# Daily Marital Interactions and Positive Affect During Marital Conflict Among Newlywed Couples

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The mundane and often fleeting moments that a couple experiences in their everyday lives may contribute to the health or deterioration of a relationship by serving as a foundation to major couple events such as conflict discussions and caring days. This study examines the role of playfulness and enthusiasm in everyday life to the use of humor and affection during conflict. Using observational methods, we studied 49 newlywed couples in a 10-minute dinnertime interaction and in a 15-minute conflict discussion. The conflict discussion was coded using the Specific Affect Coding System (SPAFF; Gottman, Coan, & McCoy, 1996), and a new observational system was developed to capture dinnertime interactions in a seminatural setting. We analyzed the data using path analysis and found a stronger path model when the direction of correlation moved from daily moments to the conflict discussion. These findings provide preliminary support for the importance of daily moments in couple relationships, but this research was strictly observational and therefore correlational, so further research is necessary to determine direction of causation.

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Cynthia and David were arguing about finances again. Cynthia had painstakingly saved for months to create a buffer for future emergencies. David wanted to use the money to take the family on a much-needed vacation. This discrepancy between saving and spending had become a common theme, so the conflict quickly became heated and territorial. Suddenly, Cynthia looked down and said, "What happened to your socks?" Startled, David looked down at his blackened socks and commented, "I had to chase a raccoon out of our garden and I didn't have time to put on my shoes." They both laughed.

This couple's fleeting moment of shared laughter and positive emotion was seemingly unimportant compared with the more important task of resolving their conflict. Yet, in our research, this laughter turned out to be one of the most important

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moments in the couple's discussion. We found that the ability to use positive affect (such as humor or affection) during conflict is essential in predicting the future health of the relationship. In a paper on the predictors of marital stability among newly married couples, Gottman, Coan, Swanson, and Carrere (1998) reported that positive affect during marital conflict was the only predictor of both marital stability and marital satisfaction 6 years after the wedding. In another longitudinal study of middle-aged and senior couples in first marriages, humor and affection was a characteristic of happily married, stable, older couples (Carstensen, Gottman, & Levenson, 1995).

Process research on positive affect in physician-patient interaction also suggests that positive emotions can enhance problem-solving skills (e.g., Carnevale & Isen, 1986; Estrada, Isen, & Young, 1994; Isen & Means, 1983). For example, Estrada, Isen, and Young (1997) found that physicians assigned to a positive affect group were better able to organize and integrate information in solving a difficult liver diagnosis. They were also more open and flexible in their medical reasoning. This research suggests that if marital therapy can somehow influence positive affect, problem solving may improve as well.

Although this information about positive affect is interesting, it is difficult to apply clinically. Simply admonishing a distressed couple to increase positive affect during conflict is ineffective. Vincent, Friedman, Nugent, and Messerly (1979) tried this experiment. They asked unhappy couples to pretend to be happily married and "fake good" for the camera. The distressed couples could not successfully portray themselves as happily married. When asked to act happy, even blissful, during an assigned discussion, couples could not hide their negativity in their nonverbal behavior. Negative affect leaked out during the discussions, so observers could tell which couples were distressed and nondistressed by nonverbal cues. Simply instructing a couple to be positive did not create a more positive interaction.

Although this is a difficult task to apply clinically, there appears to be a general call for psychology to focus on positive affect. Seligman and Czikszentmihalyi (2000) suggested that psychology as a science has focused predominantly on healing the damage that life creates. Although this focus is important, they suggest that it is limited in its ability to enhance the necessary positive qualities for a thriving individual or relationship. As the Vincent et al. (1979) study demonstrated, directly influencing positive interactions is also difficult. Perhaps this is why marital interventions have focused primarily on changing the way that the couples argue in an effort to increase marital satisfaction.

Prevailing marital theory contends that effective conflict resolution may be a path to increased positivity in the relationship. Christensen and Heavey (1999) reviewed the three most effective treatments in couple therapy research: behavioral therapy, cognitive behavioral therapy, and emotion-focused therapy. Each of these therapies, in its own way, concentrates on improving the marital relationship by changing the way that the couples communicate and resolve conflict.

In addition to improving conflict and communication, many interventions have included positive interactions such as "caring days" (Stuart, 1980) as a means to increase positivity in the relationship. On an assigned caring day, a partner is asked to increase positive behaviors that will make his or her partner feel supported. These behaviors tend to involve such everyday tasks as washing dishes, putting children to bed, or calling his or her spouse during the day. Caring days are used to refocus the relationship to caring and thoughtful actions, thereby increasing positive affect be-

tween the spouses (Gurman & Jacobson, 2002). Although caring days are not specifically related to conflict, they seem to focus on major interactions in the relationship where focused time and effort are needed.

The primary focus of marital interventions has been on communication, conflict, and major positive events. Figure 1 provides a diagram for this prevailing theory. Although all are important leverage for marital change (Christensen & Heavey, 1999), each of these areas focuses on key significant and memorable emotional events in the couple's lives. If the couple has an argument, for example, the intensity of the interaction can be recounted and reframed in therapy. A successful caring day can be described and appreciated.

Although we agree that major events are important for marital change, an added area of intervention may be the *unremarkable* moments of the couple's lives. Those occasions that are fleeting, mundane, and ordinary may also contribute to marital satisfaction and create a foundation upon which the major, more memorable events unfold. Barbara Fredrickson (2001) suggested that positive affect is cultivated over time. Contentment, for example, builds over a period of days or weeks with a series of enjoyable events. We believe that this concept may hold true for marital interactions as well.

In this article, we suggest that seemingly mundane everyday comments such as "Your sister called," can be met with a variety of responses, from an irritable groan to a positive discussion about the sister. Consistent with Fredrickson's idea, we suggest that the way a couple responds to these mundane and fleeting interactions may have a cumulative effect on major emotional interactions such as conflict or romance. For example, if a husband has consistently ignored his wife in everyday moments, she may not see the romantic dinner as sufficient to repair the feeling of neglect. If we find that these daily interactions are in fact related to positive affect during marital conflict, marital interventions could benefit from adding a focus on daily interactions as a separate target for change. Figure 2 presents a diagram for this alternative view.

Our goal for this study was to determine if there is support for the view represented by Figure 2. A first step (which this article takes) was to ask whether these everyday mundane interactions are correlated with positive affect during conflict, and to determine the direction of that correlation using path analysis.

We designed a study in which 49 newlywed couples of varying marital satisfaction could be seen in both a conflict discussion and in a seminatural apartment laboratory

# Daily Life Improve Marital Intervention Improve Major positive events Communication Conflict discussions

Figure 1 Current model for marital therapy with an emphasis on improving the relationship by improving moments of intense emotion

#### **Theoretical Marital Intervention**

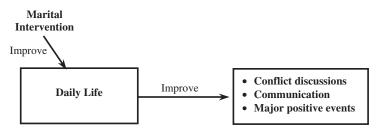


Figure 2 Theoretical model for marital therapy with an emphasis on improving daily life to improve major events

environment. For the conflict discussion, the couples were asked to argue for 15-minutes and to try to resolve an ongoing problem in their marriage. This discussion was videotaped and coded for positive and negative emotion using the Specific Affect Coding System (SPAFF; Gottman, Coan, & McCoy, 1996). Several weeks later, each of these couples also participated in an apartment laboratory session. They lived in a studio-type apartment laboratory for 24 hours and were videotaped from 9:00 a.m. to 9:00 p.m. From that video data, we extracted a 10-minute dinnertime segment.

To capture their everyday interactions, we created a new observational coding system that examines the ways that couples initiate and respond to everyday interactions. Each initiation for interaction (or bid) was coded with a hierarchy of needs and demands, from information exchange to sharing emotional support. The responses to these bids ranged from mere eye movement to playfulness, and were generally categorized as "turning toward," "turning away," and "turning against."

The current marital therapy model suggests that increasing positive behaviors during conflict will improve the relationship, including daily interactions. Our theoretical model may add to this theory by including daily interactions as an important target for relationship enhancement.

## **METHOD**

The methods for the conflict session of this study have been published in detail in Gottman et al. (1998). A review of the methods is presented here.

# **Participants**

The couples selected for this study were newlyweds who had been married less than 6 months, were in their first marriage, and were childless. For the conflict discussion, 130 newlywed couples were selected. These couples represented an even rectangular distribution of marital satisfaction based upon the Marital Adjustment Test (MAT; Krokoff, 1991; Locke & Wallace, 1959). The strategy of oversampling the tails of the marital satisfaction continuum was employed so that statistical power would be uniform across the range of marital satisfaction.

As required by the National Institute of Mental Health, this study matched the major racial and ethnic groups of the Seattle area. Approximately 5% of the couples were from non-White ethnic groups, and 25% were mixed ethnic-racial couples. Although our sample included ethnic minorities, racial distinctions are not made in this

research. This kind of evaluation would require oversampling a particular ethnic group to observe specific patterns in couple interactions. Other demographic characteristics for these newly married couples are available in Gottman et al. (1998).

Of the 130 newlywed couples who participated in the conflict session, 50 went on to the apartment laboratory session (apartment lab); 49 of these couples were used in the current analyses. We selected those couples who varied on both marital satisfaction and on negative affect during a conflict discussion. We attempted to select equally from all ranges of marital satisfaction and negative affect—again approaching a rectangular distribution—and thus oversampled the ends of these two distributions. For the couples in this analysis, the mean couple marital satisfaction was 119.64 (SD=16.61) and ranged from 82 to 156. Out of 900 seconds of conflict interaction, the mean total negative affect was 172.67 seconds (SD=126.36 seconds) and ranged from 11 seconds to 560 seconds.

#### Session 1-Conflict Discussion

Setting. For the conflict discussion session, we asked the couples to sit in opposite chairs approximately 5 feet apart. We used two remotely controlled cameras and microphones to film the conflict discussion. As the couple sat facing each other, the cameras filmed separate frontal views of each subject's head and upper torso. A video special effects generator then combined the images from these remote cameras into a split-screen image. This allowed coders to view the facial expressions of the husband and wife at the same time.

Observational measures. Each of the conflict discussions was coded in its entirety using the Specific Affect Coding System (SPAFF). The SPAFF indexes specific positive and negative emotions expressed during the conflict session. These conflict discussions were coded by two independent observers using a computer-assisted coding system (Gottman et al., 1998).

Reliability measures. We used the Cronbach's alpha generalizability coefficients (Cronbach, 1972; Wiggins, 1977) to measure the internal consistency of the SPAFF. One may use these alphas to assess how well a specific code measures variability with respect to a relevant facet of the experimental design, which in our case was variability between subjects. This variability was measured with respect to irrelevant facets of the design, which involved the statistical interaction of observers. The closer the score is to 1.0, the more reliable the code. As the alpha approaches 1.0, the more the code is discriminating between couples rather than discriminating between observers. We computed the alphas for each code as the ratio of the mean square for observers minus the mean square error term divided by the mean square for observers plus the mean square error term. The SPAFF Cronbach's alpha generalizability coefficients ranged between .65 and .99, with an average of .91 for the entire coding of both spouses across all original 130 videotapes.

Operationalizing the constructs. In the analysis for this study, we computed a combined code for husband and wife humor during the conflict discussion. The reason for

<sup>&</sup>lt;sup>1</sup>One of these couples was eliminated from the analysis because the marriage ended as a result of the husband's sexual orientation.

this combined code was that the SPAFF code for humor was reciprocal. If one partner makes a humorous comment, his or her partner must laugh for it to be coded as humor. Because humor was coded in this reciprocal way, there is an artificially high correlation between spouses for humor (r=.96, p<.01). To remove this bias, we created the couple humor score by averaging the number of seconds of humor for the husband and wife.

# Session 2—Apartment Laboratory

Setting. The apartment laboratory consisted of a single-room (studio-type) apartment with a small kitchenette, television, stereo, sofa, loveseat, and dining table. The apartment had a large picture window with a nice view of the Portage Bay Ship Canal in Seattle, Washington. Each couple was asked to spend 24 hours in this apartment, usually beginning at 9:00 a.m. on Sunday. We filmed the couples in the apartment lab using three remotely controlled cameras mounted in the corners of the room near the ceiling. All areas of the apartment except the bathroom could be filmed from these three locations. The cameras ran continuously for 12 hours, from 9 a.m. until 9 p.m. For the entire 12-hour session, each partner wore a wireless Lavaliere microphone to record audio interactions while the cameras were filming. Each couple was asked to bring groceries and enjoyable weekend activities, such as videos, CDs, books, or work. We supplied a newspaper, usually a local Sunday paper. The only instruction given to the couple was to spend the day as they would at home.

Observational segments. Out of the 12 hours of apartment lab interaction, we needed to extract a specific microsegment for a detailed and careful examination. In selecting this microsegment, it was important to eliminate the confounds of time and activities for these couples. We decided to focus on the dinnertime segment, which narrowed our study to a common event for each couple at similar time during the day. By choosing the dinnertime segment, we created a semiuniform session for each couple.

We used dinnertime as a measure rather than actual time because couples were engaged in different tasks at similar times of the day. For example, at 5:00 p.m., one couple may have been napping, while another was making dinner. To code these events for comparable couple interaction seemed unjustified.

In a similar regard, however, we did not want to code any mealtime interaction because this would confound the time of day. A couple's interaction during breakfast may be very different from that same couple's interaction during dinner. By limiting the microsegment to a specific meal, we were able to narrow the confounds of activity and time of day. Because the dinnertime interaction allowed each couple sufficient time to adjust to the apartment lab, and all couples ate dinner, we chose it for the microsegment. We coded the couples for 10 minutes into the interaction, beginning from the moment that both partners sat down to eat.

Finally, the selection of a brief 10-minute segment was supported by research on naturalistic observations. Heyman et al. (2001) reported that 10 minutes is sufficient time to witness most behaviors and obtain reliability and interrater agreement. Although a number of studies investigating family dinnertime have used longer

<sup>&</sup>lt;sup>2</sup> The humorous comment cannot contain contempt or belligerence. If either of these was present, the interaction was not coded as humor even if both partners laughed.

segments (Jain, Belsky, & Crnic, 1996), the focus of these studies was different. Their interest was on family rituals surrounding food, whereas our focus was on the quality of the conversation engagement.

Observational measures. As mentioned earlier, we created the Turning System to capture the ways that couples interact in everyday life. In this new coding system, we coded any attempt to interact as a bid. There were seven different types of bids: six neutral to positive bids and one negative bid. For the responses, we used three general categories: turning toward (positive), turning against (negative), and turning away (ignore). Within each of these general categories were specific codes for responses. For example, there were five different codes for turning toward and three for turning away. The specific codes used in the current analysis were:  $1 = playful\ bid$ : good-natured teasing that includes physical sparring, such as throwing a ball to the partner or thumb wrestling; and  $2 = enthusiastic\ response$ : showing eagerness, as if the partner is waiting to interact.

Reliability measures. As with the SPAFF coding system, we used Cronbach's alpha to measure the internal consistency of the Turning System. The alphas for this coding system ranged from .29 to 1.0, with a mean of .78. The lowest alpha score of .29 was for playful responses, which were relatively rare events in the dinnertime segments. The low alpha for this code may be related to the rarity of the code and not the code itself. In future research, playful responses should be examined more carefully. This code, however, was not used in the current analysis.

We used the Free Marginals Kappa (Kn) to measure reliability between turning coders. For each couple, the percentage of agreement between coders had to be at a minimum of 75% before we would calculate the Kn. Our overall agreement across all the couples was 81% for bids and 76% for responses. The Kn across all couples was .88 for bids and .77 for responses.

### **Analytic Strategy**

Path analysis. We used path modeling to examine the possible direction of the relationship between the correlations of these codes. These models were created using the EQS Structural Equations Program (Bentler, 1992). The covariance matrices needed for the path models were created using SPSS version 11.0. The goodness of fit was evaluated based on two criteria: (1) nonsignificant p-value (p) and chi-square ( $\chi^2$ ) to show that the covariance matrices were not significantly different; and (2) Bentler-Bonnett normed goodness of fit statistic (Bentler & Bonnett, 1980), which indexes the goodness of fit of the model and should be as close to 1.0 as possible.

In every path figure, there are two numbers listed for each path. The path coefficient score is listed first, with the z-score in parentheses, for example, .75 (6.89). For the path coefficients, a value less than .10 is a small effect, a value around .30 is a medium effect, and a value greater than .50 is a large effect (Kline, 1998). The z-score is significant at alpha less than 0.05 if it exceeds 1.96.

Variable selection. Because the number of subjects for this study was small (49), the path analysis was limited to a simple model of two codes from the apartment lab and two codes from the conflict discussion. From the preliminary observations in the

apartment lab, playful bids and enthusiastic responses seemed to be the most positive interactions, so we used those codes for the daily interaction model. For the conflict discussion model, the positive codes of humor and affection were chosen based on previous research findings (Gottman et al., 1998). As mentioned above, the humor code for the conflict discussion was averaged across the two scores for each couple and combined into couple humor.

#### **RESULTS**

Table 1 is a summary of the descriptive statistics for each of the codes and some demographic characteristics of the couples as a whole.

Table 2 is a summary of the intercorrelations within and between the conflict discussion and the apartment lab.

Within the conflict discussion, there were no significant correlations between couple humor and affection. Within the apartment lab, three significant correlations related to the husband's playful bids. These were couple humor, the wife's playful bids, and her enthusiastic responses. The wife's playful responses were also positively correlated to her enthusiasm. Husband and wife's enthusiastic responses were not related.

For the crossover correlations between the conflict and apartment laboratory sessions, the husband's playful bids and the wife's enthusiastic responses were significantly correlated with couple humor during conflict.

# **Path Modeling**

In this section, two alternative models are compared. These should be viewed as exploratory analyses comparing alternative models. We are aware that correlation

 ${\it TABLE~1} \\ {\it Conflict~Discussion,~Apartment~Lab~Codes,~and~Demographic~Characteristics}$ 

	N	Minimum	Maximum	M	SD
Apartment Lab (Frequency)					
Husband's playful bids	49	0 6		0.18	0.95
Wife's playful bids	49	0	3	6.12E-02	0.43
Husband's enthusiastic responses	49	0	2	8.16E-02	0.34
Wife's enthusiastic responses	49	0	3	0.16	0.51
Conflict Discussion (Seconds)					
Couple humor	49	0	143	26.48	26.36
Husband affection	49	0	47	5.82	11.69
Wife affection	49	0	27	4.86	7.62
Husband's humor	49	0	133	26.24	24.80
Wife's humor	49	0	153	26.71	29.70
Demographic Characteristics					
Husband's marital satisfaction	48	48	155	116.46	21.03
Wife's marital satisfaction	49	33	156	118.71	21.64
Husband's income	49	< \$10,000	\$49,000 to	\$20,000 to	
			\$50,000	\$29,000	
Wife's income	49	< \$10,000	\$49,000 to	\$20,000 to	
			\$50,000	\$29,000	
Husband's years of schooling	49	High School	Ph.D.	B.S or B.A.	
Wife's years of schooling	49	High School	Ph.D.	B.S. or B.A.	

${\rm Table}\ 2$
Intercorrelations Between Apartment Lab Turning Codes and Positive Conflict Codes

Variable	1	2	3	4	5	6	7
Bids							
<ol> <li>Husband's playful</li> </ol>	1.00						
2. Wife's playful	0.893***	1.00					
Responses							
3. Husband's enthusiastic	-0.05	-0.03	1.00				
4. Wife's enthusiastic	0.833***	0.804***	-0.08	1.00			
Conflict Discussion							
5. Couple humor	0.675***	0.626***	-0.12	0.625***	1.00		
6. Husband's affection	0.08	0.07	-0.11	0.24	0.00	1.00	
7. Wife's affection	-0.04	-0.06	0.17	0.12	0.19	0.27	1.00

p < .05. p < .01. p < .01. p < .001.

does not imply causation, but we can compare two alternative models relating daily interactions to conflict. We also examine within-person relationships across the two settings and a model that considers crossover relationships between partners.

Conflict discussion to daily interactions. The prevalent theories of marital intervention focus on conflict as one important mechanism for marital satisfaction. Our first path model assessed this prevailing view by setting the crossover pathways from the conflict discussion to the apartment lab (Figure 3). By a process of reduction called "trimming," we arrived at this best fitting conflict-to-daily model. The process of

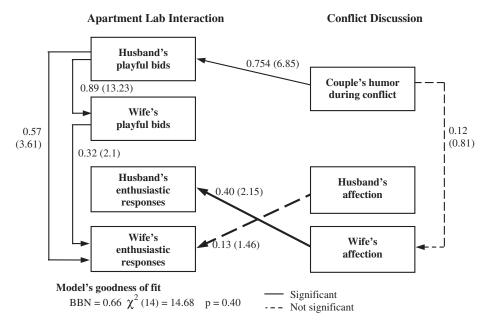


Figure 3 Path model going from the couple's conflict to everyday interactions (each path coeffecient is listed first with the z-scores in parentheses)

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reduction involved the successive elimination or redirection of model pathways to improve the model's fit. Although not all of these trimmings are shown in Figure 3, we describe them in the text. The conflict-to-daily model includes the relationship between the two sessions and the pathways within each session.

The two significant pathways between sessions 1 and 2 were the path from couple humor to husband's playful bids, .75 (6.85), and the path from the wife's affection to the husband's enthusiastic responses, .40 (2.15). The pathway from the husband's affection to her enthusiasm was not significant, .13 (1.46).

The significant pathways within each session were in the apartment lab interactions. The paths from husband's playful bids to wife's playful bids were significant, .89 (13.23). Both his playful bids and her playful bids were significantly related to her enthusiastic responses. These were not significant to his enthusiasm, but his enthusiasm was significantly related to her affection during conflict. Those nonsignificant paths that were trimmed from this model were: (1) from couple humor to the wife's playful bids, .07 (.71); (2) from husband's affection to his own enthusiastic responses, -.26 (-1.39); (3) wife's affection to her own enthusiasm, .08 (.76); and (4) from humor to husband affection, -.02 (-.13), and to wife affection, .23 (1.68). These within-session pathways were not significant in either direction between humor and affection.

Daily interactions to conflict discussion. As suggested by Figure 2, an alternative model assesses the theory that everyday moments may be driving positive affect during conflict. Hence, we set the crossover pathways from apartment lab to conflict discussion (Figure 4).

As in the conflict-to-daily model, the crossover pathways between the husband's playfulness was significantly related to the couple's humor, .69 (6.14), so this pathway

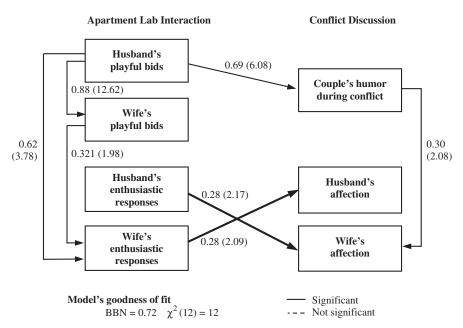


Figure 4 The path model from apartment lab to conflict discussion

is strong between the two models in both directions. In a similar way, the crossover path from wife's affection to husband's enthusiasm is strong in both directions, .28 (2.17). With correlational data, we are not able to rule out one direction of causation here

Unlike the conflict-to-daily model, the crossover path from the wife's enthusiastic responses to the husband's affection during conflict was significant, .28 (2.09). When this pathway is reversed, it is not significant, .13 (1.46).

Within the conflict session, the pathway from the couple's humor to the wife's affection is significant, .30 (2.08). This within-conflict pathway was not significant for the conflict-to-daily model. Within the apartment lab session, the pathways showed similar patterns to the conflict-to-daily model. The paths from husband's playful bids to wife's playful bids and her enthusiastic responses were significant. In addition, her playful bids were significant to her own enthusiasm. The husband's enthusiasm was not significant to her playfulness or to the wife's enthusiasm.

We also trimmed the pathways for this daily-to-conflict model. In this model, the paths from one partner's enthusiasm to his or her own affection showed a similar pattern to the conflict-to-daily model. They were not significant,  $-.19\ (-1.30)$  and  $-.27\ (-1.43)$ . The paths from wife's playful bids to couple humor were not significant,  $.13\ (.58)$ . The paths from couple humor to husband's affection was not significant,  $-.07\ (-.51)$ . This is a similar pattern to that in Figure 3.

The final model from daily interactions to conflict discussion is a reasonable model, with a goodness of fit score of .71; this compares with the conflict-to-daily model of .66 There is not much difference between the models in their overall fit, although the goodness of fit is higher in the second model. The stronger model going from daily to conflict adds significance between the wife's enthusiasm and his affection, and between the couple's humor and her affection. What is similar about the two models is the relationship between playful bids and humor during conflict. From the similarity of the strength of these paths in the two models, we would make the cautious inference that this path is likely to be bidirectional. What is most compelling about the second model is the statistical significance of both paths from enthusiastic responses to bids and affection during conflict.

#### DISCUSSION

Clearly, these analyses are based on correlational data, and an intervention is necessary to test causality. However, the current study provides preliminary support for the hypothesis that the couple's everyday moments contribute to positive affect during conflict. The path model going from daily interactions to the conflict discussion (Figure 4) was a slightly stronger model, suggesting that positive everyday moments may be contributing to the couple's ability to use affection and humor in their arguments.

The daily-to-conflict model shows that both husband and wife may be driving positive affect in different ways. We found that the husband's playful bids in daily life seem to have an important role for both conflict and everyday interactions. His ability to initiate playfulness was strongly related to both the wife's playfulness and her own enthusiasm. His playfulness was also related to the couple's ability to access humor during conflict. This relationship was strong in both directions, but when playfulness directed couple humor, there was also a relationship between couple humor and the wife's affection.

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Another important role for the husband was that his enthusiastic responses during everyday life may have directly influenced the wife's affection during conflict. Because his enthusiasm was not related to playfulness, this may be a direct causal relationship. However, her affection during conflict was also related to couple humor, which was directly related to his playfulness. So, both the husband's playfulness and his enthusiasm in everyday interaction seem to be important contributions to her affection during conflict. There is an emphasis in developmental research on the importance of male play in families. The father's play serves a unique role in parent–infant interaction and in infant emotional development (Parke, 1999). Our model may extend this research to the importance of male playfulness to marital interaction.

The wife's role in this model was different, but also important. Her enthusiastic responses seemed to be driving his affection during conflict. It was the only pathway that seemed to influence his affection. Because affection during conflict plays an important role in marital satisfaction, this pathway seems important. The relationship of the wife's playfulness to her own enthusiasm is also an important connection to his affection during conflict. Her playfulness may influence her own enthusiasm, which in turn drives his affection.

One surprising result of this analysis was that each partner's enthusiasm was not related to his or her own affection. We thought that the two would be related because the codes appear similar in the different environments. Instead, one partner's enthusiasm in daily moments drives his or her partner's affection during conflict. For the husband, this relationship was strong in both directions. These data support the importance of an interpersonal view of behavior in different contexts. Wile (1993) has made a similar point.

The current data provide preliminary support for the theory that couples build intimacy through hundreds of very ordinary, mundane moments in which they attempt to make emotional connections. Bids and turning toward may be the fundamental units for understanding how couples build their friendship.

Clinically, these data suggest that in addition to processing major moments such as date nights and conflicts, it may be helpful to examine failed or successful bids during daily moments. The anatomy of failed bids for interaction may be as important as the anatomy of their conflict. If minor, daily moments provide a foundation to access positive affect during conflict and may provide an additional avenue for altering a couple's relationship. Building positive affect during everyday life may be easier to influence than directly changing positive affect during conflict. For example, it may be easier to teach a couple to use enthusiastic responses in daily moments than to ask them to use affection during an argument. This view was recently elaborated by Gottman and DeClaire (2001).

Although these findings encourage us to think about the importance of everyday moments, the analysis is based on correlations and path analysis. We cannot show a causal relationship from daily life to conflict with these data. An important next step would be to conduct an intervention study in which we could positively influence daily interactions to determine if they have an effect on conflict discussions. This study is under way in our laboratory.

Future observational research in this area should also include more subjects. The sample size for the study was small, which limited our ability to use larger path models and to include other codes from each of the sessions. In future studies, we would like to increase the number of subjects by limiting the amount of time they are videotaped.

We would also like to extend the current study to include segments longer than 10 minutes. The limited amount of time for observation limits its generalization to other areas of daily life. In addition, we would like to extend the time to include meal preparation, dinnertime, and clean-up to gain a broader perspective on the overall interaction.

The SPAFF coding system uses 5 positive codes and 10 negative codes to capture the positive/negative interactions during the conflict discussion. Future observational research may also want to expand the positive codes to create a finer description of positive interaction. This would allow us to study the positive interactions in a more detailed way.

In summary, we believe that future research should include small, seemingly insignificant moments in the couple's daily life as an important component to marital stability and health. If these moments do have an impact on conflict, it could be a meaningful addition to current marital therapy. For example, suppose a couple had a heated argument about him flirting with another woman at an office party. Clearly, it is important for the therapist to focus on major emotions such as jealousy, loneliness, fear, and autonomy. It may also be necessary to include conflict management and to encourage romantic evenings alone. In addition to these major events, the therapist may want to emphasize the couple's everyday interactions during the previous week. Did the husband respond to her small bids for connection, or was he distant and preoccupied? Was the wife busy with work or children and unresponsive to the husband's "insignificant" moments of interaction? These questions inform us that in the context of everyday moments, the larger argument has an underlying emotional foundation based on failed bids. By encouraging the couple to re-engage on a minor everyday level, the larger conflict around jealousy may become more manageable. It also may be easier for the couple to engage at this minor level before attempting a major event such as romantic evening alone. We believe that this type of everyday intervention allows the therapist to access another level of the marital relationship and is an important addition to the couple therapy.

#### REFERENCES

- Bentler, P. (1992). EQS Structural Equations Program. Los Angeles: BMDP Statistical Software.
- Bentler, P., & Bonnett, D. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88, 588–606.
- Carnevale, P., & Isen, A. (1986). The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. *Organizational Behavior and Human Decision Processes*, 37, 1–13.
- Carstensen, L., Gottman, J., & Levenson, R. (1995). Emotional behavior in long-term marriage. *Psychology and Aging*, 10(1), 140–149.
- Christensen, A., & Heavey, C. (1999). Interventions for couples. *Annual Review of Psychology*, 50, 165–190.
- Cronbach, L. (1972). The dependability of behavioral measurements: Theory of generalizability for scores and profiles. New York: Wiley.
- Estrada, C., Isen, A., & Young, M. (1994). Positive affect influences creative problem solving and reported source of practice satisfaction in physicians. *Motivation and Emotion*, 18(4), 285–299.

Estrada, C., Isen, A., & Young, M. (1997). Positive affect facilitates integration of information and decreases anchoring in reasoning among physicians. *Organizational Behavior and Human Decision Processes*, 72(1), 117–135.

- Fredrickson, B. (2001). The role of positive emotions in positive psychology. *American Psychologist*, 56(3), 218–226.
- Gottman, J., Coan, J., & McCoy, K. (1996). The Specific Affect Coding System. Hillsdale, NJ: Erlbaum.
- Gottman, J., Coan, J., Swanson, C., & Carrere, S. (1998). Predicting marital happiness and stability from newlywed interactions. *Journal of Marriage and the Family*, 60, 5–22.
- Gottman, J.M., & DeClaire, J. (2001). The relationship cure. New York: Crown.
- Gurman, A., & Jacobson, N.S. (Eds.). (2002). *Clinical handbook of couple therapy* (3<sup>rd</sup> ed). New York: Guilford Press.
- Heyman, R.E., Chaudhry, B.R., Treboux, D., Crowell, J., Lord, C., Vivian, D., & Waters, E.B. (2001). How much observational data is enough? An empirical test using marital interaction coding. *Behavior Therapy*, 32(1), 107–122.
- Isen, A., & Means, B. (1983). The influence of positive affect on decision-making strategy. *Social Cognition*, 2, 18–31.
- Jain, A., Belsky, J., & Crnic, K. (1996). Beyond fathering behaviors: Types of dads. Journal of Family Psychology, 10(4), 431-442.
- Kline, R. (1998). Principles and practice of structural equation modeling. New York: Gilford Press.
- Krokoff, L.J. (1991). Communication orientation as a moderator between strong negative affect and marital satisfaction. *Behavioral Assessment*, 13(1), 51–65.
- Locke, H., & Wallace, K. (1959). Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 21, 251–255.
- Parke, R.D. (1999). Fatherhood. Cambridge, MA: Harvard University Press.
- Seligman, M., & Czikszentmihalyi, M. (2000). Positive psychology. An introduction. *American Psychologist*, 55(1), 5–14.
- Stuart, R. (1980). Helping couples change: A social learning approach to marital therapy. New York: Guilford Press.
- Vincent, J., Friedman, L., Nugent, J., & Messerly, L. (1979). Demand characteristics in observations of marital interaction. *Journal of Consulting and Clinical Psychology*, 47(3), 557–566.
- Wiggins, J. (1977). Personality and prediction. Reading, MA: Addison-Wesley.
- Wile, D. (1993). After the fight. New York: Guilford Press.

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