

The Timing of Divorce: Predicting When a Couple Will Divorce Over a 14-Year Period

This paper investigates the predictability of divorce in a long-term, prospective longitudinal study. Past research has indicated that 2 periods can be considered the most critical for the survival of marriages: (a) the first 7 years of marriage, during which half of all divorces are known to occur, and (b) the period during which the first child reaches 14 years of age, which has been suggested as a low point for marital satisfaction in the life course. In the present study, interaction variables at Time 1 (both during conflict and in an events-of-the-day discussion following separation of the spouses for at least 8 hours) and noninteractive variables were used to predict divorcing both early and later in the marriage. A different set of variables predicted early divorcing than predicted later divorcing. Negative affect during conflict predicted early divorcing, but it did not predict later divorcing. By contrast, the lack of positive affect in events-of-the-day and conflict discussions predicted later divorcing, but it did not predict early divorcing. Prediction was possible over the 14-year period of the study with a model that included marital satisfaction, thoughts of marital dissolution, and affective in-

teraction in both conversations. The model predicted divorce with 93% accuracy.

The theme of this paper is the predictability of divorce both early and later in marriages in a longitudinal sample. Based on the literature on marital satisfaction over the life course, it is reasonable to suggest that there are two periods critical to the survival of a marriage: the first 7 years of marriage, during which half of all the divorces occur (Cherlin, 1981), and at midlife, when people often have young teenage children. The latter period has been suggested by some investigators as perhaps the lowest point in marital satisfaction during the life course (e.g., Adelman, Chadwick, & Baerger, 1996; Orbuch, House, Mero, & Webster, 1996; Steinberg & Silverberg, 1987; White & Booth, 1991).

The question we raised in this study was whether the predictors of marriages that dissolve during the first critical period are the same as the predictors of marriages that dissolve during the second critical period. We followed a cohort of couples for a 14-year period, periodically assessing marital stability, to determine whether different Time 1 patterns of marital interaction predict early or later divorcing. The study began in 1983, during which couples were videotaped in our laboratory. In 1987, four years after the first contact, the couples were contacted again, and their marital status was reassessed; the 8.8% of couples who had divorced by then had been married an

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Key Words: critical periods for marriage, divorce, marital dissatisfaction, predictors of marriage, timing of divorce.

average of 5.2 years (average of husband's and wife's report). At that time, we reassessed the intact couple's marital satisfaction and the presence of persistent thoughts of separation and divorce, which has been found to be a reliable predictor of actual divorce (Booth & White, 1980; Weiss & Cerreto, 1980). We then asked whether we could predict the cascade toward divorce from our Time 1 data and found that we could predict divorce or marital stability using our older Rapid Couples Interaction Scoring System (RCISS; Gottman, 1996) of the couples conflict discussion (Gottman & Levenson, 1992). The couples in this study were contacted periodically during the past 14 years, and 27.8% of the sample had divorced as of 1996. Of the couples who had divorced since 1987, the average length of marriage was 16.4 years (average of husband's and wife's report). We considered whether a different model at Time 1 would predict early versus later divorcing.

POSITIVE AND NEGATIVE AFFECT MODELS

Both positive and negative affect models in divorce prediction were constructed and tested. Although Gottman & Levenson (1992) and Gottman (1994) found that only negative affect predicted divorce, a subsequent longitudinal study with newlyweds (with a newer version of our emotion coding system) found that low levels of positive affect during the first few months of marriage also predicted later divorcing (Gottman, Coan, Carrere, & Swanson, 1998). With the newer emotion coding system focusing only on affect, we could code not only the conflict-resolution conversation, but also the couple's discussion of the events-of-the-day conversation, and we had a sensitive instrument for measuring both positive and negative affect.

The inclusion on positive affect is also important for the following reasons. In the California Divorce Mediation Project (Gigy & Kelly, 1992), the most common reasons for divorcing are not strong negative affect and constant arguments. Rather, the major reasons for divorce, cited by nearly 80% of all men and women, was gradually growing apart and losing a sense of closeness and not feeling loved and appreciated. Severe and intense fighting were cited by 40% of the couples (44% of female respondents and 35% of male respondents). Thus, it could be the case that marriages characterized by intense fighting dissolve sooner than do those characterized as without affect. In the latter type of marriage, people may

stay together but become emotionally detached, postponing divorce until their loneliness becomes unbearable and the need to remain married (e.g., to raise children) becomes less compelling. It was our prediction that these marriages may not have been characterized at Time 1 so much by intense negative affect as by the absence of positive affect.

DEMAND-WITHDRAW PATTERN

It is well known that in most distressed marriages, there is a wife-demand-husband-withdraw pattern (Christensen, 1987, 1988; Christensen & Heavey, 1990, 1993; Cohen & Christensen, 1980; Heavey, Christensen, & Malamuth, 1995). We investigated whether this wife-demand-husband-withdraw pattern during conflict is predictive of both early and late divorcing. This pattern is characterized by the wife's issuing demands in a conflict that are met by the husband's withdrawal either emotionally or physically. We expected the demand-withdraw pattern to predict early divorce as has been shown in the literature. With regard to the later divorcing group, we expected that these couples would not be characterized by high negativity but by the absence of positive affect. These essentially conflict-free but passionless marriages may be good contexts for raising children but eventually prove to be devoid of other personal meanings, and this may become particularly troubling when a midlife crisis emerges.

METHODS

Participants

Couples were recruited in 1983 in Bloomington, Indiana, using newspaper advertisements. Approximately 200 couples who responded to these advertisements took a demographic questionnaire and two measures of marital satisfaction, for which they were paid \$5. From this sample, a smaller group of 85 couples was invited to participate in the laboratory assessments and to complete a number of additional questionnaires. The goal of this two-stage sampling was to ensure that we came close to obtaining a distribution of marital satisfaction in which all parts of the distribution would be equally represented. Complete sets of usable physiological data were obtained from 79 of these 85 couples. These 79 couples are described as follows. They were a fairly young sample. At Time 1, husbands were 30.8 years old (*SD*

= 9.5 years); wives were 28.9 years old ($SD = 6.8$ years). At Time 1, the couples had been married an average of 5 years ($SD = 6.3$ years). The Time 1 average marital satisfaction for husbands was (average of Locke-Wallace and Locke-Williamson scales) 96.80 ($SD = 22.16$); the average marital satisfaction for wives was 98.56 ($SD = 20.70$).

Procedures

Interaction session. Couples arrived in the laboratory after having been apart for at least 8 hours. They had three 15-minute conversations with regard to (a) events of the day, (b) conflict resolution (discussion of a problem area of continuing disagreement), and (c) a mutually agreed upon, pleasant topic. The conversations always were conducted in the above order to ensure that couples had the events-of-the-day conversation first because we wanted to sample this kind of everyday, nonconflict interaction. We also wanted to begin our laboratory session with a reunion conversation that would seem natural and help make subjects comfortable. It was also the most natural way to start the couples' conversation after they had been apart for 8 hours; during pilot work in which we began with the conflict conversation, we found that there was undesirable spillover of negative affect into the events-of-the-day discussion.

The couples' conflict discussion occurred next. After filling out a problem inventory, we interviewed the spouses about an area of continuing disagreement in their marriage and asked them to discuss this area and try their best to resolve the issue in the following 15 minutes. Each conversation was preceded by a 5-minute preconversation period in which couples were asked to be silent and not interact. This period was designed for obtaining baseline physiologic measures (not discussed in this report). Details of the procedures for setting up these conversations are available upon request. Finally, the positive conversation was introduced as a task to help couples recover from the negative affect of a conflict discussion before our debriefing procedure, in which we also gave distressed couples a list of therapeutic referrals. Only the first two conversations will be examined in this paper.

Follow-ups. The original subjects were recontacted 4 years after the initial assessment, and 73 of the original 79 couples (92.4%) agreed to participate in the follow-up. Spouses completed a set of

questionnaires assessing marital satisfaction and items relevant to possible marital dissolution, namely, two dichotomous variables, serious considerations of divorce in the 4 years since Time 1 and Time 2. Couples were then recontacted periodically to determine their marital status. The last follow-up was 14 years after the first contact. Of the original set of 79 couples, 22 (27.8%) had divorced after 14 years. Nine couples divorced an average of 7.4 years following their marriage ($SD = 1.7$ years). They form the early-divorcing group. In addition, 13 couples divorced an average of 13.9 years following their marriage ($SD = 5.1$ years). They form the later divorcing group.

Coding and Analysis of the Data

RCISS Coding of the conflict conversations. The divorce prediction data presented in Gottman & Levenson (1992) and in Gottman (1993, 1994) involved coding the video tapes of a marital conflict discussion with the RCISS (Gottman, 1996), which employs a checklist of 13 behaviors that are scored for the speaker and nine behaviors that are scored for the listener on each turn at speech. A turn at speech is defined as all utterances by one speaker until that speaker yields the floor to vocalizations by the other spouse (vocalizations that are merely back channels, such as "mm-hmm," are not considered to demarcate a turn). In the present study, we used only codes assigned to speakers. These codes consisted of five positive codes (neutral or positive problem description, task-oriented relationship information, assent, humor-laugh, other positive) and eight negative codes (complain, criticize, negative relationship-issue problem talk, yes-but, defensive, put down, escalating negative affect, other negative). The average number of positive and negative speaker codes per turn of speech and the average of positive minus negative speaker codes per turn was computed. The following summary codes were calculated: Criticism, Defensiveness, Contempt, Stonewalling (listener withdrawal from marital interaction), and the total of positive minus negative interactions. While the speaker codes are based on specific behaviors and represent the tone of what was said, the summary codes are the total number of specific codes within a category checklist within a turn at speech and represent more global categories. A trained team coded the tapes using verbatim transcripts. Using Cohen's kappa, reliability for all RCISS subcodes taken together was .72. For the individual-speaker codes, kappas ranged

from .70 to .81. The four summary codes that emerge from the RCISS are criticism, defensiveness, contempt, and stonewalling.

Specific affect coding of the conflict and events-of-the-day conversations. The same videotapes of the interaction were coded using the Specific Affect Coding System (SPAFF; Gottman, 1996), which focused on specific emotions. The couple's events-of-the-day conversation and the conflict resolution discussion were coded. Coders were first trained using the Ekman & Friesen (1978) Facial Action Scoring System, with a set of our own audio tapes for recognizing affect in the voice, and a set of videotapes for detecting specific features in affect using paralinguistic, contextual, linguistic, and kinesic channels. The training went beyond specific features and trained observers to use a Gestalt approach to recognizing specific emotions in all channels combined. The initial training of coders took more than 200 hours. Coders classified each speech act (usually a phrase) as affectively neutral, as one of five negative affects (anger, contempt-disgust, sadness, fear, whining), or as one of four positive affects (affection-caring, humor, interest-curiosity, and joy-enthusiasm). Our RCISS "defensiveness" code is actually a better index of fear during conflictual marital interaction. In fact, the SPAFF fear-tension code may at times be tapping a dimension of responsiveness and alertness to one's partner (Gottman, 1996). Couples coded as tense are often those who are a bit on edge during the conflict discussion and working to respond to their partner. Coding manuals, training and test videotapes and audiotapes are available from the first author. The number of onsets (i.e., the number of episodes) for each code, collapsing across speech acts within a turn at speech; two consecutive speech acts by a husband that received the same code would be collapsed into one, for example. The kappa coefficient of reliability, controlling for chance agreements, was equal to 0.75 for the entire SPAFF coding.

Operationalizing the wife-demand-husband-withdraw pattern. We now discuss our approach to operationalizing the wife-demand-husband-withdraw pattern during conflict resolution. The RCISS coding was employed for these analyses in the conflict context. Using the RCISS codes, as predicted by Christensen (1988) and associates, there was evidence that during the conflict discussion, the wife used more criticism than the hus-

band did, $t(78) = -3.49, p < .001$; husband's $M = .19$, wife's $M = .29$. The husband stonewalled more than the wife did, $t(78) = 5.10, p < .001$; husband's $M = 1.07$, wife's $M = .84$. Based on these preliminary results, a variable was created called "demand-withdraw" during conflict to index this Christensen wife-demand-husband-withdraw pattern. It was the sum of wife minus husband criticism, and husband minus wife stonewalling. This variable will increase as the wife criticizes more than her husband does and also increase as the husband stonewalls more than his wife does.

RESULTS

The analysis proceeded in two steps. The first step constructed a model of divorce prediction, and the second analyzed the particular predictive capability of positive versus negative interaction in the two conversations.

Step One: Constructing a Divorce Prediction Model

The discriminant function analysis is summarized by the canonical correlation, which is the correlation between the best weighting of the prediction variables and the criterion variable; its statistical significance is assessed by the χ^2 statistic (Pedhazur, 1982).

Early-divorcing couples. Two models were constructed to predict early divorcing. The positive-affect model included husband and wife marital satisfaction at Time 1 and total wife and husband SPAFF positive affect on the events of the day and conflict conversations. The canonical correlation was .31, with $\chi^2(6) = 6.84, ns$. Only the univariate F ratio for the wife's marital satisfaction at Time 1 was significant, $F(1, 70) = 4.51, p < .05$. These findings mean that stable and divorcing couples did not differ in positive affect, but they did differ in marital satisfaction Time 1.

The negative-affect model included husband and wife marital satisfaction at Time 1 and total wife and husband RCISS scores on criticism, defensiveness, contempt, and stonewalling on the conflict conversation. The canonical correlation was .52, with $\chi^2(12) = 22.36, p < .05$, with correct classification 83.5%. This means that it was possible to predict who would divorce and who would stay married with high accuracy using

the negative affect variables and marital satisfaction at Time 1.

The univariate F ratios, $df = (1, 77)$, were: husband marital satisfaction, .38, *ns*; wife marital satisfaction, 3.14, $p = .08$; husband positive-minus-negative RCISS codes, 10.27, $p < .001$; wife positive-minus-negative RCISS codes, 12.71, $p < .001$; husband criticism, 1.46, *ns*; husband defensiveness, 16.08, $p < .001$; husband contempt, 4.26, $p < .05$; husband stonewalling, 7.57, $p < .01$; wife criticism, 4.63, $p < .05$; wife defensiveness, 12.69, $p < .001$; wife contempt, 9.32, $p < .01$; and wife stonewalling, 2.00, *ns*.

To summarize, early divorce is accurately predicted by the Time-1 negative affect model but not by the Time-1 positive affect model.

Later divorcing couples. Two models also were constructed to predict later divorcing. Because a later time point was involved in this prediction, the positive affect model included husband and wife marital satisfaction at Time 1 and Time 2, thoughts of divorce and separation, and total wife and husband SPAFF positive affect at Time 1 on the events-of-the-day and conflict conversations. The canonical correlation was .73, with $\chi^2(11) = 33.82$, $p < .001$, with 88.5% correct prediction. This result means that for later divorcing couples the model that included marital satisfaction at Time 1 and positive affect was able to predict with high accuracy who would divorce and who would stay married.

The univariate F ratios, $df = (1, 50)$, were as follows: Husband positive affect, events, .02, *ns*; wife positive affect, events $F = 3.33$, $p = .07$; husband positive affect, conflict $F = 4.90$, $p < .05$; wife positive affect, conflict $F = 9.10$, $p < .01$; husband marital satisfaction at Time 1, $F = 7.09$, $p < .05$; wife marital satisfaction at Time 1 $F = 5.32$, $p < .05$; husband marital satisfaction at Time 2 $F = 13.32$, $p < .001$; wife marital satisfaction at Time 2 $F = 8.32$, $p < .01$; husband considering divorce $F = 11.83$, $p < .01$; husband considering separation $F = 21.03$, $p < .001$; wife considering divorce $F = 12.22$, $p < .001$; wife considering separation $F = 23.59$, $p < .001$.

To summarize, positive affect during conflict, as well as marital satisfaction at both time points, and thoughts of dissolution contribute to the high predictability of later divorcing.

The negative-affect model included the same noninteractive predictors with the interactive predictors of total wife and husband RCISS scores on criticism, defensiveness, contempt, and stone-

walling on the conflict conversation. The canonical correlation was .73, with $\chi^2(18) = 35.08$, $p < .001$, with 86.2% accuracy in prediction. The univariate F ratios showed that the noninteractive variables did all the work in prediction. The negative affect F ratios, $df = (1, 56)$, for the interactive variables were all statistically nonsignificant: husband positive-minus-negative RCISS codes $F = .09$, *ns*; wife positive-minus-negative RCISS codes $F = .13$, *ns*; husband criticism $F = .07$, *ns*; husband defensiveness, $F = .30$, *ns*; husband contempt, $F = .00$, *ns*; husband stonewalling, $F = .17$, *ns*; wife criticism $F = .71$, *ns*; wife defensiveness, $F = 1.15$, *ns*; wife contempt, $F = .37$, *ns*; and wife stonewalling, $F = .00$, *ns*.

Using mixed models that included both interactive and noninteractive variables, in terms of marital interaction at Time 1, early divorcing is predicted significantly by high levels of negative affect, whereas later divorcing is predicted by low levels of positive affect at Time 1.

Step Two: Constructing a Divorce Prediction Model Using Only Interaction Variables

Discriminant function analyses were conducted next, using only the marital interaction at Time 1 variables.

Early-divorcing couples. In predicting early divorce, the positive SPAFF codes for the two conversations resulted in a canonical correlation of .20, with $\chi^2(4) = 2.71$, *ns*; none of the univariate F ratios were significant. Therefore, our best way of describing positive affect did not aid us in predicting early divorcing. For this reason, we turned to the RCISS codes because of their focus on negative affect. We then found that, using the total wife and husband RCISS scores on positive-minus-negative RCISS codes, criticism, defensiveness, contempt, and stonewalling on the conflict conversation, the canonical correlation was .51, with $\chi^2(10) = 21.26$, $p < .05$, with 83.5% accuracy in prediction. This means that the focus on negative affect was warranted in predicting early divorcing.

To assess the contribution of specific negative codes, we used the univariate F ratios, ($df = (1, 77)$). They were as follows: husband positive-minus-negative RCISS codes 10.27, $p < .01$ wife positive-minus-negative RCISS codes 12.71, $p < .001$, husband criticism 1.46, *ns*, husband defensiveness, 16.08, $p < .001$, husband contempt, 4.26, $p < .05$, husband stonewalling, 7.57, $p <$

.01, wife criticism 4.03, $p < .05$, wife defensiveness, 12.69, $p < .001$, wife contempt, 9.32, $p < .01$, and wife stonewalling, 2.00, *ns*. Thus, the negative codes that contributed to this prediction were the husband's defensiveness, contempt, and stonewalling, and the wife's criticism, contempt, and defensiveness.

These findings show that the actual interactive codes are contributing uniquely to the prediction of early divorcing.

Later divorcing couples. The positive SPAFF codes for the two conversations resulted in a canonical correlation of .50, with $\chi^2(4) = 13.99$, $p < .01$, with 75.0% accuracy in prediction. This means that the positive SPAFF codes were able to predict later divorcing on their own.

To determine which specific codes are doing the work in this prediction, we computed the univariate F ratios with $df = (1, 50)$. They were: for wife positive during events of the day, 3.33, $p = .074$, husband positive during events of the day, .03, *ns*, wife positive during conflict, 9.10, $p < .01$, and husband positive during conflict, 4.90, $p < .05$. Using the total wife and husband RCISS scores on positive-minus-negative RCISS codes, criticism, defensiveness, contempt, and stonewalling on the conflict conversation, the canonical correlation was .39, $\chi^2(10) = 8.51$, *ns*; none of the univariate F ratios were significant. This shows that positive affect on both conversations is doing the work of the interactive variables in the prediction.

Using only pure interactive models, interactive (RCISS) negative codes during conflict at Time 1 predicted earlier divorcing, whereas the absence of positive affect at Time 1 during the events of the day and conflict conversations predicted later divorcing.

Time 1 interaction discriminant function analyses. We have examined the differential ability of the Time 1 codes to predict earlier or later divorce. We then considered a more stringent question: whether the two groups could be discriminated from one another using only the interaction data from Time 1 for the two conversations, that is could we predict, from interaction at Time 1 alone not only if a couple would divorce, but also when.

To test hypotheses about the prediction of earlier or later divorce, a series of discriminant function analyses were undertaken to determine if it was possible to discriminate at Time 1 which couples among the divorcing couples would divorce

earlier or later. Because we were restricting ourselves to only the couples who divorced, there was relatively low power for these analyses. The first hypothesis examined was that couples divorcing earlier would be higher in intense negative codes during conflict. Hence, only the negative RCISS codes dubbed the "Four Horsemen of the Apocalypse" by Gottman (1994) were entered into a discriminant function analysis, namely the RCISS codes criticism, defensiveness, contempt, and stonewalling, on the conflict conversation. The canonical correlation was .85, with $\chi^2(8) = 18.03$, $p = .0210$, with a 95% accuracy in discrimination. This meant that we were able to predict not only if a couple would divorce, but also when they would divorce.

To determine which codes are doing the work in this prediction of the timing of divorce, we computed the univariate F ratios. They were as follows: husband criticism, $F(1, 18) = .95$, *ns*; husband defensiveness, $F(1, 18) = 17.50$, $p = .0006$, earlier divorcing couples' $M = .57$, later divorcing couples' $M = .21$; husband contempt, $F(1, 18) = 6.88$, $p = .0172$, earlier divorcing couples' $M = .12$, later divorcing couples' $M = .02$; husband stonewalling, $F(1, 18) = 3.14$, $p = .0934$, earlier divorcing couples' $M = 1.69$, later divorcing couples' $M = 1.05$; wife criticism, $F(1, 18) = 3.05$, $p = .0980$, earlier divorcing couples' $M = .55$, later divorcing couples' $M = .25$; wife defensiveness, $F(1, 18) = 12.16$, $p = .0026$, earlier divorcing couples' $M = .53$, later divorcing couples' $M = .21$; wife contempt, $F(1, 18) = 4.88$, $p = .0404$, earlier divorcing couples' $M = .23$, later divorcing couples' $M = .04$; wife stonewalling, $F(1, 18) = 2.04$, *ns*.

Next, we examined the affective codes. For the SPAFF coding of the two conversations, we built a set of models separately for each spouse's positive affects and each spouse's negative affects for the two conversations. The only significant model was for the husband's negative affects during the events-of-the-day conversation, with canonical correlation .73, $2(4) = 11.36$, $p = .0228$, and percent correct classification 89.5%. The only univariate F ratios that were significant or marginally significant were for husband anger, $F(1, 17) = 5.02$, $p < .05$, earlier divorcing couples' $M = 3.17$, later divorcing couples' $M = .54$; and for husband whining, $F(1, 17) = 3.88$, $p = .065$, earlier divorcing couples' $M = .67$, later divorcing couples' $M = .08$.

The two groups of divorcing couples could be distinguished by the way they resolved conflict

using the negative RCISS codes and by the way they talked about the events of the day on the basis of higher husband anger and whining. This finding supports a contention that the female negative start-up pattern during conflict has an etiology that is predicted by husband negative affect during nonconflict interactions. These results may provide some of the setting condition for the differences between the two groups in the amount of criticism, defensiveness, contempt, and stonewalling displayed during the conflict-resolution discussion.

Wife-Demand-Husband-Withdraw Patterns and Divorce Prediction

The wife-demand-husband-withdraw variable predicted both earlier divorcing ($r = .32, p < .01$) and later divorcing ($r = .27, p < .05$). This variable, in turn, was predicted by the total wife's positive affect during the events-of-the-day conversation ($r = -.23, p < .05$) and by the total husband's positive affect during the events of the day conversation ($r = -.27, p < .01$). It was not related to negative affect during the events-of-the-day conversation.

DISCUSSION

Several things are noteworthy about these results. It is clear that divorce prediction with a high level of accuracy is possible, and that models that contain continued marital dissatisfaction, thoughts about divorce and separation, and the wife-demand-husband-withdraw pattern will predict divorce versus marital stability. This much is consistent with previous research (Booth & White, 1980; Gottman, 1994; Gottman & Levenson, 1992; Kurdek, 1993; Weiss & Cerreto, 1980). The interaction variables were generally about five times more powerful in this prediction than the noninteractive variables.

In this study, we discovered a pattern: although earlier divorcing couples scored higher at Time 1 on positive-minus-negative behaviors of the RCISS, as well as on criticism, defensiveness, contempt, and stonewalling, than nondivorcing couples did, later divorcing couples were different from nondivorcing couples at Time 1 (excluding the earlier divorcing couples) in the absence of positive affect codes (i.e., SPAFF scores), particularly during conflict.

The absence of positive affect and not the presence of negative affect, in both conversations, was

most predictive of later divorcing. This contrasted with the prediction of earlier divorces, in which negative codes such as contempt, criticism, defensiveness, and stonewalling were successful in predicting divorce. Intense marital conflict likely makes it difficult to stay in the marriage for long, but its absence makes marriage somewhat more acceptable. Nonetheless, the absence of positive affect eventually takes its toll. This is similar to Gigy and Kelly's results (1992). We note that a wider variety of positive affects were predictive for the wife (affection, interest, and humor), whereas only husband humor was predictive.

Hence, the two groups of divorcing couples could be distinguished in the way they discussed a conflict issue using the negative RCISS codes and in the way they talked about the events of the day on the basis of higher husband anger and whining.

This finding supports a contention that the typical female negative start-up pattern during conflict has an etiology that is predicted by the husband's negative affect during nonconflict interactions. These results may provide some of the setting condition for the differences between the two groups in the amount of criticism, defensiveness, contempt, and stonewalling displayed during the conflict-resolution discussion.

The oft-cited Christensen wife-demand-husband-withdraw pattern (1990) was predictive of both early and later divorcing. Nonetheless, our results also suggest that there is a nonconflict "etiology" to these patterns. In particular, both the wife-demand-husband-withdraw pattern and the hypothesis that wives start marital conflict discussions (Ball, Cowan, & Cowan, 1995; Oggins, Veroff, & Leber, 1993) and are more critical than are husbands may have an etiology that gives the husband a role in creating or maintaining this pattern. The women who did not begin conflict-resolution discussions as negatively were those who were paired with men who were less angry and whiny during their everyday, less emotional interactions. There was less wife-demand-husband-withdraw during conflict when there was more positive affect by both husbands and wives during the events-of-the-day conversation. These patterns may be less a function of gender differences during conflict than a residual of how well the couple connects affectively when conflict is not the topic of conversation. Perhaps changing the affective nature of the way couples discuss such mundane topics as the events of their day, in which they either make an emotional connection upon reun-

ion or fail to do so, could affect the way they resolve conflict, and possibly the future course of the marriage. This notion could lead to a new component of marital therapy that is worth testing.

It was interesting that divorce prediction was possible by examining affect even during the events-of-the-day conversation. This was the first interaction the couple had following their reunion after 8 hours of separation. Upon first examination, this conversation appears to be a fairly neutral (and, according to most of our coders, even a boring) conversation for almost all couples. We were not surprised that affect during this conversation had predictive power for ascertaining the future stability of the marriage.

In a careful viewing of the videotapes, we noticed that there were critical moments during the events-of-the-day conversation that could be called either "required" or "unrequired" interest and excitement. For example, in one couple, the wife reported excitedly about something their young son had done that day, but she was met with her husband's disinterest. After a time of talking about errands that needed doing, he talked excitedly about something important that happened to him that day at work, but she responded with disinterest and irritation. No doubt this kind of interaction pattern carried over into the rest of their interaction, forming a pattern for "turning away" from one another.

A potential limitation of the present investigation was that the order of conversations was not randomized or counterbalanced. Thus, we cannot say with confidence whether the same results would be obtained for conflict without the events-of-the-day conversation preceding it, or if the behavior observed during the positive conversation was not a function of the two conversations that preceded it. For example, would the same or different effects be obtained in divorce prediction on the events of the day conversation if it had been the only conversation in the study? At this time, we cannot say. We suspect that the order used here is necessary to obtain correlations on the order of those we obtained because we precisely tapped the spillover from one conversation to the next; indeed, that was our intent. Until there is further research, however, we cannot draw conclusions about the nature of the couples' affective behavior conversations independent of their order. Nonetheless, we are encouraged by the divorce-prediction results from each of the conversations.

NOTE

This research was supported by grant MH35997 from the National Institute of Mental Health to the authors and by Research Scientist Award K2MH00257 to the first author.

REFERENCES

- Adelman, P. K., Chadwick, K., & Baerger, D. R. (1996). Marital quality of Black and White adults over the life course. *Journal of Social and Personal Relationships, 13*, 361-384.
- Ball, F. L. J., Cowan, P., & Cowan, C. P. (1995). Who's got the power? Gender differences in partner's perception of influence during marital problem-solving discussions. *Family Process, 34*, 303-321.
- Booth, A., & White, L. (1980). Thinking about divorce. *Journal of Marriage and the Family, 42*, 605-616.
- Cherlin, A. J. (1981). *Marriage, divorce, and remarriage*. Cambridge, MA: Harvard University Press.
- Christensen, A. (1987). Detection of conflict patterns in couples. In K. Hahlweg & M. J. Goldstein (Eds.), *Understanding major mental disorder: The contribution of family interaction research* (pp. 250-265). New York: Family Process Press.
- Christensen, A. (1988). Dysfunctional interaction patterns in couples. In P. Noller & M. A. Fitzpatrick (Eds.), *Perspectives on marital interaction* (pp. 31-52). Avon, England: Multilingual Matters.
- Christensen, A. (1990). Gender and social structure in the demand/withdrawal pattern of marital conflict. *Journal of Personality and Social Psychology, 59*, 73-81.
- Christensen, A., & Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. *Journal of Personality and Social Psychology, 59*, 73-82.
- Christensen, A., & Heavey, C. L. (1993). Gender differences in marital conflict: The demand/withdraw interaction pattern. In S. Oskamp & M. Costanzo (Eds.), *Gender issues in contemporary society* (Vol. 6, pp. 113-141). Newbury Park, CA: Sage.
- Cohen, R. S., & Christensen, A. (1980). A further examination of demand characteristics in marital interaction. *Journal of Consulting and Clinical Psychology, 48*, 121-123.
- Ekman, P., & Friesen, W. V. (1978). *Facial Action Coding System*. Palo Alto, CA: Consulting Psychologist Press.
- Gigy, L., & Kelly, J. B. (1992). Reasons for divorce: Perspectives of divorcing men and women. *Journal of Divorce and Remarriage, 18*, 169-187.
- Gottman, J. M. (1993). The roles of conflict engagement, escalation or avoidance in marital interaction: A longitudinal view of five types of couples. *Journal of Consulting and Clinical Psychology, 61*, 6-15.
- Gottman, J. M. (1994). *What predicts divorce?* Hillsdale, NJ: Erlbaum.
- Gottman, J. M. (Ed.). (1996). *What predicts divorce?: The Measures*. Hillsdale, NJ: Erlbaum.
- Gottman, J. M., Coan, J., Carrere, S., & Swanson, C. (1998). Predicting marital happiness and stability from newlywed interactions. *Journal of Marriage and the Family, 60*, 5-22.
- Gottman, J. M., & Levenson, R. W. (1992). Marital pro-

- cesses predictive of later dissolution: Behavior, physiology, and health. *Journal of Personality and Social Psychology*, 63, 221-233.
- Heavey, C. L., Christensen, A., & Malamuth, N. M. (1995). The longitudinal impact of demand and withdrawal during marital conflict. *Journal of Consulting and Clinical Psychology*, 63, 797-801.
- Kurdek, L. A. (1993). Predicting marital dissolution: A 5-year prospective longitudinal study of newlywed couples. *Journal of Personality and Social Psychology*, 64, 221-242.
- Oggins, J., Veroff, J., & Leber, D. (1993). Perceptions of marital interaction among Black and White newlyweds. *Journal of Personality and Social Psychology*, 65, 494-511.
- Orbuch, T. L., House, J. S., Mero, R. P., & Webster, P. S. (1996). Marital quality over the life course. *Social Psychology Quarterly*, 59, 162-171.
- Pedhazur, E. J. (1982). *Multiple regression in behavioral research* (2nd ed.). New York: Holt, Rinehart, & Winston.
- Steinberg, L., & Silverberg, S. B. (1987). Influences on marital satisfaction during the middle stage of the family life cycle. *Journal of Marriage and the Family*, 49, 751-760.
- Weiss, R. L., & Cerreto, M. C. (1980). Development of a measure of dissolution potential. *American Journal of Family Therapy*, 8, 80-85.
- White, L. K., & Booth, A. (1991). Divorce over the life course. *Journal of Family Issues*, 12, 5-21.

