The Premarital Communication Roots of Marital Distress and Divorce: The First Five Years of Marriage

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Abstract

Using data from 210 couples who provided data across the first five years of marriage, we examined how premarital communication quality was related to divorce and later distress. The results showed that premarital observed negative and positive communication nearly reached significance as predictors of divorce, while self-reported negative communication was significantly associated with divorce. In terms of marital adjustment, we found that both premarital observed and self-reported negative premarital communication (but not observed positive communication) were associated with lower adjustment during the first five years of marriage. The most important questions addressed in this study pertain to how positive and negative dimensions of communication change over time and how these changes are related to being distressed or nondistressed after five years of marriage. This is the first study, to our knowledge, to examine the *changes* in communication over time that are so central to theories of the development of marital distress and for research based interventions. We found that all couples showed decreases in negative communication over time, but the non-distressed group declined significantly more than the distressed group in negative communication, suggesting they are handling negative emotions better. Implications for future research on the development of relationship distress and for enhancing research-based couples intervention programs are provided.

Keywords

Marriage; prediction; marital distress; communication; divorce

Millions of individuals experience marital distress, destructive conflict and divorce every year. Evidence accumulates that marital distress and family fragmentation are associated with a broad spectrum of risks for adults and children, including problems with mental health and individual adjustment, child behavior, physical health, and economic success and

stability. (Booth & Amato, 2001; Halford & Bouma, 1997). The links between marital functioning and a wide range of outcomes has led to recognition that marriage has important public health consequences (Halford, Markman & Stanley, 2008). As a result, the desire among policy makers to implement public sector programs that can help couples—especially high risk couples—achieve their own aspirations in marriage has grown dramatically in recent years (Seefeldt & Smock, 2004).

In part, such efforts have accelerated because evidence-based programs have been built on findings from long-term studies on the risk factors for marital distress and divorce. These long-term (prediction) studies have spawned theories and tests of theories of marital success and dissolution as well as provided basic descriptive data on the course of marriages over time (e.g., Markman & Hahlweg, 1993). While few individual studies have been cross-validated (Heyman & Slep, 2001), there is enough replication across studies to give us confidence in some of the major patterns of findings that link early risk and protective factors to later marital outcomes.

Most premarital couples, when they decide to marry, are happy with their relationship and expect to be happy together until "death do they part," however, these expectations are often not fulfilled (Glenn, 1998). Most couples say they decide to marry each other based on positive connections such as fun, friendship, and passion (Sternberg, 1998). When couples divorce, reasons include not enough commitment, too much conflict, infidelity, and growing apart (C.A. Johnson et al., 2002). Thus, we know most people decide to marry due to the presence of positives and divorce due the presence of negatives or the absence of positives. However, we know very little about how negatives and positives before marriage influence the course of marriage and how changes in positive and negatives over time influence marital outcomes.

The overarching aim of the current paper is to assess how negative and positive communication *before* marriage predicts future divorce and marital satisfaction. Starting before marriage enables us to detect patterns earlier in relationship development than in most previous studies and that may be apparent during the transitions associated with planning marriage but not afterwards.. In addition, the study is the first, to our knowledge, to investigate how positive and negative communication, assessed by both behavioral and self report measures, change over time and how these changes predict marital outcomes.

Negative and Positive Communication as Risk and Protective Factors

Based on Heller and Monaghan's (1977) pioneering work, Markman (1979) suggested that couples with communication-based risk factors (e.g., poor conflict management) and lower protective factors (low levels of positive communication) would be more vulnerable to the development of relationship problems. Since then, a series of cross-sectional and longitudinal studies of couples interactions have identified a set of risk factors that have to do largely with the ability to handle negative emotions along with a smaller set of protective factors that have to do largely with positive connections (e.g., support, friendship; Karney & Bradbury, 1995). Early on, researchers questioned how well participants could report on behavioral and interaction aspects of relationships, leading to the addition of laboratory

interaction tasks that allowed for both research participant and observer ratings of interaction (Markman & Notarius, 1987). The studies reviewed below focus on studies using objective observation of couples' interactions.

Cross-sectional studies

Pioneered by Weiss and colleagues (e.g., Birchler, Weiss & Vincent, 1975), early studies compared interaction patterns of distressed and non-distressed couples, and surprisingly found that *negative patterns* of interaction strongly differentiated happy from unhappy couples but that positive patterns did not (e.g., Birchler et al., 1975; Gottman, Markman, & Notarius, 1977). Here, we are calling this the "negativity effect," such that negatives are stronger risk factors than positives are protective factors. Building on cross-sectional studies, long-term studies of the development of marital distress emerged.

Prediction research

There have been two general types of "prediction" studies using interaction tasks: those predicting marital outcomes (usually dichotomous marital outcomes) from early marital (or in some cases premarital) variables and those predicting marital trajectories. We should note that none of these studies are actually true prediction studies where outcomes are predicted before they are known (see Heyman and Slep, 2001). The first study predicting marital outcomes found that couples own ratings of their communication as they were talking during a conflict discussion predicted marital satisfaction up to five years later (Markman, 1981). Better communication ratings before marriage predicted higher satisfaction five years later (but were not associated with initial satisfaction). In a similar study, newlywed couples' ratings of communication quality predicted whether a couple was stable and satisfied vs. divorced and/or unhappy six years later (Gottman, Coan, Carrere, & Swanson, 1998).

In studies using observer ratings of couples on conflict and/or support tasks, findings have supported the connections between early communication quality and future marital outcomes – with higher communication quality being associated with higher levels of marital quality up to 10 years into marriage with both premarital (e.g., Clements, Stanley, & Markman, 2004) and newlywed couples (e.g. Pasch & Bradbury, 1998; Rogge and Bradbury, 1999). Pasch and Bradbury's (1998) study was among the first to add a social support task and found that observed social support by wives predicted marital outcomes two years later. Studies have also found inconsistent findings, such that early communication predicts later satisfaction but not divorce (e.g., Kiecolt-Glaser, Bane, Glaser & Malarkey, 2003), wives' communication predicts better than husbands' (e.g., Pasch & Bradbury, 1998), and negative communication tends to predict only when there are lower levels of positive communication (e.g., M. D. Johnson et al., 2005).

Many theories of the development of marital distress have a common a focus on negatives and positives over time, and these share the general prediction that there will be declines in satisfaction. However, none of the studies reviewed above are able to test the development aspects of these theories since they only assess one time point at the beginning of the study and one at the end. More recently, researchers have added more follow-up points in order to examine how early marriage qualities predict trajectories of satisfaction over time.

Predictions of marital trajectories

Karney and Bradbury (1997) studied 60 newly couples over 4 years and assessed marital satisfaction and marital status at 6 month intervals. They found that more initial negative communication predicted steeper declines in satisfaction. While newlywed interaction quality did not predict divorce, couples with steeper declines in satisfaction levels had higher risk for divorce. For example, in stable marriages, satisfaction declined 3% per year while in unstable marriages satisfaction declined about 15% per year. Johnson et al. (2005) used the same sample found that when there were high levels of positive affect, the predictive power of the negatives was mitigated. Thus, couples were at most risk for declines in satisfaction when there was high negative communication and low positive affect. Interactions were only collected at the initial assessment, so they were not able to assess impact of positives and negatives over time, as we do in the current study.

Huston et al. (2001) studied 168 newlywed couples over a 13 year period and tested two models (both of which offer a rich extension of exchange theory) of the development of marital distress relevant to the current study. The "enduring distress model" predicts that the negatives early in marriage (or before marriage) endure over time such that a couple's starting point predicts a couple's outcomes. In contrast, the "emerging distress model" predicts that negatives increase over time to damage the positive connection for couples headed for problems. Support was found for the enduring distress model but not the emerging distress model (Huston et al., 2001). That is, couples who ended up unhappy were more negative initially than couples who ended up happy. Stronger tests of these models are possible when starting with couples before marriage (who then marry) because it is less likely that premarital couples have started down the pathway toward marital distress. For example sociologists have found in long-term studies of the same cohort that the premarital stage is the when couples are the happiest (VanLaningham, Johnson & Amato, 2001), though a minority of couples start happy and stay happy over time (Kamp Dush Taylor & Kroeger, 2008). Studies starting after marriage, in contrast,are more to include already distressed couples since 21 % of couples divorce within the first 5 years of marriage (Raley & Bumpass, 2003. Moreover starting with premarital couples provides a research base for interventions during the transition to marriage, one of the best stages for divorce prevention and marriage enhancement programs (Halford, Markman, & Stanley, 2008).

In summary, the studies reviewed above show somewhat inconsistent findings, despite assessing similar constructs. The inconsistency of the findings are in part due to differences in data collection and data reduction, how interaction was measured (self-report vs. observation), time of follow-up, sample size and composition, level of initial satisfaction, difference in measures of outcome (stability, satisfaction, combinations of stability and satisfaction), and differences in coding systems and tasks used. Nevertheless, across time, labs, tasks, and outcomes, there are links between premarital and newlywed communication quality and later outcomes. Moreover, studies suggest that negative communication is a better predictor of marital outcomes than positive communication, and all the more so when combined with low levels of positive communication. Studies generally support the enduring distress model, but since they typically start after marriage, research is needed regarding dynamics that endure from prior to marriage into marriage. In addition, none of

the studies have observed interactions over time, and thus the emerging distress theory has not yet been adequately tested.

Current Study

The overarching aim of the current study was to assess how negative and positive communication, assessed by both self-report and observational coding of interactions *before* marriage, predicts future divorce and marital satisfaction. Starting before marriage provides a better test of the enduring distress model than starting after marriage. This study is also the first to investigate how positive and negative communication assessed by observational coding changes from before marriage to 5 years into marriage, and how these changes predict marital outcomes. The current study also provides a strong test of the emerging distress model since for long-term analyses of communication we are starting with couples when they are happy, before distress sets in. Observational coding of interactions are critical since they have consistently been to be found to be associated with both relationship outcomes and are indicators of changes following interventions (Markman & Hahlweg, 1993). Specifically, we present findings from an ongoing longitudinal study of *premarital* couples recruited from 1996 to 2001. Here we focus on findings from the premarital stage of development through the first five years of marriage. We chose five years because this is the point when we have the most data to test the hypotheses that are the focus of this paper.

Hypotheses

As noted above, starting before marriage enabled us to provide the best test to date of the enduring distress model, which predicts that marital distress and divorce are associated with premarital patterns. The first major hypothesis was that that both negative and positive dimensions of premarital communication would be associated with divorce and marital adjustment across the first five years of marriage and that negative communication would be more strongly related to divorce and marital adjustment than positive communication. Second, we focused on negative and positive communication trajectories as possible roots of the emergence of marital distress. Based on prior studies, we hypothesized that couples who were distressed after being married for five years would show and self-report more negative and less positive premarital communication initially, as well as steeper increases in negative communication over time and steeper decreases in positive communication over time.

Method

Participants

Participants were 208 couples (N = 416 partners) who had taken part in a larger study on the effectiveness of premarital education (see Markman et al., 2004; Stanley et al., 2001). Couples who did not marry or who did not complete a premarital assessment were excluded, as were couples for whom we could not verify marital status at the time of their fifth wedding anniversary. When the study began, the participants were, on average, 26.55 years old (SD = 5.26) with a median education of 16 years and a median income of $30,000-39,999. The sample was 3.6% African American, 1.7% Asian American, 9.3% Hispanic or Latino, 0.7% Native American, and 84.7% White. At the couple level, 79% of

the sample involved White partners paired with White partners, 11% involved White partners paired with non-White partners, and 10% involved non-White partners paired with non-White partners. Sixty-four percent of the couples lived together before marriage. Thirty-five couples (16.8%) divorced within the first five years of marriage; 173 (83.2%) remained married.

Procedures

Couples were recruited through the religious organizations (RO's) that would perform their wedding services. These RO's were randomly assigned to deliver naturally occurring premarital education, to deliver the Prevention and Relationship Enhancement Program (PREP; Markman et al., 2001), or send eligible couples to a university to receive PREP. Before receiving services, couples completed questionnaires and videotaped interaction tasks before marriage and before premarital education, six weeks following premarital education, and yearly thereafter. These visited lasted approximately 2 hours and couples were paid $40 – 100, depending on the time point. Data from all time points between the premarital assessment and the assessment that took place within six months of a couples' fifth wedding anniversary were used in the current study. On average, couples came in five months before their wedding day for the first assessment. For those who remained married, the average couple came in for five assessments starting before marriage and ending at their fifth wedding anniversary. Besides marital status, no longitudinal data from divorced couples are included in these analyses.

Measures

Observed negative and positive communication—As mentioned earlier, couples completed videotaped interaction tasks at every time point. For the current study, data from the problem-discussion task are used. For this task, couples identified their top problem area in their relationship on paper forms and then were instructed to discuss that issue for 10-15 minutes. These problem discussions were then coded using the global Interactional Dimensions Coding System (Kline et al., 2004). Using this system, coders rate each partner on nine dimensions that include affective, behavioral, and content cues and they assign a code to the couple for negative escalation. For the current study, negative and positive composite scores of these 10 dimensions were used. The negative composite score included negative affect, denial, dominance, conflict, withdrawal, negative escalation ($\alpha = .87$). The positive composite included positive affect, problem solving skills, support/validation, and communication ($\alpha = .88$). These composites were moderately correlated, r = .56, $p < .001$. Intercoder reliability for this sample is high, with intraclass correlations ranging from .66 to .95 (*Mdn* = .87; Kline et al., 2004).

Marital adjustment—The Marital Adjustment Test (Locke & Wallace, 1959) was used to assess marital adjustment. The internal consistency for the current sample was lower than in married couple samples ($\alpha = .61$), perhaps because the sample was relatively homogeneous and happy (*M* at T1 = 127.77, *SD* = 15.65, *Range* = 84 – 156). This inventory was also used to create the distressed and non-distressed groups used in some analyses.

Self-reported negative communication—Participants rated the negativity of the communication they experience outside of the lab using the Communication Danger Signs Scale. This measure includes 7 items rated on a 1 *(almost never)* to 3 *(frequently)* scale. An example item is "My partner criticizes or belittles my opinions, feelings, or desires." This measure has demonstrated validity and reliability in a range of sample (e.g., Stanley, Markman, & Whitton, 2002). In this sample, α = .73. This measure was significantly correlated with observed negative communication in this sample, $r = .26$, $p < .01$.

Results

Premarital Communication and Divorce

To test hypotheses about premarital communication and divorce, we used 2×2 analyses of variances (ANOVAs), with factors of divorced vs. non-divorced and gender. We chose to use ANOVAs over logistic regressions because of the dependency between husbands' and wives' scores. By treating gender as a within-subjects variable in ANOVA, we were able to efficiently test whether gender moderated associations between premarital communication and divorce and also able to collapse across men and women when there were no significant interactions. Results suggest that those who divorced were observed to have more negative communication before marriage ($M = 3.51$ $SD = 1.36$) than those who remained married ($M = 3.18$ $SD = 1.13$), but this difference only approached significance, $F(1, 205) = 2.40$, $p = .06$ (one-tailed), $d = .27$. Similarly, those who divorced were observed to have less observed positive communication before marriage ($M = 3.86$ $SD = 1.17$) than those who remained married ($M = 4.11$ $SD = 1.15$), but this difference only approached significance, $F(1, 205) = 1.68$, $p = .10$ (one-tailed), $d = .22$. For self-reported premarital negative communication, the difference between those who divorced ($M = 1.56$, $SD = 0.34$) and those who remained married ($M = 1.44$, $SD = 0.38$) was significant, $F(1, 178) = 4.40$, $p = .02$ (one-tailed), $d = .38$, and in the expected direction. Adding control variables as covariates in these ANOVAs (education, income, intervention status (received PREP or not), age, gender, and religiousness) did not change the results in meaningful ways.

Premarital Communication and Marital Adjustment Over Time

For the remaining hypotheses, we used multilevel modeling and HLM 6.02 software because it allowed us to examine the trajectories of marital adjustment and communication over time. Following guidelines presented by Atkins (2005), we used three-level models in which time was nested within individuals who are in turn nested within couples.

Baseline model—We ran an initial unconditional model (below) before adding predictors to determine whether there was enough variation between partners within couples in marital adjustment intercepts and slopes (changes over time) to treat them as random effects.

$$
\begin{aligned}
\text{Level} - 1: \quad & Y_{tij} = \pi_{0ij} + \pi_{1ij}(Time)_{tij} + \varepsilon_{tij} \\
\text{Level} - 2: \quad & \pi_{0ij} = \beta_{00j} + r_{0ij} \\
& \pi_{1ij} = \beta_{10j} + r_{1ij} \quad\quad\quad (1) \\
\text{Level} - 3: \quad & \beta_{00j} = \gamma_{000} + u_{00j} \\
& \beta_{10j} = \gamma_{100} + u_{10j}
\end{aligned}
$$

Here, t indexes time (in weeks) since the pre-marriage assessment; i indexes partners within a couple; and j indexes couples. There are four separate error terms, all of which are assumed to be normally distributed: ε_{tij} is the residual error term; r_{0ij} and r_{1ij} are random intercept and slope terms at the individual level; and u_{00j} and u_{10j} are a random intercept and slope terms at the couple level. The *Time* variable was grand-mean centered, so the intercept term represents the average marital adjustment score across the first five years of marriage.

There was significant variation between partners in the level of marital adjustment, but not in slopes ($p > .50$). Therefore, we excluded random slope component in the Level 2 equations. In this baseline model we also tested whether there was significant variation between couples in marital adjustment intercept and slope. There was significant variability, so we treat the intercepts and slopes as random in Level 3 of the models testing our hypotheses. The fixed effects indicated that there were significant decreases in marital adjustment over time ($\gamma_{100} = 0.03$, $p < .001$) that were approximately equal to a 1.56 point drop in marital adjustment per year.

Hypotheses tests—We hypothesized that both negative and positive dimensions of premarital communication would be associated with marital adjustment across the first five years of marriage. To test these hypotheses, we added positive or negative premarital communication (grand-mean centered) to the baseline model (Equation 1). We ran three separate models including premarital observed negative communication (Model 1), premarital observed positive communication (Model 2), and premarital self-reported negative communication (Model 3) as predictors of marital adjustment (see Table 1). In Models 1 and 3, premarital observed and self-reported negative communication were significantly associated with lower average marital adjustment across the first five years of marriage. In the same models, premarital negative communication was also associated, unexpectedly, with less steep declines in marital adjustment over time. Premarital observed positive communication was not significantly associated with either average marital adjustment or changes in marital adjustment over time. Adding control variables to these models (education, income, intervention status (received PREP or not), age, gender, and religiousness) did not change the results in meaningful ways.

Differences in Trajectories of Communication Over Time by Marital Distress Status

In the next set of analyses we used a dichotomous outcome (distress vs. nondistressed, as defined earlier) rather than a continuous outcome We hypothesized that couples who were categorized as non-distressed (vs. distressed) after being married for five years would show less negative and more positive premarital communication, as well as less steep increases in negative communication over time and less steep decreases in positive communication over time. Married couples in which one or both partners had a score of 100 or less at the

assessment nearest to their fifth wedding anniversary were considered distressed. We choose to use 100 as the cut-off because other research has found this to be a useful cut-off score for distinguishing between couples who are distressed and non-distressed (e.g., Clements et al., 2004; Rogge & Bradbury, 1999). Of the 173 couples who remained married through their fifth year of marriage, 32 (18.5%) were distressed however, of these, 21 had been distressed at the premarital assessment and were therefore excluded from analyses so we could focus on couples before distress set in. This left 128 nondistressed and 24 (18.8%) distressed couples. Unconditional models (without predictors) in which Time was uncentered indicated that there was not significant variation between partners (at Level 2) in communication changes over time, so this random component (r_{1ij}) was excluded from the tests of hypotheses.

To test the ways in which communication changes over time related to whether couples ended up happy or unhappy at five years into their marriages, we used these equations.

$$
\begin{aligned}
\text{Level} - 1: &\quad Y_{tij} = \pi_{0ij} + \pi_{1ij}(Time)_{tij} + \varepsilon_{tij} \\
\text{Level} - 2: &\quad \pi_{0ij} = \beta_{00j} + r_{0ij} \\
&\quad \pi_{1ij} = \beta_{10j} \\
\text{Level} - 3: &\quad \beta_{00j} = \gamma_{000} + \gamma_{001}(Distress\ Status) + u_{00j} \\
&\quad \beta_{10j} = \gamma_{100} + \gamma_{101}(Distress\ Status) + u_{10j}
\end{aligned}
\qquad (2)
$$

We ran three separate models for these hypotheses, one with observed negative communication, another with observed positive communication, and a third with self-reported negative communication (Table 2; Figure 1). In these models, Time was uncentered so that the intercept term (γ_{000}) could be interpreted as the premarital communication score. Distress Status was also uncentered, so coefficients in the table represent values for those who were distressed in their marriages (i.e., those who were distressed were coded as 0). Results of the model with observed negative communication indicate that there were no differences in initial (premarital) negative observed communication between those who were distressed vs. non-distressed five years into their marriages (γ_{001}), but that those who were nondistressed five years into their marriages experienced greater declines in negative communication than those who were distressed (γ_{101}). Similarly, there were not significant differences between groups on premarital positive communication (γ_{001},), but distressed couples experiences decreases in positive communication over time (γ_{100}) whereas nondistressed couples experienced almost no change in positive communication over time (γ_{101}).

For *self-reported* negative communication, those who were nondistressed five years into their marriages reported lower premarital negative communication than those who were distressed (γ_{001}). Those who were distressed reported significant increases in negative communication over time (γ_{100}), while those who nondistressed reported significantly smaller increases in negative communication over time (γ_{101}).

Discussion

The purpose of this study was to examine the ways in which observed and self-reported indicators of negative and positive *premarital* communication were related to marital adjustment and divorce five years into marriage. Specifically, we were interested in how changes in communication over time, starting before marriage, were associated with future marital quality.

In terms of divorce, consistent with the enduring dynamics model, we hypothesized that more negative and less positive communication before marriage (both observed and self-reported) would be associated with divorce. The results showed that observed negative and positive communication nearly reached significance in the predicted direction, while self-reported negative communication was significantly associated with later divorce. This study is one of the few that examines the hypothesis that *divorce* is associated with premarital communication quality. Most studies have focused only on marital quality as an outcome or have combined stability with marital quality, however, only a few have used divorce as an outcome (e.g., Clements et al., 2004; Houston et al., 2001).

Other studies have also reported relatively small effects of interaction on divorce (see Karney & Bradbury, 1995, for a review) for both positive and negative communication. In our study we had a relatively small number of divorces and hence low power to detect effects. Also, we did not assess love. Given that Huston et al. (2001) show reasonably strong prediction of divorce using measures of love, and that falling out of love is one of major reasons people give for divorce (Amato & Hohmann-Marriott, 2007), measures of love should be used in future research on divorce risk. More generally, events later in marriage, such as infidelity, can rapidly deteriorate a marriage that was otherwise doing well (e.g., Glass & Wright, 1997), and thereby have a far greater proximal effect on marital outcomes.

In terms of marital adjustment over time, higher levels of negative communication were significantly associated with lower levels of average marital adjustment across the first five years of marriage. Contrary to predictions, premarital positive observed communication was not significantly associated with marital quality. These findings are in line with other research that has highlighted the importance of negative communication in explaining future marital quality (e.g., Markman & Hahlweg, 1993) and add the literature that somewhat different factors predict stability versus quality over time (Clements et al., 2004).

Taken together, the findings on the prediction of divorce and marital quality are consistent with Huston et al.'s enduring distress model, in that early risk is associated with later problems since the risk factors endure. The current study is one of the first that shows that some of the roots of distress lie in the couples communication quality and such risk can be identified *before* marriage and, as such, has important implications for interventions that focus on modifying communication patterns, such as PREP (Markman, Stanley, & Blumberg, in press). However, the relatively small effect sizes of these findings also suggest a variety of dimensions are important to consider in the understanding and prevention of marital distress.

In terms of how premarital negative and positive *observed c*ommunication were associated with *changes in marital adjustment* over the first five years of marriage, we found that, contrary to predictions, higher levels of observed and self-reported premarital negative communication were associated with *less steep declines* in marital adjustment. At first glance, these findings seem counterintuitive, but it is likely an artifact of the fact that those with high levels negative communication premaritally also have lower pre-marital adjustment scores. Thus, they have less room to decline than those who begin marriages with lower negative communication and higher marital adjustment scores. In addition, divorced couples were not included in the analyses since they have no end point data and these couples likely would have had steep declines

In regards to positive communication and declines in satisfaction, consistent with the general pattern of findings in the field, observed premarital positive communication was not associated with changes in marital adjustment over time.

Interaction Over Time

The most important set of questions addressed in this study pertain to how positive and negative dimensions of communication change over time and how these changes are related to being distressed or nondistressed after five years of marriage. This is the first study, to our knowledge, to examine the kinds of *changes* in communication over time that are consistent with the emergent distress model, which is central to most theories of the development of marital distress (Clements, et. al, 2004). The findings showing that the nondistressed couples declined more in negative communication over time than the distressed couples suggests that communication quality may be one of the important factors in determining the course of a couple's relationship over time. This is consistent with the emergent distress model, though it is not really possible to prove that the changes in communication precede the changes in adjustment. The finding is, however, consistent with one of the core assumptions underlying most research-based approaches to couples intervention, that negatives erode positives over time (Markman et.al., in press). These findings suggest that both overall level of negative communication (assessed by observational coding) as well as the perceived frequency of negativity communication (assessed by the self-report measure) discriminate between couples who wind up distressed vs. non-distressed. In addition, the finding that distressed compared to nondistressed couples show more negative communication over time, is the first,, to our knowledge, to support the emerging distress theory. This finding isI has important implications for interventions, since the basis of most couples prevention and therapy programs is, in part, that negatives will increase over time unless the couple learns skills to counteract them.

Perhaps the most interesting finding in the study is that couples who wind up distressed experienced more declines in positive communication compared to the couples who wind up nondistressed. This pattern is particularly important in that the nondistressed couples maintained high levels of positives while distressed couples declined. Many theories of marriage over time, suggest that the positives naturally decrease over time (e.g., Fisher, 2006), but our data do not support those contentions. Rather these finding support theories that suggest that marital distress is in part due to a decrease in positives. These findings are

especially interesting to us since they emerge from a conflict task. It is probable that conflict tasks are not the best way to assess positives, and a that the focus on conflict tasks in the history of this field may be one the reasons for the "negativity effect" (Fincham et al., 2007). The current findings not only suggest that positives do matter, but also that they can be assessed with some validity even when the context is a conflict task. In addition, we found support that positives, assessed by observational coding, predict future marital outcomes using a traditional conflict task. Perhaps couples from more recent generations are putting more stock in the positive side of the relationship and when positives are low, couples are more reactive and this is seen in lower satisfaction (and to a degree, higher risk for divorce) later on.

Positives and Negatives in Marriage

Taken together, the results of this study do support previous findings that the negatives predicted future marital distress and positives did not. Thus negatives may be stronger risk factor than the positives are protective factors). We have coined the term the "negativity effect" to describe this pattern. Clinically, we describe the negativity effect by saying that it takes a number of positive "acts of kindness" to compensate for one negative "Zinger" (Notarius & Markman, 1993). However, since we do not have a measure of self-reported positive communication like we do for negative communication, we need further research to solidify our suggestions. However, a similar finding emerges from health psychology where research reveals that negative emotions are stronger predictors of health problems than positive emotions (see Fredrickson & Losada, 2005, for a review). On the other hand, it has been noted that negative communication behavior has been much more robustly studied than positives, and that various forms of positives beyond mere positive communication behavior may have transformative properties (Fincham, Beach, & Stanley, 2007). To be clear, we are not saying that positives do not matter, they do, as we see from our current findings. Future research is needed on widely ignored aspects of relationship (e.g., fun, support, romance, passion) that may be some of the factors determine if a marriage is just ok or is a great marriage (Markman, et. al., in press)

If negatives count more than positives when it comes to communication, why might this be so? Evolutionary perspectives would suggest that there is selection in favor of being more responsive to negatives. Negatives can really hurt us so evolutionary psychologists suggest that we are selected for focusing more attention on the negatives in relationships and in life (e.g., Buss, 2000). The salience of negatives can also be explained in part by cognitive consistency theories (e.g., Aaronson, 2008) where negatives are not expected (as in marriage) and cause stress that we are motivated to relieve. For example, in therapy, couples often report that the week was "really bad", and it turns out that one negative event colored the entire week that was filled with positives otherwise. Couples therapists can help partners work on decreasing the value of the negatives and increasing the value of the positives and help couples decrease negatives and increase positives in day-to-day interactions (Markman et. al, in press).

There are several limitations with the study that must be taken into consideration when interpreting the current findings. First, all couples in the study completed a premarital

intervention, and thus the patterning of the findings might be different for couples who did not participate in premarital intervention. It is also possible that intervention effects may be affecting the pattern of finding in that the premarital data were assessed before the intervention and the post marital data were assessed after the intervention. Thus, it is possible that the couples in this sample had higher levels of positives and marital quality over time and lower levels of negatives after the intervention, but this would not likely affect the pattern of findings. However, we controlled for intervention status and it did not affect the findings.

Second, since all the couples were marrying through religious organizations, it is possible that they were somewhat more religious than the average couple planning marriage. However, since the majority of first marriages take place through a religious organization (Stanley, Amato, Johnson, & Markman, 2006), the current sample is not all that different from most couples getting married for the first time. Nevertheless, the findings may not generalize to couples who do not marry through religious organizations. Third, we used a cutoff of 100 to define distress and nondistress. While this is justified based on prior research, it is possible that included in the distressed group were some couples who were not all that distressed. Fourth, we did not include a self-report measure of positive communication. Future research should use such a scale in order to help better understand the roles of positive and negative communication in marriage. Fifth, we did not present data on communication over time for those couples who divorce. This is an important area for future research since there are no data to our knowledge on changes over time in communication of couples who go on to divorce. In the current study, we did not have enough couples and data to adequately examine this question, but will we plan to in the future as our sample of divorced couples increases in size and length of relationship. Sixth, many of the couples have had a child during the first five years of marriage and this transition likely affected their communication. Examining these effects was beyond the scope of the present paper, but a paper by Doss, Rhoades, Stanley, and Markman (2009) examined transition to parenthood in this sample. Finally, while there is some diversity in our sample, the couples are mostly Caucasian and middle class, thus the findings may not be generalizable to other groups.

In summary, the picture of non-distressed couples five years into marriage from an interaction perspective supports current theories of distress and intervention in that couples who start marriage with lower negatives and higher adjustment and who maintain high levels of positives are at risk for marital success. The findings support the use of prevention programs that focus on keeping happy couples happy by helping couples learn skills to handle the inevitable negatives in marriage and to protect and maintain positives (Markman et al., 2009) and suggest use of these programs *before* marriage or early in marriage.

Acknowledgments

References

Aronson, E. The social animal. 10th ed. Wirth/Freeman; New York: 2008.

Amato PR, Hohmann-Marriott B. A comparison of high- and low-distress marriages that end in divorce. Journal of Marriage and Family. 2007; 69(3):621–638.

Atkins DC. Using multilevel models to analyze couple and family treatment data: Basic and advanced issues. Journal of Family Psychology. 2005; 19(1):98–110. [PubMed: 15796656]

Birchler GR, Weiss RL, Vincent JP. Multimethod analysis of social reinforcement exchange between maritally distressed and nondistressed spouse and stranger dyads. Journal of Personality and Social Psychology. 1975; 31(2):349–360.

Booth A, Amato PR. Parental predivorce relations and offspring postdivorce well-being. Journal of Marriage & the Family. 2001; 63(1):197–212.

Buss, D. The dangerous passion: Why jealousy is as necessary as love and sex. The Free Press; New York: 2000.

Clements ML, Cordova AD, Markman HJ, Laurenceau J-P. Sternberg RJ, Hojjat M. The erosion of marital satisfaction over time and how to prevent it. Satisfaction in close relationships. 1997:335–355.

Clements ML, Stanley SM, Markman HJ. Before they said 'I do': Discriminating among marital outcomes over 13 years. Journal of Marriage and Family. 2004; 66(3):613–626.

Doss BD, Rhoades GK, Stanley SM, Markman HJ. The effectof the transition to parenthood on relationship quality: An 8-year prospective study. Journal of Personality and Social Psychology. 2009; 96:601–619. [PubMed: 19254107]

Fincham FD, Stanley SM, Beach SRH. Transformative processes in marriage: An analysis of emerging trends. Journal of Marriage and Family. 2007; 69(2):275–292. [PubMed: 19890466]

Fisher, H. The drive to love: The neural mechanism for mate choice. In: Sternberg, R.; Weis, K., editors. The new psychology of love. Yale University Press; New Haven: 2006.

Fredrickson B, Losada M. Positive affect and the complex dynamics of human flourishing. American Psychologist. 2005; 60:678–686. [PubMed: 16221001]

Glenn ND. The course of marital success and failure in five American 10-year marriage cohorts. Journal of Marriage & the Family. 1998; 60(3):569–576.

Gottman, JM. What predicts divorce? The relationship between marital processes and marital outcomes. Lawrence Erlbaum Associates; Hillsdale, NJ: 1994.

Gottman JM, Coan J, Carrere S, Swanson CC. Predicting marital happiness and stability from newlywed interactions. Journal of Marriage & the Family. 1998; 60(1):5–22.

Gottman JM, Krokoff LJ. Marital interaction and satisfaction: A longitudinal view. Journal of Consulting and Clinical Psychology. 1989; 57(1):47–52. [PubMed: 2487031]

Gottman JM, Markman HJ, Notarius CI. The topography of marital conflict: A sequential analysis of verbal and nonverbal behavior. Journal of Marriage and the Family. 1977; 39:461–477.

Halford, WK.; Bouma, R. Individual psychopathology and marital distress. In: Halford, K.; Markman, HJ., editors. Clinical handbook of marriage and couples intervention. John Wiley and Sons; New York: 1997. p. 291-321.

Halford WK, Markman HJ, Stanley S. Strengthening couples' relationships with education: Social policy and public health perspectives. Journal of Family Psychology. 2008; 22:497–505. [PubMed: 18729664]

Heller, K.; Monahan, J. Psychology and community change. Dorsey Press; Homewood, IL: 1977.

Heyman RE, Slep AMS. The hazards of predicting divorce without crossvalidation. Journal of Marriage and Family. 2001; 63(2):473–479. [PubMed: 17066126]

Huston TL, Caughlin JP, Houts RM, Smith SE, George LJ. The connubial crucible: Newlywed years as predictors of marital delight, distress, and divorce. Journal of Personality and Social Psychology. 2001; 80(2):237–252. [PubMed: 11220443]

Johnson, CA.; Stanley, SM.; Glenn, ND.; Amato, PR.; Nock, SL.; Markman, HJ., et al. Marriage in Oklahoma: 2001 baseline statewide survey on marriage and divorce (S02096 OKDHS). Oklahoma Department of Human Services; Oklahoma City, OK: 2002.

Johnson MD, Cohan CL, Davila J, Lawrence E, Rogge RD, Karney BR, et al. Problem-solving skills and affective expressions as predictors of change in marital satisfaction. Journal of Consulting and Clinical Psychology. 2005; 73(1):15–27. [PubMed: 15709828]

Kamp Dush C, Taylor M, Kroeger R. Marital happiness and psychological well-being across the life course. Family Relations. 2008; 57:211–226. [PubMed: 23667284]

Karney BR, Bradbury TN. The longitudinal course of marital quality and stability: A review of theory, method, and research. Psychological Bulletin. 1995; 118:3–34. [PubMed: 7644604]

Karney BR, Bradbury TN. Neuroticism, marital interaction, and the trajectory of marital satisfaction. Journal of Personality and Social Psychology. 1997; 72:1075–1092. [PubMed: 9150586]

Kiecolt-Glaser JK, Bane C, Glaser R, Malarkey WB. Love, marriage, and divorce: Newlyweds' stress hormones foreshadow relationship changes. Journal of Consulting & Clinical Psychology. 2003; 71(1):176–188. [PubMed: 12602438]

Kline, GH.; Julien, D.; Baucom, B.; Hartman, SG.; Gilbert, K.; Gonzales, T., et al. The Interactional Dimensions Coding System: A global system for couple interactions. In: Kerig, PK.; Baucom, DH., editors. Couple observational coding systems. Lawrence Erlbaum Associates; Mahwah, NJ: 2004. p. 113-127.

Locke HJ, Wallace KM. Short marital-adjustment and prediction tests: Their reliability and validity. Marriage and Family Living. 1959; 21:251–255.

Markman HJ. Application of a behavioral model of marriage in predicting relationship satisfaction of couples planning marriage. Journal of Consulting and Clinical Psychology. 1979; 47(4):743–749. [PubMed: 500910]

Markman HJ. Prediction of marital distress: A 5-year follow-up. Journal of Consulting and Clinical Psychology. 1981; 49(5):760–762. [PubMed: 7287992]

Markman HJ, Floyd F. Possibilities for the prevention of marital discord: A behavioral perspective. American Journal of Family Therapy. 1980; 8(2):29–48.

Markman HJ, Hahlweg K. The prediction and prevention of marital distress: An international perspective. Clinical Psychology Review. 1993; 13(1):29–43.

Markman, HJ.; Notarius, CI. Coding and marital family interaction: current status. In: Jacob, T., editor. Family Interaction and Psychology. Plenum; New York, NY: 1987. p. 329-390.

Markman, HJ.; Stanley, SM.; Blumberg, SL. Fighting for your marriage. 3rd Edition. Jossey-Bass; San Francisco: in press

Markman HJ, Whitton SW, Kline GH, Thompson H, Peters M St. Stanley SM, et al. Use of an empirically-based marriage education program by religious organizations: Results of a dissemination trial. Family Relations. 2004; 53:504–512.

Notarius, CI.; Markman, HJ. We can work it out: Making sense of marital conflict. G. P. Putnam's Sons; New York: 1993.

Pasch LA, Bradbury TN. Social support, conflict, and the development of marital dysfunction. Journal of Consulting and Clinical Psychology. 1998; 66(2):219–230. [PubMed: 9583325]

Rogge RD, Bradbury TN. Till violence do us part: The differing roles of communication and aggression in predicting adverse marital outcomes. Journal of Consulting and Clinical Psychology. 1999; 67:340–351. [PubMed: 10369054]

Seefeldt, KS.; Smock, PJ. PSC Research Report No. 04-554. Population Studies Center; Ann Arbor, MI: 2004. Marriage on the public policy agenda: What do policy makers need to know from research?.

Stanley SM. Making a case for premarital education. Family Relations. 2001; 50:272–280.

Stanley SM, Amato PR, Johnson CA, Markman HJ. Premarital education, marital quality, and marital stability: Findings from a large, random, household survey. Journal of Family Psychology. 2006; 20:117–126. [PubMed: 16569096]

Stanley SM, Markman HJ, Prado LM, Olmos-Gallo PA, Tonelli L, Peters M St. et al. Community-based premarital prevention: Clergy and lay leaders on the front lines. Family Relations. 2001; 50(1):67–76.

Sternberg, R. Love is a story: A new theory of relationships. Oxford University Press; NY: 1998.

VanLaningham J, David J, Amato P. Marital Happiness, Marital Duration, and the U-Shaped Curve: Evidence from a 5-Wave Panel Study. Social Forces. 2001; 78:1313–1341.

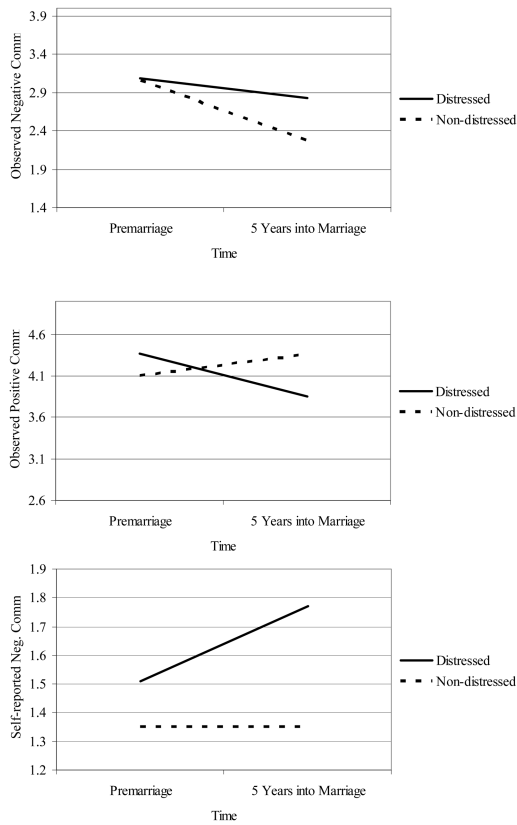**Figure 1.**
Illustration of Changes in Communication Over Time by Distress Status
Note. These figures are based on the intercept and slope values multilevel models presented in Table 2.

Table 1

Summary of Multilevel Models Predicting Marital Adjustment from Premarital Communication

Variable	Model 1: Obs. Neg.			Model 2: Obs. Pos.			Model 3: S-rep. Neg.		
	Coefficient	SE	df	Coefficient	SE	df	Coefficient	SE	df
Intercept (γ_{000})	124.79***	0.92	159	124.80***	0.94	159	141.83***	1.86	159
Observed Negative Comm. (γ_{010})	−2.45**	0.74	296	-			-		
Observed Positive Comm. (γ_{010})				0.93	0.67	296	-		
Self-reported Negative Comm. (γ_{010})	-			-			−7.77***	0.78	296
Time (γ_{100})	−0.03***	0.00	159	−0.03***	0.00	159	−0.07***	0.01	159
Obs. Negative Comm. X Time (γ_{110})	0.01*	0.00	1334	-			-		
Obs. Positive Comm. X Time (γ_{110})	-			0.01	0.00	1334	-		
S-rep. Negative Comm. X Time (γ_{110})	-			-			0.014**	0.00	1334

Notes.

*
$p < .05$

**
$p < .01$

***
$p < .001$.

Table 2

Summary of Multilevel Models Analyzing Changes in Communication Over Time by Marital Distress Status at 5 Years into Marriage

Variable	Observed Negative Comm.			Observed Positive Comm.			Self-reported Negative Comm.		
	Coefficient	SE	df	Coefficient	SE	df	Coefficient	SE	df
Intercept (γ_{000})	3.09***	0.19	150	4.37***	0.20	150	1.51***	0.05	150
Distress Status (γ_{001})	−0.04	0.21	150	−0.27	0.22	150	−0.16***	0.05	150
Time (γ_{100})	−0.001	0.001	150	−0.002	0.001	150	0.001***	0.0002	150
Distress Status X Time (γ_{101})	−0.002*	0.001	150	0.003*	0.002	150	−0.001***	0.0002	150

Notes.

*
$p < .05$

***
$p < .001$. Distress Status was coded as 0 = distressed five years into marriage, 1 = non-distressed five years into marriage.