

EMOTION REGULATION'S ROLE IN RELATIONSHIP QUALITY:
COMPARISONS AMONG AMERICAN AND INDIAN COMMITTED ROMANTIC
COUPLES

By
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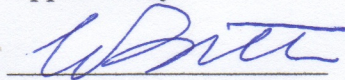
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Abstract

Emotion regulation involves changing the emotions that one experiences and expresses. Many studies have shown that culture influences emotion regulation and that regulating emotions can have positive or negative effects on relationship quality (English & John, 2013; Impett et al., 2011; Kalokerinos, Greenaway, & Denson, 2014; Regan, Lakhanpal, Anguiano, 2012; Su, Wei, & Tsai, 2014; Yelsma & Athappilly, 1988). Although research has studied culture, emotion regulation, and relationship quality separately, essentially no studies have combined the three factors to see how they are related. Specifically, there is very little information on whether emotion regulation plays a similar role in relationship quality across different cultures. The present study looks at daily associations between emotion regulation strategies (reappraisal, suppression, avoidance, and taking action) and emotions felt due to the partner, moderated by marriage type (American, Indian-arranged, Indian-love). I compare 128 heterosexual couples from the United States and India (in love and arranged marriages). These couples completed daily diaries once a day for seven days and reported the types of emotion regulation they used, as well as their positive or negative emotions due to their partner. I found that for Indian love and arranged couples, taking action was associated with increased positive partner induced emotions and reduced negative emotions. In contrast, taking action for U.S. couples had the opposite effect and was associated with increased negative emotions due to the partner, with no effect on positive emotions. In the U.S. couples, I also found that suppression and avoidance were associated with decreased positive partner induced emotions, but there was no effect for the Indian couples. With reappraisal, I found that high levels were associated with decreased negative partner induced emotions for all couples. Overall, results suggest that effective

regulation of negative partner induced emotions can protect relationship quality, but that what constitutes effective regulation depends on cultural context.

Keywords: culture, marriage, emotion regulation, action, avoid, reappraisal, suppression, partner-induced emotions

Emotion Regulation's Role in Relationship Quality:
Comparisons Among American and Indian Committed Romantic Couples

Emotion regulation is the modification of emotional responses using different strategies to accomplish that goal (Thompson, 1994; Dore & Ochsner, 2015). Regulation of emotions can be done consciously or unconsciously through extrinsic or intrinsic processes (Thompson, 1994). Using these methods, we can regulate our emotions with respect to how we feel or how we express them. With emotion regulation, we can influence how we experience the different emotions we encounter in our lives. One particularly important source of emotions that we must regulate are those provoked by our close relationship partners. These partner-provoked emotions can be positive or negative (Gross, 2002). Many studies have shown that cultures vary in how they interpret and manage emotional experiences (Thompson, 1994). Other studies show that emotion regulation strategies such as suppression may have positive or negative effects on relationship quality (English & John, 2013; Impett et al., 2011; Regan, Lakhanpal, & Anguiano, 2012; Yelsma & Athappilly, 1988). However, although research has studied culture, emotion regulation, and relationship quality separately, essentially none have combined the three factors to see how they are related. Specifically, there is very little information on whether emotion regulation plays a similar role in relationship quality across different cultures.

Although there are structural differences in marriages cross-culturally (e.g., arranged versus love marriages), research suggests that there is very little difference in relationship quality across different marriage types (Regan et al., 2012). Nevertheless, even though relationship quality levels may be the same across marriage types, the way people achieve satisfying relationships may differ cross-culturally. For some couples, some forms of emotion regulation

such as suppression (e.g., not showing the emotions one feels) might undermine relationship quality, but for others keeping feelings to oneself may not be problematic. In Asian cultures for example, individuals are encouraged to disengage from their feelings or practice suppression as a means to remain calm in a situation (Murata, Moser, & Kitayama, 2013). A better understanding of possible cultural differences can help provide insight as to what constitutes effective regulation of partner-induced emotions and help couples to achieve higher relationship quality.

Emotion Regulation

Emotion regulation involves processes, both extrinsic and intrinsic, that monitor, evaluate, and modify emotional reactions that we encounter. There are two types of emotion regulation individuals can use to change their emotions, emotion-focused and problem-focused. In emotion-focused regulation strategies, emotion response tendencies, as well as the emotions themselves, are regulated and changed directly. Emotion-focused regulation strategies can be distinguished into two separate categories, antecedent-focused and response-focused (Thompson, 1994). In antecedent-focused emotion regulation strategies, we change how we do things before we have time to feel an unwanted emotional response. Response-focused emotion regulation strategies on the other hand, occur after a response tendency has been generated and the emotion has been felt (Thompson, 1994). In contrast, problem-focused regulation strategies are types of active coping mechanisms that minimize potentially stressful situations. Generally, when a possibly stressful situation arises, active coping lessens or diverts the stress from its full impact (Aspinwall & Taylor, 1997). In the current study, I will look at one antecedent-focused strategy, reappraisal, and two response-focused strategies, suppression and avoidance. The last emotion regulation strategy that I look at in this study, taking action, is a problem-focused emotion regulation strategy.

Emotion-Focused Regulation Strategies

Reappraisal is an emotion regulation strategy in which someone deliberately changes his or her interpretation or connection to an event or stimulus early on in a situation (Dore & Ochsner, 2015; Gross & John, 2003). When reappraising a situation, people will attempt to alter its emotional significance or meaning to help them cope better and experience less negative, or more positive, emotions (Weinstein, Brown, & Ryan, 2009). The overall goal with cognitive reappraisal is to change the emotional impact of a specific situation and interpret it in more positive terms before we experience a full emotional response (Gross & John, 2003; Richards, Butler, & Gross, 2000). The use of reappraisal in relationships has been found to reduce conflict-related distress over time (Finkel, Slotter, Luchies, Walton, & Gross, 2013). In the study, individuals who reappraised conflict protected themselves from a decline in marriage quality over the years. Overall, reappraisal intervention produced positive effects on marriage quality and also diminished conflict anger and distress in relationships (Finkel et al., 2013). Thus, evidence suggests that reappraisal can have a positive impact on relationships by looking at situations in a positive light.

Suppression refers to concealing certain expressive emotions or behaviors (Impett et al., 2012; Gross & John, 2003). Suppression reduces outward expression of emotions and can have different effects on relationships depending on various factors (Impett et al., 2012). In general, most research finds that suppression can hurt our memory and social interactions with others because we focus so much effort on avoiding certain feelings that real details become blurry (Impett et al., 2012). In addition, suppression can disrupt smooth communication and mutual understanding (Totenhagan, Curan, Serido, & Butler, 2013). However, suppression can also act as a sacrifice to maintain the well-being of a relationship. An individual may want to voice their

concerns or express their negative emotions, but refrain from doing so to avoid upsetting their partner. In this case, they would be avoiding their desire to express their own emotions to benefit their partner's emotional state. In other words, an individual may sacrifice their own happiness for their partner's to ensure relationship satisfaction. Sacrifice often involves performing unwanted tasks, but making sacrifices for a partner may lead to an increase in relationship satisfaction (Impett et al., 2012). Practicing suppression may help conceal emotions that may otherwise cause conflict within a relationship. Thus, one way that suppression can have positive affects on relationships is by avoiding conflicts.

Experiential avoidance is a type of emotion regulation focused on delaying or avoiding psychological discomfort. Individuals refuse to accept or experience distressing emotions (Su, Wei, & Tsai, 2014). For example, individuals may practice ignoring, distorting, or escaping to avoid stressful stimuli (Weinstein, Brown, & Ryan, 2009). With this type of emotion regulation, individuals deliberately try to control or escape from unwanted thoughts and feelings. This strategy is a short-term method to manage emotional experiences that we encounter and wish to ignore (Kashdan, Barrios, Forsyth, & Steger, 2005). The overall purpose to using experiential avoidance is for self-protection and allows individuals to prevent undesirable consequences (Kashdan et al., 2005). It appears that although avoidance may be a good mechanism for self-protection, it can cause increased distress in individuals and even interfere with life experiences (Kashdan et al., 2005). Currently, a lack of research exists to understand the impact of avoidance on close relationships. Given that avoidance causes more distress and psychological problems, it is likely that practicing avoidance can harm a close relationship as well.

Taking action is a method in which one turns toward a situation and uses direct action to address the issue at hand. When using action, an individual attempts to directly take care of a

stressful situation (Weinstein et al., 2009). With this form of active coping, potentially stressful situations are modified so that the emotional impact is softened or not felt at all. Minimizing a stressful encounter makes coping with a situation easier. Practicing an active coping strategy like taking action can give individuals more time to find more options to manage the situation at hand (Aspinwall & Taylor, 1997). The literature suggests that taking action may positively impact a relationship (Aspinwall & Taylor, 1997). Taking action can generate a positive response by diminishing the effects of a rough situation and may bring a couple closer together. Given that taking action reduces the effect of rough situations, it is likely that this particular type of emotion regulation can help with a couple's overall relationship quality.

Emotion Regulation and Culture

Culture influences how individuals think, feel, and behave in life (Ford & Mauss, 2015). Each culture has some unique factors, but there is also some overlap between cultures on many values (Tsai & Lau, 2013). Cultural psychology has shown that differences exist between East Asian cultures versus American and Western European cultures with respect to how they practice emotion regulation. These differences are related to different ways of constructing the self (Tsai & Lau, 2013). Culture can promote either interdependence or independence (Ford & Mauss, 2015). Some societies value interdependence (Eastern or Asian culture) while others value independence (Western or American culture). In an interdependent culture, individuals prioritize relationships and promoting harmony with others. In an independent culture, individuals prioritize distinguishing themselves from others (Ford & Mauss, 2015).

Reflecting on negative experiences can allow individuals to cope with their emotions and understand the problems they encounter. Self-reflection is a strategy that allows individuals to reflect on past negative experiences. Tsai and Lau's study (2013) found that practicing self-

reflection, caused distress for the Easterners. When self-reflection causes distress, individuals may adapt by practicing emotion regulation strategies such as avoidance to dodge the distressing emotions (Su et al., 2014). The Easterners may also adopt suppressing their emotions altogether to prevent interpersonal conflict. It appears that in many of the Eastern cultures, emotion regulation is a very important value, which may be a result of their interdependent societies. In an interdependent context, emotion regulation strategies such as avoidance and suppression of emotions helps to preserve relationships with others and as a result follow cultural ideals (Wei, Su, Carrera, Lin, & Yi, 2013).

On the other hand, in an independent, Western, society, expression of emotional states is valued because it shows assertion of the self (Tsai & Lau, 2013). Tsai and Lau's study (2013) found that Westerners felt less distressed when they practiced self-reflection compared to the Easterners. Being able to express their emotions rather than having to hide them brought emotional relief to the Westerners (Tsai & Lau, 2013). Western societies in general value more freedom and expression of emotions. In addition, a couple studies have reported that communication is less influential on Indian marital satisfaction (Yelsma & Athappilly 1988; Butler, Lee, & Gross, 2007). In companionate marriages, however, such as US marriages, effective communication predicts higher satisfaction in relationships (Yelsma et al., 1988). Therefore, the use of suppression and avoidance in Western relationships could predict lower relationship quality in couples due to cultural values, while this may not be true in Asian cultures.

Along similar lines, other studies show that cultural groups and values may moderate the association between emotional suppression and interpersonal harmony. Western cultures tend to value independence, which promotes the practice of suppression to protect the self but not to

protect relationships (Butler et al., 2007; Wei et al., 2013). In Western culture, suppression may even be correlated with more negative emotion (Butler et al., 2007). Also, in Western cultures, expressing emotions may be healthy in at least some circumstances because it helps to not keep emotions built up and communicates one's needs and feelings. In contrast, Eastern cultures that value interdependence encourage emotional suppression in pursuit of interpersonal harmony and to preserve relationships with others (Wei et al., 2013). Eastern cultures may not see emotional suppression as unhealthy, but instead as a way to maintain interpersonal harmony when used in moderation (Wei et al., 2013).

Since emotion regulation strategies such as suppression vary across interdependent and independent cultures, we may find that other strategies such as reappraisal and taking action differ as well. Matsumoto, Yoo, and Nakagawa (2008) found in their study that the effects of culture on emotion regulation strategies are more directly seen on observable, expressive behaviors. Since reappraisal is an internal, unobservable behavior, it may be that culture does not have an impact on reappraisal. Taking action should also generally be effective since it changes the source of the negative emotions directly. To the best of my knowledge, cultural differences in these emotion regulation strategies have not received much empirical attention.

Marriage Type and Culture

Marriage is a fundamental relationship that takes various forms cross-culturally. Some cultures allow individuals to choose their spouses. Other cultures dictate one's choice of partner. Traditionally in Indian culture, a family member arranges a marriage. Marriages of choice are discouraged because it is thought that this may reduce family closeness (Madathil & Benschhoff, 2008). Individuals holding traditional Indian values even believe that romantic love can be dangerous and is impractical. This belief may reflect their interdependent values. Arranged

marriages are often seen as an agreement between two families. The marriage focuses on bringing two families together more so than the two individuals who are being married (Madathil & Benshoff, 2008). In addition, in Eastern societies, there are lower divorce rates, and one reason may be that couples are more committed to their institutional relationship (Yelsma et al., 1988). This stronger commitment may stem from the relationship's focus on fulfilling societal and familial obligations (Regan et al., 2012). In order to fulfill such a commitment, sacrifices may be made. At times, these couples may practice emotion regulation strategies such as avoidance, active coping, reappraisal, and suppression to control their emotions that may be disruptive to their family. Thus, certain marriage types or cultures may encourage more participation in using most methods of emotion regulation, while other cultures that do not value emotion regulation as highly may lead to people practicing less emotion regulation in their relationships.

Some Indians, however, branch off from traditional ideals and marry someone they fell in love with. This phenomenon is referred to as an Indian love marriage. These individuals undergo a self-selection process, similar to dating. These marriages are often between people of different religions or of different socioeconomic levels (Yelsma et al., 1988). If a couple falls in love before marriage, problems may occur between families since love marriages go against the traditional Indian ways. Indian love marriages are seen as a threat to the hierarchical caste society. Some families may oppose the marriage to the point where they withdraw family support (Yelsma et al., 1988). In other words, going against traditional cultures may cause quite a few problems for couples. To avoid discussing these family conflicts, couples in Indian love marriages may have higher levels of suppression in comparison to U.S. love marriages, helping their relationship out overall. At the moment however, existing literature lacks evidence to

suggest that there are differences across marriage types in terms of the use of various emotion regulation strategies.

Research Questions and Hypotheses

To the best of my knowledge, no research has looked at whether or not relationship quality differs cross-culturally when taking specific emotion regulation strategies into account. Many factors can influence a couple's relationship quality based on emotions they feel within the relationship. The present study investigates daily associations between emotion regulation strategies (reappraisal, suppression, avoidance, and taking action) and emotions felt due to the partner, moderated by marriage type (American, Indian-arranged, Indian-love). Some argue that marriage type alone is a good indication of relationship quality. Research though has shown contradictory results when looking at arranged and love marriages. One possibility for the conflicting results may be that marriage satisfaction depends on other variables not considered, such as emotion regulation strategies. The use of emotion regulation is highly valued in Indian arranged marriages, and so it may be associated with better relationship quality. Due to their general valuing of emotion regulation, the use of any form of emotion regulation may have beneficial impacts and be associated with better relationship quality. On the other hand, emotion regulation is less valued in United States marriages and therefore, the type of emotion regulation used will matter. Emotion regulation strategies such as suppression and avoidance should have negative impacts, which may be associated with lower relationship quality. Reappraisal and taking action should have positive effects for the Americans though. Since the couples in Indian love marriages likely hold both Indian U.S. values to some degree, they will likely fall somewhere in between with their valuing of emotion regulation. They will likely value emotion regulation more than the U.S. couples, but perhaps not as much as the Indian arranged couples.

Thus, I expect that the results for the Indian love couples will likely fall somewhere in between those for the U.S. couples and the Indian arranged couples.

This study investigates the following question:

Does the regulation of emotions using the strategies of suppression, action, avoidance, and reappraisal vary across cultures in its associations with the emotions people feel about their partner?

My hypotheses are:

Cultures value emotion regulation differently. The use of emotion regulation strategies such as suppression, taking action, avoidance, and reappraisal to deal with partner provoked emotions will have different associations with those emotions in American versus Indian romantic relationships.

- (1) Since the Indian arranged couples highly value emotion regulation, the use of any form of emotion regulation should be beneficial to couples and be associated with better overall relationship quality (e.g., higher positive partner provoked emotions and lower negative ones).
- (2) The type of emotion regulation the Americans use will matter since they value emotion regulation less. Suppression and avoidance should have a negative impact on US couples (e.g., be associated with lower positive partner provoked emotions and higher negative ones), while reappraisal and taking action should have positive effects (e.g., be associated with higher positive partner provoked emotions and lower negative emotions)
- (3) Since the Indian love couples are similar to both the Indian arranged and U.S. couples, they will likely fall somewhere in between the two in how they value

and use emotion regulation strategies. Thus, the associations between the emotions regulation strategies and partner provoked emotions should fall somewhere between those for the Indian arranged and the U.S. couples.

Methods

Participants and Recruitment

Community samples of heterosexual, committed couples were recruited in the United States and India. All of the Indian couples were married, but not all of the American couples were married. The United States couples were recruited using flyers titled “Relationships, Emotion, and Eating,” which were distributed at University of Arizona with eligibility information for the study. The Indian couples were recruited through announcements at Karnatak University campus in Dharwad, India. Those who were interested and qualified were given the contact information for the primary investigator, who would then provide the potential participants with more study information. All the participants recruited had to meet the following criteria: 1) be at least 18 years of age, 2) both partners had to be willing to participate in the study, 3) couple must be in a committed relationship for at least six weeks.

The sample included a total of 128 couples ($N=256$), ranging in age from 18.75 to 73 years old ($M=32.78$, $SD=10.68$). Participants included 35 couples from the United States ($N=120$) and 93 couples from India (43 in love marriages, 50 in arranged marriages) ($N=196$). The relationship length for American couples ranged from 0.17 to 43.5 years ($M=7.24$ years, $SD=10.04$ years). The relationship length for Indian-love marriages ranged from 1.92 to 36.42 years ($M=8.85$ years, $SD=7.31$ years) and for Indian-arranged couples it ranged from 1.83 to 42.17 years ($M=12.05$ years, $SD=8.92$ years).

Procedures

Participants from the United States were asked to log-on to a secure website to read a full disclosure invitation and to register for the study. Online instructions asked participants to complete all measures individually and to not discuss them with their partners. Participants completed a baseline survey that included assessments of demographics and individual difference measures. After the survey, participants were instructed to return to the website each day for seven consecutive days to complete daily measures. Reminder emails were sent each day to complete the measures. In India, interested participants phoned the research assistant and a time was arranged to meet in their home. All Indian participants were fluent in English and all items were identical for the American and Indian samples, with the addition of assessing marriage-type for the Indian sample (love versus arranged).

At the first meeting participants completed the full disclosure invitation and were given a paper form of the baseline survey. Paper versions were used in India because not all participants had easy access to the Internet. Participants were also given a package with seven daily forms and an explanation of when to fill them out (one time per day at the end of the day). Participants were asked not look at them after they filled them out and to not discuss them with their partner. The research assistant returned at the end of the week to collect the completed study materials. The data were sent as a de-identified password protected file to the principle investigator in the United States. On average participants completed four days of the daily diary (range 1–7 days, $SD = 2.2$). Missing data were not associated with marriage-type, age, relationship satisfaction, or any of the assessed demographic variables.

Measures

Baseline Survey

Participants were asked to complete a baseline survey, which consisted of questions that asked about their age and their relationship length (in months and years), as well as how long the couple has been married. It also included a single item that assessed marriage type. Indian participants were asked to indicate marriage type with responses including love, arranged, or other. US couples were assumed to be in a love marriage if they indicated that they were married. The marriage type was a face-valid single-item response, so no scale scoring was used. The survey also included questions about demographics and other individual measures not relevant to the analyses of this paper.

Daily Measures

The daily diaries included items that assessed emotion regulation, with the initial question being: *“To what extent did you do the following thing(s) to try to solve a problem, or to control or change your emotions?”* The specific question that addressed suppression was *“I kept emotions to myself.”* Action was addressed with the question, *“I took action and tried to do something about a situation.”* Avoidance was addressed by asking, *“I tried to avoid a problem or to ignore my emotions about it.”* Reappraisal was addressed by asking the question, *“I tried to look on the bright side, or to see something good in a situation.”* Emotions felt due to a partner were addressed by the following questions: *“To what extent did you experience positive feelings such as joy or relaxation due to your partner?”* and *“To what extent did you experience negative feelings such as anger or sadness due to your partner?”* All of the responses were on a scale of zero to ten. Zero was "not at all", five was "moderately", and ten was "extremely". To account for an individual and an individual with a dyad data, repeated measures of dyadic modeling was used.

Data Analysis

To analyze the data, I used the statistical analysis program “R” to analyze the data taken from the daily diaries and questionnaires. To account for individuals being nested within dyads, repeated measures dyadic modeling was used. Specifically, I used a dyadic multilevel model that included two categorical predictor variables. Marriage-type was a categorical variable with three levels: American, Indian-love, and Indian-arranged. Gender was a categorical variable with two levels: male and female. First, I used histograms and boxplots to investigate the variables to ensure that no outliers were present that could indicate error with the data. I then tested models that included the predictors of marriage type, gender, and the following emotion regulation variables one at a time: reappraisal, suppression, avoidance, and taking action. The models included the 3-way interaction (marriage type X gender X emotion regulation) and all 2-way interactions. The continuous predictor variables were person-mean centered. I used separate models to predict the effect of these variables on positive emotions provoked by a partner and negative emotions provoked by a partner. Several significant interactions were found, graphed, and simple slope estimates were obtained.

Results

In *Table 1*, we see the descriptive characteristics for men and women with the mean and standard deviation for each variable tested (reappraisal, suppression, avoidance, action, positive partner provoked emotions, and negative partner provoked emotions). In *Table 2*, we see correlations between the variables we looked at in this study using the mean centered scores. The men are on the top of the diagonal, while the women are on the bottom part of the diagonal. In *Table 3*, we see correlations between the variables using the person-centered scores, with men on top of the diagonal and women on the bottom.

Positive Partner Provoked Emotions

In **Figure 1**, we see that on the days love and arranged couples practiced higher levels of action, they also reported higher levels of positive partner provoked emotions. The slope for the arranged couples was positive and significant ($b = 0.29$, $t(df) = 1491$, $p = 0.00$). The same was true for the love couples ($b = 0.21$, $t(df) = 1491$, $p = 0.00$). With the U.S. couples ($b = 0.02$, $t(df) = 1491$, $p = 0.56$), we see no association between action and positive partner provoked emotions. In **Figure 2**, we see that when U.S. couples reported higher levels of suppression they reported a decrease in positive partner provoked emotions ($b = -0.18$, $t(df) = 1491$, $p = 0.00$). With the love ($b = -0.04$, $t(df) = 1491$, $p = 0.20$) and arranged couples ($b = -0.00$, $t(df) = 1491$, $p = 0.85$), we see no association between suppression and positive partner provoked emotions. In **Figure 3**, we see that on the days the U.S. couples practiced high levels of avoidance, they also reported decreased positive partner provoked emotions ($b = -0.19$, $t(df) = 1492$, $p = 0.00$). With the love couples, we see no association between avoidance and positive partner provoked emotions ($b = -0.04$, $t(df) = 1492$, $p = 0.16$). As for the arranged couples, we see a weak negative association between avoidance and positive partner provoked emotions ($b = -0.06$, $t(df) = 1492$, $p = 0.03$). Reappraisal was found to not have a significant interaction ($p = 0.14$) with positive partner provoked emotions. When the interaction and marriage type were removed from the model, the results still did not yield any significant interactions.

Negative Partner Provoked Emotions

In **Figure 4**, we see that when high levels of action were reported from the U.S. couples, they also reported an increase in negative partner provoked emotions ($b = 0.10$, $t(df) = 1485$, $p = 0.02$). However, levels of action for the love couples was not associated with negative partner emotions ($b = -0.06$, $t(df) = 1485$, $p = 0.30$) and for the arranged couples it was associated with decreased partner induced negative emotions ($b = -0.17$, $t(df) = 1485$, $p = 0.00$). In **Figure 5**, we

see that in all couples, when they reported high levels of reappraisal, they also reported a decrease in partner induced negative emotions: U.S. ($b = -0.15$, $t(df) = 1482$, $p = 0.00$), love ($b = -0.09$, $t(df) = 1482$, $p = 0.07$), and arranged ($b = -0.14$, $t(df) = 1482$, $p = 0.01$). The interaction between suppression and negative partner provoked emotions ($p = 0.49$) did not produce any significant results. Avoidance was found to not have a significant interaction with negative partner induced emotions ($p = 0.38$) either. When the interaction and marriage type were removed from the model for both suppression and avoidance, the results still did not yield any significant interactions.

Discussion

This study was done to address the question, “Does the regulation of emotions using the strategies of suppression, action, avoidance, and reappraisal vary across cultures in its associations with the emotions people feel about their partner?” Through this study, I have found that the regulation of emotions does vary across cultures in its associations with the emotions people feel about their partner. Based on the literature, I predicted that couples in Indian arranged marriages would benefit their relationship quality from any form of emotion regulation they used because of their cultural values on the subject matter. Consistent with this prediction, I found that when the arranged couples reported high levels of action, they showed increased positive partner provoked emotions, promoting better relationship quality. With high levels of action and reappraisal, the Indian arranged couples also showed decreased negative partner provoked emotions, also positively impacting relationship quality. No effect was found with suppression and avoidance on positive or negative partner provoked emotions, suggesting it did not hurt or benefit arranged couple’s relationship quality. These results support the idea that

Indian arranged couples value emotion regulation in general and that the use of emotion regulation benefits them as a couple and promotes better relationship quality.

I also predicted that in U.S. couples, the type of emotion regulation they used would matter because their culture places less of an emphasis on emotion regulation. Specifically, I predicted that suppression and avoidance would have negative impacts, while reappraisal and action would have positive impacts. Consistent with this prediction, I found that when U.S. couples reported high levels of suppression and avoidance, they showed decreased positive partner induced emotions, thus having a negative impact on relationship quality. When U.S. couples reported high levels of reappraisal, they showed decreased negative partner induced emotions, thus having a positive effect on relationship quality. Counter to my prediction, however, high levels of action were associated with increased negative partner induced emotions and had no association with positive emotions.

Lastly, I predicted that the Indian love couples would fall in between the Indian arranged and U.S. couples with how emotion regulation affects their relationship quality since they are similar to both types of couples and likely held values in between the two. I found that when love couples reported high levels of action, it was associated with increased positive partner induced emotions, promoting better relationship quality amongst couples. When Indian love couples reported high levels of reappraisal, it was associated with decrease negative partner provoked emotions, but had no effect on positive emotions. No effects were found for suppression and avoidance for positive or negative partner emotions for the love couples. Comparing these results with the Indian arranged and U.S. couples, it appears that the Indian love couples have more associations in common with the Indian arranged couples. This contradicts my hypothesis that they love couples would fall in between the arranged and U.S.

couples. In summary, the findings from this study suggest that culture does have an impact on emotion regulation and its associations with the emotions individuals feel about their partner.

The results did yield a few surprising findings that were not addressed in my hypotheses. It was interesting to see that the use of reappraisal has no effect on all marriage types in association with positive partner provoked emotions. Since reappraisal is generally used to better a situation, it was surprising that it had no significant interactions. I was also surprised to see that suppression and avoidance had no significant interactions across all marriage types. I was expecting to see that suppression and avoidance would at least have negative impact on relationship quality for U.S. couples and increase negative partner provoked emotions. These results may have occurred because there are other factors besides culture that I have not taken into consideration in my model. This may open up further research opportunities on the subject matter.

Implications of the Research

This study was the first to look at how emotion regulation strategies such as suppression, reappraisal, avoidance, and action may vary across different cultures in its relation to partner provoked emotions using daily associations. The results of this research provide useful findings to the advancement of research in cultural and familial psychology. This study's findings reveal how cultural values do matter in the use of emotion regulation strategies and its associations with how individuals feel about their partner. I have found that there are different ways to achieve good relationship quality with the use of emotion regulation strategies, which may differ across cultures. These implications can provide a good basis for marital counseling with clients who come from different cultural backgrounds (e.g. non-Western cultures). Depending on their cultural background, psychologists can guide couples to achieve good relationship quality with

the use of certain emotion regulation strategies and encourage them to avoid using negative strategies. It could also be beneficial to use the findings from this study in individual counseling, to work with individuals on strategic emotion regulation strategies to use in different situations they may encounter. Overall, I have found that the use of emotion regulation strategies is not inherently good or bad, but rather depends on the cultural context in which they are learned and employed.

Limitations and Future Research

The present study only looked at a selection of heterosexual, Indian and US couples. Therefore, the results from this study may not be applicable to same sex couples. It also may not be applicable to individuals in other geographical locations or different cultures. To solidify the findings in this study, it would be interesting to expand to other cultures with similar values. For example, some European cultures follow similar ideals to Asian cultures and value an interdependent society. If I performed a similar study with these individuals and received similar results, I would gain increased confidence in our conclusions.

The use of take-home surveys is beneficial for researchers because they allow for participants to answer questions in their natural environment, under lower levels of stress, compared to a laboratory setting. However, due to the nature of self-reported data, there are likely many errors in the process. Since the participants reported their answers from home, the researchers could not enforce all instructions strictly, which could cause mistakes not controlled for in the study. In the United States, the questionnaires were completed online. In India on the other hand, the data was collected via questionnaires at home in written form because not all Indian participants had Internet access. All participants were instructed to not share their daily responses with their partners; however, participants may have violated the rules or even changed

their answers from other days in the study. Participants may have also lied with their responses or forgotten to fill responses out one day and caught up on it later on. With any of these possible sources of error, results may be biased.

This study provided profound insight on culture, emotion regulation, and relationship quality. With these results, we can see that culture does have an effect on emotion regulation and its association with relationship quality in couples. Cultural values play such a large role in our lives growing up that the values we learn to integrate these values into our relationships without even realizing it at times. The findings from this study can be applied to counseling sessions and open the door for further research on the subject matter. Particularly, it will help us understand why couples use certain emotion regulation strategies in their relationships and allow us to see what is effective. Hopefully, we can take the current findings, look at the results that were surprising, and conduct further research on the subject matter to discover more answers and tips for improving relationship quality amongst couples.

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Table 1. Descriptive Statistics: Means and Standard Deviations for Men and Women for Each Outcome Variable

| Variable | Men (Mean, Standard Deviation) | Women (Mean, Standard Deviation) |
|------------------------------------|--------------------------------|----------------------------------|
| Reappraisal | 7.13 (2.51) | 7.31 (2.40) |
| Suppression | 4.57 (3.11) | 4.33 (2.97) |
| Avoidance | 4.54 (3.07) | 4.53 (3.11) |
| Action | 6.90 (2.66) | 7.06 (2.68) |
| Positive Partner Provoked Emotions | 7.87 (2.11) | 7.97 (2.07) |
| Negative Partner Provoked Emotions | 2.80 (2.70) | 2.49 (2.49) |

Note. Participants were asked to rate the amount of each variable, using a Likert scale ranging from 0 (not at all) to 10 (extremely).

Table 2. Mean Centered Correlations for Men and Women

| | Positive Partner Provoked Emotions | Negative Partner Provoked Emotions | Avoid | Suppression | Reappraisal | Action |
|------------------------------------|------------------------------------|------------------------------------|-------|-------------|-------------|--------|
| Positive Partner Provoked Emotions | 1.00 | -0.42 | -0.08 | -0.25 | 0.48 | 0.66 |
| Negative Partner Provoked Emotions | -0.49 | 1.00 | 0.44 | 0.49 | -0.10 | -0.12 |
| Avoid | -0.01 | 0.26 | 1.00 | 0.69 | -0.03 | 0.12 |
| Suppression | -0.11 | 0.25 | 0.79 | 1.00 | 0.08 | -0.001 |
| Reappraisal | 0.51 | -0.14 | 0.15 | 0.16 | 1.00 | 0.65 |
| Action | 0.54 | -0.12 | 0.10 | 0.13 | 0.84 | 1.00 |

Note. Men are on the top of the diagonal and women are on the bottom of the diagonal

Table 3. Person-Centered Correlations for Men and Women

| | Positive Partner Provoked Emotions | Negative Partner Provoked Emotions | Avoid | Suppression | Reappraisal | Action |
|------------------------------------|------------------------------------|------------------------------------|-------|-------------|-------------|--------|
| Positive Partner Provoked Emotions | 1.00 | -0.47 | -0.04 | -0.01 | 0.13 | 0.08 |
| Negative Partner Provoked Emotions | -0.33 | 1.00 | 0.02 | 0.08 | -0.08 | -0.09 |
| Avoid | -0.16 | 0.09 | 1.00 | 0.26 | 0.07 | -0.01 |
| Suppression | -0.09 | 0.12 | 0.34 | 1.00 | 0.07 | 0.07 |
| Reappraisal | 0.25 | -0.12 | -0.01 | 0.01 | 1.00 | 0.34 |
| Action | 0.06 | 0.09 | 0.01 | 0.08 | 0.29 | 1.00 |

Note. Men are on the top of the diagonal and women are on the bottom of the diagonal

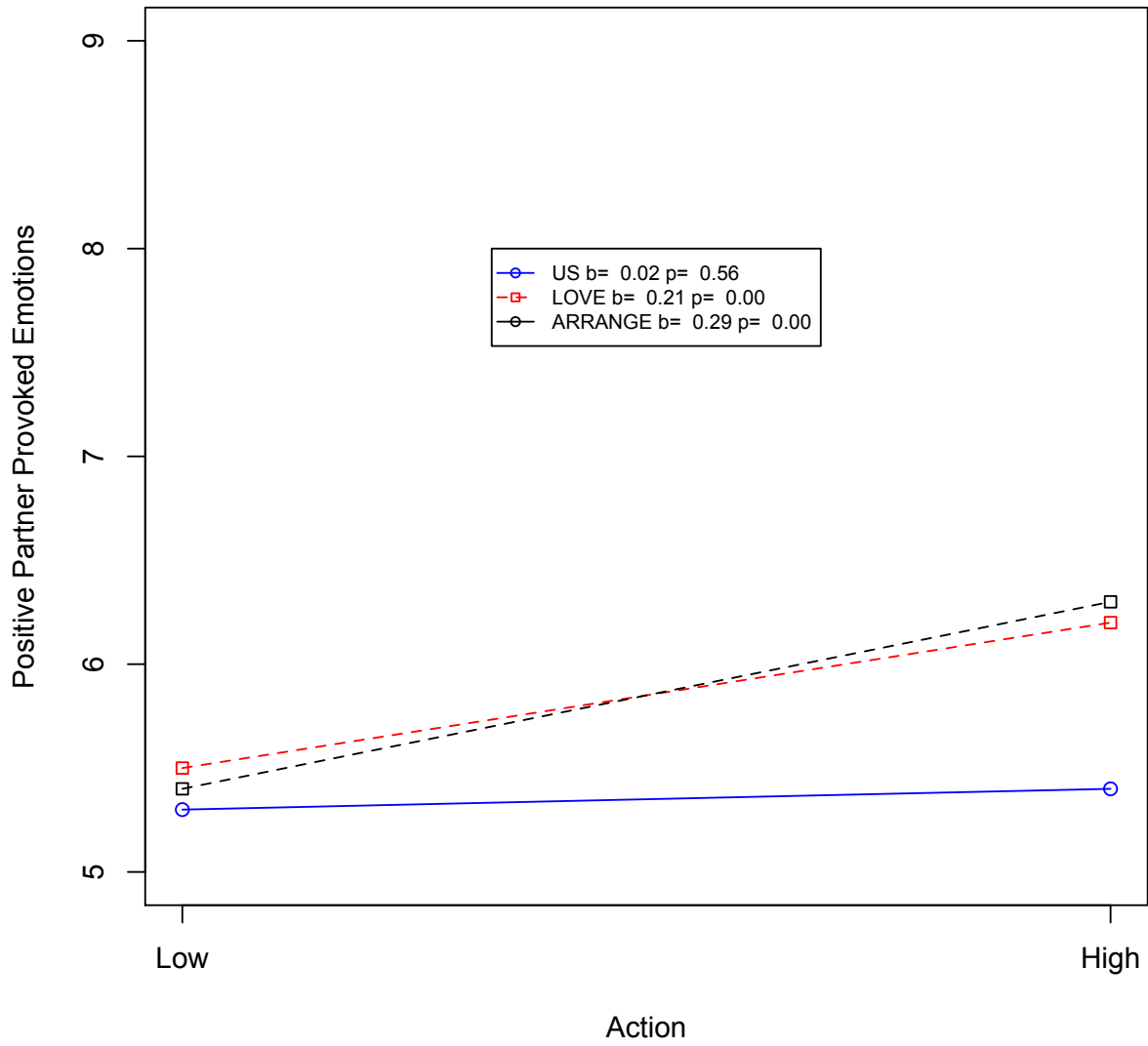


Figure 1. Action Predicting Positive Partner Provoked Emotions

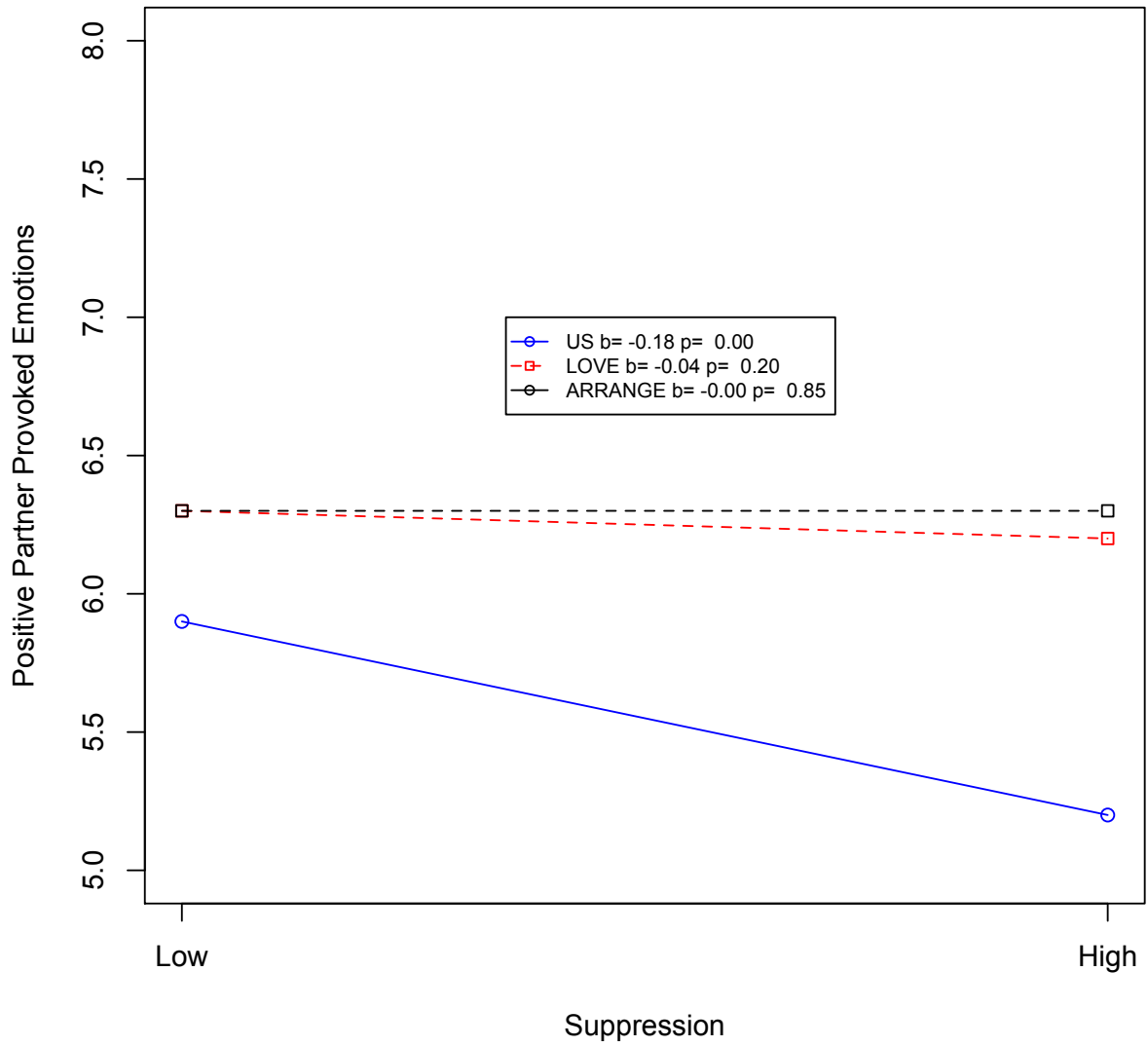


Figure 2. Suppression Predicting Positive Partner Provoked Emotions

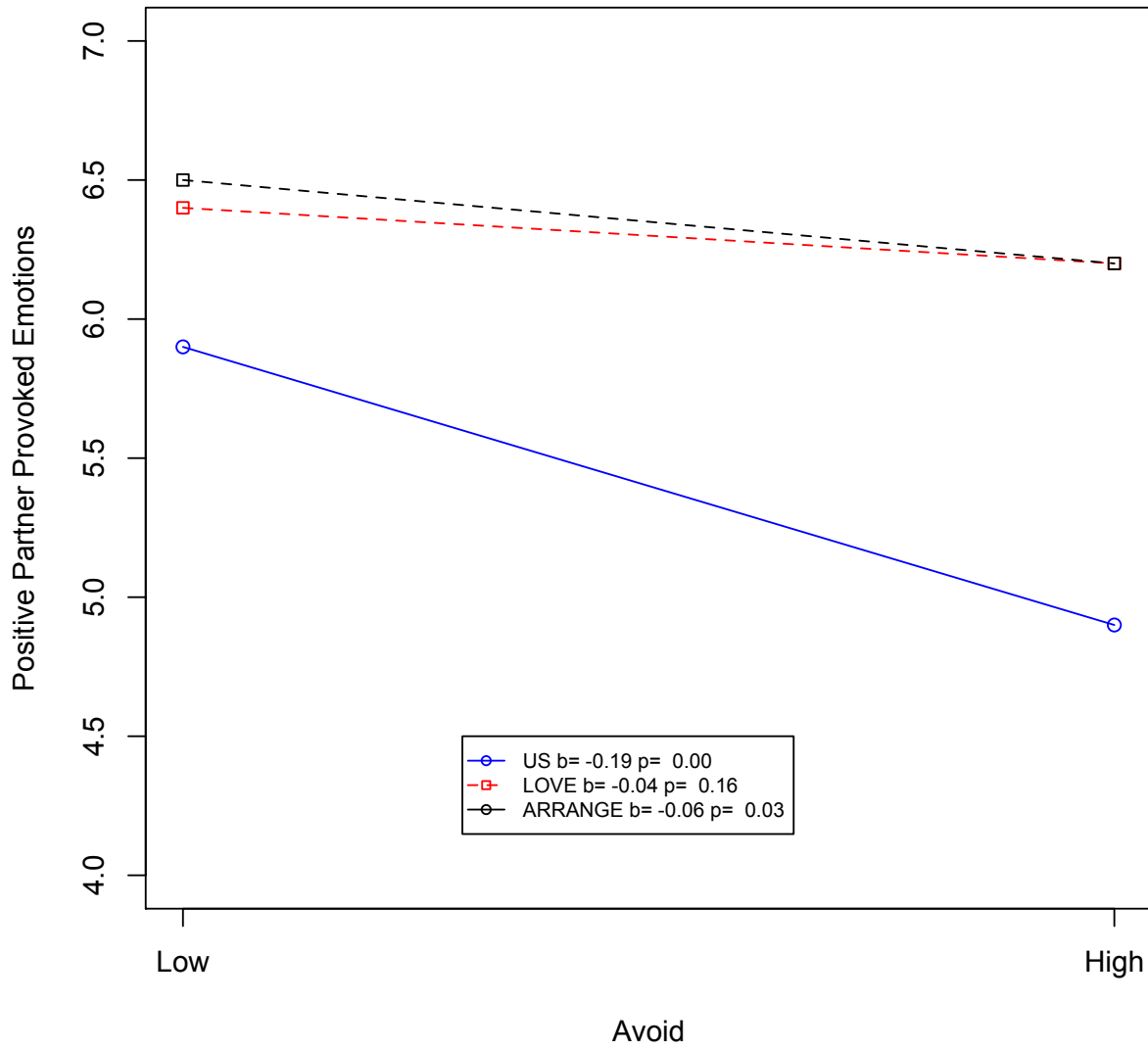


Figure 3. Avoidance Predicting Positive Partner Provoked Emotions

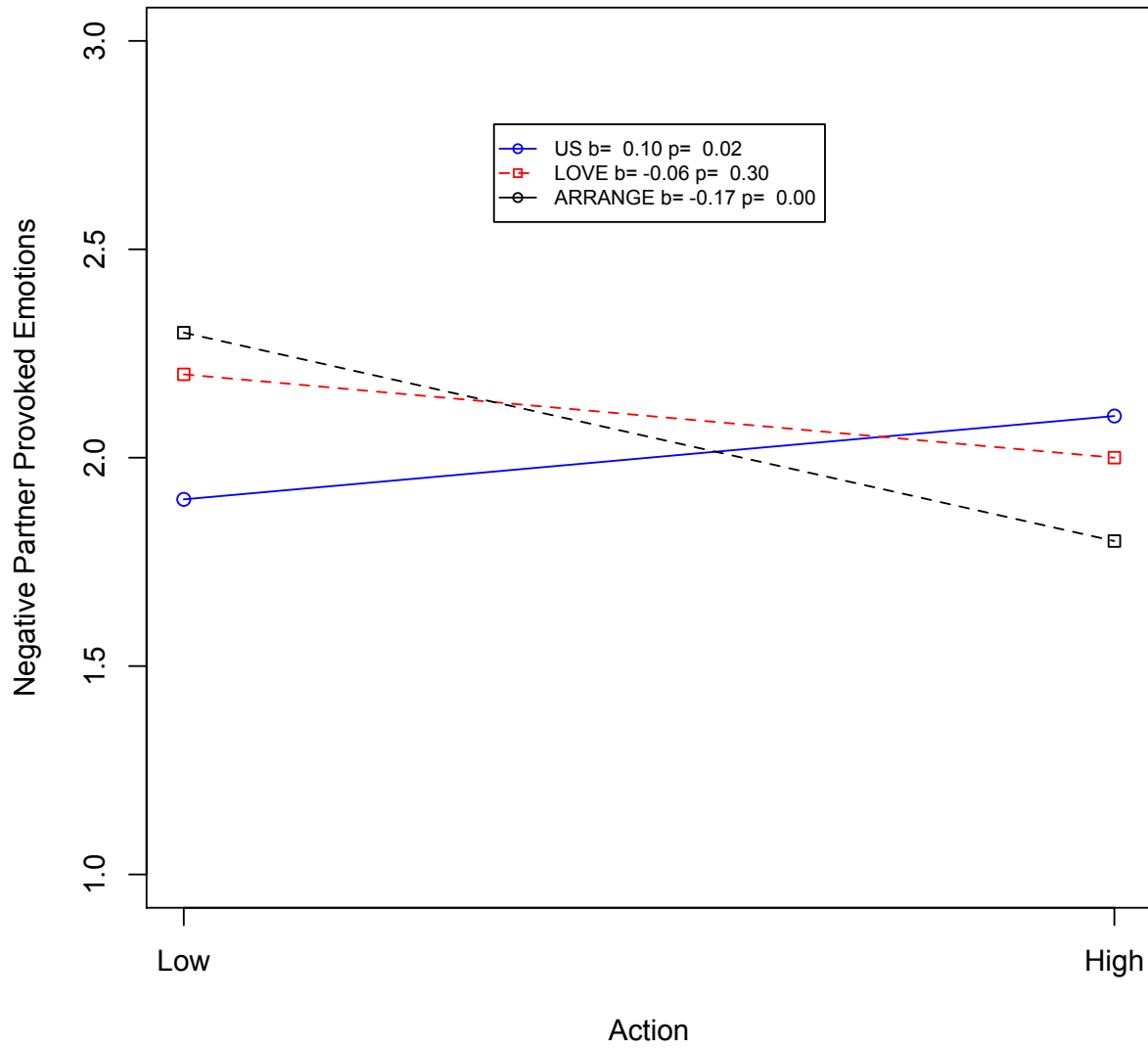


Figure 4. Action Predicting Negative Partner Provoked Emotions

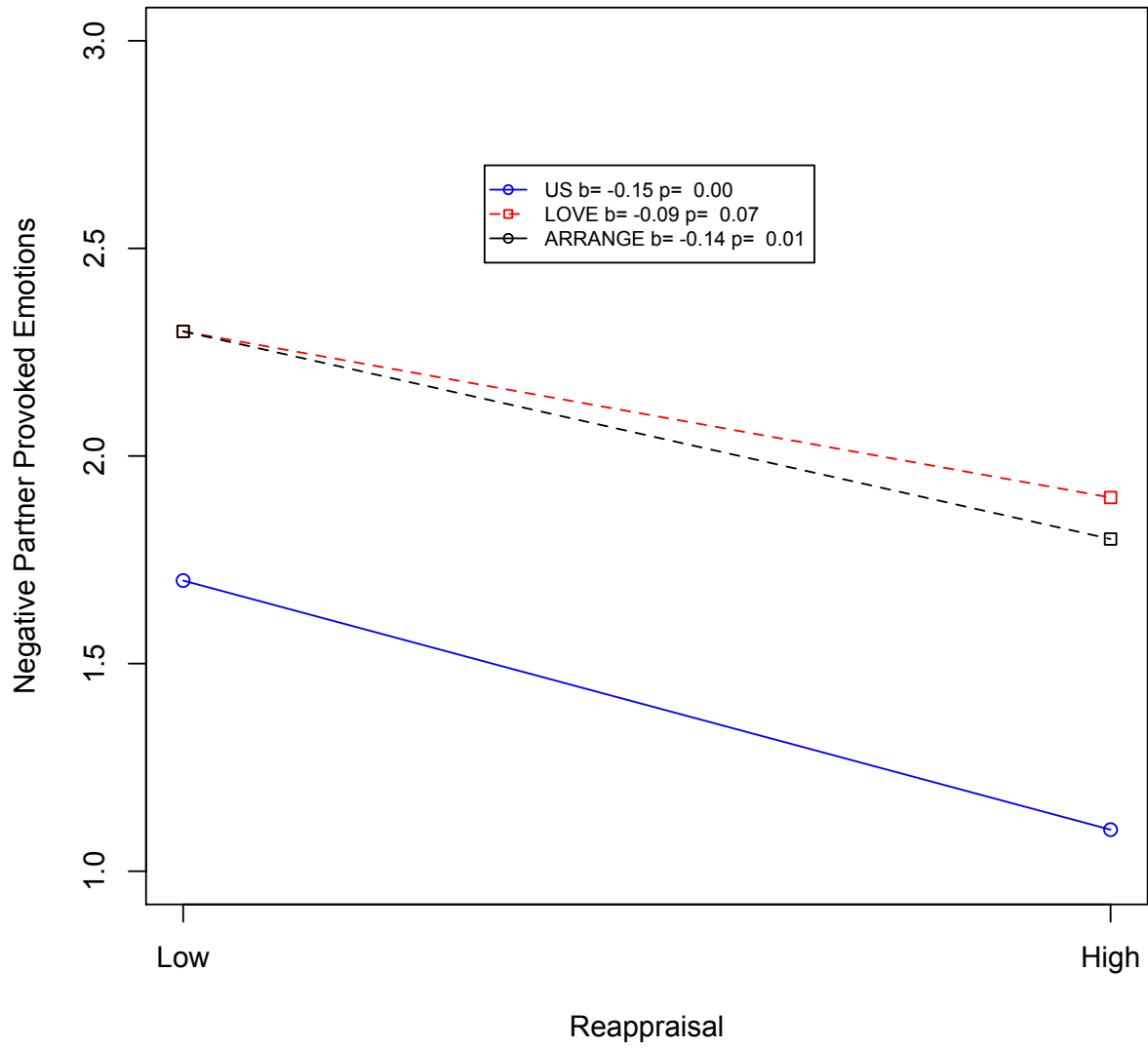


Figure 5. Reappraisal Predicting Negative Partner Provoked Emotions

Appendix A: Questions from Baseline Survey

Marriage Type/Culture:

-Based on whether survey is in distributed in America (coded as = 0) or in India, response to the following item:

Arranged marriage 1 Love marriage 2 Other 3

(Arranged Marriage coded as = 1, Love Marriage coded as = 2)

Relationship Length:

How long have you and your partner been in a romantic relationship together?

 Relaty years relatm months

Relationship Satisfaction:

Overall, how satisfied are you with your relationship with your partner?

| | | | | | | |
|-------------|-------------|-------------|---------|-----------|-----------|-----------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Very | Somewhat | Slightly | Neutral | Slightly | Somewhat | Very |
| Unsatisfied | Unsatisfied | Unsatisfied | | Satisfied | Satisfied | Satisfied |

Appendix B: Questions from Daily Diaries

10. To what extent did you experience positive feelings such as joy or relaxation due to your partner?

0 1 2 3 4 5 6 7 8 9 10
not at all moderately extremely

11. To what extent did you experience negative feelings such as anger or sadness due to your partner?

0 1 2 3 4 5 6 7 8 9 10
not at all moderately extremely

14. To what extent did you do each of the following things to try to solve a problem, or to control or change your emotions?

I took action and tried to do something about a situation.

0 1 2 3 4 5 6 7 8 9 10
not at all moderately extremely

I kept my emotions to myself.

0 1 2 3 4 5 6 7 8 9 10
not at all moderately extremely

I tried to look on the bright side, or to see something good in a situation.

0 1 2 3 4 5 6 7 8 9 10
not at all moderately extremely

I tried to avoid a problem or to ignore my emotions about it.

0 1 2 3 4 5 6 7 8 9 10
not at all moderately extremely