Running Head: Anger

Using Interpersonal Scripts and Meta-Mood to Understand

the Impact of Anger on Personal Relationships and Health

By Lorissa P. Martens

A Thesis

Submitted to the Faculty of Graduate Studies

University of Manitoba

In Partial Fulfillment of the Requirements

Of the Degree of

Master of Arts

Department of Psychology

University of Manitoba

Winnipeg, Manitoba

THE UNIVERSITY OF MANITOBA

FACULTY OF GRADUATE STUDIES
*****
COPYRIGHT PERMISSION

Using Interpersonal Scripts and Meta-Mood to Understand the
Impact of Anger on Personal Relationships and Health

BY

Lorissa P. Martens

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of

Manitoba in partial fulfillment of the requirement of the degree

Of

Master of Arts

Lorissa P. Martens © 2005

Abstract

Anger, one of the most commonly felt emotions, has been linked to both health and

relationship problems. Surprisingly though, some studies show that anger is not always

harmful, and in some cases, it may even be beneficial. As such, it is fundamental to both the

theoretical understanding of anger and for promoting personal and relationship health to

understand these discrepancies. The proposed study investigated both constructive and

destructive interpersonal anger patterns, also known as anger scripts. Specifically, it was

expected that how individuals think and feel about emotions (i.e., meta-mood) would have

direct implications for their anger scripts, which in turn would affect the well-being of close

relationships and health. To test this idea, 88 heterosexual dating couples completed

measures of meta-mood, anger scripts, relationship satisfaction, and personal health. A

regression analysis was used to test the hypothesis that anger scripts would be related to

relationship satisfaction and personal health. Another regression analysis tested the

hypothesis that anger, in terms of frequency and severity, would be negatively related to

relationship satisfaction and personal health only for those with destructive anger scripts and

not at all related for those with constructive anger scripts. As well, differences between

partners' anger scripts and meta-mood were tested for their effect on relationship satisfaction

and health using cross-interclass correlation analyses. Finally, a mediation analysis was used

to test the hypothesis that meta-mood has direct implications for anger scripts, which in turn

influence both relationship satisfaction and personal health. Results generally supported the

hypothesis that anger scripts are related to relationship satisfaction and health, though most

effects involved destructive, not constructive, scripts. Moreover, anger scripts were found to

affect partner's levels of satisfaction (but not health). As predicted, meta-mood was related

to anger scripts, negatively to destructive, and positively to constructive, scripts. However, surprisingly, meta-mood was not found to moderate the relationship between anger level and satisfaction. Finally, the significance of the mediation-model was restricted to destructive scripts mediating the relationship between meta-mood and relationship satisfaction and only for women. Limitations and implications for future research are also discussed.

USING INTERPERSONAL SCRIPTS AND META-MOOD TO UNDERSTAND THE

IMPACT OF ANGER ON PERSONAL RELATIONSHIPS AND HEALTH

Anger may be one of the most commonly felt emotions. As Averill (1995) notes, anger is an everyday emotion: "Depending on how records are kept, most people report becoming mildly to moderately angry anywhere from several times a day to several times a week" (p. 338).   However, this ordinary emotion has been linked to both health and relationship problems. Subsequently, anger is receiving increased attention as North Americans' concerns over their ailing health and personal relationships mount. Surprisingly, some studies show that anger is not always harmful, and in some cases, it may even be beneficial. For example, anger has not been consistently related to relationship problems and it has even been related to increased relationship satisfaction over time (Gottman & Krokoff, 1989). Similarly, in the health literature, it has been suggested that while holding anger in, or explosively letting anger out, poses risks to personal health, calm expression of anger may be beneficial to health (e.g., Davidson, MacGregor, Stuhr, Dixon, & MacLean, 2000). As such, it is fundamental to both the theoretical understanding of anger and for promoting personal and relationship health to understand these discrepancies. In order to accomplish this task, it is necessary to examine both constructive and destructive anger. Moreover, it should be useful to examine how peoples' anger scripts are related to their partners' perceived relationship satisfaction and personal health.

As well, because people differ in what is popularly known as emotional intelligence it may also be useful to examine if meta-mood (thoughts and feelings about emotion) is related to more or less harmful anger episodes.   It is expected that personal thoughts and feelings about emotions (i.e., meta-mood) have direct implications for anger expectations and

expression (i.e. anger scripts), which in turn affect the well being of close relationships and health.

Health Consequences of Anger

Evidence of the negative health consequences of anger is accumulating in the medical literature. For instance, in a longitudinal study of 1055 male medical students, anger reactions to stress were related to a significant increased risk of premature cardiovascular disease, coronary heart disease, and myocardial infarction (i.e., heart attacks) 36 years later (Chang, Ford, Meoni, Wang, & Klag, 2002). The deleterious effect that anger has on the cardiovascular system may be even more significant for those who are already predisposed to develop heart problems (see Kawachi, Sparrow, Spiro, Vokonas, & Weiss, 1996; Knox, et al., 1998).

Anger also poses problems for immediate health. For instance, in one study it was found that an episode of anger doubled the risk of experiencing a nonfatal myocardial infarction for two hours after the episode (Mittleman, et al., 1995; see also Tofler, et al., 1990). As evidence of the interpersonal nature of anger, for those who experienced an episode of anger as a possible trigger of myocardial infarction, the most frequently reported causes were arguments with family members (25%) and conflicts at work (22%).

As well, anger has been associated with hypertension and increased self-reports of physical symptoms (see Davidson et al., 2000). One study of particular interest looked at how anger affected the health of newlyweds (Kiecolt-Glaser et al., 1993). Specifically, 90 newlywed couples were asked to resolve two or three issues after being hospitalized for 24 hours to control for diet, caffeine intake, and physical activity. Recordings of their problem-

solving interactions were coded for anger. As predicted, those who exhibited more anger were found to have reduced cellular immunity as measured by immunological assays.

Notably, the form of anger expression can moderate its consequences. While the hostile expression of anger (anger-out) and the suppression of anger (anger-in) have adverse health outcomes, the constructive expression of anger may be beneficial. For example, Davidson et al. (2000) found that discussing anger calmly, constructively, and with a motivation to solve the problem, was related to both a faster recovery to pre-anger blood pressure levels and lower resting blood pressure.

With Whom Do We Become Angry?

As pointed out by Averill (1995), people are more likely to become angry with close friends (24%) loved ones (29%) than they to become angry with strangers (13%) and disliked others (8%). (Acquaintances make up another 25 percent). Others have come to similar conclusions suggesting that, somewhat ironically, it is those whom we like and love that are most likely to make us angry (e.g., Fehr & Baldwin, 1996; Fitness & Fletcher, 1993).

Relationship Consequences of Anger

It has been suggested that it is emotional, not verbal, content that is related to marital quality (Gottman, 1979). Intuitively, then, positive emotions should be associated with better marital quality and negative emotions with poorer marital quality. While some empirical findings support this "common sense" idea (e.g., Holtzworth-Munroe, Stuart, Sandin, Smutzler, & McLaughlin, 1997), some emotions may be more predictive of marital quality than others (e.g., Gottman, 1998). For instance, Waldinger, Shulz, Hauser, and Crowell (2004) found that expression of hostility in a marital interaction was not predictive of break-up at a five-year follow-up in a sample of married and cohabiting couples. However, this

study found that men's (but not women's) hostility was negatively related to the couples' present marital satisfaction. Overall, the finding that anger may be related to immediate, but not long term, satisfaction or stability lends support to other work that suggests that expression of anger is not in and of itself a cause of relational distress or dissolution (Katz, & Wilson, Gottman, 1999).

The lack of a clear relation between anger and relationship satisfaction and stability is likely due to a neutralizing presence of those people who engage in anger for constructive reasons and in a constructive fashion. For instance, one potentially good reason for disclosing anger to a spouse is to provide the spouse with the opportunity to repair damage (Fitness & Fletcher, 1993). Given the health and relationship consequences of various anger expressions, it seems important to examine people's emotion knowledge structures.

<div align="center">Script Theory</div>

Abelson (1981) presented script theory as a means of describing people's knowledge of ordinary experiences and how these "constructions" translate into behavior. The script contains information about the ordering of events. This is important because the expectation of which responses follow which behaviors can be used to predict and understand chains of events. Abelson (1981) demonstrated the temporal nature of the script with the example of the experience of going to a restaurant. That is, a typical script for going to a restaurant might include waiting to be seated, ordering drinks, looking at a menu, selecting items, eating, requesting the check, paying. Similarly, although emotion is often thought of as a thing, it can also be looked at it as a sequence of events. For instance, Abelson (1981) noted that, "A sizeable set of inferences can be made from the knowledge that, say, "John is angry." A negative thing has happened to John; he blames it on someone; he regards it as unjust; he is

aroused, flushed, and prone to swear or lash out; he may seek revenge on the instigator, and so on" (p. 727).

Although much work in the area of emotion is focused on the intrapersonal aspect of emotion, script theory has the benefit of allowing the study of aspects of emotion that occur between people or are dependent on other people. This is important considering that typically we see other people are responsible for and/or the target of our anger (Fehr & Baldwin, 1996). As mentioned earlier, people are more likely to get angry with friends and family than with strangers and disliked others (see Averill, 1995). In view of this, it seems reasonable to expect that the experience of anger will depend on the relationship with the other person. That is, partner reactions, or even expected partner reactions, have the potential to shape the approach, experience, and, ultimately the consequences, of anger. A study conducted by Fitness (2000) in the domain of the work place supported this finding, by identifying two basic emotion scripts. For those in a higher power position, anger was likely to be felt in situations where the subordinate was seen as incompetent or at fault. Here anger would often lead to confrontation, which was either followed by efforts towards resolution or punishment of the subordinate, after which the anger subsided. On the other hand, for those in a lower power position, anger was most likely to be experienced in situations of unjust treatment or humiliation. In this case, anger often led to withdrawal or retaliation without the release of tension. In sum, looking at the interpersonal aspects of anger makes it evident that anger triggers, anger expression, courses of action, and the resolution of anger are dependent on the dynamics of the relationship in which anger is experienced.

In addition to examining the interpersonal aspect of anger, another benefit of script analysis is the recognition of the temporal and causal sequence of emotion events. That is,

much like a script for a play, scripts represent the expected order of events. As Fehr et al. (1999) note, a frustration or offence occurs, producing anger, which in turn produces a desire for something to remedy the situation. Thus, by examining the minute details of emotion scripts we are able to learn about how people conceptualize, discuss, express, and regulate emotions. This includes beliefs about what causes emotions, what they are, how they are expressed behaviorally, and their associated outcomes (Fitness, 2000).

What Makes Us Angry?

Overall, perceptions of the instigation of anger are most frequently related to a voluntary and unjustified act, or a potentially avoidable accident or event (Averill, 1995; Fitness & Fletcher, 1993). Men and women experience approximately the same amount of anger in their relationships, but the particular triggers appear to vary slightly. For example, Buss (1989) found that men and women experienced the same frequency of upsets, but differed in what they found to be upsetting. Women were angered more by their partners' condescending, neglecting, inconsiderate, and insulting remarks and behaviors, while men were angered more by their partners' self absorption, moodiness, and sexually withholding behaviors. Overall, women may also be more inclined to see the events as more upsetting than men (Fehr et al., 1999; Buss, 1989). It has been suggested that this gender difference is based on women's greater sensitivity to the well-being of their relationships, a heightened motivation to care for their relationships (Gottman & Levenson, 1992; Gottman et al., 1995), and women's propensity to base self-esteem on relationship quality (Josephs, Markus & Tafarodi, 1992).

Fehr et al. (1999) also looked at anger instigation. Men and women were asked to rate how angry they would be if their partners acted in potentially anger-provoking ways. Both

men and women rated betrayal of trust as the greatest anger provoker, followed by rebuff, unwarranted criticism, negligence/lack of consideration, and cumulative annoyance. Similarly, Fitness and Fletcher (1993) found that for married couples, the most frequent anger triggers were related to feelings of being unfairly treated, badly treated, or unsupported by a partner. This is consistent with other general assertions that anger is elicited by the perception of unjust or unfair treatment (e.g. see Averill, 1982).

How Do We Express Anger?

Typically, when people feel angry, they have an urge to express their feelings to their partners, and most do, whether verbally or nonverbally (Fitness & Fletcher, 1993). However, other urges such as wanting to making sarcastic remarks, yelling, or wanting to fight, hit, or destroy something are not as likely to be acted on (Kassinove & Sukhodolsky, 1997).

Fehr et al. (1999) identified six categories of anger expression: Direct aggression (e.g., trying to hurt your partner in some way, either verbally or physically), indirect aggression (e.g., complain to someone else, get angry at someone or something else), avoidance (e.g., withdrawing, becoming silent), talking it over (e.g., negotiating, compromising, expression of hurt feelings), and conciliation (e.g., give in, accept responsibility). Overall, they found that the most prototypical anger reaction was talking and expressing hurt feelings, followed by indirect aggression, avoidance, and giving in, while the least likely anger expression reported was direct aggression. However, some sex differences were found. Specifically, women were generally more likely to report expressing hurt feelings than men, which is consistent with other research that has shown that when expressing anger women are four times more likely to cry than are men (e.g. Averill, 1983). Furthermore, the type of situation also had influence on how anger was expressed. That is, in

the case of a forgotten birthday, women were more likely to express hurt feelings and direct aggression than were men. Women were also more likely to express hurt feelings and direct aggression when receiving unwarranted criticism, while men were more likely to report conciliating/giving in.

It has been suggested in popular literature, and occasionally in empirical literature, that women are generally more inhibited when it comes to anger and that men have a difficult time controlling themselves (see Fehr et al., 1999). This notion is controversial, however, and in some cases women actually report more aggression than do men (e.g., Fehr & Baldwin, 1996; Archer, 2000). It should be noted that women may be more likely to get angry with their partner in the first place (Campbell & Muncer, 1997) and be more comfortable expressing anger to their partner, while men are more comfortable expressing anger to another man (e.g., Blier & Blier-Wilson, 1989). However, it should also be noted that endorsement of aggression is generally infrequent in both men and women (see Fehr & Baldwin, 1996).

How Do We Expect Others to React to Our Anger?

In a study of anger experiences, when those who had experienced anger and those who had been a target of anger were asked what the consequences were of the episode, the ratio of reported beneficial to harmful consequences was 3 to 1 for angry persons and 2.5 to 1 for targets of anger (see Averill, 1995 for a review). This is not to suggest that people enjoy experiencing anger or being the target of anger, but that the outcome can be positive (see also Kassinove & Sukhodolsky, 1997). Averill also found that when asked about the long-term consequences of an anger episode, 76% of the targets of anger reported that they came to realize their own faults because of the other person's anger. As well, more targets reported

that their relationship with the other person was strengthened (48%), rather than weakened (35%). Moreover, more targets reported gaining respect for the other (44%), rather than losing respect (29%).

Perhaps one of the reasons for this surprising positive twist on anger is that people tend to realize that constructive anger expressions tend to have constructive anger reactions. For example, Fehr et al. (1999) found that women and men expect constructive reactions to anger when initial anger expressions are constructive. In other words, when anger is expressed without hostility, when hurt feelings are expressed, or when an effort is made to conciliate, people do expect their partner's reaction to be similarly constructive. Some gender differences have been found when anger is expressed destructively, however. For example, Fehr et al. (1999) reported that men are more likely than women to expect their partners to react to avoidance/withdrawal with hurt feelings and a desire to talk. Also, men expect their partners to react to indirect aggression with rejection and hurt feelings, and men are more likely to expect their partners to react to direct aggression with avoidance, rejection, and the expression of hurt feelings. Women, on the other hand, expect their partners to react to direct aggression with denial of responsibility and mocking. Overall, the fact that people can anticipate their partner's reactions to anger makes it likely that people choose certain expressions in order to elicit particular reactions from their partner. If true, however, the level of insight and restraint required by this process may be related to the considerable variability in couples' ability to engage in constructive anger interactions.

Meta-Emotion/Meta-mood

It is apparent that emotions do not occur in vacuums, but within a social context. Moreover, both our pleasant and unpleasant experiences are subject to emotion-management

(Salovey, Hsee, & Mayer, 2001). However, people differ in their ability to manage their emotions, a concept that is captured in the idea of emotional intelligence. Two theories that tap into differences in how people view their emotions and try to manage them are meta-emotion and meta-mood. Meta-emotion, literally taken, means emotions about emotions, but often the term is used in a broader sense to include thoughts and cognitions. The vast majority of research on meta-emotion has been done in the area of parenting and divorce. Gottman and his collogues have defined two broad categories of parental styles derived from one's outlook on emotion: emotion dismissing and emotion coaching (see Gottman, Katz, & Hooven, 1995). Emotion dismissing (ED) describes a tendency to minimize or obliterate the experience of negative emotion. Typically parents who are characterized by this style see the negative effects of anger as toxic; they want to protect their child from feeling negative affect. Often parents who are ED believe that children should be cheerful and happy, and view unhappy children as a parental failure. They believe in accentuating the positive and de-emphasizing the negative in life; "wasting time" on feeling bad is believed to have destructive consequences.

In contrast, emotion coaching (EC) refers to a style of parenting in which the parent seeks to help the child understand negative emotion. These parents see emotions as natural cues to the self and to the world and, as such, see emotion as beneficial. Instead of using distractions (e.g., candy) or threats ("If you want to cry, go to your room!"), parents "coach" the children about what they are feeling and why they may be feeling it. Interestingly, in comparison to dismissing parents, coaching parents tend to have more words to explain emotions (see Gottman, 2001).

These two parenting styles have been shown to have implications for the child's emotional, social, and academic development as well as the child's reaction to marital conflict and, when it occurs, divorce. While the main focus of meta-emotion literature is in the area of child functioning, particularly in buffering children from marital conflict and divorce, some research has examined the relationship between the parents. This research shows that emotion-coaching parents (in comparison to emotion-dismissing parents) have fewer negative and more positive interactions (Hooven, Gottman, & Katz, 1995), less hostility, and more satisfaction in their marriages (see Gottman et al., 1999). Additionally, those who have discrepancies in their emotion philosophies are found to be at risk for divorce (Gottman, 2001).

Meta-mood

The idea that how we think and feel about our emotions has implications for the health of our personal relationships has been addressed more specifically in the romantic relationships literature. Here the literature uses the term "meta-mood" which bares a striking resemblance to Gottman's "meta-emotion". Meta-mood is defined as the "reflective experience" which occurs in conjunction with the more direct experience of the mood (see Mayer & Gaschke, 1988). The reflective experience is evident in common expressions regarding feelings about emotions (e.g., "I feel guilty about being happy") and those regarding the clarity or confusion about emotions (e.g., "I don't know how I feel right now"). Cognitive monitoring of emotion is also evident in attempts at mood regulation or mood change. For instance, when people do not like how they feel, they may use strategies such as thoughts of action (e.g., get advice), suppression (e.g., don't think about it), or denial (e.g., show no reaction) (Mayer, Salovey, Gomberg-Kaufman, & Blainey, 1991).

Several studies, including that of Salovey et al. (2002), suggest that people "differ in the skill with which they can identify their feelings and the feelings of others, regulate these feelings, and use the information provided by their feelings to motivate adaptive behavior" (p. 611). People who score higher on measures of meta-mood also have a greater understanding of their emotions and are better able to effectively regulate their emotions through their reactions in stressful situations. People who score lower on measures of meta-mood have less understanding of their emotions and struggle more to regulate their emotions in the thrall of stressful situations. As such, meta-mood is sometimes used as a measure of perceived emotional intelligence.

Overall, measures of meta-mood have been related to psychological and interpersonal functioning. Specifically, Salovey et al. (2002) administered the Trait Meta-Mood Scale and found that people's beliefs about the desire to maintain or repair moods (Repair) was related to less passive coping, less ruminating, and more active coping. Greater clarity of moods and emotions (Clarity) and Repair also were correlated with greater relationship satisfaction. Greater attention to feelings (Attention) was associated with greater empathy. All scales were associated with greater self-esteem.

According to Gohm (2003), " If the information carried by emotional feelings is critical for judgment and decision making, being unable or unwilling to avail oneself of this information should have costs" (p. 594). Indeed, Gohm (2003) found that people who had a combination of high affect intensity and low clarity (classified as "overwhelmed") overly relied on avoidance as a regulating strategy by making judgments about personal and nonpersonal risk that were not congruent with an experimental mood induction task. That is, while those who were not classified as overwhelmed judged personal and nonpersonal risk as

being higher after reading a new story about a homicide, those who were classified as overwhelmed had lower estimates of risks.

In line with medical research on anger, meta-mood has been linked to personal health, as well. For instance, in a study by Salovey, Stroud, Woolery, and Peel (2002), measures of Attention were associated with both lower cortisol and blood pressure in response to laboratory challenges. Being able to clearly discriminate between moods (i.e., Clarity) was associated with greater negative mood, but reduced cortisol secretions across three consecutive laboratory sessions. Greater Clarity was also indicative of greater Repair, lower levels of symptom reporting, social anxiety, and depression. While emotional information is useful to effectively minimize the impact of a stressors, Salovey et al. (2002) suggested that, "rumination and the absence of attempts to attend to, clarify, and repair mood may then lead to prolonged physiological arousal and negative health outcomes " (p. 612). Moreover, large increases in physiological response due to an acute stressor, in addition to inability to habituate to chronic stressors, may culminate in damaged organs and disease.

Overview

Given that people who score lower on measures of meta-mood have less understanding of their emotions and struggle more to regulate their emotions, they are likely to also have more destructive anger scripts, expecting destructive responses from their partners after a constructive or destructive anger expression. Subsequently, for these individuals anger should be associated with relationship dissatisfaction. Moreover, for these people, the inefficient management of anger and the associated prolonged physiological arousal and lack of habituation may be related to an increased risk of anger-related health problems. On the other hand, people who score higher on measures of meta-mood have a

clearer understanding of their emotions and how to regulate their emotions. Thus, they should have more constructive anger scripts, expecting constructive responses from their partners after a constructive expression and the occasional destructive expression. As a result, individuals scoring high on meta-mood should not show an association between anger and relationship dissatisfaction. Likewise, the efficient management of anger and constructive anger scripts should serve as a buffer against the health risks associated with anger.

Furthermore, given Gottman's (2001) finding that differing ideologies of anger between partners put the relationship in jeopardy, similarities between partners on measures of meta-mood and anger scripts may predict relationship satisfaction and personal health (see also, Holmberg & MacKenzie, 2002). However, if the deleterious effects of negative reciprocity on relationship satisfaction outweigh the protective value of similarity, similarity of the destructive/destructive track should predict particularly low relationship satisfaction (see Gottman 1998). Finally, partner qualities (in terms of meta-mood, anger-expression, and expected partner-reactions) may have a direct influence on personal measures of satisfaction and health.

Hypotheses

General Anger Scripts

1) Individuals would generally expect constructive responses from their relationship partners.

2) Destructive expectations would be more likely to be preceded by destructive self-expressions of anger than constructive self-expressions of anger.

Anger Script Tracks and Satisfaction/Health

1) Constructive tracks (i.e., a script involving constructive partner responses) would be associated with relationship satisfaction and a low incidence of health problems.

2) Destructive tracks (i.e., a script involving destructive partner responses) would be associated with low relationship satisfaction and a high incidence of health problems.

3) The constructive/destructive (i.e., constructive expression, destructive expectation) track would be particularly detrimental to relationship satisfaction and health, and the destructive/constructive track (i.e., destructive expression, constructive expectation) would be particularly beneficial to relationship satisfaction and health.

Anger Scripts and Health/Satisfaction Across Partners

1) Generally, it was expected that one partner's anger script would affect the other partner's relationship satisfaction and personal health. That is, constructive tracks would be positively related to partner satisfaction and negatively related to health problems. On the other hand, it was hypothesized that destructive scripts would be negatively related to partner's satisfaction and positively related to partner's incidence of health problems.

2) It was expected that similarity of constructive scripts would be related to couple satisfaction, based on the idea of similar emotion philosophies lead to better relationship well-being.

3) Two competing hypothesis were generated for predicting couple satisfaction based on similarity of destructive scripts. If similarity of emotion philosophies has a protective effect on the relationship, similarity of destructive scripts should serve to negate the consequences of both partners having destructive scripts. However, if the deleterious

effects of negative reciprocity on relationship satisfaction outweigh the protective value of similarity, similarity of the destructive/destructive track should be associated with particularly low relationship satisfaction.

Meta-Mood and Scripts

1) People low on meta-mood, opposed to those high on meta-mood, would expect more destructive responses from their partners after constructive and destructive anger expression.

2) People low on meta-mood, opposed to those high on meta-mood, would expect fewer constructive responses from their partners after constructive and destructive anger expressions.

Meta-Mood and Satisfaction/Health Across Partners

1) It was expected that meta-mood would be positively related to satisfaction and negatively related to health problems.

2) Individuals' meta-mood would be related to the health and satisfaction reported by their partners.

3) Similarity of meta-mood would be related to increased satisfaction and health.

Meta-Mood and Anger Frequency and Intensity

1) People with low, but not high, meta-mood would show a correlation between anger level (frequency plus intensity) and satisfaction/health.

The Mediation Model

1) Finally it was expected that meta-mood would influence anger-scripts, which in turn would influence both relationship satisfaction and personal health. That is, it was

expected that meta-mood would mediate the relation between meta-mood and health/satisfaction.

Method

Participants

Participants were Introductory Psychology students at the University of Manitoba (N = 88) and their dating partners.   Participants could participate in this study in exchange for Introductory Psychology course credit or for $5.00. Requirements of the study were that all participants be involved in a romantic heterosexual relationship of at least six months duration and that their partners were available to attend a data collection session. Because there was no language proficiency requirement for this study, there were several subject pool participants and partner participants who had difficulty understanding the oral and written instructions for the study. The data from these couples were excluded from the analysis (13 couples). As well, the data from two couples who had broken-up and two other couples in which one partner did not take the questionnaire seriously were not included in the analysis. Thus, the final sample size was 71 dyads.   The average age for men was 20.1 and the average age for women was 19.1. Participants generally indicated their relationship status was "serious and exclusive dating" (87%). The remainder of participants indicated that they were casually dating (5.0%), engaged (5.0%), or selected other (1.4%) and two people (1.4%) did not answer this question. The average length of these relationships was 21.8 months.

Procedure

Interested and eligible participants were able to make an appointment (via e-mail or telephone) to attend a data collection session of less than one hour in length. At the session,

participants and their partners were given a packet of questionnaires (see Appendix).

Participants who were enrolled in an Introduction to Psychology class received course credit

while their partners received remuneration (or a credit if they were also Introduction to

Psychology students).

Materials

The questionnaire packet consisted of various measures addressing anger scripts, trait

meta-mood, relationship satisfaction, and personal health. In order to prevent the anger

questionnaire from influencing participants' sense of relationship satisfaction and their

reports of meta-mood, the questionnaires were presented in the order that they are described

bellow.

Relationship satisfaction. Hendricks' (1988) Relationship Assessment Scale (RAS)

was used to assess relationship satisfaction. The RAS is a 7-item Likert type with possible

answers for each item ranging from 1 (low satisfaction) to 5 (high satisfaction). This measure

is widely used and has been shown to be both reliable and valid (see, Hendrick, Dicke, &

Hendrick, 1998). The reliability of this measure, as measured by Cronbach's alpha, was good

($\alpha = .86$ for men and $\alpha = .81$ for women).

Trait Meta-Mood experience. The second measure, Trait Meta-Mood Experience

(TMMS), as its name suggests, attempts to uncover stable thoughts about emotions. The

TMMS is 48 items long (Salovey et al., 1995). Participants are asked to rate a variety of

statements from 1 (strongly disagree) to 5 (strongly agree). For instance, "Feeling give

direction to life", "I am usually confused about how I feel" (reversed), and "Although I am

sometimes sad, I have a mostly optimistic outlook". Factor analysis has revealed three

factors: (1) Attention--attention to feelings, (2) Clarity--clarity of moods and emotions, (2)

Repair-- beliefs about the desire to maintain or repair moods. However, these scales were summed to yield a wide-ranging gauge of meta-mood. Cronbach's reliability coefficient for this measure was good ($\alpha = .87$ for men and $\alpha = .87$ for women).

Anger scripts. The materials for examining anger scripts were directly taken from Fehr et al. (1999) with the addition of one item from Buss (1989). There are three parts to Fehr et al's measure: causes of anger, reactions when angry, and anticipated partner reactions to one's expression of anger. For Part 1 (causes of anger) potential anger instigators (i.e., betrayal of trust, rebuff, negligence/lack of consideration, cumulative annoyance, and unwarranted criticism) are provided. For each of the five exemplars, participants are asked to indicate how much anger they would experience in each situation from 1 (not at all) to 7 (very much). Additionally, participants completed a similar item pertaining to sexual/affection withholding behavior, which Buss (1989) found to be an aggravating situation, especially for men.

For Part 2 (reactions when angry), participants are asked to indicate how they would respond to each of the aforementioned potential instigators. For each instigating event, six possible reactions are presented: direct aggression, avoidance, expression of hurt feelings, talking it over, and giving in/conciliating. Participants are asked to rate the likelihood of each reaction from 1 (not at all) to 7 (very likely).

In Part 3 (anticipated partner responses), participants are asked to indicate how they would expect their partner to respond to each possible self-reaction. For each possible reaction, 9 anticipated partner responses are presented: direct aggression, avoidance, expression of hurt feelings, talking it over, and giving in/conciliating, as well as deny responsibility, reject, and mock/minimize.

Personal health measure. Finally, participants answered questions regarding their health using a measure designed by Cohen and Hoberman (1983). This physical symptom inventory, sometimes referred to as CHIPS, is a list of 39 common physical complaints. Participants are asked to rate the degree to which each problem has been bothersome in the past two weeks on a scale from 1 (not at all) to 5 (extremely).

Results

General Anger Scripts

The first analysis was conducted to determine the nature of general anger scripts. Results were expected to replicate past findings that: (1) individuals generally expect constructive responses from their partners and (2) that destructive expectations are more likely to be expected in response to a destructive, than a constructive, expression of anger. To test these hypotheses, a repeated measures ANOVA was used. First, all self-expressions and expected partner reactions were labeled as constructive or destructive. Constructive self-expressions were: talk it over with out hostility, conciliate/give in, and express hurt feelings. Destructive self-expressions were: avoidance, direct aggression, indirect aggression, and withholding physical affection. Constructive expected partner responses were the same as the self-expressions. Destructive expected partner responses included all options listed for self-expression plus three more which only apply as responses: deny responsibility, reject you, and minimize the situation. The two levels of partner reactions (constructive, destructive) were nested within the two levels of possible self-expressions (constructive, destructive). This analysis was conducted separately for men and women because couples' data is interdependent and analyzing interdependent data together violates statistical assumptions of independence of observations.

Men

The ANOVA revealed a significant main effect for expected partner reactions, $F(1,70) = 96.69$, $p < .001$. That is, men generally tended to expect constructive, as opposed to destructive, responses from their partners (see Table 1 for means). There was also a significant effect for possible self-expressions, $F(1,70) = 41.66$, $p < .001$, indicating that individuals expect more intense reactions from their partners when they express anger destructively. As predicted, the interaction between self-expressions of anger and expected partner responses was significant, $F(1, 70) = 100.62$, $p < .001$. That is, men generally expected constructive response from their relationship partners, but they were more likely to expect constructive responses to constructive expressions of anger (constructive/constructive $M = 4.49$, destructive/constructive $M = 4.20$; $t(70) = 3.36$, $p = . 001$) and also more likely to expect destructive responses to destructive self-expressions ($M = 3.38$) of anger than to constructive expressions of anger ($M = 2.30$; $t(70) = 11.15$, p < .001).

Women

Expected partner reactions depended on self-expressions of anger for women as well (see Table 1 for means). The ANOVA revealed a significant main effect for expected partner responses, $F(1,70) = 129.31$, $p < .001$, meaning that, overall, women expected more constructive partner reactions than destructive partner reactions. A significant effect of self-expression of anger was also found ($F(1,70) = 35.27$, $p < .001$), although in the context of this analyses this finding merely indicates that women were reporting stronger expected partner reactions to destructive than to constructive self-expressions of anger. Finally, as predicted, there was a significant interaction between self-expression and expected partner response ($F(1,70) = 77.35$, $p < .001$). That is, although women generally expect constructive

responses, they are more likely to expect a constructive response when they express anger constructively ($M = 4.61$) versus destructively ($M = 4.38$; $t(71) = 2.10, p = .039$), and also more likely to expect destructive responses to destructive self-expressions of anger ($M = 3.02$) versus constructive self-expression ($M = 2.07$; $t(71)= 13.29, p < .001$).

Anger-Tracks and Satisfaction/Health

One of the main hypotheses of this study was that anger-tracks affect people's relationship satisfaction and personal health. The tracks of interest here are constructive versus destructive expressions leading to constructive versus destructive partner expectations. For the purpose of this paper, the scripts are abbreviated as self-expression/partner-expectation that is, constructive/constructive, constructive/destructive, destructive/constructive, and destructive/destructive. This analysis examined how the different tracks affect self-rated satisfaction and personal health. Specifically, anger-tracks were correlated with both of the dependent variables: satisfaction (as measured by the RAS scale) and health (number of physical symptoms reported on the PSI). This analysis was conducted separately for men and women. Means for satisfaction and health are reported in Table 1 and aggregated results of this analysis can also be seen in Table 2.

Men

The constructive/constructive track did not predict relationship satisfaction ($r = .178$, $p = .140$) or health ($r = .076$, $p = .529$). The constructive/destructive track did predict both lowered relationship satisfaction ($r = -.301, p = .011$) and poorer health ($r = .330$, $p = .005$). The destructive/constructive track was not related to relationship satisfaction ($r = .047$, $p = .701$) or health ($r = .111$, $p = .359$), while endorsing the destructive/destructive track did predict lower relationship satisfaction ($r = -.318$, $p = .007$) and poorer health ($r = .259$, $p = $

.029). In summary, for men, having destructive anger-scripts (constructive/destructive and/or destructive/destructive) was related low satisfaction and poor health. No significant relation was found between the constructive tracks (constructive/constructive and/or destructive/constructive) and the dependent variables.

Women

The constructive/constructive track did predict higher relationship satisfaction ($r = .247, p = .038$), but not health ($r = -.05, p = .676$). The constructive/destructive track did predict lower relationship satisfaction ($r = -.375, p = .001$), but not poorer health ($r = .155, p = .197$). The destructive/constructive track was not related to relationship satisfaction ($r = .148, p = .218$) or health ($r = -.103, p = .359$). Finally, the destructive/destructive track did predict lower relationship satisfaction ($r = -.330, p = .005$) and marginally poorer health ($r = .206, p = .084$). In summary, for women the destructive tracks did predict lower relationship satisfaction. Unlike men, however, these destructive tracks did not predict lowered health. Also unlike men, for women the constructive/constructive track predicted relationship satisfaction. No other relations were significant.

Within-Partner, Cross-Partner, and Dyadic Correlations

Although the previous analysis provided information about how anger tracks are related to satisfaction and personal health for men and for women, several of the hypotheses of this study pertain to the influence of the partner on the self and vice versa. In order to test these hypotheses, measures must be taken to adjust for the interdependence inherent in couple data. This was done using the method proposed by Gonzalez and Griffin (1999) for non-exchangeable (i.e. cross-sex) dyad level data.

Before beginning the analysis, the assumptions of the analysis were tested. That is, the procedure suggested by Gonzalez and Griffin requires that the within-partner and cross-partner variances and covariances are equivalent for each variable. Notably, all variable variances and covariances met these assumptions (i.e., all ps were non-significant).

The overall within partner correlation, denoted as $r_{xy.c}$, is a measure of the correlation between two variables for the entire group controlling for gender, as indicated by the subscript "c". The cross partner, denoted as $r_{xy'.c}$, is a measure between self-ratings on one variable and partner self-ratings on another variable. The dyad level correlation denoted as r_d is an indication of dyad similarity on both variables. Finally, r_i is an indication of the correlation of two variables at the individual level, controlling for the influence of the partner.

Constructive Expression, Constructive Expectation

Predicting relationship satisfaction. Expecting a constructive reaction to a constructive self-expression of anger was related to relationship satisfaction ($r_{xy.c}$ = .210, Z = 2.37, p = .018). Participants who had a high rating of this track were marginally more likely to have partners with higher relationship satisfaction ($r_{xy'.c}$ =.147 Z = 1.61, p = .107). Partners' similarity of constructive/constructive tracks did not predict similarity of satisfaction scores (r_d =.504, Z = 1.59, p = .118). Finally, constructive/constructive tracks did not predict satisfaction at the individual level (r_i = .119, t = .99, *ns*).

Predicting health. Expecting a constructive reaction to a constructive self-expression of anger was not related to better health ($r_{xy.c}$ = .001, Z = .013, p = .992). Participants' ratings of this track were also not related to their partners' self-ratings of personal health ($r_{xy'.c}$ = -.039 Z = -.039, p = .968). Dyadic similarity of constructive/constructive tracks did

not predict dyadic similarity of health (r_d = -.027, Z = .039, p = .968). Finally,

constructive/constructive tracks did not predict health at the individual level (r_i = .003, t =

.02, *ns*).

Constructive Expression, Destructive Expectation

Predicting satisfaction. Expecting a destructive reaction to a constructive self-

expression of anger was negatively related to relationship satisfaction ($r_{xy.c}$, = -.332, Z = -

3.55, p < .001). Participants who had this destructive script were more likely to have partners

who had less relationship satisfaction ($r_{xy'.c}$ = -.281, Z = 3.01, p = .001). Dyadic similarity for

this track was not related to particularly low dyadic satisfaction scores (r_d = -.0953, Z = -

.384, p = .704). Finally, constructive/destructive tracks did not predict satisfaction at the

individual level (r_i = -.095, t = .79, *ns*).

Predicting health. Expecting a destructive reaction to a constructive self-expression

of anger was related to poorer health ($r_{xy.c}$ = .237, Z = 2.79, p = .005). Participants' ratings of

this track were not related to their partners' self-ratings of personal health ($r_{xy'.c}$ = .036, Z =

.424, p = .674). Dyadic similarity of constructive/destructive tracks did not predict dyadic

similarity of health (r_d = .220, Z = -.413, p = .682). Finally, the constructive/destructive track

was predictive of poorer health at the individual level (r_i = .245, t = 2.10, p < .05).

Destructive Expression, Constructive Expectation

Predicting satisfaction. Expecting a constructive reaction to a destructive self-

expression of anger was not related to relationship satisfaction ($r_{xy.c}$ = .095, Z = 1.14, p =

.254). Participants who had this constructive script were not more likely to have partners

who had more relationship satisfaction ($r_{xy'.c}$ = .019, Z = .231, p = .984). The dyadic level

correlation for this track could not be calculated because it involved the square root of a

negative integer. Finally, having a destructive/constructive track did not predict satisfaction at the individual level ($r_i = .123$, $t = 1.02$, ns).

Predicting health. Expecting a constructive reaction to a destructive self-expression of anger was not related to better health ($r_{xy.c} = -.013$, $Z = -.153$, $p = .984$). Participants' ratings of this track were not related to their partners' self-ratings of personal health ($r_{xy'.c} = .112$, $Z = 1.33$, $p = .184$). Dyadic similarity for destructive/constructive tracks could not be calculated because it involved the square root of a negative integer. Finally, constructive/destructive tracks were not predictive of health at the individual level ($r_i = -.130$, $t = .11$, ns).

Destructive Expression, Destructive Expectation

Predicting satisfaction. Expecting a destructive reaction to a destructive self-expression of anger was negatively related to relationship satisfaction ($r_{xy.c} = -.325$, $Z = -3.51$, $p < 001$). Participants who had this destructive script were more likely to have partners who had less relationship satisfaction ($r_{xy'.c} = -.209$, $Z = -2.25$, $p = .024$). Dyadic similarity for this track was related to lower dyadic satisfaction scores ($r_d = .530$, $Z = -2.20$, $p = .028$). Finally, having this destructive script marginally predicted low relationship satisfaction at the individual level ($r_i = -.221$, $t(68) = 1.87$, $p = .07$).

Predicting health. Expecting a destructive reaction to a destructive self-expression of anger was related to poorer health ($r_{xy.c} = .228$, $Z = 2.68$, $p = .007$). Participants' ratings of this track were not related to their partners' self-ratings of personal health ($r_{xy'.c} = .009$, $Z = .106$, $p = .912$). Dyadic similarity of destructive tracks did not predict similarity of health ($r_d = .056$, $Z = .103$, $p = .920$). Finally, destructive/destructive tracks were predictive of poorer health at the individual level ($r_i = .266$, $t = 2.58$, $p < .02$).

Congruent/incongruent response comparisons. Although it was expected that responses that were not congruent with self-expressions would have more of an impact on relationship satisfaction and health than congruent responses, all comparisons were non-significant. That is, the constructive/destructive track was not more detrimental than the destructive/destructive track for satisfaction ($Z = .60, p = .55$) or for health ($Z = .31, p = .80$). As well, the destructive/constructive track was not more beneficial than the constructive/constructive track for satisfaction ($Z = -.30, p = .76$) or health ($Z = -.31, p = .30$)

The Influence of Meta-Mood on Anger-Scripts.

In order to determine if meta-mood influences expected partner reactions to possible self-expressions of anger, a repeated measures ANOVA was conducted. It was expected that individuals high on meta-mood would have more constructive anger scripts (i.e., generally expect constructive responses from their partners) and less destructive anger scripts (i.e., generally not expect destructive responses from their partners). The two levels of partner reactions (constructive, destructive) were nested within the two levels of possible self-expressions (constructive, destructive). Participants were categorized as high or low meta-mood based on a median split for their gender on the aggregate Trait Meta-Mood Scale to form a between-subjects factor (see Table 1 for means). This analysis was conducted separately for men and women.

Men

Consistent with the ANOVA for general anger scripts, there was a significant main effect of self-expression ($F(1,69) = 41.28, p < .001$) and expected partner reaction ($F(1,69) = 98.16, p < .001$). The between subject main effect of meta-mood was not significant ($F < 1$). Neither the interaction between meta-mood and expected partner response($F(1,70) = 1.81, p$

= .183) or the interaction between self-expression and meta-mood was significant ($F < 1$).

The three-way interaction between self-expression, expected response, and meta-mood was

also not significant ($F < 1$). A priori independent samples t-tests revealed that men who were

high on meta-mood expected marginally less destructive reactions from their partners

following constructive self-expressions of anger (M = 2.10) than men who were low on

meta-mood ($M = 2.50$; $t(69) = 1.82, p = .073$). There were no other differences in anger

scripts between low and high meta-mood men. In sum, the only difference between high

versus low meta-mood men was that high meta-mood men expected a marginally less

destructive response to their constructive expressions of anger.

Women

Consistent with the analysis for general anger scripts, there was a significant main

effect for self-expression ($F(1,69) = 34.64, p < .001$) and for expected partner response

($F(1,69) = 146.09, p < .001$). The main effect of meta-mood was not significant ($F < 1$). As

predicted, there was a significant interaction between meta-mood and expected partner

reactions for women ($F(1,69) = 8.61, p = .005$). That is, women who were high on meta-

mood compared to low on meta-mood expected both more constructive responses ($Ms = 4.74$

vs. 4.27; $t(69) = 1.95, p = .056$) and less destructive responses ($Ms = 2.29$ vs. 2.78; $t(69) =$

$2.76, p = .007$). Similarly to men, neither the interaction between self-expression and meta-

mood ($F < 1$), nor the three-way interaction between expected partner reactions, self-

expressions, and meta-mood were significant ($F(1,69) = 1.28, p = .262$). However, a priori

independent sample t-tests did reveal that women high on meta-mood did not expect more

constructive responses following constructive self-expression than did women low on meta-

mood ($Ms = 4.82$ vs. 4.41; $t(69) = 1.45, p = .151$). Women high on meta-mood expected

significantly less destructive responses to constructive self-expressions than did women low on meta-mood (Ms = 1.86 vs. 2.26; $t(69)$ = 2.38, p = .020). They also expected significantly more constructive responses following destructive self-expressions than did women low on meta-mood (Ms 4.66 vs. 4.13; $t(69)$ = 2.06, p = .044). Finally, women high on meta-mood expected significantly less destructive responses to destructive self-expressions than did women low on meta-mood (Ms = 2.73 vs. 3.30, $t(69)$ = 2.76, p = .008). In sum, compared to women who are low on meta-mood, women who are high in meta-mood generally had more constructive scripts and less destructive scripts.

Meta-Mood and Satisfaction/Health Across Partners

Predicting satisfaction. Based on previous studies, it was expected that meta-mood would be positively associated with satisfaction; it was, $r_{xy.c}$ = .227, Z = 2.65, p = .008. Also as expected, one partner's meta-mood was related to the other partner's satisfaction ($r_{xy'.c}$ = .169, Z = 1.97, p = .049). The dyad level correlation could not be calculated because it would have involved the square root of a negative integer. The individual level correlation was not significant (r_i = .095, t = .79, ns).

Predicting health. Meta-mood was only marginally related to health $r_{xy.c}$ = -.144, Z = 1.71, p = .087. The cross partner correlation was not significant ($r_{xy'.c}$ = -.051, Z = -.611, p = .535). The dyad level correlation could not be calculated for the same reason noted previously and the individual level correlation was not significant (r_i = -.098, t = .77, ns).

Meta-Mood and Anger Level (Frequency and Intensity)

Self-Rated Anger Frequency and Intensity

It was predicted that individuals scoring low, but not high, on meta-mood would show a negative association between anger level (in terms of frequency and intensity) and

relationship satisfaction and health. Given that the questionnaire item measuring anger intensity (as rated on a 7-point likert scale) and the item measuring anger frequency (also rated on a 7-point likert scale) were highly correlated for both men and women (men, $r = .727, p < .001$; women, $r = .527, p < .001$), these scores were summed to form an index of anger level. The index of anger level was then correlated with satisfaction and health for both those low and high on meta-mood. This analysis was performed separately for men and women. Finally, the significance of differences between genders in these correlations was tested.

Men. Results were not as expected. Higher anger levels were related to lower satisfaction for the low and high meta-mood groups ($r = -.348$, $p = .037$; $r = -.544, p = .001$, respectively). Higher anger level did not significantly predict poorer health for those low on meta-mood ($r = .139, p = .419$), but surprisingly, was marginally related to poorer health for those in the high meta-mood group ($r = .320, p=.061$).

Women. Results were also not as expected for women, in terms of the original predictions and in terms of the analysis for men. That is, contrary to predictions and in contrast to men, anger level in women was not related to lower satisfaction for those in the low ($r = .018, p = .919$) or in the high meta-mood group ($r = .166, p = .349$). However, similar to men, higher anger levels did not significantly predict poorer health for those low on meta-mood ($r = .113, p = .519$), but did significantly predict poorer health for those high on meta-mood ($r = .403, p = .018$).

Correlation differences. Fishers' Z test was used to compare the correlations between men and women. No significant gender differences in correlations were found, although the

correlation between satisfaction and anger was marginally different for both those low and high on meta-mood (low, $Z = -1.37$, $p = .085$; high, $Z = -1.46$, $p = .072$).

Partner Anger Frequency and Intensity

No specific predictions were made regarding individuals' reports of their partner's anger frequency and intensity. However, individuals' reports of their partner's anger were correlated with relationship satisfaction and health in a similar fashion to the previous analysis. Given that partner's anger intensity and partner's anger frequency were highly correlated for both men and women ($r = .722$, $p < .001$; $r = .592$, $p < .001$, respectively) these scores were summed to form a partner's anger index, called partner anger level. Partner anger level was correlated with satisfaction and health for both those low and high on meta-mood. Finally, gender differences were tested.

Men. Surprisingly, having a partner who is perceived as being angry was related to low satisfaction for men who were in the high meta-mood group ($r = -.657$, $t(33) = -4.94$, $p < .001$) but not for men who were in the low-meta-mood group ($r = -.240$, $t(35) = -1.44$, $p = .159$). Although the trend was in the right direction, having a high partner anger level was not related to poorer health for either the low ($r = .261$, $t(34) = 1.58$, $p = .124$) or high ($r = .272$, $t(35) = 1.63$, $p = .114$) meta-mood group.

Women. For women, having a partner whom they perceive as being angry was not related to low satisfaction for either group (low, $r = -.256$, $t(34) = -1.52$, $p = .138$; high, $r = -.183$, $t(33) = -1.05$, $p = .301$). Similarly, partner anger level was not related to poorer health for either group (low, $r = .017$, $t(34) = .10$, $p = .924$; high, $r = .243$, $t(33) = 1.42$, $p = .167$).

Gender differences. Fishers' Z' test was performed to test for possible gender differences. There was a significant difference between high meta-mood men and women;

men who reported higher partner anger level had significantly less relationship satisfaction than women who reported more partner anger ($Z' = -.2.34, p = .01$). All other correlation differences were non-significant.

<div align="center">*The Mediation Model*</div>

To test the hypothesis that meta-emotion has direct implications for anger scripts, which in turn influence both relationship satisfaction and personal health, a mediation analysis was conducted. In the first step of the analysis, the predictor (meta-mood) was tested for its ability to predict the proposed mediator (anger script tracks; see Table 3). In the second step, the mediator (anger script tracks) was tested for its ability to predict the criterion variables (health and satisfaction; see Table 4). In the third step, the proposed mediator was included in the predictor-criterion relation. If the addition of the mediator renders the relation non-significant, mediation is assumed to be occurring (see Table 5). Finally, a Sobel's Z-test was used to test the significance of the possible mediators. This analysis was done separately for men and women.

First Step: Predictor-Mediator Relation.

Men. As shown in Table 3, for men, the proposed predictor (meta-mood) was not significantly related to the proposed mediators (script tracks). This prevents the proposed model from being tested further.

Women. For women, the proposed predictor (meta-mood) was significantly related to the proposed mediators (see Table 3). Specifically, meta-mood positively predicted a constructive response for both constructive expressions ($\beta = .226$, $R^2 = .051, p = .058$) and for a destructive expression ($\beta = .267$, $R^2 = .071, p = .024$). Meta-mood also negatively

predicted a destructive response to a constructive expression ($\beta = -.300$, $R^2 = .090$, $p = .011$) and to a destructive expression ($\beta = -.300$, $R^2 = .090$, $p = .011$).

Second Step: Mediator-Criterion (Satisfaction) Relation

Men. For men, the constructive scripts were not significantly related to the criterion variable of satisfaction (constructive/constructive $\beta = .178$, $R^2 = .032$, $p = .140$; destructive/constructive $\beta = .047$, $R^2 = .002$, $p = .701$). However, as can be seen in Table 4, men's destructive scripts, a destructive expected response following a constructive or a destructive expression, were related to lower relationship satisfaction (constructive/destructive $\beta = .301$, $R^2 = .091$, $p = .011$; destructive/destructive $\beta = -.318$, $R^2 = .101$, $p = .007$).

Women. For women, a constructive expected response following a constructive expression was positively related to satisfaction ($\beta = .247$, $R^2 = .061$, $p = .038$), but a constructive response following a destructive expression was not related to satisfaction ($\beta = .148$, $R^2 = .022$, $p = .218$). On the other hand, as seen in Table 4, a destructive response following both a constructive and a destructive expression was related to lower satisfaction ($\beta = -.375$, $R^2 = .141$, $p = .001$; $\beta = -.330$, $R^2 = .109$, $p = .005$, respectively).

Second Step: Mediator-Criterion (Health) Relation

Men. For men, only destructive expected reactions in response to both constructive and destructive anger expressions were significantly related to poorer health ($\beta = .330$, $R^2 = .109$, $p = .005$; $\beta = .259$, $R^2 = .067$, $p = .029$, respectively) (see Table 5).

Women. As can be seen in Table 5, for women there were no significant relations for anger tracks and health, although a destructive expected reaction in response to a destructive self-expression was marginally related to poorer health ($\beta = .206$, $R^2 = .043$, $p = .084$).

Third Step: Predictor-Mediator-Criterion (Satisfaction)

To test whether the proposed mediators render the predictor-criterion relation non-significant and thus demonstrate mediation, the predictor (meta-mood) was entered into the first block of a regression analysis and the mediators (script tracks) in the second block.

Men. As discussed previously, the predictor was not significantly related to the proposed moderator for the men. Thus the proposed predictor-mediator-criterion relation for men could not be tested (see Table 5).

Women. For women, significant results in the previous two steps provide reason to continue with step 3 for the criterion of satisfaction, but not for health. Predicting women's satisfaction by adding the constructive/constructive track did not render the predictive value of meta-mood non-significant (meta-mood $\beta = .250$, $p = .036$). (Note: the other constructive track, was non-significant at step 2 and therefore could not be significant here). The addition of both of these proposed mediators did not contribute any predictive value above what was already predicted by meta-mood (constructive/constructive, $R^2 = .034$, $p = .107$; destructive/constructive, $R^2 = .005$, $p = .537$; see Table 5). In sum, the constructive scripts were not mediating the relation between meta-mood and satisfaction.

In contrast to the non-significant constructive track results, adding the destructive scripts to the prediction of satisfaction did render the predictive value of meta-mood non-significant for both constructive/destructive (meta-mood $\beta = .199$, $p = .090$) and destructive/destructive (meta-mood $\beta = .213$, $p = .073$). Moreover, in both cases, the

addition of the mediator significantly increased the predictive value of regression equation (constructive/destructive, $R^2 = .090$, $p = .008$; destructive/destructive, $R^2 = .064$, $p = .026$; see Table 5). A Sobel's Z-test found that both destructive tracks significantly mediated the relation between meta-mood and satisfaction (constructive/destructive $Z = 2.06$, $p = .04$; destructive-destructive $Z = 1.94$, $p = .05$). That is, women high on meta-mood were less likely to expect destructive reactions to their constructive and destructive expression of anger, and in turn experienced greater relationship satisfaction. In sum, the destructive scripts were significant mediators of the relation between meta-mood and satisfaction for women.

Discussion

The objective of this study was to use anger scripts and meta-mood to understand the impact of anger on dating couples. The first hypothesis concerned the relation between anger scripts and relationship satisfaction and personal health. Overall, destructive anger scripts were related to lower satisfaction and personal health, while constructive anger scripts were generally not significant predictors. The second purpose of this study was to determine the relation between meta-mood and anger scripts. Evidence generally supported the hypothesis that meta-mood facilitates the development of constructive scripts and reduces the likelihood of destructive scripts (although more so in women than in men). A third purpose of this study was to determine if partners influence each other's satisfaction and health through their anger scripts and meta-mood. It was found that individuals' destructive scripts were related to their partners' lower satisfaction, but not health. On the other hand, constructive scripts had little predictive value for satisfaction or health. What is more, the proposed idea that dyadic similarity of scripts and meta-mood would have a positive effect on relationship satisfaction

and health was generally not supported, but similarity in destructive scripts had a negative effect on relationship satisfaction. The fourth and final purpose was to test a mediation model. Specifically, it was predicted that anger scripts would mediate the relation between meta-mood and satisfaction and health. This hypothesis was supported for women's satisfaction (but not health) and not at all for men.

General Anger Scripts

Replicating past studies, and in line with predictions, men and women expected constructive responses from their partners, regardless of how anger was expressed. However, any destructive expectations that were reported were more likely to be in response to a destructive expression of anger. This finding is important because (1) it supports the notion that people expect their partners to act in a manner that would resolve problems, and (2) it is evidence that people can be cognizant of how their own actions elicit responses from their partner, making it plausible that people express their emotions in ways to elicit desired responses from their partners. One caution, however, is that this sample was quite satisfied (averaging 5.8 out of the 7 point satisfaction scale); these results may not describe individuals who are in unhappy relationships.

Anger Script Tracks and Satisfaction/Health

Constructive tracks. It was expected that constructive tracks (i.e., the tracks involving constructive partner responses) would be associated with relationship satisfaction and a low incidence of health problems. This prediction was generally not supported. (The one exception was that for women, constructive partner reactions following constructive self-expressions of anger, did predict higher relationship satisfaction.) Providing that participants were answering questions truthfully and were not influenced by social desirability, the lack

of an effect for constructive scripts can be taken as further evidence that constructive scripts are the basic standard for dating relationships, and not just a sought-after ideal.

Destructive tracks. The second hypothesis for anger script tracks was that destructive tracks (i.e., tracks involving destructive partner responses) would be associated with low relationship satisfaction and a high incidence of health problems. This prediction was generally supported. Expectations for destructive partner responses were predictive of low relationship satisfaction. However, expected destructive partner responses were only predictive of poorer health in men. While other studies have looked at the effects of satisfaction, marriage, physiological responses to anger, and social support on health (see Robles & Kiecolt-Glasser, 2003 for a review), this may be the first study to find that men who expect a destructive response to their anger expression are more likely to have poorer health.

Taken together, it seems that the presence of destructive anger script tracks has more of an influence on relationship satisfaction than the presence of constructive anger script tracks. In fact, other researchers have found that negative events have a greater impact on relationships than positive events (e.g., Rusbult, 1993). The relatively stronger effect of destructive scripts in this study may be tied to the earlier finding that people generally expected constructive reactions from their partners. Perhaps destructive expectations were more predictive of satisfaction because they are a sharp contrast to the generally constructive scripts people have for what should happen in relationship or for what happens in other people's relationships.

Anger Scripts and Health/Satisfaction Across Partners

Overall Within Partner Correlation

The overall within partner correlation (calculated on the total sample, controlling for gender and interdependence) provided further evidence that destructive scripts are related to both lower relationship satisfaction and poorer health. On the other hand, constructive anger scripts tended to be related to higher relationship satisfaction, but were not predictive of better health.

Cross-Partner Correlations

One of the benefits of having both members of relationship dyads participate in this study was the ability to test for correlations between partners. It was expected that one partner's anger script would affect the other partner's relationship satisfaction and personal health. This hypothesis was largely supported for relationship satisfaction, but not for health.

Constructive tracks. With regard to the constructive tracks, constructive expectations in response to constructive self-expressions were positively related to the partners' levels of relationship satisfaction. However, the other constructive track, constructive expectations for destructive self-expressions, was not related to the other partner's satisfaction. Nonetheless, even this null finding is in some ways potentially meaningful. That is, the non-significant effect of the destructive/constructive track reveals that the potentially negative effect of a destructive expression can be neutralized by an expectation that a partner will respond constructively. For example, although Sally, may yell at her partner John when angry, she knows that he will respond by trying to negotiate with her, and thereby solve the problem. Thus, though John may not enjoy being yelled at by Sally, their problems do get solved and his relationship is no worse for the wear (but also no better).

Destructive tracks. It was hypothesized that destructive scripts would be negatively related to partner's satisfaction and positively related to partner's incidence of health problems. This hypothesis was supported for satisfaction; one partner's destructive anger script track predicted lower relationship satisfaction in the other partner. Surprisingly though, the expected cross-partner effect was not found for health.

Summary. The overall within partner correlation showed that anger-scripts can affect our relationship satisfaction. Furthermore, having destructive scripts also affects the satisfaction of our relationship partners as shown by a significant cross interclass correlation. With regard to health, the same correlations showed that destructive scripts (but not constructive scripts) are related to our poorer health, but are not significantly related to health of our partners.

Dyadic Script Similarity

Constructive scripts. It was expected that similarity of constructive scripts would be related to enhanced couple satisfaction. However, results relevant to this hypothesis were inconclusive. The similarity between partners in terms of the constructive/constructive track was marginally related to similarity of relationship satisfaction. Unfortunately, the relation between similarity in terms of the other constructive track (destructive/constructive) and satisfaction could not be calculated.

Destructive scripts. For destructive scripts, the theory that similar anger philosophies have a protective effect on relationships satisfaction competes with research showing that negative reciprocity is particularly detrimental to relationship well-being (see Gottman, 1998 for a review). Accordingly, if similarity of destructive scripts had not been related to lower satisfaction, this would have supported the hypothesis that similarity of anger scripts has a

protective function for relationship satisfaction. However, couples that expected destructive responses to their destructive expressions were more likely to be dissatisfied, supporting the negative reciprocity hypothesis.

Incongruent responses. The third hypothesis was that expected responses that were not congruent with self-expressions would have more of an impact on relationship satisfaction and health than congruent self-expressions and expected partner responses. That is, of the two destructive tracks, the constructive/destructive track (e.g. "even if I try to talk about it with my partner, she will ignore me") was expected to be particularly detrimental to relationship satisfaction and health as it violates the normative script of responding constructively. On the other hand, of the two constructive tracks, the destructive/constructive track (e.g., "even if I am mean to my partner, she will try to negotiate with me") was expected to be particularly beneficial to relationship satisfaction and health because the partner could have responded in kind, but did not. However, a comparison of correlations did not support this hypothesis.

The Influence of Meta-Mood on Anger Scripts

Meta-mood is described as thoughts and feelings about emotions and is sometimes used as a measure of emotional intelligence. As predicted, meta-mood did influence anger scripts, although more so for women than for men. Specifically, women who were high on meta-mood expected both more constructive responses and fewer destructive responses from their partners. Men who were high on meta-mood expected marginally fewer destructive responses, but not more constructive responses, than low-meta-mood men. For men, the differences between high and low meta-mood appeared to be specifically related to expecting fewer destructive responses to their constructive expressions of anger. Women, on the other

hand, expected more constructive and fewer destructive responses to both types of anger expression.

Meta-Mood and Satisfaction/Health Across Partners

Overall within and cross-partner correlations. As predicted, the overall within partner correlation revealed that meta-mood was positively related to satisfaction and negatively related to health problems. In addition, individuals' meta-mood was also correlated with their partners' levels of relationship satisfaction; participants who had high meta-mood were more likely to have more satisfied partners. Although meta-mood was related to health within the whole sample (overall within partner correlation), there was no evidence of a cross partner correlation.

Dyadic meta-mood similarity. Past research provided reason to expect that similarity between partners in terms of meta-mood would be related to increased satisfaction and health of the dyad. Unfortunately the method used to calculate this sort of correlation could not be performed on these data.

Meta-Mood and Anger Frequency and Intensity

Self-rated anger frequency and intensity. Past research has not shown a clear relationship between anger and relationship well-being. There may be several reasons for this. One suggested reason was that people have varying abilities of emotion management and that for those who have a difficult time managing emotions, anger may particularly distressing. Therefore, it was hypothesized that anger level would be related to satisfaction for people who are low on meta-mood. Specifically, it was predicted that individuals scoring low (vs. high) on meta-mood would be more likely to show a negative association between anger level (measured in terms of frequency and intensity) and satisfaction and health.

Results, however, were not as expected for men or women. For men, anger level was related to low satisfaction for both those high and low on meta-mood. For women, no relation was found between anger level and satisfaction. Therefore, it seems that the relation of anger level to relationship satisfaction is not moderated by meta-mood. Nonetheless, it is interesting to note that anger level was related to satisfaction for men, but not for women. This gender difference is likely related to several other gender differences in the anger literature. For instance, men tend to experience more of the negative effects of physiological arousal in conflict interactions and find conflict more aversive than do women (Levenson, Carstensen, & Gottman, 1994). Men also are more likely to believe that discussing problems does not necessarily generate positive outcomes (e.g., Christensen & Heavey, 1990; Gottman & Carrère, 1994) and more likely to endorse statements such as "disagreement is destructive" (Bushman, 1999).

It was also expected that meta-mood would moderate the relationship between anger and health, with those high on meta-mood showing no relation and those low on meta-mood showing a significant relation. However, results were exactly opposite to predictions: No relation was found between anger and health for those who were low on meta-mood, but for those high on meta-mood, anger was related to poorer health (although only marginally for men). These results were unexpected and are difficult to interpret. As such, it may be beneficial to see if other studies replicate these findings before drawing conclusions based on this analysis.

Partner anger frequency and intensity. No specific predictions were made regarding individuals' reports of their partner's anger frequency and intensity between high and low meta-mood groups. Overall, results were not significant. The one exception was that for

men high in meta-mood, having a partner whom they perceived as being angry was related to low satisfaction. Once again, the effect of meta-mood was opposite to predictions and difficult to explain. On the other hand, the gender difference could be related to men experiencing more of the aversive effects of conflict interactions. However, the more likely reason that men were more affected by an angry partner is that women did not report perceiving men to be as angry as men perceived women (see Table 1). That is, considering that women's perception of men's anger was low, the ability of these perceptions to influence their relationship satisfaction may have also been low.

The Mediation Model

The final prediction for this study was that anger scripts would mediate the relations between meta-mood and health/satisfaction. Overall, this model was not supported, because there were few significant relations between meta-mood and health and satisfaction. The one exception was that for women, meta-mood did significantly predict satisfaction and this relation was mediated by the destructive scripts. Specifically, women high in meta-mood were found to have fewer destructive expectations for their partner, which in turn was related in higher relationship satisfaction.

Summary

This study contributes to the literature on relationship satisfaction and personal health in several ways. First, this anger-script analysis expands on the relation between anger and health. Although the literature is replete with examples of how holding anger in, or letting it out, can be damaging to health, the results of this study provide more complex information about the effects of interpersonal contingencies. For example, the constructive expression of anger may actually be harmful to health if it is expected that the partner will respond

negatively. On the other hand, the destructive expression of anger does not have to be harmful to health if it is expected that the partner will respond positively. Accordingly, interventions for those who have, or are at risk for, experiencing anger-related health problems may need to focus on not just how anger is expressed, but on changing the expected responses from significant others.

Second, this research also furthers our understanding of romantic relationships. As part of this process, anger script matches and mismatches were examined, an area that has not previously been studied. The results supported the predicted benefits of script similarity with one exception: Couples who tended to reciprocate their partners' destructive anger expressions experienced less relationship satisfaction as a couple, even when controlling for individual and partner effects. In fact, a script in which a destructive expression triggers a destructive reaction had the most profound effect on a relationship in that it was the only script to affect satisfaction on three levels; within-partners, across partners, and as a couple.

Third, this research not only examined what types of interpersonal patterns are risky for relationship satisfaction, it also examined what types of core emotion-beliefs are related to these problems. Overall, meta-mood did seem to have an impact on the anger scripts. It seems that changing the way people think and feel about emotions would be one way to change how people engage in anger interactions.

Limitations and Future Research

There are several limitations to this study. The primary limitation is inherent in all correlational research, namely limited grounds to argue for causation. For instance, in this study it was suggested that anger-scripts influence relationship satisfaction, However, it is also possible that couples who are more satisfied have more constructive and less destructive

scripts. The experimental manipulation needed to demonstrate causality in this case would have been difficult (and perhaps unethical). However, another possible avenue for this research is a longitudinal study, which could be analyzed by using time-lagged correlations to provide evidence of causality. A longitudinal study would also have the added benefit of addressing the stability of scripts over time and the influence of scripts on relationship dissolution, not just satisfaction. As well, a longitudinal study would be useful to address the long-term (as opposed to concurrent) health problems associated with meta-mood and anger-scripts.

Truncated scripts are another limitation of this study. Participants were asked how they would express their anger in particular situations and how they would expect their partners to respond. However, it is possible, and even likely, that anger scripts are more complex than this. For example, when Beth is angry with Marc, she typically ignores him (destructive). He responds by mocking her (destructive), and she responds to him by crying and expressing hurt feelings (constructive). Marc then accepts responsibility and suggests a solution (constructive) at which time the conflict is resolved. In the current study, Beth's anger script would have been measured using only the first two exchanges (i.e., destructive/destructive). A lot of information that contained within this anger script is lost by only considering the first two exchanges.

A second related limitation is that this study did not ask participants to indicate the likelihood of the conflict being resolved. For example, consider Beth's script (abbreviated as destructive/destructive), which was eventually resolved. Consider a second example in which Jessie believes that if she would express her anger by ignoring her partner Paul, he would express a similar destructive response, and this issue would never be resolved. In this study,

Jessie's anger script would also be coded as destructive/destructive. However, note that Beth believes that her (destructive/destructive) script will lead to a resolution whereas Jessie does not. Thus, it would be of benefit in future research to differentiate between scripts not only on their form, but also in terms of the outcome that is expected by following those scripts.

A third limitation with this study is the reliance on a university population. This study should be replicated with a community sample, particularly in order to determine whether the findings of this study can be generalized to an older population that would tend to have longer relationships and more married couples in it. Certainly it would be interesting to determine whether or not anger scripts remain consistent throughout adulthood. Other researchers have found differences between the conflict interactions of younger and older couples. For instance, older couples have been found to display less negative behavior and more affection (Carstensen, Gottman, & Levenson, 1995) and report less severity of potential sources of conflict than younger couples (Levenson, Carstensen & Gottman, 1993).

Finally, future research should investigate how people see their scripts as differing or being similar to other peoples' scripts or to their ideal scripts. Social comparison theory holds that comparisons to other people or to ideal-selves and feared-selves can have an impact on various constructs, including those relevant to relationships. For instance, one study found that after individuals made a comparison to a worse-off relationship, they were more satisfied with their relationship than those who simply generated ways in which they or their partners were "good" partners (Buunk, Oldersma, & de Dreu, 2001). Future research should not only investigate individual's personal anger scripts, but also what they think other people's scripts are like, as well as their romantic ideals. Moreover, it would be interesting to see if relationship satisfaction or perhaps comparison level for alternative relationships (see

Broemer & Diehl, 2003) would vary, depending on whether one's own scripts were seen as better than, worse than, or similar to peoples' scripts or idealized scripts.

In conclusion, anger, one of the most commonly felt emotions, has been blamed for both health and relationship problems. However, the form of anger expression has been shown to moderate the potentially harmful effect of anger. There is relatively little information, however, about how interpersonal elements of anger influence relationship satisfaction. It was expected that examining the way in which people think about their anger interactions and their emotions in general would help explain the influence of anger on relationship satisfaction and health. Using a script analysis, this study found that interpersonal contingencies are related to the way in which anger affects our relationships and our personal health. Stated differently, our expected responses from relationship partners to our expression of anger predict relationship satisfaction and health. Moreover, results showed that ability to engage in constructive anger interactions is related to how we think and feel about emotions.

References

Abelson, R. P. (1981). The physiological status of the script concept. *American Psychologist, 36,* 715-729.

Archer, J. (2000). Sex differences in aggression between heterosexual partners: A meta-analytic review. *Psychological Bulletin, 126,* 651-680.

Averill, J. R. (1982). *Anger and aggression: An essay on emotion.* New York: Springer-Verlag.

Averill, J. R. (1983). Studies on anger and aggression: Implications for theories of emotion. *American Psychologist,* 38, 1145-1160.

Averill, J. R. (1995). Studies on anger and aggression: Implications for theories of emotion. In J. Pennebaker (Ed*.), Emotion, Disclosure, and Health* (pp. 337-352). Washington DC: American Psychological Association.

Bernardez-Bonsesatti, T. (1978). Women and anger: Conflicts with aggression in contemporary women. *Journal of the American Medical Women's Association, 33,* 215-219.

Blier, M. J., Blier-Wilson, L. A. (1989). Gender differences in self related emotional expressiveness. *Sex Roles, 21,* 287-295.

Bushman, W. J. (1999). The relationship between conflict, love and satisfaction and relationship beliefs, problem-solving techniques and negotiating strategies in romantic relationships. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 59,* 4534.

Buss, D. M. (1989). Conflict between the sexes: Strategic interference and the evocation of anger and upset. *Journal of Personality and Social Psychology, 56,* 735-747.

Buunk, B. P., Oldersma, F. L., & de Dreu, C.K.W. (2001). Enhancing satisfaction through downward comparison: The role of relational discontent and individual differences in social comparison orientation. *Journal of Experimental Social Psychology, 37*, 452-467.

Broemer, P. & Diehl, M. (2003). What you think is what you get: Comparative evaluations of close relationships. *Personality and Social Psychology Bulletin, 29*, 1560-1569.

Campbell, A., & Muncer, S. (1987). Models of anger and aggression in the social talk of women and men. *Journal for the Theory of Social Behavior, 17*, 489-511.

Carstensen, L. L., Gottman, J.M., & Levenson, R.W. (1995). Emotional behavior in long-term marriage. *The Psychology of Aging, 10,* 140-149.

Chang, P. P., Ford, D. E., Meoni, L. A., Wang, N. Y, & Klag, M. J. (2002). Anger in young men and subsequent premature cardiovascular disease. The Precursors study. *Archives of Internal Medicine, 162,* 901-906.

Christensen, A. & Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. *Journal of Personality and Social Psychology, 59,* 73-81.

Cohen, S. & Hoberman, H. (1983). Positive events and social supports as buffers of life change stress. *Journal of Applied Social Psychology,* 13, 99-125.

Davidson, K, MacGregor, M. W., Stuhr, J., Dixon, K., McLean, D. (2000). Constructive anger verbal behavior predicts blood pressure in a population-based sample. *Health Psychology, 19,* 55-64.

Fehr, B. & Baldwin, M. (1996). Prototype and script analyses of laypeople's knowledge of anger. In G. J. O Fletcher & J. Fitness (Eds.), *Knowledge Structures in Close*

Relationships: A Social Psychological Approach (pp.219-246). Mahwah NJ, US:
Lawrence Erlbaum.

Fehr, B., Baldwin, M., Collins, L., Patterson, S., & Benditt, R. (1999). Anger in close
relationships: An interpersonal script analysis. *Personality and Social Psychology
Bulletin, 25,* 299-312.

Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective.
Journal of Experimental Psychology: General, 113, 464-486.

Fehr, B., Russell, J. A., & Ward, L. M. (1982). Prototypicality of emotions: A reaction time
study. *Bulletin of the Psychonomic Society, 20,* 253-254.

Fitness, J. & Fletcher, G. J. O. (1993). Love, hate, anger, and jealousy in close relationships:
A prototype and cognitive appraisal analysis. *Journal of Personality and Social
Psychology, 63,* 942-958.

Fitness, J. (2000). Anger in the workplace: An emotion script approach to anger episodes
between workers and their superiors, co-workers and subordinates. *Journal of
Organizational Behavior, 21,* 147-162.

Fletcher, G. J. O., & Fincham, F. D. (Eds.). (1991). *Cognition in close relationships.*
Hillsdale NJ, US: Lawrence Erlbaum Associates.

Gergen, K. J. & Gergen M. M. (1988). Narrative and the self as relationship. *Advances in
Experimental Social Psychology, 21,* 17-56.

Gohm, C. L. (2003). Mood regulation and emotional intelligence: Individual differences.
Journal of Personality and Social Psychology, 84, 594-607.

Gonzalez, R., & Griffin, D. (1999). The correlational analysis of dyad-level data in the
distinguishable case. *Personal Relationships, 6,* 449-469.

Gottman, J. M. (1990). How marriages change. In Patterson, G. R. (ed.), *Depression and Aggressions in Family Interaction,* Lawrence Erlbaum Associates, Hillsdale, NJ.

Gottman, J. M. (1991). Predicting the longitudinal course of marriage. *Journal of Marriage and Family Therapy, 17,* 3-7.

Gottman, J. M. (1998). Psychology and the study of marital processes. *Annual Review of Psychology, 49,* 169-197.

Gottman, J. M. (2001). Meta-emotion, children's emotional intelligence, and buffering children from marital conflict. In C. D. Ryff & B. H. Singer (Eds.*), Emotion, Social Relationships, and Health* (pp. 23-40). New York, US: Oxford University Press.

Gottman, J. M., & Carrère, S. (1994). Why can't men and women get along? Developmental roots and marital inequities. In L. Stafford and D. J. Canary (Eds.). *Communication and Relational Maintenance.* San Diego, CA, US: Academic Press.

Gottman, J. M. & Krokoff, L. (1989). Marital interaction and marital satisfaction: A longitudinal view. *Journal of Consulting and Clinical Psychology, 57,* 47-52.

Gottman, J. M., Katz, L., & Hooven, C. (1995). *Meta-emotion.* Hillsdale NJ, US: Lawrence Erlbaum.

Gottman, J. M. & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and health. *Journal of Personality and Social Psychology, 63,* 221-233.

Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family, 50,* 93-98.

Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The relationship assessment scale. *Journal of Social and Personal Relationships, 15,* 137-142.

Holmberg, D. & Mackenzie, S. (2002). So far so good: Scripts for romantic relationship development as predictors of relational well-being. *Journal of Social and Personal Relationships, 19,* 777-796.

Holtzworth-Munroe, A., Stuart, G., Sandin, E., Smutzler, N. & McLaughlin, W. (1997). Comparing the social support behaviors of violent and nonviolent husbands during discussions of wife personal problems. *Personal Relationships,* 4, 395-412.

Hooven, C., Gottman, J. M., & Katz, L. F. (1995). Parental meta-emotion structure predicts family and child outcomes. *Cognition and Emotion, 9,* 229-264.

Josephs, R. A., Markus, H. R., & Tafarodi, R.W. (1992). Gender and self-esteem. *Journal of Personality and Social Psychology, 63,* 391-402.

Kassinove, H. & Sukhodolsky, D. G. (1997). Self-reported anger episodes in Russia and America. *Journal of Social Behavior & Personality, 12,* 543-557.

Katz, L. F., Wilson, B., & Gottman, J. M. (1999). Meta-emotion philosophy and family adjustment: Making an emotional connection. In M. J. Cox & J. Brooks-Gunn (Eds.), *Conflict and cohesion in families: Causes and consequences* (pp. 131-165). Mahwah NJ, US: Lawrence Erlbaum Associates.

Kawachi, I., Sparrow, D., Spiro, A., Vokanas, P., & Weiss, S. T. (1996). A prospective study of anger and coronary heart disease. The normative aging study. *Circulation, 94,* 2090-?)

Kiecolt-Glaser, J., Malarkey, W., Chee, M., Newton, T., Cacioppo, J., Mao, H., & Glaser, R. (1993). Negative behavior during marital conflict is associated with immunological down-regulation. *Psychosomatic Medicine, 55,* 395-409.

Knox, S. S., Siegmund, K. D., Weidner, G., Ellison, R. C., Adelman, A., & Paton, C. (1998). Hostility, social support, and coronary heart disease in the National Heart, Lung, and Blood Institute Family Heart Study. *The American Journal of Cardiology, 82,* 1192-1196.

Levenson, R. W., Carstensen, L. L., and Gottman, J. M. (1994). The influence of age and gender on affect, physiology, and their interrelations: A study of long-term Marriages. *Journal of Personality and Social Psychology, 67,* 56-68.

Mayer, J. D., Salovey, P., Gomberg-Kaufman, S., & Blainey, K. (1991). A broader conceptualization of mood experience. *Journal of Personality and Social Psychology, 60,* 100-111.

Mittleman, M. A., Maclure, M, Sherwood, J. B., Mulry, R. P., Tofler, G. H., Jacobs, S. C., Friedman, R., Benson, H., & Muller, J. E. (1995). Triggering of acute myocardial infarction onset by episodes of anger. *Circulation, 92,* 1720-1725.

Robles, T. F. & Kiecolt-Glaser, J. K. (2003). The physiology of marriage: Pathways to health. *Physiology & Behavior, 79,* 409-416.

Rusbult, C. E. (1993). Understanding responses to dissatisfaction in close relationships: The exit-voice-loyalty-neglect model. In S. Worchel & J. Simpson (Eds.). *Conflict between People and Groups: Causes, Processes, and Resolutions.* Chicago; Nelson-Hall Publishers.

Salovey, P., Hsee, C. K., Mayer, J. D. (2001). Emotional intelligence and the self-regulation of affect. In W. G. Parrot (Ed.), *Emotions in Social Psychology: Essential Readings* (pp. 185-197). New York NY, US: Psychology Press.

Salovey, P., Mayer, J. D., Goldman, S. L., Turvey, C., & Palfai, T. P. (1995). Emotional

    attention, clarity, and repair: Exploring emotional intelligence using the Trait Meta-

    Mood Scale. In J. Pennebaker (Ed.), *Emotion, Disclosure, and Health* (pp. 125-154).

    Washington, DC US: American Psychological Association.

Salovey, P., Stroud, L. R., Woolery, A., & Epel, E. S. (2002). Perceived emotional

    intelligence stress reactivity, and symptom reports: Further explorations using the

    trait meta-mood scale. *Psychology and Health, 17,* 611-627.

Suinn, R. M. (2001). The terrible twos—anger and anxiety: Hazardous to your health.

    American Psychologist, 56, 27-36.

Tofler, G. H., Stone, P. H., Maclure, M., Edelman F., Davis, V. G., Robertson, T., Antman,

    E. M., & Muller, J. E. (1990). Analysis of possible triggers of acute myocardial

    infarction (the MILIS Study). *The American Journal of Cardiology, 66:* 22-27.

Waldinger, R. J., Schulz, M. C., Hauser, S. T., Crowell, J. A. (2004). Reading others'

    emotions: The role of intuitive judgments in predicting marital satisfaction, quality,

    and stability. *Journal of Family Psychology, 18,* 58-71.

Table 1

Means and Standard Deviations for Predictor and Criterion Variables

	Males		Females		
	Mean	SD	Mean	SD	p
Meta-Mood	3.69	.496	3.70	.444	.987
Satisfaction	5.79	.845	5.88	.714	.001
Health	23.21	16.11	31.61	20.12	.346
Const./Const.	4.49	1.01	4.61	1.18	.273
Const./Destr.	2.30	.96	2.07	.73	.034
Destr./Const.	4.20	1.02	4.38	1.12	.764
Destr./Destr.	3.38	.96	3.02	.91	.046
Self Anger Frequency	3.83	1.65	3.96	1.33	.073
Self Anger Intensity	4.02	1.83	4.12	1.45	.916
Other Anger Frequency	4.00	1.80	3.30	1.56	.005
Other Anger Intensity	3.86	1.78	3.91	1.63	.015

Note. Listwise valid *n*s for paired t-tests were: Satisfaction $n = 70$; Health, Meta-Mood, Anger Script Tracks $n = 71$; Self Anger Intensity, Self Anger Frequency, Other Anger Frequency, Other Anger Intensity $n = 69$.

Table 2

Anger tracks and satisfaction/health correlations

	Men		Women	
	Satisfaction	Health	Satisfaction	Health
Const./Const.	.178	.076	.249*	-.050
Const./Destr.	-.301*	.330***	-.375***	.155
Destr./Const.	.407	.111	.148	.103
Destr./Destr.	-.318**	.259*	-.330***	.206a

a $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .005$.

Table 3

Step 1: Regression Analysis Using Meta-Mood as a Predictor of Anger Tracks

	Males (*n* = 70)		Females (*n* = 70)	
	β	R^2	B	R^2
Const./Const.		.001		.051a
Meta-Mood	-.034		.226a	
Const./Destr.		.038		.090*
Meta-Mood	-.196		-.300*	
Destr./Const.		.001		.071*
Meta-Mood	-.035		.267*	
Destr./Const.		.037		.090*
Meta-Mood	-.192		-.300*	

a *p* < .10; *p* < .05; **p* < .01; ***p* < .005.

Table 4

Step 2: Regression Analysis Using Anger Script tracks as a Predictor of Satisfaction and Health

	Males ($n = 70$)[a]		Females ($n = 70$)	
	β	R^2	β	R^2
Satisfaction		.032		.061*
Const./Const.	.178		.247*	
Satisfaction		.091*		.141***
Const./Destr.	-.301*		-.375***	
Satisfaction		.002		.071
Destr./Const.	.047		.148	
Satisfaction		.101**		.109**
Destr./Destr.	-.318**		-.330**	
Health		.006		.003
Const./Const.	.076		-.050	
Health		.109**		.024
Const./Destr.	.330**		.155	
Health		.012		.011
Destr./Const.	.111		-.103	
Health		.067*		.043a
Destr./Destr.	.259*		.206a	

[a] For males the $n = 69$ for any analysis involving satisfaction as one male neglected to complete the satisfaction scale.
a $p < .10$; *$p < .05$; **$p < .01$, ***$p < .005$.

Table 5

Step 3: Mediation Analysis of the Relationship between Meta-Mood and Health/Satisfaction Using Anger Script Tracks.

	Males ($n = 70$)[a]				Females ($n = 70$)			
	Block1		Block2		Block1		Block2	
	β	R^2	β	ΔR^2	β	R^2	B	ΔR^2
Satisfaction		.031		.037		.086*		.034
Meta-Mood	.175		.191		.293*		.250*	
Const./Const.			.194				.190	
Satisfaction		.031		.075*		.086*		.09**
Meta-Mood	.175		.125		.293*		.199a	
Const./Destr.			-.279*				-.315**	
Satisfaction		.031		.003		.086*		.005
Meta-Mood	.175		.177		.293*		.273*	
Destr./Const.			.054				.075	
Satisfaction		.031		.084*		.086*		.064*
Meta-Mood	.175		.116		.293*		.213a	
Destr./Destr.			-.295*				-.266*	
Health		.015		.005		.028		.000
Meta-Mood	-.123		-.120		-.166		-.163	
Const./Const.			.072				-.014	
Health		.015		.097**		.028		.012

Meta-Mood	-.123	-.060	-.166	-.131
Const./Destr.		.318**		.115
Health	.015	.011	.028	.004
Meta-Mood	-.123	-.119	-.166	-.149
Destr./Const.		.106		-.063
Health	.015	.057*	.028	.027
Meta-Mood	-.123	-.076	-.166	-.114
Destr./Destr.		.244*		.172

Note. a $p < .10$; *$p < .05$; **$p < .01$, ***$p < .005$.
[a] For males the n = 69 for any analysis involving satisfaction as one male neglected to complete the satisfaction scale.

APENDIX

Relationship Assessment Scale

For the following questions please indicate your answer by circling one number one the scale provided, to indicate your thoughts and feelings about your current relationship.

1) How well does your partner meet your needs?

1   2   3   4   5   6   7

not at all   very well

2) In general, how satisfied are you with your relationship?

1   2   3   4   5   6   7

not at all   very satisfied

3) How good is your relationship compared to most?

1   2   3   4   5   6   7

not very good   very good

4) How often have you wished you hadn't got involved in this relationship?

1   2   3   4   5   6   7

not at all   very often

5) To what extent has your relationship met your expectations?

1   2   3   4   5   6   7

not at all   very much

6) How much do you love your partner?

1   2   3   4   5   6   7

not at all   very much

7) How many problems are there in your relationship?

1   2   3   4   5   6   7

none at all   very many

Trait Meta-Mood Scale

Please read each statement and decide whether or not you agree with it. Place a number
in the blank line next to each statement using the following scale:

5 = strongly agree

4 = somewhat agree

3 = neither agree not disagree

2 = somewhat disagree

1 = strongly disagree

_____ 1. I try to think good thoughts no matter how badly I feel.

_____ 2. People would be better off if they felt less and thought more.

_____ 3. I don't think it's worth paying attention to your emotions or moods.

_____ 4. I don't usually care much about what I'm feeling

_____ 5. Sometimes I can't tell what my feelings are.

_____ 6. I am rarely confused about how I feel.

_____ 7. Feeling give direction to life.

_____ 8. Although I am sometimes sad, I have a mostly optimistic outlook

_____ 9. When I am upset I realize that the "good things in life" are illusions.

_____ 10. I believe in acting from the heart.

_____ 11. I can never tell how I feel

_____ 12. The best way for me to handle my feelings is to experience them to the fullest.

_____ 13. When I become upset I remind myself of all the pleasures in life.

_____ 14. My belief and opinions always seem to change depending on how I feel.

_____ 15. I am often aware of my feelings on a matter.

_____ 16. I am usually confused about how I feel.

_____ 17. One should never be guided by emotions.

_____ 18. I never give in to my emotions

_____ 19. Although I am sometimes happy, I have mostly pessimistic outlook.

_____ 20. I feel at ease about my emotions.

_____ 21. I pay a lot of attention to how I feel.

_____ 22. I can't make sense out of my feelings.

_____ 23. I don't pay much attention to my feelings.

_____ 24. I often think about my feelings.

_____ 25. I am usually very clear about my feelings.

_____ 26. No matter how badly I feel, I try to think about pleasant things.

_____ 27. Feelings are weakness humans have.

_____ 28. I usually know my feelings about a matter.

_____ 29. It is usually a waste of time to think about your emotions.

_____ 30. I almost always know exactly how I am feeling.

Anger Script Questionnaire

In this questionnaire we will describe a number of situation that you might be in with your partner. Most of these situations have the potential to make a person bothered or angry.

At the top of the page we will describe the situation:

EXAMPLE: Your partner tries to start a fight with you.

First, <u>imagine yourself in the situation described</u>. You may want to remember a time when you actually were in a similar situation.

Then, keep this situation in mind while you answer a number of questions about it. The first question, for example, is:

	not at all					very much
How angry would this type of event make you?	1 2 3 4 5 6 7					

We will also be describing a number of possible responses you could make in this situation (i.e., "your partner tries to start a fight with you"). For each response, please rate **How likely is it that you would respond in that way?** An example of a possible response is given below:

	not at all					very much
1. Avoid the issue and/or avoid your partner, become silent, leave the room, withdraw.	1 2 3 4 5 6 7					

Now please turn to the next page to read about the first type of situation.

You have trusted your partner by telling some very personal information; Then he/she uses the information to take advantage of you

	not at all					very much
How angry would event make you?	1	2	3	4	5	6	7

How likely is it that you would respond in each of the following ways?

	not at all					very much
1. Avoid the issue and/or avoid your partner, become silent, leave the room, withdraw.	1	2	3	4	5	6	7
2. Express aggression directly: Try to hurt your partner in some way, either verbally or physically, or by punishing him/her in some way.	1	2	3	4	5	6	7
3. Talk it over without hostility; try to compromise, negotiate.	1	2	3	4	5	6	7
4. Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.	1	2	3	4	5	6	7
5. Go along with your partner, give in, accept responsibility, do something to make it up.	1	2	3	4	5	6	7
6. Express hurt feelings.	1	2	3	4	5	6	7
7. Withhold physical affection (e.g., hugging, kissing, etc).	1	2	3	4	5	6	7

You have suggested that your partner and you spend the evening together. At the last minute he/she cancels in order to do something else.

	not at all					very much
How angry would this event make you?	1 2 3 4 5 6 7

How likely is it that you would respond in each of the following ways?

	not at all					very much

1. Avoid the issue and/or avoid your partner, become silent, leave the room, withdraw.

    1 2 3 4 5 6 7

2. Express aggression directly: Try to hurt your partner in some way, either verbally or physically, or by punishing him/her in some way.

    1 2 3 4 5 6 7

3. Talk it over without hostility; try to compromise, negotiate.

    1 2 3 4 5 6 7

4. Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.

    1 2 3 4 5 6 7

5. Go along with your partner, give in, accept responsibility, do something to make it up.

    1 2 3 4 5 6 7

6. Express hurt feelings.

    1 2 3 4 5 6 7

7. Withhold physical affection (e.g., hugging, kissing, etc).

    1 2 3 4 5 6 7

Your partner forgets your birthday.

	not at all					very much

How angry would this event make you?   1 2 3 4 5 6 7

**How likely is it that you would respond
in each of the following ways?**

	not at all					very much

1. Avoid the issue and/or avoid your partner,
    become silent, leave the room, withdraw.   1 2 3 4 5 6 7

2. Express aggression directly: Try to hurt
    your partner in some way, either verbally or
    physically, or by punishing him/her in some
    way.   1 2 3 4 5 6 7

3. Talk it over without hostility; try to
    compromise, negotiate.   1 2 3 4 5 6 7

4. Express aggression indirectly: e.g., complain
    to someone else, get angry at someone or
    something else.   1 2 3 4 5 6 7

5. Go along with your partner, give in, accept
    responsibility, do something to make it up.   1 2 3 4 5 6 7

6. Express hurt feelings.   1 2 3 4 5 6 7

7. Withhold physical affection
    (e.g., hugging, kissing, etc).   1 2 3 4 5 6 7

Your partner persists in an extremely annoying habit (e.g., talking to you during movies, clicking pens, cracking knuckles).

	not at all					very much

How angry would this event make you?

1 2 3 4 5 6 7

How likely is it that you would respond in each of the following ways?

not at all   very much

1. Avoid the issue and/or avoid your partner, become silent, leave the room, withdraw.

1 2 3 4 5 6 7

2. Express aggression directly: Try to hurt your partner in some way, either verbally or physically, or by punishing him/her in some way.

1 2 3 4 5 6 7

3. Talk it over without hostility; try to compromise, negotiate.

1 2 3 4 5 6 7

4. Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.

1 2 3 4 5 6 7

5. Go along with your partner, give in, accept responsibility, do something to make it up.

1 2 3 4 5 6 7

6. Express hurt feelings.

1 2 3 4 5 6 7

7. Withhold physical affection (e.g., hugging, kissing, etc).

1 2 3 4 5 6 7

Your partner criticizes you for small mistakes you make, or for your clothing or appearance.

	not at all					very much
How angry would this event make you?	1 2 3 4 5 6 7

How likely is it that you would respond
in each of the following ways?

	not at all					very much

1. Avoid the issue and/or avoid your partner,
   become silent, leave the room, withdraw.

   1 2 3 4 5 6 7

2. Express aggression directly: Try to hurt
   your partner in some way, either verbally or
   physically, or by punishing him/her in some
   way.

   1 2 3 4 5 6 7

3. Talk it over without hostility; try to
   compromise, negotiate.

   1 2 3 4 5 6 7

4. Express aggression indirectly: e.g., complain
   to someone else, get angry at someone or
   something else.

   1 2 3 4 5 6 7

5. Go along with your partner, give in, accept
   responsibility, do something to make it up.

   1 2 3 4 5 6 7

6. Express hurt feelings.

   1 2 3 4 5 6 7

7. Withhold physical affection
   (e.g., hugging, kissing, etc).

   1 2 3 4 5 6 7

Your partner withholds physical affection.

	not at all					very much
How angry would this event make you?	1 2 3 4 5 6 7					

**How likely is it that you would respond
in each of the following ways?**

	not at all					very much
6. Avoid the issue and/or avoid your partner, become silent, leave the room, withdraw.	1 2 3 4 5 6 7					
7. Express aggression directly: Try to hurt your partner in some way, either verbally or physically, or by punishing him/her in some way.	1 2 3 4 5 6 7					
8. Talk it over without hostility; try to compromise, negotiate.	1 2 3 4 5 6 7					
9. Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.	1 2 3 4 5 6 7					
10. Go along with your partner, give in, accept responsibility, do something to make it up.	1 2 3 4 5 6 7					
6. Express hurt feelings.	1 2 3 4 5 6 7					
7. Withhold physical affection (e.g., hugging, kissing, etc).	1 2 3 4 5 6 7					

Now we are interested in how you think your partner might react to you, depending on what you do. First, imagine that you are angry about something. We will describe some things you might do if you are angry; Imagine acting in the way described, and rate how often you think that your partner would respond in each of the ways provided.

If you are angry, and **you avoid the issue and/or avoid your partner, become silent, leave the room, withdraw,** how likely is it that your partner would respond in each of these ways:

	not at all					very much

Avoid the issue and/or avoid you,
become silent, leave the room, withdraw.

1 2 3 4 5 6 7

Express aggression directly: Try to hurt
you in some way, either verbally or
physically, or by punishing you in some
way.

1 2 3 4 5 6 7

Talk it over without hostility; try to
compromise, negotiate.

1 2 3 4 5 6 7

Express aggression indirectly: e.g., complain
to someone else, get angry at someone or
something else.

1 2 3 4 5 6 7

Go along with you, give in, accept
responsibility, do something to make it up.

1 2 3 4 5 6 7

Express hurt feelings.

1 2 3 4 5 6 7

Withhold physical affection
(e.g., hugging, kissing, etc).

1 2 3 4 5 6 7

Deny responsibility, say you shouldn't
be angry.

1 2 3 4 5 6 7

Reject you, dislike you.

1 2 3 4 5 6 7

Minimize the situation, humor or
mock you.

1 2 3 4 5 6 7

If you are angry, and **you express aggression directly; Try to hurt your partner in some way, either verbally or physically, or by punishing him/her in some way,** how likely is it that your partner would respond in each of these ways:

	not at all					very much
	1	2	3	4	5	6	7

Avoid the issue and/or avoid you, become silent, leave the room, withdraw.

1 2 3 4 5 6 7

Express aggression directly: Try to hurt you in some way, either verbally or physically, or by punishing you in some way.

1 2 3 4 5 6 7

Talk it over without hostility; try to compromise, negotiate.

1 2 3 4 5 6 7

Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.

1 2 3 4 5 6 7

Go along with you, give in, accept responsibility, do something to make it up.

1 2 3 4 5 6 7

Express hurt feelings.

1 2 3 4 5 6 7

Withhold physical affection (e.g., hugging, kissing, etc).

1 2 3 4 5 6 7

Deny responsibility, say you shouldn't be angry.

1 2 3 4 5 6 7

Reject you, dislike you.

1 2 3 4 5 6 7

Minimize the situation, humor or mock you.

1 2 3 4 5 6 7

If you are angry, and **you talk it over without hostility; try to compromise, negotiate,** how likely is it that your partner would respond in each of these ways:

	not at all					very much
Avoid the issue and/or avoid you, become silent, leave the room, withdraw.	1 2 3 4 5 6 7
Express aggression directly: Try to hurt you in some way, either verbally or physically, or by punishing him/her in some way.	1 2 3 4 5 6 7
Talk it over without hostility; try to compromise, negotiate.	1 2 3 4 5 6 7
Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.	1 2 3 4 5 6 7
Go along with you, give in, accept responsibility, do something to make it up.	1 2 3 4 5 6 7
Express hurt feelings.	1 2 3 4 5 6 7
Withhold physical affection (e.g., hugging, kissing, etc).	1 2 3 4 5 6 7
Deny responsibility, say you shouldn't be angry.	1 2 3 4 5 6 7
Reject you, dislike you.	1 2 3 4 5 6 7
Minimize the situation, humor or mock you.	1 2 3 4 5 6 7

If you are angry, and **you express aggression indirectly; e.g., complain to someone else, get angry at someone or something else**, how likely is it that your partner would respond in each of these ways:

	not at all					very much
Avoid the issue and/or avoid you, become silent, leave the room, withdraw.	1 2 3 4 5 6 7					
Express aggression directly: Try to hurt you in some way, either verbally or physically, or by punishing you in some way.	1 2 3 4 5 6 7					
Talk it over without hostility; try to compromise, negotiate.	1 2 3 4 5 6 7					
Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.	1 2 3 4 5 6 7					
Go along with you, give in, accept responsibility, do something to make it up.	1 2 3 4 5 6 7					
Express hurt feelings.	1 2 3 4 5 6 7					
Withhold physical affection (e.g., hugging, kissing, etc).	1 2 3 4 5 6 7					
Deny responsibility, say you shouldn't be angry.	1 2 3 4 5 6 7					
Reject you, dislike you.	1 2 3 4 5 6 7					
Minimize the situation, humor or mock you.	1 2 3 4 5 6 7					

If you are angry, and **you go along with your partner, give in, accept responsibility, do something to make it up**, how likely is it that your partner would respond in each of these ways:

	not at all					very much	
Avoid the issue and/or avoid you, become silent, leave the room, withdraw.	1	2	3	4	5	6	7
Express aggression directly: Try to hurt you in some way, either verbally or physically, or by punishing you in some way.	1	2	3	4	5	6	7
Talk it over without hostility; try to compromise, negotiate.	1	2	3	4	5	6	7
Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.	1	2	3	4	5	6	7
Go along with you, give in, accept responsibility, do something to make it up.	1	2	3	4	5	6	7
Express hurt feelings.	1	2	3	4	5	6	7
Withhold physical affection (e.g., hugging, kissing, etc).	1	2	3	4	5	6	7
Deny responsibility, say you shouldn't be angry.	1	2	3	4	5	6	7
Reject you, dislike you.	1	2	3	4	5	6	7
Minimize the situation, humor or mock you.	1	2	3	4	5	6	7

If you are angry, and **you express hurt feelings**, how likely is it that your partner would respond in each of these ways:

	not at all					very much

Avoid the issue and/or avoid you, become silent, leave the room, withdraw.

1 2 3 4 5 6 7

Express aggression directly: Try to hurt you in some way, either verbally or physically, or by punishing you in some way.

1 2 3 4 5 6 7

Talk it over without hostility; try to compromise, negotiate.

1 2 3 4 5 6 7

Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.

1 2 3 4 5 6 7

Go along with you, give in, accept responsibility, do something to make it up.

1 2 3 4 5 6 7

Express hurt feelings.

1 2 3 4 5 6 7

Withhold physical affection (e.g., hugging, kissing, etc).

1 2 3 4 5 6 7

Deny responsibility, say you shouldn't be angry.

1 2 3 4 5 6 7

Reject you, dislike you.

1 2 3 4 5 6 7

Minimize the situation, humor or mock you.

1 2 3 4 5 6 7

If you are angry, and **you withhold physical affection**, how likely is it that your partner would respond in each of these ways:

	not at all						very much

Avoid the issue and/or avoid you, become silent, leave the room, withdraw.

1 2 3 4 5 6 7

Express aggression directly: Try to hurt you in some way, either verbally or physically, or by punishing you in some way.

1 2 3 4 5 6 7

Talk it over without hostility; try to compromise, negotiate.

1 2 3 4 5 6 7

Express aggression indirectly: e.g., complain to someone else, get angry at someone or something else.

1 2 3 4 5 6 7

Go along with you, give in, accept responsibility, do something to make it up.

1 2 3 4 5 6 7

Express hurt feelings.

1 2 3 4 5 6 7

Withhold physical affection (e.g., hugging, kissing, etc).

1 2 3 4 5 6 7

Deny responsibility, say you shouldn't be angry.

1 2 3 4 5 6 7

Reject you, dislike you.

1 2 3 4 5 6 7

Minimize the situation, humor or mock you.

1 2 3 4 5 6 7

Physical Symptom Inventory

For each of the following statements, mark the number for each statement that best describes
HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THE
PAST MONTH INCLUDING TODAY. Mark only one number for each item. At one extreme, o
means that you have not been bothered by the problem. At the other extreme, 4 means that
the problem has been an extreme bother.

HOW MUCH WERE YOU BOTHERED BY:

1) Sleep problems (can't fall asleep, wake up in the middle of night or early in morning)	0	1	2	3	4
2) Weight change (gain or loss of 5 lbs or more)	0	1	2	3	4
3) Back pain	0	1	2	3	4
4) Constipation	0	1	2	3	4
5) Dizziness	0	1	2	3	4
6) Diarrhea	0	1	2	3	4
7) Faintness	0	1	2	3	4
8) Constant fatigue	0	1	2	3	4
9) Headache	0	1	2	3	4
10) Migraine headache	0	1	2	3	4
11) Nausea and/or vomiting	0	1	2	3	4
12) Stomach acid or indigestion	0	1	2	3	4
13) Stomach pain (e.g., cramps)	0	1	2	3	4
14) Hot or cold spells	0	1	2	3	4
15) Hands trembling	0	1	2	3	4
16) Heart pounding or racing	0	1	2	3	4
17) Poor appetite	0	1	2	3	4
18) Shortness of breath when not exercising or working hard	0	1	2	3	4
19) Numbness or tingling in parts of your body	0	1	2	3	4

20) Felt weak all over	0	1	2	3	4
21) Pains in heart or chest	0	1	2	3	4
22) Feeling low in energy	0	1	2	3	4
23) Stuffy head or nose	0	1	2	3	4
24) Blurred vision	0	1	2	3	4
25) Muscle tension or soreness	0	1	2	3	4
26) Muscle cramps	0	1	2	3	4
27) Severe aches and pains	0	1	2	3	4
28) Acne	0	1	2	3	4
29) Bruises	0	1	2	3	4
30) Nosebleed	0	1	2	3	4
31) Pulled (strained) muscles	0	1	2	3	4
32) Pulled (strained) ligaments	0	1	2	3	4
33) Cold or cough	0	1	2	3	4

Anger Inventory

How often do **you** get angry?

1	2	3	4	5	6	7
never						very often

How intense is **your** experience of anger?

1	2	3	4	5	6	7
very mild						very intense

How often does **your partner** get angry?

1	2	3	4	5	6	7
never						very often

How intense is **his/her** experience of anger?

1	2	3	4	5	6	7
very mild						very intense

Demographic Information

Gender (circle one):   FEMALE   MALE

Age (in years): _____

What is your current "relationship status" with the person who is here with you today?

_____ **Not** currently dating or involved

_____ Casually dating

_____ Seriously or exclusively dating

_____ Engaged

_____ Married

_____ Other (please specify):_____

Please indicate how long (in months and years) you have been involved with your current relationship partner:_____

Is English your first language? (Please circle one): YES   NO

If, you answered no, how long have you spoken English for? _____ (months/years)

What is your ethnicity? _____

Thank you!