EMOTION SKILLS AND MARITAL HEALTH: THE ASSOCIATION BETWEEN OBSERVED AND SELF-REPORTED EMOTION SKILLS, INTIMACY, AND MARITAL SATISFACTION

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The relationship between observed and self-reported emotion skills, intimacy, and relationship satisfaction was examined. Results showed that emotion skills can be reliably observed in couples’ interactions. Results also supported a model in which emotion skills influence marital satisfaction through their influence on intimacy. Results further showed that observed emotion skills added to self-report in the prediction of marital health. Finally, where there were gender differences, women were more emotionally skillful than men.

Intimate relationships are the principal arena within which adults live out their emotional lives. Of all the domains of life, marriage and family relationships are perhaps the most consistently emotionally challenging. Following from decades of research dedicated to the study of adult intimate relationships and, separately, to the study of emotion, research has begun to connect the two domains in significant ways (e.g., Erikson, 2005; Feeney, 2005; Fitness & Fletcher, 1993; Gottman, Katz, & Hooven, 1996; Laurenceau, Troy, & Carver, 2005; Waldinger et al., 2004).

Emotional processes in interpersonlal relationships are being actively studied in numerous ways, including studies of emotional intelligence.
(Lopes, Salovey, Cote, Beers, & Petty, 2005), emotional competence (Volling, McElwain, Notaro, & Herrera, 2002), and emotion regulation (John & Gross, 2004). The current study adds to this body of work by elaborating on our previously described concept of emotion skills (Cordova, Gee, & Warren, 2005) and developing an observational measure of emotion skills in couples' interactions. The broad goal of the current study is to further test a model in which intimacy mediates the relationship between emotion skills and relationship satisfaction (Cordova et al., 2005) using a more comprehensive set of self-report and observational emotion skills measures.

DEFINING EMOTION SKILLS

Emotion skills refer to relationally skillful emotional enactments. Our basic premise is that people learn through their interactions with others how to behave in the context of their emotional reactions (e.g., Cordova et al., 2005). For example, having one's feelings hurt by another person is a universal relational experience; however, people learn to enact emotional hurt in a variety of ways. Some people learn to enact emotional hurt by withdrawing, some by attacking, and some by self-disclosing. Thus, our first assumption is that individuals differ in what they learn about how to enact different emotions. Following from that, we further assume that the variety of these emotional enactments are distributed along a continuum of interpersonal effectiveness, with some enactments being more predictably conducive to the long-term health of intimate relationships (e.g., self-disclosure) and some more predictably corrosive (e.g., retaliation). This is consistent with Gross and John's (2002) suggestion that the important question is not whether emotions are good or bad, but whether how they are expressed is helpful or unhelpful in a particular context. Thus, we are using the term emotion skills to simultaneously denote two specific but related assumptions. The first is that emotional enactments are learned in the context of emotional reactions. The second is that those emotional enactments vary in their interpersonal skillfulness, specifically in relation to the long-term health of intimate relationships.

The existing literature provides some support for this conceptualization. For example, the quality of parental emotion coaching has been found to affect children's regulatory physiology, emotion regulation abilities, and outcomes in middle childhood (Gottman, Katz, & Hooven, 1996). Additionally, by the time children enter school, they have acquired many of society's expectations about expressive emotional behavior in social situations (Saarni, 2000).

EMOTION SKILLS AND HEALTHY INTIMATE RELATIONSHIPS

Adequate emotion skills are essential to the healthy functioning of intimate relationships because of the emotionally challenging nature of intimacy. Intimacy theory (Cordova & Scott, 2001) holds that intimacy development is a process involving one partner sharing interpersonally vulnerable behavior and the other partner responding supportively to that vulnerable expression. Expressions of vulnerable behavior are thus reinforced, becoming more frequent in that relationship. Because intimacy development involves increasing levels of personal vulnerability, intimate partners become uniquely sensitive to being hurt by each other (see Leary & Carrie, 2001, for a discussion of the literature on hurt). As vulnerabilities are shared and left exposed in intimate relationships, the potential for experiencing emotional hurt increases. In short, the closer two people are to each other, the more easily and more frequently they hurt each other, both purposefully and accidentally, making intimate relationships especially emotionally challenging. If one has acquired poor emotion skills, interpersonal hurt is enacted as retaliation, withdrawal, defensiveness, hostility, or avoidance, diminishing intimacy and overall relationship health. On the other hand, if one has acquired adequate emotion skills, interpersonal hurt is enacted as self-disclosure, confident emotional communication, repair seeking, positive approach, appropriate self-care, forgiveness, relationship-enhancing attributions, and assertive communication, maintaining intimacy and enhancing relationship health. Additionally, partners with adequate emotion skills are likely to hurt their intimate partners less frequently, further facilitating the development and maintenance of intimacy.

Available evidence is consistent with this model. For example, partners who are more empathically sensitive are happier with their relationships (e.g., Noller & Ruzzene, 1991) and partners who are better able to identify and communicate their emotions report greater marital health, and that association appears to be mediated by felt intimacy (Cordova et al., 2005). In addition, Rusbult and her colleagues, in their studies of the related construct of accommodation (i.e., an individual's willingness to inhibit destructive reactions to a partner's bad behavior), have found that accommodation is associated with greater relationship satisfaction and commitment (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991).

The purpose of the current study is to test the association among emotion skills, intimacy, and relationship satisfaction and to begin development of an observational measure of emotion skills. Cordova et al. (2005), in their original study of emotional skills and marital health, relied on a single self-report measure of emotion skills focusing on partici-
riencing in interpersonal contexts is necessary to fully understand these
neuroscientist and physiologists; however, the study of emotional expe-

literature involving the study of emotions is being conducted by
husbands and 16.3 years (SD = 3.2) for wives.

Mean length of marriage was 9.8 years (range = 6 weeks to 52.5 years; SD 
12.3), and the mean age for wives was 35.7 years (SD = 11.9).

This follows from the contention that broad classes of emotional experi-
cerations and a search for established measures that fit our theoretical con-
ceptualization of emotion skills resulted in the current working set of 
emotion skills.

The first hypothesis is that emotion skills will be reliably observable. 
Efforts to identify emotion skills observable in couples' interac-
tions and a search for established measures that fit our theoretical con-
ceptualization of emotion skills resulted in the current working set of 
emotion skills.

HYPOTHESES

The first hypothesis is that emotion skills will be reliably observable. This 
follows from the contention that broad classes of emotional experiencing are played out interpersonally and are therefore not wholly private, but publicly available for observational study. Much of the literature involving the study of emotions is being conducted by neuroscientist and physiologists; however, the study of emotional experiencing in interpersonal contexts is necessary to fully understand these complex phenomena. Thus, reliable observational measures must be developed to supplement self-report measures.

The second hypothesis is that emotion skills will be associated with marital satisfaction and that the association will be mediated by intimacy. These analyses are intended to further evaluate emotion skills and intimacy theory (Cordova et al., 2005) using a broader assortment of emotion skills measures, including observational measures.

The third hypothesis is that observational measures will add to self-report measures of emotion skills in the prediction of marital satisfaction. Given common method variance, it is feasible that self-report measures will outperform observational measures in the prediction of marital satisfaction, undermining the utility of observational measures.

METHOD

PARTICIPANTS

Participants were 76 married couples recruited to participate in a Marriage Checkup (MC; Cordova, Warren, & Gee, 2001). Participants were recruited from a small Midwestern city using newspaper advertisements for couples interested in receiving a professional assessment of the strengths and weaknesses of their marriage. The MC is not therapy but is an indicated prevention intervention for identifying couples at risk for marital deterioration and for motivating their efforts to improve marital health. Couples who were currently, or had previously been, in couples therapy or who were living apart were excluded from participation. Otherwise, all interested couples were included in the study. Couples were randomly assigned to treatment or control conditions. Treatment couples received a relationship assessment and feedback report, and control couples received $50 for their participation. In addition to measures used to assess the efficacy of the MC, couples' emotion skills were also assessed specifically to address the questions of the current study. Mean marital distress scores were on the low end of the moderately distressed range (T > 50) on the Global Distress Scale of the Marital Satisfaction Inventory (Snyder, 1997; M = 53.9, SD = 10.9). Almost all of the participants were white (86%); the mean age for husbands was 37.6 years (SD = 12.3), and the mean age for wives was 35.7 years (SD = 11.9). Mean length of marriage was 9.8 years (range = 6 weeks to 52.5 years; SD = 10.5). Completed education was an average of 15.7 years (SD = 3.5) for husbands and 16.3 years (SD = 3.2) for wives.

TABLE 1. Descriptive Statistics and Mean Differences for Husbands and Wives for Observational Emotion Skills Codes

<table>
<thead>
<tr>
<th>Codes</th>
<th>Husbands M (SD)</th>
<th>Wives M (SD)</th>
<th>t</th>
<th>p</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benign Control in Delivery</td>
<td>3.5 (0.8)</td>
<td>3.5 (0.8)</td>
<td>-0.16</td>
<td>0.88</td>
<td>36</td>
</tr>
<tr>
<td>Benign Control in Receipt</td>
<td>3.3 (0.8)</td>
<td>3.3 (0.8)</td>
<td>0.47</td>
<td>0.65</td>
<td>36</td>
</tr>
<tr>
<td>Aggression Control</td>
<td>4.6 (0.5)</td>
<td>4.4 (0.7)</td>
<td>1.55</td>
<td>0.13</td>
<td>36</td>
</tr>
<tr>
<td>Eliciting Positive Emotions</td>
<td>2.2 (0.6)</td>
<td>2.0 (0.7)</td>
<td>1.71</td>
<td>0.10</td>
<td>35</td>
</tr>
<tr>
<td>Expressing Positive Emotions</td>
<td>2.1 (0.7)</td>
<td>2.2 (0.7)</td>
<td>-1.59</td>
<td>0.12</td>
<td>36</td>
</tr>
<tr>
<td>Expressing Negative Emotions</td>
<td>2.3 (0.6)</td>
<td>2.8 (0.9)</td>
<td>-3.26**</td>
<td>0.00</td>
<td>36</td>
</tr>
<tr>
<td>Use of Feeling Words</td>
<td>2.4 (0.8)</td>
<td>2.9 (0.9)</td>
<td>-3.23**</td>
<td>0.00</td>
<td>36</td>
</tr>
<tr>
<td>Perspective Taking Code</td>
<td>2.1 (0.8)</td>
<td>2.2 (0.7)</td>
<td>-0.97</td>
<td>0.34</td>
<td>36</td>
</tr>
<tr>
<td>Empathic Concern Code</td>
<td>2.7 (0.7)</td>
<td>2.7 (0.9)</td>
<td>-0.45</td>
<td>0.65</td>
<td>36</td>
</tr>
<tr>
<td>Lack of Defensiveness</td>
<td>4.0 (0.9)</td>
<td>4.2 (0.9)</td>
<td>2.24*</td>
<td>0.03</td>
<td>37</td>
</tr>
</tbody>
</table>

Note: **p < .01.
PROCEDURES

Data gathered prior to any intervention were used for the current study. However, only treatment group couples provided videotaped problem-solving interactions prior to the intervention (n = 37), so the observational portion of the study is limited to this smaller sample. All partners were mailed a packet of questionnaires assessing marital satisfaction, intimacy, and emotion skills and were asked to complete them separately. Treatment couples returned their questionnaires at their in-lab assessment session, and control couples returned the questionnaires by mail.

MEASURES

Emotion Skill Codes

Couples in the treatment group (n = 37) of the study were videotaped in the lab as part of the assessment phase of the MC. Couples discussed a highly rated area of disagreement in their relationship. Videotapes of problem-solving interactions were coded using the Emotion Skills Coding System (ESCS; Mirgain & Cordova, 2003). Codes were constructed to be consistent with the theoretical conceptualization of emotion skills. A new coding system was constructed because existing coding systems inadequately represented our conceptualization of emotion skills. Interested readers can contact the second author for a copy of the ESCS coding manual.

Using the ESCS manual, four undergraduate raters (two female and two male) practiced rating sample tapes under the supervision of the first author until they obtained reliability scores as measured by intraclass correlations above r = .70 as calibrated against the first author's ratings. Coders were not informed of the specific hypotheses of the study. Once coding began, raters were subject to weekly reliability checks. Observers independently rated each interaction on a 5-point scale (1 = Not At All Skillful, 5 = Extensively Skillful) based on the frequency and intensity of the observed behaviors. Tapes were watched twice, once for each partner so that each partner could be rated separately. The ESCS is composed of the following codes.

Emotion Control Codes

Benign control in delivery. The extent to which a partner engages in behavior that softens the delivery of an emotionally negative message. How careful is this person being with his/her partner’s feelings? The conflict issue or frustration is expressed softly and in a nonthreatening manner. The person expresses needs, desires, and/or genuine hurt. Tries his/her best to be understood without threatening partner.

Benign control in receipt. The extent to which a partner manages his/her hurt, irritation, or anger by responding positively or neutrally to a negative message from his/her partner. To what degree does the person stay engaged, open, and receptive to his/her partner’s message? How open is this person to hearing his/her partner’s complaint? At its best, this has a quality of leaning in rather than away (or attacking) and being open to being influenced by the partner’s complaint/hurt feeling.

Aggression control. The extent to which a partner engages in poorly controlled aggression. The person may be mad, but not attacking, degrading, or swearing. In general, the anger is directed at the partner’s behavior or events, and is not directed at who the partner is as a person (e.g., “I’m mad that you forgot our anniversary” vs. “You are an inconsiderate selfish idiot”). The emotion skill involved here is being able to express anger in a way that is conducive to the long-term health of the relationship.

Eliciting positive emotions. The extent to which a partner actively elicits positive affect from the other partner to maintain or reestablish a positive connection while discussing a problem. Both verbal and nonverbal efforts to maintain and sustain a sense of positive connection with the partner. This can be summarized as ways of communicating that “even though we’re talking about something difficult, we are still okay.” Mostly this is done by smiling at the partner at various points during the interaction or interspersing the conversation with positive comments or comments intended to lighten the mood.

Expressing positive emotions. The extent to which partners are skillful in expressing positive emotions. How comfortable is the partner in expressing positive emotions such as happiness, love, affection, joy, and contentment?

Lack of Defensiveness. The extent to which partners respond to the hurt of complaints or criticism by becoming and remaining defensive. High scores are given for the absence of chronic defensiveness.

Expressing Nonhostile Negative Emotions. The extent to which partners are clear in communicating nonhostile negative emotions, including sadness, anxiety, despair, fear, and hurt.

Skillful Identification and Communication of Emotions

Identifying and Communicating Feelings. The extent to which partners mention positive or negative feelings by name, directly revealing the affective experience of the speaker.

Empathic Skill Codes

Perspective Taking. The extent to which partners communicate that they see things from their spouse’s point of view.

Empathic concern. The extent to which partners communicate that they are experiencing feelings of sympathy and compassion for their partner.
TABLE 2. Descriptive Statistics and Mean Differences for Self-Report Emotion Skills

<table>
<thead>
<tr>
<th>Measures</th>
<th>Husbands M (SD)</th>
<th>Wives M (SD)</th>
<th>α (Husbands)</th>
<th>α (Wives)</th>
<th>T</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification and Communication</td>
<td>12.0 (4.6)</td>
<td>13.0 (4.6)</td>
<td>.69</td>
<td>.75</td>
<td>-0.50</td>
<td>72</td>
<td>.62</td>
</tr>
<tr>
<td>Identification of Emotions</td>
<td>13.4 (6.3)</td>
<td>14.6 (5.9)</td>
<td>.86</td>
<td>.83</td>
<td>-1.34</td>
<td>72</td>
<td>.13</td>
</tr>
<tr>
<td>Communication of Emotions</td>
<td>11.9 (4.0)</td>
<td>11.3 (4.3)</td>
<td>.69</td>
<td>.76</td>
<td>0.75</td>
<td>72</td>
<td>.46</td>
</tr>
<tr>
<td>Emotional Control</td>
<td>2.6 (0.5)</td>
<td>2.5 (0.5)</td>
<td>.27</td>
<td>.49</td>
<td>-0.62</td>
<td>72</td>
<td>.35</td>
</tr>
<tr>
<td>Rehearsal</td>
<td>2.4 (1.0)</td>
<td>2.6 (0.9)</td>
<td>.91</td>
<td>.91</td>
<td>-1.22</td>
<td>72</td>
<td>.13</td>
</tr>
<tr>
<td>Emotional Inhibition</td>
<td>2.8 (0.7)</td>
<td>2.4 (0.6)</td>
<td>.75</td>
<td>.71</td>
<td>2.94**</td>
<td>72</td>
<td>.004</td>
</tr>
<tr>
<td>Impulsiveness</td>
<td>2.6 (0.6)</td>
<td>2.5 (0.6)</td>
<td>.71</td>
<td>.66</td>
<td>0.17</td>
<td>72</td>
<td>.85</td>
</tr>
<tr>
<td>Ambivalence Over Expression</td>
<td>2.5 (0.6)</td>
<td>2.7 (0.6)</td>
<td>.93</td>
<td>.87</td>
<td>-1.98</td>
<td>68</td>
<td>.052</td>
</tr>
<tr>
<td>Control of Anger</td>
<td>29.5 (5.9)</td>
<td>29.2 (5.9)</td>
<td>.81</td>
<td>.75</td>
<td>0.33</td>
<td>71</td>
<td>.74</td>
</tr>
<tr>
<td>Control of Anger In</td>
<td>28.6 (7.1)</td>
<td>28.3 (7.1)</td>
<td>.93</td>
<td>.95</td>
<td>0.25</td>
<td>71</td>
<td>.81</td>
</tr>
<tr>
<td>Control of Anger Out</td>
<td>30.4 (5.7)</td>
<td>29.5 (5.9)</td>
<td>.86</td>
<td>.89</td>
<td>-0.96</td>
<td>71</td>
<td>.34</td>
</tr>
<tr>
<td>Empathy</td>
<td>2.8 (0.5)</td>
<td>2.9 (0.5)</td>
<td>.33</td>
<td>.51</td>
<td>-1.57</td>
<td>72</td>
<td>.12</td>
</tr>
<tr>
<td>Perspective Taking</td>
<td>2.8 (0.7)</td>
<td>3.0 (0.8)</td>
<td>.72</td>
<td>.80</td>
<td>1.42</td>
<td>72</td>
<td>.16</td>
</tr>
<tr>
<td>Empathic Concern</td>
<td>3.0 (0.7)</td>
<td>3.4 (0.5)</td>
<td>.76</td>
<td>.68</td>
<td>4.13**</td>
<td>72</td>
<td>.000</td>
</tr>
<tr>
<td>Personal Distress</td>
<td>2.5 (0.6)</td>
<td>2.3 (0.7)</td>
<td>.72</td>
<td>.79</td>
<td>-2.41*</td>
<td>72</td>
<td>.02</td>
</tr>
<tr>
<td>Global Distress</td>
<td>54.2 (11.4)</td>
<td>53.5 (10.4)</td>
<td>.76</td>
<td>.82</td>
<td>-0.60</td>
<td>72</td>
<td>.66</td>
</tr>
<tr>
<td>Intimate Safety</td>
<td>3.0 (0.6)</td>
<td>3.0 (0.6)</td>
<td>.88</td>
<td>.88</td>
<td>-0.48</td>
<td>72</td>
<td>.63</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01, ***p < .001.
domains, someone moderately skilled to demonstrate strengths in some domains but not others, and someone not skillful in emotional control to score low on all three domains. Exploratory examination of the correlations among the global score, the subscales, and the outcome measures (marital distress and intimacy) revealed that the correlations between the global score and the outcome variables were consistently larger (rs of -.33 and .46, respectively) than correlations between outcome variables and the individual subscales (for marital distress, rs ranged from -.20 to -.30, and for intimacy, rs ranged from .28 to .38), which is consistent with our assumption that higher scores across more subscales indicate greater overall emotional skillfulness.

The ECQ subscales have been found to be internally consistent (Kuder-Richardson reliability of between 0.77 and 0.86) and stable over inter-test intervals (rs from 0.79 to 0.92). Concurrent validity has also been established using a variety of well-established personality measures. For example, the Rehearsal subscale has been found to correlate significantly with measures of Neuroticism (r = .57; Roger & Najarian, 1989).

Self-Expression and Control Scale (SECS; van Elderen, Verkes, Arkesteijn, & Komproe, 1996). The SECS measures how anger and hostility are expressed and contains four subscales. Participants rate how often they use various strategies when feeling angry or furious using a 4-point scale (1 = Almost Never to 4 = Almost Always); higher scores indicate greater anger control skills. Two subscales were combined into a global measure of anger control; Control of Internalization of Anger (CAI) assesses inwardly directed control of anger (e.g., “I try to relax”), and Control of Externalization of Anger (CAO) assesses outwardly directed control of anger (e.g., “I keep my anger in restraint”). The remaining two subscales, Anger In and Anger Out, were not used in this study because they did not fit with our conceptualization of emotion skills. Anger In assesses efforts to hide anger (e.g., “Inside I seethe without showing it”) and Anger Out assesses outwardly directed anger (e.g., “I say nasty things”). Internal reliability has been reported to be high (CAI alpha = 0.91, CAO alpha = 0.910) as have test-retest correlations (0.63 and 0.68, respectively). Construct validity has been demonstrated on samples of psychiatric patients (van Elderen et al., 1996).

Empathy Measure

Interpersonal Reactivity Index (IRI; Davis, 1980). The IRI is a 21-item scale measuring three domains of empathic ability, averaged to create a global measure of empathy. Participants were asked to rate how well each item described them on a 5-point scale (0 = Does Not Describe Me Well to 4 = Describes Me Well); higher scores indicate greater empathic ability. The Perspective Taking (PT) subscale measures ability to see things from another’s point of view (e.g., “I try to look at everybody’s side of a disagreement before I make a decision”). The Empathic Concern (EC) subscale assesses ability to experience feelings of compassion for others (e.g., “Sometimes I don’t feel very sorry for other people when they are having problems”). The Personal Distress (PD) subscale measures the tendency to experience personal feelings of discomfort in the presence of others’ suffering (e.g., “I sometimes feel helpless when I am in the middle of a very emotional situation”). Construct validity has been demonstrated for the IRI (e.g., Davis & Oathout, 1987). Adequate internal reliability has been reported with alphas ranging from .70 to .78 for the various subscales. Test-retest correlations were reported as ranging from .61 to .76. Davis (1980) reports that intercorrelations between the subscales suggest that scores on one subscale do not strongly predict scores on the other subscales. In keeping with this, high internal reliability was found for the three subscales but not for the global score. As with the ECQ 2, a global score remains a useful metric of overall empathy because higher scores on more subscales imply a greater overall capacity for empathy.

Comfort with Emotional Expressiveness Measure

Ambivalence Over Emotional Expressiveness Questionnaire (AEQ; King & Emmons, 1990). The AEQ is a 28-item scale measuring ambivalence about emotional expressiveness. Items were rated on a 5-point scale (1 = Never to 5 = Always) with higher scores reflecting greater levels of comfort in emotional expression. Items include those that reflect ambivalence about expressions of love and affection (e.g., “I want to tell someone when I love them, but it is difficult to find the right words”) and items reflecting ambivalence about expressing negative emotions (e.g., “After I express anger at someone, it bothers me for a long time”). Adequate internal reliability has been reported (alpha = .82). The construct validity of the AEQ has been demonstrated. For example, studies have shown the AEQ to be significantly correlated with measures of general ambivalence, peer rated inexpressiveness, and family expressiveness (King & Emmons, 1990).

Identification and Communication of Emotions Measure

Toronto Alexithymia Scale (TAS-20; Bagby, Taylor, & Parker, 1994). This 20-item self-report scale assesses difficulty with identifying and communicating emotions (e.g., “I am often confused about what emotion I am feeling” and “It is difficult for me to find the right words for my feelings,” respectively). Two subscales of the TAS-20 were averaged to create a global measure. Participants rated items on a five-point scale (1 = Strongly Disagree to 5 = Strongly Agree) with higher scores reflecting greater skillfulness at identifying and communicating emotions. The
TAS-20 has been found to have adequate test-retest reliability and internal consistency as well as good convergent and discriminant validity (e.g., Taylor, Bagby, & Ryan, 1990).

Marital Health Measures

Marital Satisfaction Inventory–Revised (MSI-R; Snyder, 1997). This scale is a 150-item (true/false) self-report measure of marital satisfaction providing T-scores reflecting the intensity of distress in several relationship areas. The Global Distress Scale (GDS) was used in this study, with higher scores reflecting greater levels of marital distress. Reliability and validity have been well demonstrated for the MSI-R (Snyder, 1997).

The Intimate Safety Questionnaire (ISQ; Cordova, Warren, Gee, & McDonald, 2004). The ISQ is a 14-item self-report scale designed to measure intimate safety defined as a feeling of safety being vulnerable. Items include “When I am with my partner, I feel anxious, like I’m walking on eggshells,” “I feel comfortable telling my partner things I would not tell anybody else,” and “I feel comfortable telling my partner my likes and dislikes while we are making love.” Respondents rate each statement on a 5-point scale (0 = Never to 4 = Always). Internal reliability has been found to be adequate with alpha of .93 for men and .96 for women and test-retest reliabilities over a one-month period of .83 for men and .92 for women. The ISQ has been found to be significantly correlated with the Personal Assessment of Intimacy in Relationships Questionnaire (PAIR; Schaefer & Olson, 1981), particularly with the Emotional Intimacy subscale (rs = -.82 for women and -.80 for men). In addition, the ISQ is significantly correlated with the Global Distress Scale of the Marital Satisfaction Inventory (Snyder, 1997; rs = -.72 for women and -.68 for men), the Marital Status Inventory (Weiss & Cerreto, 1980; rs = -.54 for women and -.43 for men), and partners’ attachment styles (Hazan & Shaver, 1990; rs = .42 for women and .43 for men), supporting construct and criterion validity. Recent research has found the ISQ to mediate the association between the ability to identify and communicate emotions and marital satisfaction (Cordova et al., 2005).

RESULTS

DESCRIPTIVE STATISTICS AND GENDER DIFFERENCES

Descriptive statistics are presented in Tables 1 and 2. With regard to observational measures, paired t-tests revealed that women expressed more nonhostile negative emotions and were more likely to mention feelings by name than men. In addition, women were coded as showing a greater lack of defensiveness than men. With regard to self-report measures, women reported more empathic concern, less discomfort with the personal distress of others, and less inhibition of their emotional responses than men.

HYPOTHESIS 1: EMOTION SKILLS WILL BE OBSERVABLE IN COUPLES’ INTERACTIONS

Intraclass correlations calculated interrater reliabilities across four coders using 54% of the interactions. Not all of the interactions were coded for reliability in order to limit the burden on coders. Intraclass correlations ranged from .68 (Use of Feeling Words) to .92 (Expressing Positive Emotions). These results demonstrate that these 10 emotion skills were reliably observed in couples’ problem-solving interactions. The codes provided by the primary coder for each interaction were entered as the official measure for that interaction. Codes provided by the reliability coders were used only for reliability analyses.

In order to limit the risk of Type I error, a composite observed emotion skills variable was created by summing across the 10 emotions skills codes. This composite variable was found to have an internal reliability of $\alpha = .78$ for husbands and $\alpha = .73$ for wives. Women were rated as more emotionally skillful than men on this composite variable ($t(35) = 2.61, p < .05$).

HYPOTHESIS 2: INTIMACY WILL MEDIATE THE ASSOCIATION BETWEEN EMOTION SKILLS AND MARITAL SATISFACTION

The mediation model was tested using the Baron and Kenny (1986) guidelines: (1) there must be a significant association between the independent variable (i.e., emotion skills) and the proposed mediator (i.e., intimate safety); (2) there must be a significant association between the independent variable and the dependent variable (i.e., marital satisfaction); (3) there must be a significant association between the proposed mediator and the dependent variable; and, (4) the direct association between the independent variable and the dependent variable must be reduced to nonsignificant once the mediator is taken into account.

1. Note that we use the term marital health to refer to a broad constellation of variables that include satisfaction, intimacy, social support, friendship, trust, relationship-mindedness, and other variables that contribute to the overall quality, stability, and resiliency of a marriage.

2. Note that we use the terms intimacy and intimate safety synonymously with regard to our own conceptualization, but recognize that other theorists conceptualize intimacy as a broader construct.
In order to limit the risk of Type I error, a composite self-report emotion skills variable was calculated by first standardizing and then summing across the five self-reported emotions skills. This composite variable was found to have an internal reliability of $\alpha = .71$ for husbands and $\alpha = .81$ for wives. Wives and husbands did not significantly differ on this composite ($t(67) = -.31, p = .75$). This composite measure was consistently more strongly correlated with the marital health measures than any of the five emotion skill variables or any of the individual subscales of specific emotion skill measures. This suggests that the composite measure, despite inclusion of some measures with low internal reliabilities (e.g., the global ECQ and the global IRI), is an adequate global measure of overall emotion skills.

First, the composite self-report emotion skills variable was used for the mediation analyses. For husbands and wives, the first two conditions for mediation were met. Self-reported emotion skills were positively associated with marital satisfaction and intimate safety when each was entered alone. In addition, marital satisfaction was positively associated with intimate safety. As hypothesized, the direct path between wives' self-reported emotion skills and marital satisfaction was reduced to nonsignificant once intimate safety was included. The direct path between husbands' self-reported emotion skills and marital satisfaction, although reduced by approximately 50%, was still significant after the inclusion of intimate safety, suggesting that intimate safety partially mediated the association between self-reported emotion skills and marital satisfaction for men (see Figure 1).

Next, intimacy was tested as the mediator between one partner's self-reported emotion skills and the other partner's marital satisfaction. Analyses for both husbands and wives revealed that intimacy partially mediated the association between one spouse's emotion skills and the other spouse's marital satisfaction (see Figure 2).

Next, the composite score for the observed emotion skills variables was used for the mediation analyses. All conditions for testing mediation were met for both husbands and wives. When the amount of variance attributable to intimate safety was considered, the direct path between observed emotion skills and marital satisfaction, although reduced, was still significant. Thus, intimate safety partially mediated the association between the observed emotion skills and marital satisfaction for both men and women (see Figure 3).

Finally, intimacy was tested as the mediator between one partner's observed emotion skills and the other partner's marital satisfaction. Analyses revealed that intimacy partially mediated the association between wives' emotion skills and husbands' marital satisfaction, and fully mediated the association between husbands' emotion skills and wives' marital satisfaction (see Figure 4).

**WHICH SELF-REPORT EMOTION SKILLS ARE ASSOCIATED WITH OBSERVED EMOTION SKILLS?**

Zero-order correlations were calculated between observed and self-reported emotion skills variables (see Table 3). Husbands' observed capacity to display positive emotions was related to their self-reported control of anger, ability to identify and communicate emotions, and comfort with emotional expression. Husbands' observed ability to elicit positive emotions in the spouse was related to their self-reported comfort with emo-
tional expression. Husbands’ observed ability to display nonhostile negative emotions was negatively related to their self-reported anger control (the greater the control, the less expression of negative emotions). Finally, husbands’ ability to use feeling words was positively related to their self-reported ability to identify and communicate their emotions and was positively related to their self-reported comfort with emotional expression.

Wives’ observed ability to deliver criticism in a positive or neutral way was related to their self-reported anger control. Wives’ observed ability to respond to criticism in a positive or neutral way was positively associated with their self-reported control of nonhostile negative emotions, anger control, ability to identify and communicate emotions, and empathy. Finally, wives’ observed ability to display empathic concern was positively related to their self-reported control of nonhostile negative emotions and ability to identify and communicate emotions.

No other significant correlations were found between observed and self-reported emotion skills variables. Given sample size and other limitations, however, questions concerning associations between the two types of measures remain.

HYPOTHESIS 3: OBSERVED EMOTION SKILLS WILL ADD TO SELF-REPORT SKILLS IN THE PREDICTION OF MARITAL SATISFACTION

To test the hypothesis that observed emotion skills will predict marital satisfaction, after controlling for self-reported emotion skills, hierarchical regression analyses were performed. The self-reported emotion skills composite variable was entered in Step 1, followed by the observed emotion skills composite variable in Step 2, as predictors of marital satisfaction. For husbands, both observed and self-reported emotion skills accounted for unique portions of the variance in their own marital satisfaction ($\beta = .36, p < .01$, and $\beta = .50, p < .001$, respectively). When predicting wives’ marital satisfaction from husbands’ emotion skills, again both observed and self-reported emotion skills accounted for unique portions of the variance ($\beta = .35, p < .05$, and $\beta = .40, p < .01$, respectively).

For wives, when observed emotion skills were included in a hierarchical regression analysis, the contribution of self-reported emotion skills to marital satisfaction was reduced to marginal significance, whereas observed emotion skills were a highly significant predictor of marital satisfaction ($\beta = .31, ns$, and $\beta = .37, p < .05$, respectively). When predicting husbands’ marital satisfaction from wives’ emotion skills, again the contribution of self-reported emotion skills was reduced to nonsignificance whereas observed emotion skills remained a significant predictor ($\beta = .25, ns$, and $\beta = .35, p < .05$, respectively). Thus, for wives the observational measure of emotion skills was found not only to account for a unique portion of the variance in marital satisfaction, but also to supplant the predictiveness of self-report measures.

DISCUSSION

The present study provides further support for the theory that emotion skills play a critical role in the development and maintenance of marital health because of the role such skills play in sustaining the intimacy process (Cordova et al., 2005). Further, results indicate that emotion skills
can be reliably observed in couples' interactions, supporting the argument that intimate relationships are particularly useful contexts in which to observe emotion skills in action. Analyses also support the model in which emotion skills influence marital satisfaction through their influence on intimate safety. The results also raise questions about the extent to which self-assessed emotion skills accurately reflect observed emotion skills. Results further demonstrate that observational measurement of emotion skills adds to self-report measurement in the prediction of marital health. Finally, there were few gender differences, but where there were differences women appeared more skillful, on average, than men.

EMOTION SKILLS RESIDE IN THE FIELD OF INTIMATE INTERACTION

That emotion skills can be reliably observed in marital interactions suggests that, although emotions are often thought of as wholly private and perhaps best observed as fluctuations in brain activity, there are whole realms of emotional functioning that are played out principally in interpersonal contexts. Our contention is that the study of emotion skills in intimate relationships will contribute substantially to our understanding of interpersonal functioning and to our basic understanding of emotional functioning. In the area of interpersonal functioning, we suspect that emotion skills are a key ingredient in the development of long-term...
marital health because they are essential to managing the emotionally challenging nature of intimacy. The field is still in the early phases of studying this important facet of individual and interpersonal functioning (e.g., Feeney 2005; Gottman et al., 1996), including the degree to which emotion skills develop within adult intimate relationships and the degree to which emotion skill deficits can be addressed therapeutically.

In the area of basic emotion research, we propose that intimate relationships are the principal context within which we live out our emotional lives and that the basic study of emotional processes can benefit significantly from taking full advantage of intimate relationships as emotional context.

**INTIMACY MEDIATES THE ASSOCIATION BETWEEN EMOTION SKILLS AND MARITAL SATISFACTION**

We found that both wives’ and husbands’ emotion skills were positively associated both with their own marital satisfaction and with the marital satisfaction of their partners. Further, we found that feelings of intimate safety at least partially mediated those associations using both observational and self-report measures of emotion skills. One of the benefits of developing observational measures of emotion skills is that they provide additional support for the model using a data source free from common method variance.

Again, these results provide some support for the contention that emotion skills influence marital satisfaction at least partially because of their influence on the processes of intimacy, perhaps particularly because of the role of interpersonal vulnerability and hurt in intimate relating. Theoretically (Cordova & Scott, 2001), the intimacy process is driven by interpersonal vulnerability and necessarily involves openness to hurt, making intimacy uniquely emotionally challenging. As a result, how a person has learned to behave in the context of emotional challenge should determine whether intimacy processes result in deepening intimacy and greater relationship health or result in aggression, withdrawal, and polarization. The current study provides results generally consistent with this theory.

In addition, the results also suggest that emotion skills continue to have direct effects on marital satisfaction apart from feelings of intimate safety, suggesting that emotion skills influence marital satisfaction through additional mechanisms, including possibly attribution styles (e.g., Fincham & Bradbury, 1993), the general balance of positivity and negativity (Gottman, 1994), and general problem-solving and social
support competence (e.g., Dehle, Larsen, & John, 2001; Markman, Floyd, & Stanley, 1988).

PARTNERS’ SELF-ASSESSED EMOTION SKILLS CORRESPOND TO FEW OBSERVED EMOTION SKILLS

Analyses revealed a handful of correlations between observed and self-reported emotion skills. For example, husbands’ observed ability to display positive emotions during problem-solving interactions was associated with their self-assessed ability to control their anger, their facility with identifying and communicating their own feelings, and their comfort with emotional expression. Thus, the ability to stay positive during conflict may depend, for men, on a combination of emotional control, emotional knowledge, and emotional comfort, suggesting the potential complexity underlying what may appear to be a simple emotion skill.

Similarly, wives’ observed ability to respond positively to criticism was associated with their own self-assessed ability to control anger and other, nonhostile, negative emotions, their ability to identify and communicate emotions, and their degree of empathy. Thus, again, an observed emotion skill that may appear fairly simple on the surface (responding well to a spouse’s criticism) may involve a complex set of underlying skills composed of emotion control, emotion knowledge, and empathy.

Generally, however, there were relatively few significant correlations between the two methods. On the one hand, this may mean that the two methods are measuring different phenomenon, a possibility that remains to be ruled out. Alternatively, it may mean that the current study lacked the power to detect correlations between observed and self-reported measures of the same construct, correlations that have consistently been small within the marital literature (Bradbury, Fincham, & Beach, 2000). These results may also suggest that the two methods are measuring different facets of the same broad phenomenon, resulting in the current mix of significant and nonsignificant correlations. For example, there may be an unavoidable difference between a person’s self-assessment of his or her emotion skills and the person’s actual ability to behave skillfully in emotionally challenging situations. Alternatively, people with poorer emotion skills may be poorer judges of their actual emotion skills than people with more well-developed emotion skills, resulting in higher measurement error. Given the work that remains to be done to answer these questions, perhaps the most pragmatic question for the time being is whether the observational measure contributes substantially to self-report measures in the prediction of marital outcomes.

OBSERVED EMOTION SKILLS ADD TO SELF-REPORTED EMOTION SKILLS IN THE PREDICTION OF MARITAL SATISFACTION

Observed emotion skills were found to contribute significantly to self-reported emotion skills in the prediction of both partners’ marital satisfaction. It appears that both methods may usefully capture different facets of the phenomenon. Observational measures of emotion skills appear to warrant use, despite the more complicated nature of the measurement task, because they appear to be uniquely predictive of marital health. In fact, with regard to this particular data set, wives’ observed emotion skills were better predictors of marital satisfaction than self-report, despite the advantage self-report measures gain from common method variance in such analyses. These results suggest the hypothesis that wives may overestimate their emotion skills on self-report measures, perhaps because of strong social expectations for women to be particularly emotionally competent.

WHEN GENDER DIFFERENCES EXIST, WOMEN APPEAR, ON AVERAGE, MORE SKILLFUL THAN MEN

The results revealed a few gender differences in emotion skills, and in each case, women were found to be more skillful, on average, than men. Brody and Hall (1993) have concluded that schooling in emotions fosters very different skills, with girls learning to read and express verbal and nonverbal emotions and boys learning to suppress emotions such as vulnerability, guilt, fear, and hurt. Thus, some women may come into marriage groomed for the role of emotional manager (including bearing the burden of actively addressing areas of conflict), while some men arrive less prepared for the emotionally vulnerable work of intimate relating (e.g., Floyd & Markman, 1983).

We also found that husbands, compared to wives, reported significantly less empathic concern and more feelings of personal distress in response to the distress of others. This is also consistent with previous research (e.g., Rowan, Compton, & Rust, 1995). Levenson, Carstensen, and Gottman (1994) found that husbands are more prone to physiological “flooding” at lower levels of a spouse’s negativity than were their wives. Speculatively, some men may find their wives’ distress not simply unpleasant but fundamentally disconcerting, more frequently limiting
their ability to remain intimately engaged with their partners around emotionally distressing issues.

Additionally, empathy and compassion may be learned and strengthened through practice and use. Women may become more proficient at empathy because much of their early play is specifically relational. Men, on the other hand, may get substantially less empathy practice because much of their early play is competitive. It is likely that relationally relevant emotion skills are best learned in the process of pursuing relationship goals (which girls start substantially earlier than boys), and the pursuit of competition goals does not provide the necessary contingencies for learning relationally relevant emotion skills (although it may be a good context for learning competition-relevant emotion skills).

LIMITATIONS
The current study has several limitations. First, the sample size is modest and therefore limits the study's potential to detect effects. Second, the current study is limited in its representation of ethnicity and socioeconomic status. Further studies will be needed to address the generalizability of these findings to a more representatively diverse population. Third, the current data are cross-sectional, so do they not address directionality of effect, developmental issues, or the longitudinal prediction of relationship outcomes. The theory proposed is clearly developmental in character and yet the current cross-sectional data cannot address that particular aspect of the theory. We are currently conducting longitudinal studies to address the developmental implications of emotion skills and intimacy theory.

DIRECTIONS FOR FUTURE RESEARCH
Further research needs to be conducted to continue to explore the range of emotion skills relevant to intimate relationships. Additionally, the observational measure of emotion skills used in this study remains to be more thoroughly studied. It remains to be determined whether the emotion skills construct as coded here is distinct from other problem solving and social support coding systems. In addition, further research is needed to address whether emotion skills are longitudinally predictive of marital satisfaction and whether emotion skills continue to develop across the course of a relationship. Longitudinal study of newlyweds at multiple time points may be the best way of testing developmental hypotheses. Finally, further research needs to be conducted to address the possibility of intervening in emotion skill deficits as a means of addressing intimacy difficulties in couples and increasing overall level of marital health. Given these limitations, however, this preliminary foray into the observational coding and self-reported measurement of emotion skills processes indicates that it is a productive area of inquiry that may provide important knowledge about both basic relational and emotional processes.

REFERENCES


