A Two-Factor Model for Predicting When a Couple Will Divorce: Exploratory Analyses Using 14-Year Longitudinal Data*

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This article examines 14-year longitudinal data and attempts to create a post hoc model that uses Time-1 data to "predict" the length of time the marriage will last. The sample consists of the 21 couples (of 79 studied) who divorced over a 14-year period. A two-factor model is proposed. One factor is the amount of unregulated volatile positive and negative affect in the marriage, and this factor predicts a short marriage length for the divorcing couples. A second factor is called "neutral affective style," and this factor predicts a long marriage length for the divorcing couples. This model is compared to a Time-1 model of ailing marriage in which Time-1 marital satisfaction is used to predict the timing of divorce.

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THE theme of this article is the timing of divorce; it uses 14-year longitudinal data in an exploratory fashion to investigate a post hoc idea that there are two patterns of affect regulation in couples headed for divorce: an emotionally inexpressive pattern that is low in both negative and positive affect, and an emotionally volatile attack-defend pattern. The idea is that the *emotionally inexpressive pattern* will predict later divorcing while the *emotionally volatile attack-defend pattern* will predict earlier divorcing.

There is some evidence to suggest that there are two high-risk critical periods for divorce in the life course. The first critical period for divorcing is the first 7 years of marriage. It is well known that half of all the divorces are known to occur in the first seven years (Cherlin, 1982). The first 7 years of marriage are also often characterized as a volatile and highly emotional period of marriage. The second critical period for divorce is midlife, often when most people have young teenage children. This latter time has been suggested by some investigators as perhaps the lowest point in marital satisfaction in the life course (see Adelman, Chadwick, & Baerger, 1996; Orbuch, House, Mero, & Webster, 1996; Steinberg & Silverberg, 1987; White & Booth, 1991).

In this article, we examine whether a two-factor model can be developed to explain whether a marriage will end in the first or the second critical period. The dependent variable in this exploration is the length of time a "divorcing" marriage will last before the divorce. To explore whether such a two-factor model can be developed, we employ data from a longitudinal sample of married couples. We have been following a cohort of 70 couples for a 14-year period, periodically assessing marital stability. The study began in 1983, during which time couples were videotaped in our laboratory. The couples in this study have been contacted periodically for the past 14 years, and 26.6% of the sample has divorced as of 1996. The original sample of 79 couples included in the study were selected to represent evenly all the ranges of marital satisfaction; that is, the tails were over-sampled so that there was uniform power throughout the range of marital satisfaction.

Our analyses are admittedly post hoc. When we examined our data for the correlates of the length of time until a couple divorces, we noticed that some variables seemed to predict a short marital length until divorce while others seemed to predict a long marital length until divorce. The two sets of variables seemed to cluster into two constructs: one that might describe a high level of expressiveness, and the other that describes the absence of affect. The construct describing a high level of expressiveness was related to a short marital length until the divorce, while the construct describing an affective inexpressiveness was related to a long marital length until the divorce.

An alternative explanation for the timing of divorce was also developed for this article. A construct that may be useful in predicting when couples eventually divorce could be called "ailing marriage," by which we mean a couple initially low in marital satisfaction. Marital unhappiness has been a significant but weak predictor of divorce (see Gottman, 1994). The ailing marriage construct might be adequate for predicting the earlier timing of divorce: for couples who are higher on the ailing construct, while couples who are ailing less divorce later.

This article represents a revision and extension of our previous work on divorce prediction. In that work (Gottman & Levenson, 1992), we identified a pattern of greater negativity than positivity during a conflict discussion, a pattern called "the four horsemen of the apocalypse" (criticism, defensiveness, contempt, and stonewalling) that predicted divorce. We also identified a pattern of recasting the oral history of the marriage in negative terms (Buehlman, Gottman, & Katz, 1992) that predicted divorce. In our research on newlyweds, a pattern of reduced positive affect during conflict predicted both divorce and marital unhappiness of stable couples; in that study only stable *happy* couples used positive affect in the service of de-escalation of the conflict. In the present study, we explore data from a 14-year followup, which suggests that a different pattern of Time-1 marital interaction predicts earlier versus later divorcing.

Post Hoc Hypotheses: Derived from post-hoc analyses of the data, we explore the idea that there will be two factors emerging from the data, one factor tapping a volatile affective style, which will be related to early divorcing, and another factor tapping a more neutral affective style, which will be related to later divorcing.

METHODS

Participants

Couples were originally recruited in 1983 in Bloomington, Indiana, using newspaper advertisements. The 197 couples who responded to these advertise-

ments completed a demographic questionnaire and two measures of marital satisfaction, for which they were paid $5.00. 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 insure that we came close to obtaining a rectangular distribution of marital satisfaction in which all parts of the distribution would be equally represented. The tails of the distribution were over-sampled so that power could be uniform across the entire range of marital satisfaction. The marital satisfaction continuum was standardized in the 1950s to resemble the intelligence test (for a review of this period of research see, for example, Burgess, Locke, & Thomes, 1971), with a mean of 100 and a standard deviation of 15. Using the couple's average marital satisfaction, about 14 couples were selected from the six categories: below 70, 70–84, 85–99, 100–114, 115–129, 130 and above. Complete sets of usable physiological data were obtained from 79 of these 85 couples. These 79 couples could be described as follows. They were a fairly young: at Time-1, husbands were 32 years old (SD = 9.5 years); wives were 29 years old (SD = 6.8 years). At Time-1 they were 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); and for wives the average marital satisfaction was 98.56 (SD = 20.70).

Procedures

The following procedures focus primarily on the initial time point of measurement of this sample, called "Time-1" here. The second time point of measurement occurred four years later (1987), and is referred to as "Time-2." Thereafter, the sample was contacted yearly, using questionnaires for the remaining ten years of the study.

Time-1 Data

Oral History Interview: The oral history interview asks the couple about their dating and marital history, their philosophy of marriage, and how their marriage has changed over time. It is a semi-structured interview, conducted in the couple's home, in which the interviewer asks a set of open-ended questions about the history of the couple's relationship: how they met, how they courted and decided to get married, about the good times and the bad times in their marriage, how their marriage is similar or different from their parents' marriages, their philosophy of what makes a marriage work, their views of marital conflict, and how their marriage has changed over the years.

Interaction session: Couples arrived in the laboratory after having been apart for at least 8 hours. They had three 15-minute conversations: (1) events of the day; (2) conflict resolution (discussion of a problem area of continuing disagreement), and (3) a pleasant topic conversation. The conversations were always in the order shown above because we wanted couples to have the events of the day conversation first since we wanted to sample this kind of everyday, nonconflict interaction, and we wanted to begin our laboratory session with a reunion conversation that would seem natural and help make subjects comfortable with the laboratory situation. It was also the most natural way to start the couples' conversation after they had been apart for 8 hours. In pilot work, in which we began with the conflict conversation, we had found that there was an undesirable spillover of negative affect into the events-of-the-day discussion. We followed this "events" conversation with the couples' conflict discussion. After filling out a problem inventory, the spouses were interviewed about the

area of greatest continuing disagreement in their marriage, and then asked to discuss this area and try to resolve the issue in the next 15 minutes. This procedure in past research resulted in inducing conflict, and usually considerable amounts of real affect in all couples that they felt needed resolution. Each conversation was preceded by a 5-minute pre-conversation period in which couples were asked to be silent and not interact. This period was designed for obtaining baseline physiological measures (not discussed in this report). Details of the procedures for setting up these conversations are available upon request. The positive conversation was considered useful to assess rebound from conflict, and also for human subjects reasons. It was used 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 article.

Physiological: Five physiological measures were obtained from each partner using a system consisting of a Lafayette Instruments polygraph and a DEC LSI 11/73 microcomputer: (a) Cardiac interbeat interval (IBI)—Beckman miniature electrodes with Redux paste were placed in a bipolar configuration on opposite sides of the subject's chest and the interval between successive R-waves of the electrocardiogram was measured in msec; (b) Skin conductance level—a constant voltage device passed a small voltage between Beckman regular electrodes attached to the palmar surface of the middle phalanges of the first and third fingers of the nondominant hand, using sodium chloride in Unibase as the electrolyte; (c) General somatic activity—an electromechanical transducer attached to a platform under the subject's chair generated an electrical signal proportional to the amount of body movement in any direction; (d) Pulse transmission time to the finger—a UFI photoplethysmograph was attached to the second finger of the nondominant hand. The time interval was measured between the R-wave of the EKG and the upstroke of the peripheral pulse at the finger; and (e) Finger pulse amplitude—the trough-to-peak amplitude of the finger pulse was measured, providing an index of the amount of blood in the periphery. This set of physiological measures was selected to sample broadly from major organ systems (cardiac, vascular, electrodermal, somatic muscle); to allow for continuous measurement; to be as unobtrusive as possible; and to include measures used in our previous studies of relationships (see Levenson & Gottman, 1983) and emotion (Levenson, Ekman, Heider, & Friesen, 1992). The computer was programmed to derive second-by-second averages for each physiological measure for each partner.

Video: Two remote-controlled high resolution video cameras, which were partially concealed behind darkened glass, were used to obtain frontal views of each partner's face and upper torso. These images were combined into a single split-screen image using a video special effects generator and were recorded on a VHS videocassette. Two lavaliere microphones were used to record the partners' conversations. The computer enabled synchronization between video and physiological data by controlling the operation of a device that superimposed the elapsed time on the video recording and a second device that recorded a synchronization tone on one of the audio channels of the videotape recording. This tone was also used to synchronize the data obtained in the recall session with the data obtained in the interaction session.

Followups

Four years after the initial assessment, the original subjects were re-contacted

and at least one spouse (70 husbands, 72 wives) from 73 of the original 79 couples (92.4%) agreed to participate in the followup. Spouses completed a set of questionnaires assessing the following: marital satisfaction (Locke-Wallace and Locke-Williamson), and they each were asked if they had divorced or not, and if not, if they had seriously considered separation and divorce in the intervening 4 years since Time-1 and Time-2; or if they had separated, and, if so, for how long (in months). Couples were re-contacted yearly after Time-2 to determine their marital status. The last follow up was in 1996–97, 14 years after the first contact. Of the original set of 79 couples, 21 (26.6%) had divorced after 14 years.

Coding and Data Analysis

Coding Facial Expressions: The Ekman and Friesen Emotion Facial Expression Coding System (EMFACS), an abbreviated form of the Facial Action Coding System (Ekman & Friesen, 1978) was used to code facial expressions of couples during the conflict discussion. Reliability was computed by having an independent observer code 25% of the videotapes with EMFACS, and computing one interobserver confusion matrix for all codes (see Bakeman & Gottman, 1986). These data were summarized using a computer program designed by Levenson in cooperation with Paul Ekman and Wallace Friesen. The Cohen's kappa for all EMFACS codes over all videotapes was .77. For this study, we computed the total number of facial action units for both partners during the 15-minute conflict discussion, as a measure of facial expressiveness. A facial action unit refers to a muscle group that produces a visible change in the face.

Oral History Narratives Coding: The oral history interview was coded on the following four dimensions: (1) *Fondness/ Admiration* (husband and wife) is a dimension that rates couples according to how much they seem to be in-love or fond of each other. This includes any compliments, positive affect, and reminiscing about romantic, special times; (2) *Negativity Toward Spouse* (husband and wife) assesses the extent to which spouses are vague or general about what attracted them to their spouse, the extent to which they express disagreement during the interview, the display of negative affect toward one another during the interview, and the extent to which they are critical of their spouse during the interview; (3) *Disappointment in the Marriage* assesses statements of regret and dashed expectations and hopes; and (4) *Cognitive Room* is a measure of the extent to which people spontaneously recall details about salient periods in their marriage. We have found that it is strongly related to the amount of knowledge persons have about their partner's psychological world, and the extent to which they periodically update this knowledge. Overall reliability for the oral history Coding System was maintained at 75% agreement between coders. Intercorrelations for individual dimensions ranged between .77 and .89. For this report, the sum of negativity and disappointment minus fondness and admiration and cognitive room were computed as an index of overall negativity during the Oral History Interview.

SPAFF Coding of the Conflict and Events-of-the-Day Conversations: The same videotapes of the interaction were now coded using the Specific Affect Coding System (SPAFF; Gottman, 1996), which focused on specific emotions. The couple's events of the day conversation was coded as well as the conflict resolution discussion. Coders were first trained using the Ekman & Friesen (1978) Facial Action Scoring System, with a set of our own audiotapes for recognizing affect in the voice, and a set of videotapes for detecting specific features in affect using

paralinguistic, contextual, linguistic, and kinesic channels. However, the training went beyond specific features and observers were also trained to use a Gestalt approach to recognizing specific emotions in all channels combined. The initial training of coders took over 200 hours. Coders classified each speech act (usually a phrase) within a turn at speech as affectively neutral, as one of five negative affects (anger, contempt/disgust, sadness, fear, and whining), or as one of four positive affects (affection/caring, humor, interest/curiosity, and joy/enthusiasm). (Coding manuals, training and test video and audiotapes are available from the first author.) The number of onsets of each code (the number of episodes) for each code, collapsing across speech acts within a turn at speech—for example, two consecutive speech acts by a husband that received the same code would be collapsed into one. The Kappa coefficient of reliability, controlling for chance agreements, was equal to 0.75 for the entire SPAFF coding.

Variable Selection

We selected as the *ailing marriage* dimension the husband and the wife marital quality at Time-1 (average of Locke-Wallace and Locke-Williamson inventories). These two variables defined the extent to which a couple might be termed as having an "ailing" marriage.

During the discussion of both the events of the day and the conflict issue, we selected the following variables: (1) Neutral, the sum of the amount of neutral affect in both conversations for both spouses; (2) Humor, as assessed by the SPAFF, the sum of the amount of husband and wife humor during the events of the day and conflict discussions; (3) Anger, as assessed by the SPAFF, the amount of husband and wife anger during the events of the day and the conflict discussions; (4) Express, the total number of EMFACS (husband and wife facial action units) during the conflict discussion; (5) Wife Negativity, the following Buehlman Oral History coding composite variable; the sum of wife disappointment, plus wife displaying negative affect during the interview, minus wife complimenting her husband during the interview, and vividly describing memories of their past together; and (6) SCL, the sum of the husband and wife mean skin conductance levels during the baseline plus the conflict discussion (which were inversely related to the amount of affect expressed in the discussion). Skin conductance is used by polygraphers as an index of the intentional suppression of affect (Dawson, Schell, & Filion, 1990); however, skin conductance is a nonspecific response system, and many events other than suppression can create skin conductance reactions.

TABLE 1
Factor Loadings of Variables (after Varimax Rotation)

Variable	Factor 1	Factor 2	Factor 3
SCL	−.22	.78	.25
Neutral	.20	.80	−.29
Oral	.05	.02	.54
Express	.86	−.18	.22
Anger	−.09	−.05	.83
Humor	.87	.16	−.23

These six variables were subjected to a principal components factor analysis with varimax rotation criterion, and this analysis resulted in three factors that accounted for 69.3% of the total variance (see Table 1). The first factor had Express and Humor loading with .86 and .87, respectively, and all other loadings less than .20; the second factor had Neutral and SCL loading with .80 and .78, respectively, and all other loadings less than .20; the third factor had Oral and Anger loading with .54 and .83, respectively, and all other loadings less than .25. Based on

TABLE 2

Intercorrelations among Predictor Variables for All Couples (N = 62)

Variable	SCL	Neutral	Oral	Express	Anger	Humor
SCL	1.00					
Neutral	.27	1.00				
Oral	−.05	.00	1.00			
Express	−.15	−.09	.03	1.00		
Anger	.12	−.23	.12	.05	1.00	
Humor	−.12	.31	−.11	.54	−.21	1.00

this analysis, the variables in the first factor were added and this factor was labeled Expressiveness. The variables in the second factor were considered a cluster and this factor was labeled Neutral Affect. The variables in the third factor were considered a cluster and this factor was labeled Negativity. The variables that index high levels of neutral affect are unusual during the discussion of the major conflict area in the marriage and are a reasonable index of an affectively inexpressive style.[1] More questionable is the suggestion that this style is related to the suppression of affect, but that is one possible interpretation of these variables. This interpretation is supported, in part, by the polygrapher's use of skin conductance as an index of suppression of affect (usually lying); however, skin conductance is response to a wide variety of stimuli, and, in the context of conflictual marital interaction, may also index physiological arousal. The intercorrelations of these six variables is provided in Table 2.

RESULTS

The bimodal distribution of the time until divorce variable is displayed as Figure 1. Hence, over half the divorces occurred in the first 10 years after marriage. Based on peaks again in years 15 and 16 after the wedding, the distribution appears to be bimodal. It thus might make sense to search for a two-factor model, where one factor predicts earlier divorcing and one predicts later divorcing.

Multiple Regression Analyses

A series of multiple regressions were performed on the data, with marriage length of the divorcing couples as the dependent variable.

Rationale for the regression analyses: The three factors that emerged from the principal components analysis will be stepped into a regression, with the length of marriage until the divorce as the dependent variable. First a large model will be used and then this model will be pared

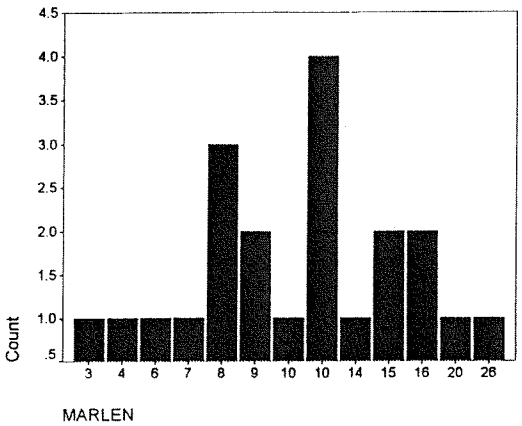

FIG. 1. Distribution of the length of marriage until divorce for the 21 divorces in the study.

[1] The possible exception to this latter classification of the negative affects is some of our experience with the fear/tension code, which may not always be a negative affect during marital interaction, nor actually indicative of fear. It could, at times, indicate an alert responsiveness toward one another, or a discomfort with being observed.

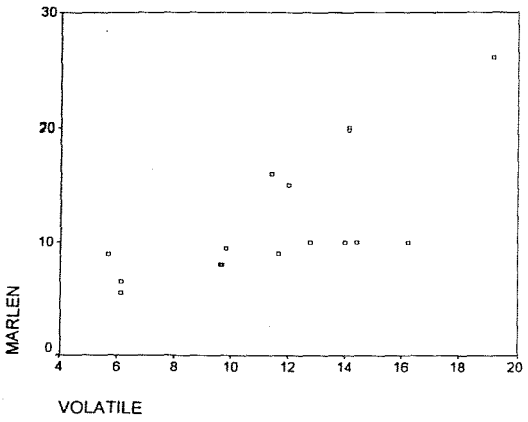

FIG. 2. Scatter Plot of the two variables indexing volatility with marriage length until divorce.

down to arrive at a simplified model, which will be tested against a more simplified "ailing marriage" model derived from Time-1 marital satisfaction of both spouses.

Results of the regression analyses: For the first analysis, the three factors (six variables) were entered in the following arbitrary order: (1) Anger and Oral; then (2) Express and Humor; then (3) Neutral and SCL. At the first step, the multiple R was .70, with $F(2, 12) = 5.70, p = .018$. At the second step, the $F(4, 10)$ for change was .52, not significant. At the third step, the $F(6, 8)$ for change was 2.72, not significant. We thus considered dropping the middle set of variables: Express and Humor.

By themselves, Anger and Oral result in a multiple correlation of .70, with $F(2, 12) = 5.70, p = .018$, while Neutral and SCL result in a multiple correlation of .69, with $F(2, 16) = 7.32, p = .006$. Scatter plots (Figures 2 & 3) show that prediction is comparable for each factor.

We now investigate the *combined* effects of the two sets of variables together, namely, Anger and Oral, and Neutral and SCL. To reiterate, because the second F-for change was not significant, in the second multiple regression analysis we dropped the second step, and Express and Humor were no longer entered into the analysis. For this analysis only the remaining four variables were entered, and they were entered in two orders. First, the following order was used: (1) Anger and Oral; then (2) Neutral and SCL. Next the reverse order was used: (1) Neutral and SCL; then (2) Anger and Oral. For the first order, after the first step, the multiple R was .70, and $F(2, 12)$ for change was $5.70, p = .018$, and after the second step, the multiple R was .85, and $F(4, 10)$ for change was $4.10, p = .050$. For the second regression, using the reversed order, after the first step, the multiple R was .79, and $F(2, 12)$ for change was $9.77, p = .003$, and after the second step, the multiple R was .85, and $F(4, 10)$ for change was 1.75, nonsignificant.

Alternative model: The alternative "ailing marriage" model regression resulted in a multiple regression R of .35, $F(2, 18) = 1.26$, nonsignificant. This means that just knowledge that the marriage is unhappy at Time-1 adds no ability to predict either early or later divorcing.

Summary: Table 3 summarizes the regression analyses. In our view, theoretically, the most interesting model to emerge from these analyses is the two-

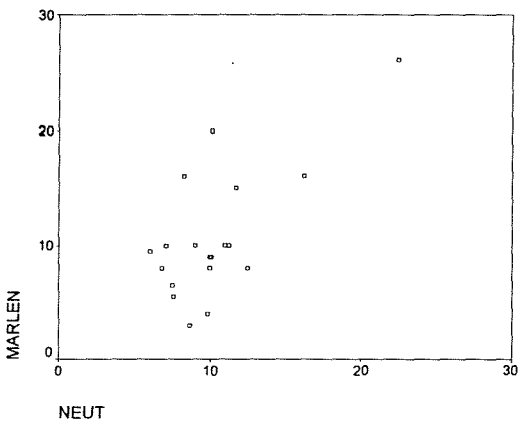

FIG. 3. Scatter Plot of the two variables indexing neutral affect with marriage length until divorce.

TABLE 3
Summary of Regression Analyses

Variables	Mutiple-*R*	*F*-for-change	DF	Beta Weight
First Regression				
Step 1				
Anger				−.15
Oral	.70	5.70*	2, 12	−.66
Step 2				
Express				−.23
Humor	.73	.52	4, 10	−.07
Step 3				
Neutral				−1.92
SCL	.85	2.72	6, 8	2.26
Second Regression				
Step 1				
Anger				−.15
Oral	.70	5.70*	2, 12	−.66
Step 2				
Neutral				−1.84
SCL	.85	4.10*	4, 10	2.12
Third Regression				
Step 1				
Neutral				−2.57
SCL	.79	9.77**	2, 12	2.90
Step 2				
Anger				−.03
Oral	.85	1.75	4, 10	−.37
Alternative model				
Wife Marital Sat				.43
Husb Marital Sat	.35	1.26	2, 18	−.24

*$p < .05$; **$p < .01$.

factor model in which both factors are significantly related to marriage length, with Anger and Oral (entered first) related to a short marriage length, and Neutral and SCL (entered second) related to a longer marriage length. The simple Pearson correlations with marriage length support this interpretation that the two factors operate in very different ways; they were, with marriage length: Anger = −.32, Oral = −.68, Neutral = .25, and SCL = .40.

DISCUSSION

Several things are interesting about these results. The data support the post hoc hypothesis that there may be at least two factors operating to determine *when* a couple will divorce. It is clear that a model that contains information only about Time-1 marital satisfaction is inadequate to predict divorce versus marital stability. In this study we explored two patterns: couples who divorce earlier were initially expressive and had both high levels of anger and wife negativity, while later divorcing couples were higher at Time-1 on our indices of the neutral affect and high on skin conductance levels.

Neutral affect usually is somewhat of a "positive" event in marital conflict conversations, in the sense that it tends to correlate with good things such as marital satisfaction. So it must be the very *high* levels of neutral affect during a conflict discussion that are somehow dysfunctional. How might this be the case? We suggest that it is the very absence of

much affect in both conversations that was most predictive of later divorcing. We suggest that these high levels of neutral affect are indexing a devitalized, essentially affectless marriage. That is, the data may be suggesting two dysfunctional adaptations to marital issues, one that is dysregulated by escalating negativity, and the other that is dysregulated by having no affect. The dysregulated negativity is clearly unpleasant, but there is still a fire.

The relationship of elevated skin conductance and high levels of neutral affect are interesting, as is the predictive power of the skin conductance variables. This predictive power was somewhat of a surprise. While skin conductance levels are certainly used by polygraphers as an index of suppression, skin conductance is responsive to a variety of psychological stimuli, including suppression of affect. Nonetheless, in this study, its correlation with high levels of neutral affect suggests that its classic use may apply.

It is likely that intense marital conflict makes it difficult to stay in the marriage for very long, and that its absence makes it somewhat easier to stay; but perhaps the absence of any affect eventually takes its toll. This is reminiscent of the Gigy & Kelly (1992) results in the California Divorce Mediation project. They found that the most common reason given for divorcing was an increasing distance and isolation between partners, a decay of the marital friendship. The second time-until-divorce distribution occurs around midlife in this sample. Our results are also consistent with those of Steinberg and Silverberg (1987), who suggested that one of the key ingredients in marital dissatisfaction during the midlife period is alienation because of long-standing unexpressed marital disillusionment and disappointment in the marriage, which is exacerbated by a midlife crisis, and then expressed via a coalition triangle with an unhappily married (and long-silent) parent and a rebellious adolescent.

Clinical Speculations

One must be cautious when moving from correlational data, particularly those based upon post hoc analyses, to suggestions about intervention. Hence, the following comments should be taken in the spirit of speculation. The extent to which we can draw implications from this work to clinical intervention will be justified only by forthcoming clinical trials. With that caveat, let us consider what the implications of this work might be for clinical work with couples.

It might be interesting to compare two couples' Time-1 interaction: the first couple divorced after 8 years of marriage and the second couple divorced after 26 years of marriage. The first couple's interaction (couple 114, divorced after 8 years) is characterized by anger, criticism, defensiveness, and contempt (sarcasm):

H: I realize that at times we don't have the money to get these things, but at other times we do. We throw away a lot of money.

W: I know we throw a lot away, a lot of money.

H: You won't even . . . that time we had the fifty dollars you compromised with me there, but now you won't even compromise and work out some sort of budget plan where I can gradually save the money up. There was that rifle last week. $63.00. You're never gonna get that rifle again for $63.00. By next year it will be over a hundred dollar rifle.

W: By next year hopefully we'll have a job, an income.

H: Yeah, but what's the difference, what's the difference, pay more then.

W: Honey. And you know what I've always said. Look how many times your Mom and Dad have helped us out. And then you go flaunting a rifle

around, that would really look like you were really responsible.

H: They have not helped us out.

W: Yeah, but they have in the past.

H: In the past they have, but they haven't helped us out for a long time.

W: And what would've known if we had used that $60 that they wouldn't have had to help us out.

H: They wouldn't of. We'd of just struggled by a little bit.

W: I know and I'm tired of struggling by.

H: I'm not. I am, but . . .

W: Yes you are.

H: Well why can't we work something out where I can at least save a little money from each payday like we did the other time.

W: Because what happens is that we get short of funds and we have to use that money.

H: Not if we budget it better.

W: And how do you suggest on us budgeting it?

H: Well just budget $10 or so . . .

W: Stop going out to eat?

Contrast this attack-defend interaction with the Time-1 interaction of couple 107, who eventually divorced after 26 years. With neutral affect, the wife raises an issue that she finds his parents cold and thinks that her father doesn't respect her, but the issue is quickly dropped:

W: Yeah, I'm sure you're right . . . um . . . but I guess it just again . . . while my parents might seem aggravating because of the holding on that they do sometimes, your parents seem a little cold to me.

H: Hmmm.

W: I guess just the opposite because that's the way I've been brought up.

H: Yeah.

W: I guess I still feel sometimes that your Dad doesn't like me. Maybe he's holding back . . . maybe he's holding back . . . maybe I'm interpreting it that he doesn't like me because, you know, with Becky he's always talking about the *Science,* the magazine *Science,* because they have the mutual interest.

H: Oh, he is?

W: Yeah.

H: Oh, I didn't realize that.

W: Well, he doesn't talk about it to me, but I see it with Becky, you know. They're sharing magazines . . .

H: That's what I meant I didn't know that they talked that much about it.

W: Yeah . . . and I feel like there's sometimes he thinks what I say is stupid.

H: Ah . . . I don't think you should feel that way.

W: But I *do.*

H: I know, but . . .

W: I feel better than I did.

H: Good.

They then drop this issue and the wife begins talking about how much she admires his mother's housekeeping.

W: And I guess it's something I'll come over—get over—come over . . . but . . . I guess sometimes I'm jealous because you know, your Mom has a newer house . . . your parents' house is *really neat.*

H: Ummm.

W: And it's never dirty, or if it's dirty it's nowhere up to the standards of my parents' interpretation of dirty, and I guess it's not that I think that's bad . . . I envy it . . . I wish my parents could be that way, but Mother just . . . Dad was talking about it last night, Mother just doesn't do anything. He says her attitude is good.

H: Um hum.

W: But he can't get her to do anything. I

guess I wish I had a Mother like yours, you know.

This is a conflict-avoiding style that appears consistent with a suppression of negative affect.

The two types of ailing couples described in this article may represent the two most common presenting problems in marital therapy, couples that Wile (1993) has described as either an "attack-defend mode" or "avoidant mode." The attack-defend couple is engaged in dysregulated escalating quarrels that includes criticism, contempt, defensiveness, and stonewalling (the "Four Horsemen of the Apocalypse," Gottman, 1994; Gottman & Levenson, 1992), and in what Christensen (1987, 1988, 1990) and his associates (e.g., Christensen & Heavey, 1990) have called the demand-withdraw pattern. These data suggest that the second type of dysregulated couples, the avoidant couples, perhaps do not merely avoid conflict, but, as Wile has suggested, they avoid self-disclosure or any affective expression; they stay hidden, distant, and emotionally disengaged.

The present data could suggest different treatment interventions for the two types of dysfunctional affect regulation styles. For the couple characterized by *negativity and volatility,* the issue may be replacing what could be called "the culture of criticism" with a "culture of appreciation," and helping the couple to balance negative and positive affect and to be able to self-soothe and regulate the intensity of their affective life together. The Fondness and Admiration system tapped by the Oral History Interview would seem to be crucial here as a balance against negativity and disappointment.

For the couple characterized by the affectless marriage, the therapist may be best served by encouraging the expression of all the affects around the conflicts that separate them, as recommended by emotionally focused marital therapy (Greenberg & Johnson, 1988), and building the marital friendship would seem to be critical to ending the distance and isolation these people may be experiencing (Gottman, 1999). Paramount here would be an investigation of meaning and shared meaning systems, what Doherty (1997) has called the "intentional" family. This would suggest bringing logotherapy (Frankl, 1984) into the marital arena, and investigating the symbolic nature of the couple's conflicts and the ties that fail to bind them. The therapist helps them to have their midlife crisis together. Central to this couple's dilemma is their emotional disengagement from one another, and the therapist needs to build emotional connection. The expansiveness dimension of the Oral History interview, which taps the couple's knowledge of one another's psychological world, would seem important to establishing emotional connection.

Limitations and Future Research

The limitations of the present study are that this was a relatively small sample of couples in the first place, and that the analyses were post hoc and thus the conclusions must be taken as exploratory and hypothesis-generating. Replication is essential. Nonetheless, the data do generally fit with other research and with clinical experience, and these hypotheses may therefore be of some use for both basic and clinical research.

We encourage other laboratories to engage in longitudinal research across the life course and to employ a multimethod perspective in this work. There are severe limitations in our own work. They have been based on necessarily small representative samples because of the expense of multimethod research and budgetary limitations. The major limitation this has created is that we have too few representatives of minority subcultures to analyze

for cultural differences. Replication is essential in this work, and so far we have conducted seven longitudinal studies that have generally replicated our prediction results.

Another limitation is in our observational coding of affect. To obtain reasonable measures of interobserver reliability, observers are often forced to set a high detection level, which means that more of the subtle affects are coded "neutral" in the interests of reliability. This is particularly true of low intensity affect, controlled affect, or briefly occurring affect. Thus, it may well be the case that a more detailed and sophisticated coding of our "high neutral" couple would observe brief moments of sadness and anger, or other negative affects. This was the case for one couple coded high in neutral affect whom we examined more carefully for this discussion. The content of their interaction is clearly indicative of an emotionally disengaged, or what Cuber and Harroff (1965) called a "devitalized" marriage. An excerpt of their transcript follows, all of which was coded neutral, but now with our annotations about the more subtle affects included (excerpt from Gottman, 1996, p. 156).

H: Communication. (mild sadness) (long pause) The question is . . . (tension)

W: How we disagree.

H: On communication?

W: You don't see the need for it. (whine)

H: Oh yeah.

W: You just said you kept to yourself. (defensive)

H: Well, yeah I just, semi, I dunno. Idle chit chat, I guess. (tension)

W: You what? (constrained anger)

H: Some of the idle chit chat I guess if that is what you refer to as communication. (neutral)

W: What do you mean idle chit chat? (anger)

H: General run of the mill bullshit (his laughter is not reciprocated)

W: There's non-verbal communication if you are tuned in.

H: (nods head)

* * *

W: But you never ask me what's wrong. (sadness)

H: Maybe I know. (defensive)

W: No I don't think you do. (sadness)

H: Maybe I just enjoy the quietness of it. (defensive) I don't know. (tension)

W: Well seriously I think that as long as we've been married that you don't, you don't know very much about me at all. (sadness)

H: No I think it's true about both of us maybe. (sadness)

This excerpt shows that a more subtle coding of affect might better describe the characteristics (of what we are here calling "highly neutral") as emotional disengagement in which there is constrained sadness and anger accompanying the emotional distance and emptiness between partners. Subsequent research on these couples would do well to pay more attention to these subtle affects than we have.

One of the problems in building theory from correlational data is that we can not test causal models. To test these models we require an interplay between basic research and clinical research. Subsequent efforts need to address this problem and to integrate clinical work with basic work.

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