

**HOW LOVE EMERGES IN ARRANGED MARRIAGES:  
TWO CROSS-CULTURAL STUDIES**

Robert Epstein

American Institute for Behavioral Research and Technology  
1035 E. Vista Way, Suite 120  
Vista, CA 92084-4606 USA  
001-206-309-9633  
[re@aibrt.org](mailto:re@aibrt.org)

Mayuri Pandit

American Institute for Behavioral Research and Technology  
1035 E. Vista Way, Suite 120  
Vista, CA 92084-4606 USA  
001-206-309-9633  
[mpandit@aibrt.org](mailto:mpandit@aibrt.org)

Mansi Thakar

American Institute for Behavioral Research and Technology  
1035 E. Vista Way, Suite 120  
Vista, CA 92084-4606 USA  
001-206-309-9633  
[mthakar@aibrt.org](mailto:mthakar@aibrt.org)

*Journal of Comparative Family Studies*, in press.

Authors' Note: This paper is based on presentations made at the 2009 and 2011 meetings of the National Council on Family Relations. We thank Aisha Prasad for help in collecting data and Rachel Uda for help in preparation of the manuscript. We also thank Robert Baudouin for providing the French translation of the abstract and Alicia Castillo Holley for providing the Spanish translation. Correspondence should be sent to the first author at [re@aibrt.org](mailto:re@aibrt.org).

### ABSTRACT

Two studies ( $N = 52$ ) examined how love emerged in arranged marriages involving participants from 12 different countries of origin and 6 different religions. The first study ( $n = 30$ ), mainly qualitative in design, found that self-reported love grew from a mean of 3.9 to 8.5 on a 10-point scale. A number of factors were identified that appeared to contribute to the growth of love, the most important of which was commitment. In the second study ( $n = 22$ ), mainly quantitative in design, 36 factors that might contribute to the growth of love were assessed, with participants indicating on a 13-point scale (from -6 to +6) whether each factor made their love grow weaker or stronger. Love grew from a mean of 5.1 to 9.2, and sacrifice and commitment emerged as the most powerful factors in strengthening love. These and other factors appear to work because they make people feel vulnerable in each other's presence, a hypothesis that is consistent with a growing body of laboratory research. The fact that love can grow in some arranged marriages—and that this process can apparently be analyzed and understood scientifically—raises the possibility that practices that are used to strengthen love in arranged marriages could be introduced into autonomous marriages in Western cultures, where love normally weakens over time.

Keywords: arranged marriage, cross-cultural studies, love, vulnerability theory, love marriage, autonomous marriage

**RESUMEN** (Spanish)

Dos estudios (N = 52) evaluaron cómo surge el amor en matrimonios arreglados. Los estudios incluyeron participantes de 12 diferentes países y 6 religiones diferentes. El primer estudio (n = 30), principalmente cualitativo en diseño, concluyó que el amor, medido de manera auto-reportada, creció de un promedio de 3,9 a 8,5 en una escala de 10 puntos. Un número de factores que se identificaron parecen contribuir al incremento en el sentimiento de amor, siendo el nivel de compromiso el más importante de todos. En el segundo estudio (n = 22), principalmente de diseño cuantitativo, se evaluaron 36 factores que pueden contribuir al crecimiento del sentimiento de amor. Los participantes indicaron en una escala de 13 puntos (de -6 a +6) el impacto de cada factor para hacer el amor más débil o más fuerte. El sentimiento del amor creció de una media de 5,1 a 9,2, siendo el sacrificio y el compromiso los factores más poderosos para el fortalecimiento de amor. Estos y otros factores parecen funcionar porque hacen que una persona se sienta vulnerable en la presencia del otro, una hipótesis que es compatible con un número creciente de investigaciones de laboratorio. El hecho de que el amor puede crecer en algunos matrimonios arreglados, y de que este proceso aparentemente pueda ser analizado y entendido científicamente plantea la posibilidad de que las prácticas que se utilizan para reforzar el amor en los matrimonios arreglados podrían ser introducidos en los matrimonios decididos autónomamente en las culturas occidentales, donde el amor normalmente debilita con el tiempo.

## RÉSUMÉ (French)

Deux études (N=52) ont examiné comment l'amour émerge dans des mariages arrangés impliquant des participantes et des participants originaires de 12 pays différents et de 6 religions différentes. La première étude (n=30), principalement d'approche qualitative, a rapporté que l'autoévaluation de l'amour augmente d'une moyenne de 3,9 à 8,5 sur une échelle de 10 points. Certains facteurs identifiés sembleraient contribuer à l'augmentation du degré de perception de l'amour, le plus important étant l'engagement envers l'autre. Dans la deuxième étude (n=22), principalement d'approche quantitative, 36 facteurs pouvant contribuer à l'augmentation de l'amour ont été mesurés. Les participants indiquaient, sur une échelle de 13 points (de -6 à +6) si le facteur augmentait ou diminuait leur degré d'amour. L'amour augmentait en moyenne de 5,1 à 9,2. Le sacrifice et l'engagement émergèrent comme étant les facteurs les plus puissants pour augmenter l'amour. Ces facteurs ainsi que d'autres semblables, semblent exercer une influence parce que les participantes et les participants se sentent vulnérables en la présence de l'autre, une hypothèse conforme avec une littérature grandissante issue des laboratoires de recherche. Le fait que l'amour peut grandir dans certains mariages arrangés et que le processus puisse être analysé et compris scientifiquement, soulève la possibilité que des pratiques utilisées pour renforcer l'amour dans des mariages arrangés pourraient être introduites dans des mariages autonomes de cultures occidentales où généralement, l'amour s'affaiblit avec le temps.

## **HOW LOVE EMERGES IN ARRANGED MARRIAGES: TWO CROSS-CULTURAL STUDIES**

Americans, and perhaps Westerners in general, are demanding when it comes to love, and they are becoming increasingly so. In the past, many Americans were willing to marry without love; now most Americans see romantic love as a precondition for marriage (Kephart, 1967; Sprecher et al., 1994). In many cultures in the non-Western world, however, love is still not a requirement for marriage. In fact, most of the world's marriages are arranged by parents or matchmakers (Holmes-Eber, 1997; Mackay, 2000; Meekers, 1995; Mitchell, 2004; Penn, 2011). In such marriages, if love emerges at all, it does so over time. As people say in India, "First comes marriage, then comes love." Understanding how love grows in such marriages might be beneficial for people living in Western countries, first by presenting us with a different model of marriage, and second by revealing techniques and strategies for deliberately building love over time.

At least 11 studies have compared love or satisfaction in love marriages—also sometimes called "autonomous" marriages, in which people choose their own mates and generally marry for love—to love or satisfaction in arranged marriages. A study involving 50 couples from India suggests that love in love marriages decreases somewhat over time, that love in arranged marriages grows over time, and that love in arranged marriages may ultimately surpass the love that occurs in love marriages (Gupta & Singh, 1982). A study by Yelsma & Athappilly (1988) found the satisfaction level in arranged marriages in India to be higher than in love marriages in the U.S.; a similar, more recent study found no difference in marital satisfaction between these groups, noting, however, that in India, "love is expected to grow as the spouses learn more about each other as the years go by" (Myers, Madathil, & Tingle, 2005, p. 187). A fourth study

involving couples from India found recently that the satisfaction level of Indians living in arranged marriages in the U.S. is substantially higher than the satisfaction levels of both Indians living in arranged marriages in India and Americans living in love marriages in the U.S. (Madathil & Benschhoff, 2008).

Two studies involving native Japanese showed varying results. One study found no difference between marital “understanding” in love marriages and arranged marriages in Japan (Walsh & Taylor, 1982). Another study compared native Japanese love and arranged marriages with marriages in America, specifically in Detroit, Michigan (Blood, 1967). Within Japanese marriages, the aggregate marital satisfaction score of both genders in arranged marriages was higher than in love marriages, and Japanese couples overall had higher marital satisfaction than Americans. In arranged marriages women had lower satisfaction scores than men, perhaps because of the strict division of labor that was common in Japan when the study was conducted. As the author notes, “*Miai* [arranged marriage] wives are servants, waiting on their husband like valets, raising children for him like governesses” (Blood, 1967, p. 93).

A study conducted in the U.S. with Orthodox Jews found no difference between the love experienced in love marriages and arranged marriages (Schwartz, 2007). In contrast, studies in China (with women only; Xiaohe & Whyte, 1990), Israel (with Arabs; Lev-Wiesel & Al-Krenawi, 1999), South Africa (with people of Indian descent; Dinna, 2005), and Turkey (Hortacsu & Oral, 1994) suggest that satisfaction may be stronger in love marriages than in arranged marriages in those cultures, possibly because people who enter into love marriages in those cultures tend to be more affluent (cf. Cooke, & Baxter, 2010).

At least 80 studies involving American couples also shed light on factors that strengthen love, among them self-disclosure, accommodation, and physical arousal (e.g., Aron, Melinat, Aron, Vallone, & Bator, 1997; Dutton & Aron, 1974; Foster, Witcher, Campbell, & Green, 1998;

White, Fishbein, & Rustin, 1981; cf. Epstein, 2010). Other influences on romantic relationships are also important, such as family support and social values (Huijnk & Liefbroer, 2012), as well as genetic and environmental variables (D'Onofrio et al., 2007).

Understanding what factors contribute to a satisfying and successful marriage has been and continues to be challenging (Bradbury, Fincham, & Beach, 2000; Fincham & Beach, 2010). Beach, Fincham, and Stanley (2007) suggest looking at a broad range of perspectives to create a deeper understanding of this issue. Accordingly, we believe that if one is interested in factors that maintain or increase love in romantic relationships, the arranged marriage is potentially a fertile area of study. In love marriages, people are usually strongly in love at the time of their marriage. In arranged marriages, the betrothed are not marrying for love, yet love sometimes emerges in such marriages. How does this occur?

We have sought to answer this question in two new studies through a mixed-method analysis of factors that appear to contribute to the growth of love over time. The first study is mainly qualitative in design, and the second study, which was informed by the results of the first study, is mainly quantitative in design, allowing for more precise characterization and ranking of relevant factors.

## **STUDY 1**

In Study 1 we located individuals in arranged marriages in which love increased over time and asked them how their love grew. From recordings of the interviews, we then extracted what we believed were 11 reasonably unique factors that contributed to the growth of love.

## **METHOD**

### **Sample**

Reaching out through personal contacts as well as through online discussion groups, we interviewed 30 individuals in 22 marriages between May 2006 and February 2009; married spouses were interviewed separately. Participants were pre-screened to assure that their level of love had increased over the course of their marriage.

Fourteen participants were male, and 16 were female. Sixteen were white, and 14 were Asian. They were of five different religious backgrounds: Buddhist ( $n = 2$ ), Christian ( $n = 4$ ), Hindu ( $n = 5$ ), Islam ( $n = 6$ ), and the Unification Church ( $n = 13$ ). At the time of the interview, most resided in the United States ( $n = 19$ ), and others resided in India ( $n = 1$ ), Japan ( $n = 1$ ), Korea ( $n = 1$ ), the Netherlands ( $n = 2$ ), and New Zealand ( $n = 2$ ), with some locations unknown ( $n = 4$ ). Participants were from nine different countries of origin: Austria ( $n = 1$ ), Holland ( $n = 1$ ), Hungary ( $n = 1$ ), India ( $n = 5$ ), Italy ( $n = 1$ ), Japan ( $n = 3$ ), New Zealand ( $n = 1$ ), Pakistan ( $n = 6$ ), and the United States ( $n = 11$ ). The average age was 46.9 (range 22 to 67), and the average length of marriage was 19.4 years (range 3 to 540 months). For couples supplying the relevant information ( $n = 25$ ), the average time they knew each other before marrying was 17.6 months; in some cases they had had little or no contact before marrying. Four of the participants knew each other for only about 1 day before marrying.

### **Procedure**

Participants were interviewed either by email or telephone, and telephone calls were recorded (with permission) and later transcribed. In about the half the cases, a follow-up interview was conducted, mainly to clarify answers or to seek missing information. Basic demographic information was requested, and a series of questions was asked about participants' cultural, religious, and family backgrounds. They were then asked a series of questions about their marriage; in particular, they were asked to estimate, on a scale of 1 to 10, how in love they were when they first married and how in love they were at the time of the interview. They were



also asked, through open-ended questions, to identify factors or events which they believed contributed to an increase in love in their marriage. All participants were assured that their responses were confidential, and participants were not compensated for their participation. Textual material in transcripts and emails was screened by the researchers for statements that specifically identified factors leading to the growth of love over time.

## RESULTS

On average, participants estimated their level of love of at the time they were married to be 3.9 on a scale of 1 to 10, where 1 is a low level of love and 10 is a high level of love. At the time of the interview (on average, 19.4 years later), the level of love was estimated to be 8.5. The correlation between length of marriage and degree of increase in love was low (Spearman's  $\rho = .06$ )<sup>1</sup>, contradicting the Gupta & Singh (1982) finding. This low correlation resulted in large part from data from three individuals who reported dramatic increases in love early in their relationships; in one case the level of love increased from 1 to 10 in just 3 months. Eliminating the three outlying points, the correlation increased substantially ( $\rho = 0.47, n = 27$ ). The average increase in love reported by women was 5.2, whereas the average increase in love reported by men was 4.1; the difference was not statistically significant.

Two out of our 30 participants could offer no insights about why their love increased. The remaining 28 participants identified a variety of events, factors, and turning points that they believed were contributory. The most frequently mentioned factor was commitment. Participants also mentioned factors such as self-disclosure and communication, accommodation by the partner, parenting, and physical intimacy (Table 1, Figure 1).

---

<sup>1</sup>Because our love and factor scores are on ordinal scales of measurement, nonparametric statistical tests such as Spearman's rho, the Mann-Whitney U, and the Kruskal-Wallis H are used throughout this study.

Insert Table 1 and Figure 1 about here

-----

## **STUDY 2**

The qualitative design of Study 1 made it difficult to be precise about the 11 factors we identified. In Study 2, new individuals were located who completed a detailed questionnaire posted on the Internet at ArrangedMarriageSurvey.com. In addition to many open-ended questions that were similar to the interview questions posed in Study 1, the questionnaire included a list of 36 factors that participants were asked to rate on a 13-point scale (from -6 to +6) according to how much each factor either weakened or strengthened love in their relationship.

## **METHOD**

### **Sample**

Twenty-two individuals in 21 separate marriages participated in the study. Data collection began in May 2009 and ended in February 2012. People were included in the study only if they reported that the love they felt for their spouse had increased over time.

Thirteen participants were male, and nine were female. Thirteen identified themselves as Asian, seven as White, and two as an "Other" race/ethnicity. At the time participants took the survey, most resided in the United States ( $n = 13$ ) and others resided in India ( $n = 3$ ), with some locations unknown ( $n = 6$ ). Participants were from six different countries of origin: Bangladesh ( $n = 1$ ), Canada ( $n = 1$ ), India ( $n = 13$ ), Israel ( $n = 1$ ), Japan ( $n = 1$ ), and the United States ( $n = 5$ ), with spouses from Argentina ( $n = 1$ ), India ( $n = 13$ ), Israel ( $n = 2$ ), Japan ( $n = 1$ ), New Zealand ( $n = 1$ ), South Korea ( $n = 1$ ), the United Kingdom ( $n = 1$ ), and the United States ( $n = 2$ ). The average age was 43.6 (range 27 to 66), and the average length of marriage was 16.4 years (range 1.3 to 47 years). Participants were from five different religious backgrounds: Christian ( $n$

= 2), Hindu ( $n = 6$ ), Islamic ( $n = 1$ ), Jewish ( $n = 2$ ), the Unification Church ( $n = 4$ ), and undisclosed ( $n = 7$ ). The average time the participants knew their spouses before marrying was 15.0 months (range “at the altar” to 180 months). If we exclude one participant who had known her spouse for 15 years (as a family friend) before marrying him, the mean becomes 7.1 months.

Two of the 19 participants who answered questions about contact prior to the marriage indicated that they had spent only hours with their spouse before the marriage took place, and three had had no contact with their spouses until they met at the altar. In addition, eight individuals who had had contact by phone or email for extended periods of time did not actually meet their spouse face to face until the wedding day. In other words, in all, 13 of the participants in the study had not met their spouses face to face until the marriage day.

### **Procedure**

Participants were recruited either by networking or through mention of the research project in online discussion groups or in media reports (such as an article in *The Times of India*). Participants were then directed to take the survey at ArrangedMarriageSurvey.com. Participants were not compensated for their participation, and all participants were assured that their responses were confidential.

Basic demographic information was requested, and a series of questions was asked about the participants’ cultural and family backgrounds. They were then asked a series of questions about their marriage. In particular, they were asked to estimate, on a scale of 1 to 10, how in love they were when they first married and how in love they were at the time they completed the questionnaire. The questionnaire also included 36 factors that participants were asked to rate on a 13-point scale (from -6 to +6) according to how much that factor either decreased or increased love in their marriage (Table 2). These factors were based either on information obtained from the interviews in Study 1 or on the results of empirical studies which suggest that such factors

can strengthen emotional bonds (see Discussion). As in Study 1, qualitative information was screened by the researchers for information that might shed light on how love may have been strengthened over time in these marriages.

-----  
Insert Table 2 about here  
-----

## **RESULTS**

### **Quantitative Results**

On average, participants estimated their level of love at the time they were married to be 5.1 on a scale of 1 to 10 (compared with 3.9 in the previous study). At the time the questionnaire was completed (on average, 16.4 years later in the present study, compared with 19.4 in the previous study), the level of love was 9.2 (compared with 8.5 in the previous study). The correlation between the length of the marriage and degree of increase in love was 0.38, consistent with the Gupta and Singh (1982) finding that love in arranged marriages (at least in India) increases gradually over time. Also notable, participants rated the quality of their relationship at the time of the survey to be 8.8 on a scale of 1 to 10, which is consistent with the common Western belief that when the emotional bond in a relationship is strong, the quality of the relationship will be high (Johnson, 2008; Penn, 2011).

Figure 2 shows the 36 factors in order from highest to lowest mean ranking. “Seeing your spouse make sacrifices for you” and “Expressing strong commitment for each other” ranked highest—that is, most effective in increasing love. “Drinking an alcoholic beverage” with one’s spouse was the only one of the 36 factors with a mean negative ranking.

-----  
Insert Figure 2 about here  
-----

### *Gender and Other Demographic Differences*

Mean ratings of the 36 factors by gender produced a somewhat different picture (Table 3). Although there were no significant gender differences between the factors means, women and men ranked factors differently in their effect on love. For example, women rated “Having or raising children with your spouse” the highest ( $M = 5.4$ ), with “Expressing strong commitment for each other” ( $M = 5.1$ ) and “Kind or thoughtful acts by your spouse toward you” ( $M = 5.0$ ) also high in value. The only factor women rated negatively was “Doing something with your spouse that’s sometimes prohibited or forbidden” ( $M = -0.2$ ).

Men rated “Seeing your spouse make sacrifices for you” the highest ( $M = 4.9$ ), with “Having physical intimacy with your spouse” ( $M = 4.5$ ) and “Sharing humor and laughter with your spouse” ( $M = 4.4$ ) also rated highly. The only factor rated negatively by men was “Drinking an alcoholic beverage with your spouse” ( $M = -1.4$ ). The average increase in love reported by women was 4.9, and the average increase in love reported by men was 4.0; the difference was not statistically significant.

-----  
Insert Table 3 about here  
-----

Very likely because of the small number of people in each group, the means of only four of the 36 factors proved to be significantly different by race, religion, or age. For example, older participants ( $n = 13$ , age 40 and over, where 40 was the median age in the study) identified “Facing a tragedy with your spouse” as being more effective in growing love ( $M = 4.1$ ) than

younger participants did ( $n = 8$ ,  $M = 1.1$ ,  $U = 20.0$ ,  $p < .05$ ). Those born in the East ( $n = 15$ ) and those born in the West ( $n = 6$ ) differed in their ratings for the factor “Helping your spouse cope with or recover from a sickness or injury,” with participants born in the East rating this factor higher ( $M = 4.5$ ) than participants born in the West ( $M = 2.2$ ,  $U = 13.5$ ,  $p < .05$ ). Older participants also rated “Having your spouse provide a good income and standard of living for you and your children” more highly ( $M = 2.7$ ) than younger participants did ( $M = 0.9$ ,  $U = 27.5$ ,  $p < .05$ ). The factor “Having or raising children with your spouse” was also rated differently according to participants’ religious orientation ( $\chi^2 = 9.6$ ,  $p < .05$ ), with Islamic ( $n = 1$ ) and Jewish ( $n = 2$ ) participants rating it highest ( $M = 6.0$ ), followed by Unification participants ( $n = 3$ ,  $M = 5.7$ ), then Christian participants ( $n = 3$ ,  $M = 4.7$ ), and then Hindu participants ( $n = 5$ ,  $M = 1.6$ ).

There was considerable variability among the top factors identified by people according to age, race, and religion. “Seeing your spouse make sacrifices for you” and “Being comforted by your spouse when you were in distress” were among the more highly rated factors.

### **Qualitative Results**

Qualitative analysis revealed some additional information about the nature of the arranged marriages, as well as about factors contributing to the growth of love. For example, when asked how they felt about entering into an arranged marriage, most participants ( $n = 14$ ) said they were happy to have done so, whereas a few ( $n = 5$ ) said they were accepting of it, and two said they were not very happy about it.

#### *How Spouses Were Matched*

When asked who arranged their marriages, most said their families ( $n = 10$ ), and others said their church ( $n = 7$ ), a marital company ( $n = 2$ ), or a social network ( $n = 2$ ). Also, when asked why they thought their spouse was a good match for them, most identified their spouse’s

personal characteristics ( $n = 10$ ), specifically his or her values. For example, one participant said:

We both tried to develop our relationship with God first, and we both wanted to make a positive difference in the world. We also understood that we had a lot of potential to grow in our relationship. I knew that [my husband and I] had similar core beliefs.

### *Physical Attraction*

Twelve out of 15 participants reported that they were not particularly physically attracted to their spouse when they first met, with some people saying explicitly that physical attraction was not a good basis for marriage. One typical comment: “It was pleasant to talk with her. [She was] very intellectual and [we had] common interests and background. [She] seemed to have a good sense of humor, but [we had] no real ‘attraction.’”

### *Being In Love at the Time of the Marriage*

When asked how in love they were with their spouse when they got married, 10 out of 15 participants who chose to give us detailed answers said there was no love at the beginning but that there was a desire to build love over time. One participant noted, “I did not feel love at all, but I got a person to start to love, so I was happy.” Another said:

[There were] no romantic feelings to speak of. Before becoming religious, I had plenty of ‘romances’ from the age of 15 to 23, but after becoming religious I was aware of the potential of a different kind of relationship in which the love would be built up over the years, and [I] wasn’t expecting romance at the beginning.

### *Falling In Love*

When asked how they managed to fall in love, participants frequently used the word “commitment,” just as participants had in Study 1. Also, women identified caring and

thoughtfulness as a meaningful component of increasing love. One woman claimed, “He made me fall in love with him by being very caring, loving and understanding.” Another woman said:

As I had moved to [the Middle East] away from my family in [the U.S.], I had a hard time getting used to it. My husband was ever so supporting and caring all along the process, and this made me love him and admire him.

Men frequently listed overcoming challenges and physical intimacy as important influences. One man said:

Perhaps I could say that love involves commitment or [that] marriage is a commitment to love. From the beginning I was committed to love [my wife]. Sometimes I have been challenged to keep the commitment or just challenged to love her, but I do my best to be a loving husband. Loving her is usually easy but sometimes not.

Another man stated, “sex was an important part [of the process of falling in love]—just having somebody of the opposite sex [with whom] to share a house.” Participants also spoke about mutual support and humor. One man said:

We both mostly work at home. Today she asked me about something we needed to take care of for our church. That wasn't on my list of things I wanted to do today, so I started getting short tempered. We were a little upset with one another, but we both have the same long term goals and commitments. So though we were getting upset, within a little while we were smiling and joking with one another, and I did do the things she was hoping I would.

When asked if their love grew gradually or suddenly, all participants who answered this question ( $n = 18$ ) reported their love grew gradually. One person said “very gradually.” When asked about the kind of love they were experiencing, six out of the 13 people who answered this question claimed that their love was somehow better than the romantic kind of love we see in



Hollywood movies. As one person stated, “It’s committed love, it’s romantic love, it’s sexual love, it’s affectionate love, it’s supportive love, it’s patient love.... Shall I go on?” Another asserted:

It is a much mellower, low-intensity feeling, but much more multi-level and “full.” There is an absolute trust in each other, an awareness that has grown over these many years that we are two parts of one entity. It’s not at all “I’m in love with you” but rather a feeling like: “We are one.”

Two of the three male participants who discussed the role of children in increasing or decreasing love identified children as decreasing their love in some respects. However, all the female participants ( $n = 3$ ) who discussed the role of children were consistently positive about the role that children played in their relationships. One woman said her love grew “with every child that was born.” Another woman said, “Our love grew gradually. We had all kinds of phases: wildly in love, couldn’t-keep-our-hands-off-each-other love, deep moments with the births of our children, [and] struggles and victories and shared challenges while raising our kids.”

## DISCUSSION

The present studies are narrow in focus, looking only at arranged marriages in which love increased over time, the goal being to learn about factors contributing to the growth of love, rather than to gain insights about arranged marriage per se. Not all arranged marriages are successful; some are abusive or coercive, and we estimate that love emerges in perhaps only half of arranged marriages (cf. Liao, 2006; Sahni, 2007). Nevertheless, we believe that the arranged marriage is an ideal vehicle for studying how love can be built over time by two committed partners and that there is value in trying to understand how this works.

Although we feel we have made some progress in this regard, our understanding of the process of building love is greatly limited by our methodology. All of our participants were self-

selected, for one thing; it is possible, and perhaps even probable, that people who volunteer to participate in a study of this sort have highly atypical marriages—atypical even among arranged marriages in which love grows over time. The extent to which love grew among our participants—by an average of 4.7 points on a scale of 10 in Study 1 and by an average of 4.1 points on a scale of 10 in Study 2—might be unusually high. If so, it is also possible that the factors we identified as having contributed to the growth of love might be atypical. In Study 2, our personal contact with participants was also limited; in some cases, the only communication we received was through the completion of the online survey. Although we have no reason to believe that the information we received online was suspect, our confidence about the identities and demographic information of participants was greater in Study 1.

These reservations notwithstanding, we are confident about two aspects of our findings. First, both our qualitative and quantitative data show that love can indeed grow over time in arranged marriages, confirming the findings of Gupta and Singh (1982) and others. Second, we believe that we have indeed begun both to isolate and prioritize some of the factors that contribute to the growth of love in such marriages. We believe that the emergence of commitment as an important factor is especially notable.

One might question why we have chosen not to define the word “love” in this study, both in this report and for our participants. Given the diversity of our participants, it is certainly possible that they have different ways of understanding the term. Even so, we chose not to define love, recognizing that it is a term from common language that people have enormous trouble defining but little trouble recognizing. We were concerned that if we narrowed the concept of love with a definition—especially an “operational” one—we would have discouraged people from telling us about the love in their lives as they conceived of it. In Study 2, rather than offer a definition of love, we instead posed the following questions: “What kind of love would

you say you have? Is it the romantic kind of love that we see in Hollywood movies, or is it different somehow?” As we noted earlier, the replies sometimes described love that was indeed different from the passionate, crazy, somewhat neurotic love that is often depicted in Hollywood movies, but in all cases people described a very strong, positive bond, sometimes identified as “better” than Hollywood love. That bond, however difficult it is to describe precisely in words, apparently improved over time. That improvement and the factors contributing to that improvement are our main concerns.

Because of the relatively small number of participants in both studies, we are able to say fairly little about demographic differences. In neither study was the increase in love statistically different by gender, for example. Study 2, however, did suggest that men and women prioritize factors leading to the growth of love differently. Women ranked having children as the most important factor, for example, whereas men ranked sacrifice as the most important factor. In general, the differences in rankings are consistent with studies suggesting that women are generally socialized to think of others and to care for them, whereas men are generally socialized to be more self-reliant and self-focused (Heilman & Wallen, 2010; Reid, Cooper, & Banks, 2008).

Our results are also consistent with a vulnerability theory of emotional bonding, according to which emotional bonds are strengthened when people have experiences that make them feel vulnerable and “open” in each other’s presence. Vulnerability often involves interlocking feelings of need and empathy produced by stressful situations. In one such scenario, one person is hurt (say, he or she has fallen to the ground), and another person provides comfort (say, a passerby who stops to help). In this situation, the need of the person who has fallen and the empathy of the passerby draw them to each other emotionally. In a more dramatic scenario, two strangers are drawn together instantly when they are near the site of a disaster (say, where a

bomb has just exploded). At the moment of the event, each person experiences great need, and each in turn may express great empathy toward the other, providing comfort and support. A strong emotional bond—one that can last a lifetime—may then be formed as mutual need and empathy interlock. A variety of research findings exist which are consistent with vulnerability theory (e.g. Arriaga, Slaughterbeck, Cappelz, & Hmurovic, 2007; Dienstbier, 1979; Dijker, 2001; Dutton, & Aron, 1974; Luminet, Bouts, Delie, Manstead, & Rime, 2000; Strong & Aron, 2006), and the first author is currently conducting research to test this idea more rigorously.

To determine whether the results of Study 2 were consistent with vulnerability theory, we asked a colleague who was unaware of our study hypothesis or results to rate the “vulnerability value” of each of the 36 factors evaluated in the study, assigning a value of 1 where vulnerability is low, 2 where vulnerability is moderate, and 3 where vulnerability is high. Factors such as sacrifice and physical intimacy, which normally involve both a high level of need and a high level of empathy, were generally assigned high vulnerability values, whereas factors such as “received family support” or “frequent contact,” which involve little need or empathy, were generally assigned low vulnerability values. Consistent with the theory, the correlation between these theoretical vulnerability values and the mean ratings given to these factors by the participants in Study 2 was relatively high ( $\rho = 0.41$ ,  $p < 0.05$ ), suggesting that the more vulnerable these experiences make people feel, the more love they are likely to feel toward their partner.

At first glance, commitment, which emerged as a strong factor in both Studies 1 and 2, might not seem to make people feel vulnerable to each other. We believe, however, that commitment may be the ultimate expression of vulnerability. Strong commitment of the sort people make in arranged marriages communicates the idea that “I will comfort and support you *no matter what*.” In Western marriages, it is traditional for spouses to expand this idea to include

“for better or for worse, for richer, for poorer, in sickness and in health,” but when commitment is strong, it can include *everything*, even abuse. A battered spouse is sometimes so committed to (usually) her husband that she views him as an imperfect or “damaged” individual who *needs* her love and support. He, in turn, sometimes recognizes how much he has hurt her, which is why abusive husbands are sometimes especially loving and apologetic in between episodes of abuse (Marshall, Weston, & Honeycutt, 2000). Strong commitment, in other words, makes people so vulnerable that they may unwittingly expose themselves to a lifetime of misery. That possibility aside, the fact that love often declines in Western love marriages may be due in part to the fact that spouses are so often unable to honor their marriage commitment, as evidenced by the high divorce rate in most Western countries.

Although our samples were fairly small, they were strong in their diversity, encompassing participants from 12 different countries of origin (Austria, Bangladesh, Canada, Holland, Hungary, India, Israel, Italy, Japan, New Zealand, Pakistan, and the United States) and of 6 different religions (Buddhist, Christian, Hindu, Islam, Jewish, and the Unification Church), married to spouses from 12 different countries of origin (Argentina, Austria, Holland, India, Israel, Italy, Japan, New Zealand, Pakistan, South Korea, United Kingdom, and the United States) and of 6 different religions (Buddhist, Christian, Hindu, Islam, Jewish, and the Unification Church). The fact that love grew in the marriages of such a diverse sample of people is encouraging, suggesting that under the right conditions—or perhaps with the right practices—love could be made to grow in many marriages. It is notable here that 10 of our participants said that building love in their marriages was an intentional act, even though we never asked specifically whether our participants were building love intentionally. That brings us to an aspect of the present research which could be helpful in improving the sad state of many marriages in Western countries.

In the West, people leave many aspects of their romantic relationships entirely to chance—to the Fates, in effect, who also controlled the futures of most of the couples we learned about in fairy tales when we were children. In stories such as *Sleeping Beauty* and *Snow White*, mysterious forces bring forth a handsome prince to save the day and kiss the damsel, and the new couple lives happily-ever-after, apparently without skills, effort, or compatibility. These stories have been retold and these themes reiterated in hundreds of popular movies over much of the past century—*Sleepless in Seattle*, *Happily Ever After*, *Kate and Leopold*, and so on. Woven into every aspect of our culture, the idea that the success of our romantic relationships depends on mysterious forces over which we have no control undoubtedly contributes to the gradual decline of those relationships, as well as to a high divorce rate.

In cultures in which arranged marriage is practiced, people are far more likely to believe that they can exercise some degree of positive control over the course of the marriage—even over the feelings spouses develop for each other over time. This kind of thinking is exemplified in Salman Rushdie's novel, *Midnight's Children*, in which the main character, Amina, “has resolved to fall in love with her husband bit by bit.” “Each day,” wrote Rushdie, “she selected one fragment of [her husband] Ahmed Sinai, and concentrated her entire being upon it until it became wholly familiar; until she felt fondness rising up within her and becoming affection and, finally, love.” (Rushdie, 2006, p. 73). Although not stated so precisely, we saw similar intentionality expressed by the participants in our studies.

The proactive idea that two people can be deliberate about creating a successful relationship may contribute to some extent to the success of arranged marriages. In India—at least until recently—more than 90 percent of marriages were arranged, and even though divorce has long been legal there, India has long had one of the lowest divorce rates in the world (Ahloowalia, 2009; Mackay, 2000). Although cultural pressures to remain married undoubtedly

contribute to the low divorce rate, most young Indians still enter into arranged marriages voluntarily (Hankeln, 2008), and all of the relevant studies of which we are aware suggest that arranged marriages in India are relatively happy ones.

Relevant here are numerous experiments conducted in the U.S. and other Western countries which show how various factors can strengthen emotional bonds. For example, a classic study by Dutton and Aron (1974) showed that male subjects were more likely to develop an attraction to female confederates under high-anxiety conditions (when crossing a rickety bridge) than under low-anxiety conditions (when crossing a stable bridge). An intriguing study by Kellerman, Lewis, & Laird (1989) showed that when two strangers gazed into each other's eyes for 2 minutes—making each other feel vulnerable by allowing each other to engage in what is often a “threat gesture”—they often developed marked feelings of love for each other; no such increase occurred when they gazed at each other's hands. Other studies show that emotional bonds are strengthened when people disclose secrets to each other (Collins & Miller, 1994; Finkenauer & Hazam, 2000; Keelan, Dion, & Dion, 1998), and still other studies attribute bonding to factors such as novelty (Strong & Aron, 2006; Walster & Walster, 1978), touch (Dermer & Pyszczynski, 1978; Emmers & Dindia, 1995; Sprecher, Christopher, & Cate, 2006), and kindness (Mikulincer & Shaver, 2005).

Also relevant are therapy techniques that strengthen emotional bonds. Emotionally Focused Couples Therapy, which is derived from Bowlby's attachment theory (Bowlby, 1953), is one of several forms of therapy that help spouses to rebuild an emotional bond by causing them to feel vulnerable in each other's presence, and the effectiveness of such interventions has been demonstrated empirically (Johnson, 2004, 2007).

Both laboratory and therapeutic techniques that strengthen emotional bonds have an important element in common with practices that contribute to the growth of love in arranged

marriages: *deliberateness*. Researchers and therapists deliberately strengthen emotional bonds, just as committed spouses deliberately do so in some arranged marriages. We believe, moreover, that the three different bodies of relevant research should be able to inform and guide each other. Western research, both clinical and experimental, should be able to replicate and explain how love arises in arranged marriages, and the factors that strengthen love in arranged marriages should be consistent with the findings of Western research. We do not propose, however, to reconcile these bodies of research in the present paper. Rather, we suggest that over time it should be possible to formulate such a reconciliation.

We also believe that these three bodies of research may ultimately yield a technology of relationship improvement which might help to reverse the deterioration of Western love relationships, which, alas, are now becoming more popular and decreasing the stability of marriage in some countries that have long practiced arranged marriages (Gautham, 2002; Guest, 1992; Meekers, 1994). Specifically, we believe that two positive changes are possible in Western love marriages: First, people can become aware that it is possible to build love over time. At the moment, love and other indicators of success in a romantic relationship all tend to decline over time in Western marriages (Call, Sprecher, & Schwartz, 1995; Kurdek, 1999); the possibility that love can be made to grow might appeal to many in the West, where people dream of “true love” but don’t know how to achieve it. Second, people can learn specific techniques for strengthening their love over time. People occasionally gaze into each other’s eyes or go on roller coasters together, but what if people were more generally aware that such activities can be used deliberately to strengthen love? What if people were generally aware that strong commitment can help love grow over time? What if people learned and regularly practiced multiple techniques for strengthening love? The outcome, we believe, would be significant.



While continuing to interview people in arranged marriages in different cultures, we are also now attempting to understand how the various factors we have examined might lead to emotional bonding in a laboratory setting. In particular, we are trying to quantify various aspects of that bonding with one or both individuals in a dyad experiencing different levels of vulnerability, which we define as a state of mind in which one feels open to being harmed without retaliating. Notably, we are inducing states of vulnerability with exercises that simulate some of the love-building experiences that appear to occur in arranged marriages.

## REFERENCES

- Ahloowalia, B. S. (2009). *Invasion of the Genes: Genetic Heritage of India*. Strategic Book Publishing.
- Aron, A., Melinat, E., Aron, E. N., Vallone, R. D., & Bator, R. J. (1997). The experimental generation of interpersonal closeness: A procedure and some preliminary findings. *Personality and Social Psychology Bulletin*, *23*, 363-377.
- Arriaga, X. B., Slaughterbeck, E. S., Cappelz, N. M., & Hmurovic, J. L. (2007). From bad to worse: Relationship commitment and vulnerability to partner imperfections. *Personal Relationship*, *14*, 389-409.
- Beach, S. R. H., Fincham, F. D., & Stanley, S. M. (2007). Contextualizing the study of marital transformation: Points of convergence. *Journal of Marriage and Family*, *69*(2), 315-319.
- Blood, R. O. (1967). *Love Match and Arranged Marriage: A Tokyo-Detroit Comparison*. New York, NY: The Free Press.
- Bowlby, J. (1953). Some pathological processes set in train by early mother-child separation. *Journal of Mental Science*, *2*, 265-272.
- Bradbury, T. N., Fincham, F. D., & Beach, S. H. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and Family*, *62*(4), 964-980.
- Call, V., Sprecher, S., & Schwartz, P. (1995). The incidence and frequency of marital sex in a national sample. *Journal of Marriage and Family*, *57*(3), 639-652.
- Claxton, A., & Perry-Jenkins, M. (2008). No fun anymore: Leisure and marital quality across the transition to parenthood. *Journal of Marriage and Family*, *70*, 28-43.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin*, *116*, 457-475.
- Cooke, L. P., & Baxter, J. (2010). "Families" in international context: Comparing institutional effects across western societies. *Journal of Marriage and Family*, *72*(3), 516-536.
- Dermer, M., & Pyszczynski, T. A. (1978). Effects of erotica upon men's loving and liking responses for women they love. *Journal of Personality and Social Psychology*, *36*, 1302-1309.
- Dienstbier, R. A. (1979). Attraction increases and decreases as a function of emotion-attribution and appropriate social cues. *Motivation and Emotion*, *3*(2), 201-218.
- Dijker, A. J. (2001). The influence of perceived suffering and vulnerability on the experience of pity. *European Journal of Social Psychology*, *31*, 659-676.

Dinna, M. (2005). *Marital Satisfaction in Autonomous and Arranged Marriages: South African Indian Sample*. Unpublished master's thesis. University of Pretoria, South Africa.

D'Onofrio, B. M., Turkheimer, E., Emery, R. E., Harden, K. P., Slutske, W. S., Heath, A. C., et al. (2007). A genetically informed study of the intergenerational transmission of marital instability. *Journal of Marriage and Family*, 69(3), 793-809.

Dutton, D.G., & Aron, A.P. (1974). Some evidence for heightened sexual attraction under conditions of high anxiety. *Journal of Personality and Social Psychology*, 30, 510-517.

Emmers, T. M., & Dindia, K. (1995). The effect of relational stage and intimacy on touch: An extension of Guerrero and Anderson. *Personal Relationships*, 2, 225-236.

Epstein, R. (2010, January/February). How science can help you fall in love. *Scientific American Mind*, pp. 26-33.

Fincham, F. D., & Beach, S. H. (2010). Marriage in the new millennium: A decade in review. *Journal of Marriage and Family*, 72(3), 630-649.

Finkenauer, C., & Hazam, H. (2000). Disclosure and secrecy in marriage: Do both contribute to marital satisfaction? *Journal of Social and Personal Relationships*, 17, 245-263.

Foster, C.A., Witcher, B.S., Campbell, W.K., & Green, J.D. (1998). Arousal and attraction: Evidence for automatic and controlled processes. *Journal of Personality and Social Psychology*, 74, 86-101.

Gautham, S. S. (2002, February 18). Coming next: The monsoon divorce. *New Statesman*, 131, 32.

Gilbertson, J., Dindia, K., & Allen, M. (1998). Relational continuity constructional units and the maintenance of relationships. *Journal of Social and Personal Relationships*, 15, 774-790.

Guest, P. (1992). Marital dissolution and development in Indonesia. *Journal of Comparative Family Studies*, 23(1), 95-113.

Gupta, U., & Singh, P. (1982). An exploratory study of love and liking and type of marriages. *Indian Journal of Applied Psychology*, 19, 92-97.

Heilman, M. E., & Wallen, A. S. (2010). Wimpy and undeserving of respect: Penalties for men's gender-inconsistent success. *Journal of Experimental Social Psychology*, 46, 664-667.

Hankeln, M. D. (2008). *India's Marriages Re-Arranged*. Saarbrücken, Germany: VDM Verlag Dr. Müller Aktiengesellschaft & Co.

Holmes-Eber, P. (1997). Migration, urbanization, and women's kin networks in Tunis. *Journal of Comparative Family Studies*, 28(2), 54-72.

Hortacsu, N., & Oral, A. (1994). Comparison of couple- and family-initiated marriages in Turkey. *The Journal of Social Psychology, 134*, 229-235.

Huijnk, W., & Liefbroer, A. C. (2012). Family influences on intermarriage attitudes: A sibling analysis in the Netherlands. *Journal of Marriage and Family, 74*(1), 70-85.

Johnson, S. (2004). *The Practice of Emotionally Focused Couple Therapy: Creating Connection*. New York, NY: Brunner-Routledge.

Johnson, S. (2007). A new era for couple therapy: Theory, research, and practice in concert. *Journal of Systemic Therapies, 26*(4), 5-16.

Johnson, S. (2008). *Hold Me Tight: Seven Conversations for a Lifetime of Love*. New York, NY: Little, Brown.

Keelan, J. P. R., Dion, K. K., & Dion, K. L. (1998). Attachment style and relationship satisfaction: Test of a self-disclosure explanation. *Canadian Journal of Behavioral Science, 30*, 24, 35.

Kellerman, J., Lewis, J., & Laird, J. D. (1989). Looking and loving: The effects of mutual gaze on feelings of love. *Journal of Research in Personality, 23*, 145-161.

Kephart, W. (1967). Some correlates of romantic love. *Journal of Marriage and the Family, 29*, 470-479.

Kurdek, L. A. (1999). The nature and predictors of the trajectory of change in marital quality for husbands and wives over the first 10 years of marriage. *Developmental Psychology, 35*(5), 1283-1296.

Lev-wiesel, R. & Al-Krenawi, A. (1999). Attitudes towards marriage and marital quality: A comparison among Israeli Arabs differentiated by religion. *Family Relations, 48*(1), 51-56.

Liao, M. S. (2006). Domestic violence among Asian Indian immigrant women: Risk factors, acculturation, and intervention. *Women & Therapy, 29*(1/2), 23-39.

Luminet, O., Bouts, P., Delie, F., Manstead, A. S., & Rime, R. (2000). Social sharing of emotion following exposure to a negatively valenced situation. *Cognition and Emotion, 14*(5), 661-688.

Mackay, J. (2000). *The Penguin Atlas of Human Sexual Behavior*. New York, NY: Penguin Putnam.

Madathil, J., & Benshoff, J. M. (2008). Importance of marital characteristics and marital satisfaction: A comparison of Asian Indians in arranged marriages and Americans in marriages of choice. *Family Journal, 16*(3), 222-230.

Marshall, L. L., Weston, R., & Honeycutt, T. C. (2000). Does men's positivity moderate or mediate the effect of their abuse on women's relationship quality? *Journal of Social and Personal Relationships, 17*, 660-675.

Meekers, D. (1994). Combining ethnographic and survey methods: A study of the nuptiality patterns of the Shona of Zimbabwe. *Journal of Comparative Family Studies, 25*(3), 313-328.

Meekers, D. (1995). Freedom of partner choice in Togo. *Journal of Comparative Family Studies, 26*(2), 163-178.

Mikulincer, M., & Shaver, P. R. (2005). Attachment, security, compassion, and altruism. *Current Directions in Psychological Science, 14*, 34-38.

Mitchell, B. A. (2004). Making the move: Cultural and parental influences on Canadian young adults' home-leaving decisions. *Journal of Comparative Family Studies, 35*(3), 423-441.

Myers, J. E., Madathil, J., & Tingle, L. R. (2005). Marriage satisfaction and wellness in India and the United States: A preliminary comparison of arranged marriages and marriages of choice. *Journal of Counseling and Development, 83*, 183-190.

Penn, R. (2011). Arranged marriages in Western Europe: Media representations and social reality. *Journal of Comparative Family Studies, 42*(5), 637-650.

Picker, L. (2005, April 25). And now the hard part. *Newsweek, 145*(17), 46-49.

Reid, P. T., Cooper, S. M., & Banks, K. H. (2008). Girls to women: Developmental theory, research, and issues. In F.L. Denmark & M. A. Paludi (Eds.), *Psychology of women: A handbook of issues and theories* (2nd ed., pp. 237-270). Westport, CT: Praeger.

Rindfuss, R. R., & Stephen, E. H. (1990). Marital noncohabitation: Separation does not make the heart grow fonder. *Journal of Marriage and the Family, 52*, 259-270.

Rushdie, S. (2006). *Midnight's Children*. (25<sup>th</sup> Anniversary Edition, ed.). New York, NY: Random House.

Sahni, T. (2007). *Domestic Violence within Asian Indian Immigrant Women in the United States*. Washington, DC: American Psychological Association.

Schwartz, S.A. (2007). The relationship between love and marital satisfaction in arranged and romantic Jewish couples. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 68*(4-B), 2716.

Sprecher, S., Aron, A., Hatfield, E., Cortese, A., Potapova, E., & Levitskaya, A. (1994). Love: American style, Russian style, and Japanese style. *Personal Relationships, 1*, 349-369.

Sprecher, S., Christopher, F. S., & Cate, R. (2006). Sexuality in close relationships. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships* (pp. 463-483). New York, NY: Cambridge University Press.

Stafford, L., & Dainton, M. (1994). The dark side of “normal” family interaction. In W. R. Cupach & B. H. Spitzberg (Eds.), *The dark side of interpersonal communication* (pp. 259-280). Hillsdale, NJ: Erlbaum.

Strong, G., & Aron, A. (2006). The effect of shared participation in novel and challenging activities on experienced relationship quality: Is it mediated by high positive affect? In K. D. Vohs & E. J. Finkel (Eds.), *Self and relationships: Connecting intrapersonal and interpersonal processes* (pp. 342-359). New York, NY: Guilford Press.

Walsh, M., & Taylor, J. (1982). Understanding in Japanese marriages. *Journal of Social Psychology*, 118, 67.

Walster, E., & Walster, G. W. (1978). *A New Look at Love*. Reading, MA: Addison-Wesley.

White, G.L., Fishbein, S., & Rustin, J. (1981). Passionate love: The misattribution of arousal. *Journal of Personality and Social Psychology*, 41, 56-62.

Xiaohe, X., & Whyte, M.K. (1990). Love matches and arranged marriages: A Chinese replication. *Journal of Marriage and Family*, 52(3), 709-722.

Yelsma, P., & Athappilly, K. (1988). Marital satisfaction and communication practices: comparisons among Indian and American couples. *Journal of Comparative Family Studies*, 19,

Table 1

*Study 1 Factors Contributing to Growth of Love*

Factor	Participant's Response
Commitment	<p>S12: "It [love] starts from an absolute commitment and that begins to break down barriers in my heart and head, so feelings of joy and contentment and peace can bubble up."</p> <p>S13: "We prayed together, tried to serve each other, worked on our personal growth (overcoming anger, etc.). We shared common values and a commitment to stay the course."</p> <p>S7: "It's very important for the couple to look into the same direction than to look into each other's eyes."</p> <p>S6: "First we knew marriage is for life"</p> <p>S4: "But what I have seen in the past is that it started off as a rocky relationship and staying committed in a relationship changes it into a more stable relationship..."</p> <p>S3: "My parents were together for more than 50 years. And so I learned from my family that this is a very serious relationship and I was very very serious about this and I wanted to make it successful...I found so many things which I did not like about my husband. And I am sure he also found so many things. But then I thought, okay, if I would have married a different person, that this person would also have some other problem. The important thing is I was very very serious about this relationship..."</p> <p>S15: "Our love is still growing, and will always grow. We have moments of feeling deep love, and other moments where we do not feel deep love. But we have an underlying commitment which makes our marriage permanent."</p>
Communication/Self-Disclosure	<p>S23: "Good communication is the key to continuously falling in love with each other."</p> <p>S20: "We have made effort to communicate regularly."</p> <p>S6: "During honeymoon we discussed our likes and dislikes, expressed our appreciation for each other, and declared we were lucky to find such a good spouse; that was the beginning of love"</p> <p>S4: "You can't love anyone until you know them. But that was the process of getting to know the person and then trying, getting to understand them and to feel that affection...You share your responsibilities and your strengths are of whatever nature and you move with that..."</p> <p>S24: "I would say that falling in love is a continuous process that started at the matching and still continues to this day. Good communication is the key to continuously falling in love with each other."</p>
Accommodation by the Partner	<p>S19: "I also feel that he [my husband] has changed quite a bit and is now making more effort to consider how his behavior might affect me, and to do things that will be more likely to help me feel good rather than the opposite."</p> <p>S1: "We made things work. She made things work with me. I made things work with her."</p> <p>S4: "When my kids were learning to drive he would just get very uptight about driving and he would say, 'okay, if you want them to drive, you'll have to teach them to drive!' So I say okay and then, he'd always be in the back seat he'd never sit in the front seat....This is how we decided what we'll do."</p>

*(table continues)*

Table 1 (Continued)

*Study 1 Factors Contributing to Growth of Love*

---

Parenting-Related <sup>1</sup>	S5: "His support for his children was my main reason to love him all the more." S3: "...it {love} happened slowly. I had some love feeling for him after I came here. And then I had my first baby and after that I was kind of attached with him...so it [love] started after I started to have children." S2: "After having child, I think it [love] arrived at the highest point."
Physical Intimacy	S22: "One significant turning point was during our first lovemaking, which was accompanied by prayer and ceremony. It did not go perfectly smoothly, and I recall being grateful to her for her easy-going and accepting nature." S2: "There was sexual attraction too. That was natural." S10: "I fell in love with him after our nuptial night. He chose my favorite spot for our honeymoon."
Vulnerability of Partner	S6: "When on the 19th day of our marriage, during honeymoon, my husband injured his knee and bled, I cried while dressing up the wound (is how I definite love)." S3: "I had a feeling of love for him when he had a heart attack and when he was sick in the hospital."
Comfort/Consideration	S4: "My husband would call me from work each in the morning and say, 'how are you doing?' because he left early and I would be sleeping...small things like that obviously affects the other person..."
Outside Help	S19: "Also, for 5 years I have been working the 12 Steps for Emotions Anonymous, and this year completed a one-week therapeutic workshop at The Meadows in Wickenburg, AZ. I feel the work I did on myself is the most important component of my increased happiness in the marriage."
Shared Activities	S21: "About a year into our engagement, there was a big turning point for me. I distinctly remember a date when we were walking on 6th Avenue in NYC. John was admiring some of the sculptures and modern art in a few shops. Normally I would never have given it any attention. Instead, I asked him why he liked it. He helped me to see the art form a whole new point of view. This was a magical moment that opened my heart to him."
Absence <sup>2</sup>	S9: "We didn't speak for about 5 days because I was away on work and we missed each other."
Arousal	S1: "I realized the love for her when we had a first fight."

---

<sup>1</sup>Studies conducted in the U.S. (e.g., Claxton and Perry\_Jenkins, 2008; Picker, 2005) show the opposite effect. Consider this statement by Stafford and Dainton (1994): "after the birth of a child the prognosis for the course of the marital relationship is unequivocally grim" (p. 270).

<sup>2</sup> Research (e.g., Gilbertson et al., 1998; Rindfuss & Stephen, 1990) shows consistently that the proverb, "Absence makes the heart grow fonder," is generally incorrect, but this case is an exception. Most studies show that proximity is an important determinant of emotional bonding.



Table 2  
*Study 2 Labels of 36-item Survey*

Label	Items on Survey
Accommodation	Having your spouse change his or her behavior to accommodate your needs or wishes
Alcohol	Drinking an alcoholic beverage with your spouse
Appreciation	Having your spouse express appreciation or gratitude to you
Attention	Having your spouse pay special attention to you
Being helped when ill	Having your spouse help you cope with or recover from a sickness or injury
Children	Having or raising children with your spouse
Comfort	Being comforted by your spouse when you were in distress
Commitment	Expressing strong commitment for each other
Communication	Being able to communicate well with your spouse
Compliments	Having your spouse compliment you
Contact	Seeing your spouse frequently
Counseling	Participating in counseling or therapy sessions
Danger	Being in a frightening or dangerous situation with your spouse
Encouragement	Having your spouse encourage you or express confidence in you
Excitement	Participating in fun, exciting, or vigorous activities with your spouse
Family	Receiving guidance or support from other family members, friends, or others
Forbidden	Doing something with your spouse that's sometimes prohibited or forbidden
Forgiveness	Having your spouse forgive you or apologize to you
Gazing	Looking into your spouse's eyes
Generosity	Acts of kindness or generosity by your spouse toward other people, organizations, or the community
Helping when ill	Helping your spouse cope with or recover from a sickness or injury
Humor	Sharing humor and laughter with your spouse

*(table continues)*

Table 2 (Continued)  
*Study 2 Labels of 36-item Survey*

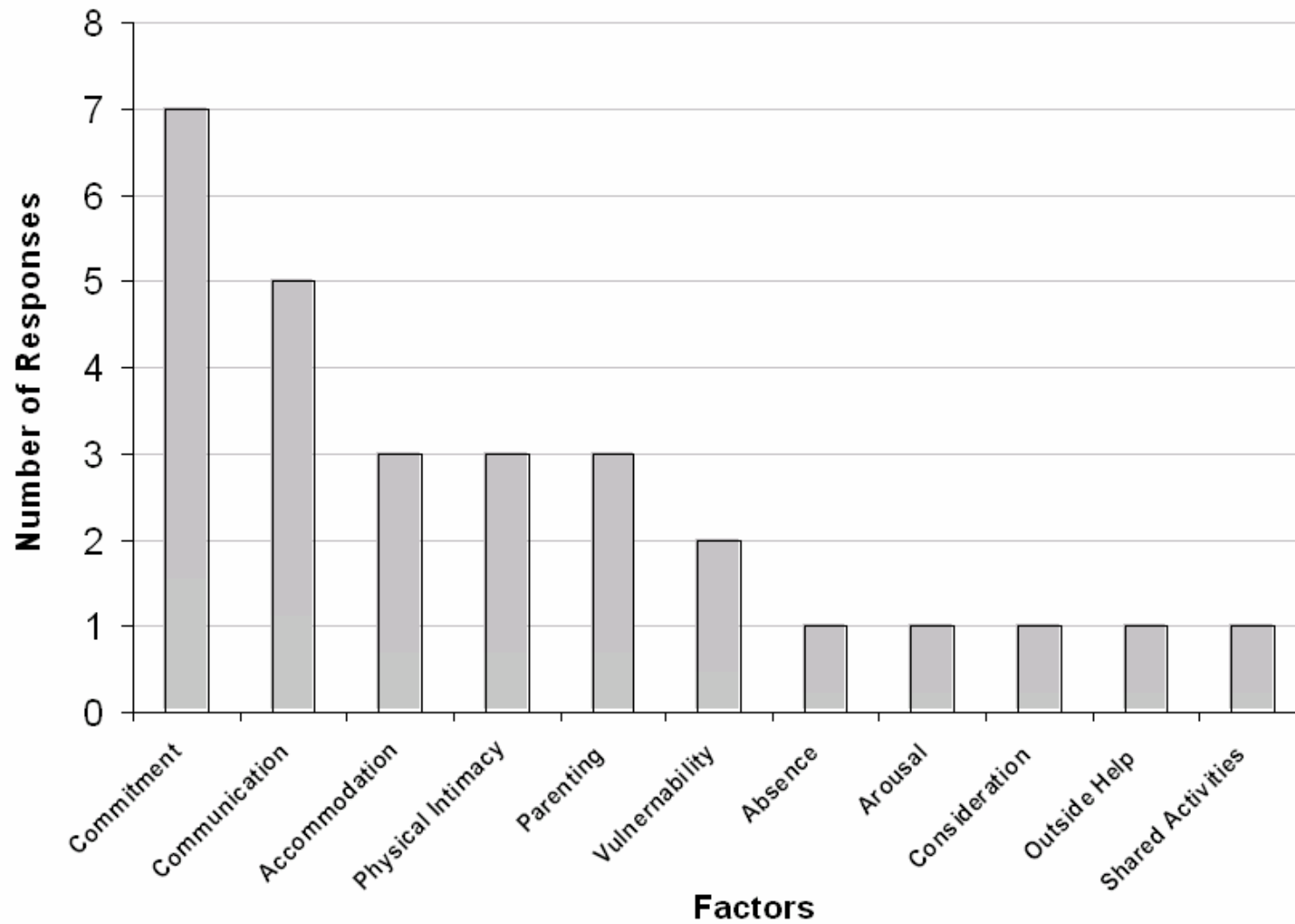
---

Label	Items on Survey
Interests	Having many common interests with your spouse
Intimacy	Having physical intimacy with your spouse
Novelty	Doing something new with your spouse
Parents	Receiving guidance or support from parents
Protection	Being in a situation in which your spouse protected or rescued you or others
Proximity	Being physically near your spouse
Sacrifice	Seeing your spouse make sacrifices for you
Secrets	Sharing secrets with your spouse
Stress	Being in stressful situations with your spouse
Thoughtfulness	Kind or thoughtful acts by your spouse toward you
Touching	Having your spouse hold or touch you in a caring way
Tragedy	Facing a tragedy with your spouse
Vacation	Going on vacations with your spouse
Income	Having your spouse provide a good income and standard of living for you and your children
Interests	Having many common interests with your spouse
Intimacy	Having physical intimacy with your spouse
Novelty	Doing something new with your spouse
Parents	Receiving guidance or support from parents
Protection	Being in a situation in which your spouse protected or rescued you or others
Proximity	Being physically near your spouse
Sacrifice	Seeing your spouse make sacrifices for you
Secrets	Sharing secrets with your spouse
Stress	Being in stressful situations with your spouse
Thoughtfulness	Kind or thoughtful acts by your spouse toward you
Touching	Having your spouse hold or touch you in a caring way
Tragedy	Facing a tragedy with your spouse
Vacation	Going on vacations with your spouse

---

Table 3  
*Study 2 Highest to Lowest Means of Factors by Gender*

Women ( <i>M</i> )	Factor	Men ( <i>M</i> )	Factor
5.4	Children	4.9	Sacrifice
5.1	Commitment	4.5	Intimacy
5.0	Thoughtfulness	4.4	Humor
4.8	Forgiveness	4.3	Commitment
4.8	Being helped when ill	4.2	Comfort
4.7	Proximity	4.2	Contact
4.6	Communication	4.2	Generosity
4.6	Appreciation	4.1	Encouragement
4.4	Encouragement	4.1	Thoughtfulness
4.4	Compliments	4.0	Attention
4.4	Helping when ill	4.0	Novelty
4.3	Humor	3.9	Proximity
4.2	Sacrifice	3.9	Touching
4.1	Intimacy	3.9	Communication
4.1	Comfort	3.9	Danger
4.1	Generosity	3.9	Excitement
4.0	Attention	3.9	Compliments
3.9	Contact	3.9	Appreciation
3.9	Touching	3.8	Forgiveness
3.9	Accommodation	3.7	Helping when ill
3.8	Excitement	3.6	Protection
3.6	Novelty	3.6	Accommodation
3.4	Protection	3.5	Vacation
3.3	Gazing	3.5	Being helped when ill
3.3	Interests	3.2	Children
3.2	Secrets	3.2	Gazing
2.9	Tragedy	3.2	Secrets
2.8	Vacation	2.9	Tragedy
2.4	Danger	2.9	Stress
2.4	Income	2.8	Interests
2.3	Family	1.9	Forbidden
1.4	Parents	1.9	Family
0.6	Alcohol	1.8	Counseling
0.5	Stress	1.8	Parents
0.2	Counseling	1.6	Income
-0.2	Forbidden	-1.4	Alcohol



*Figure 1.* Factor ratings in Study 1, shown in order from the most frequently mentioned factor to the least frequently mentioned factor.

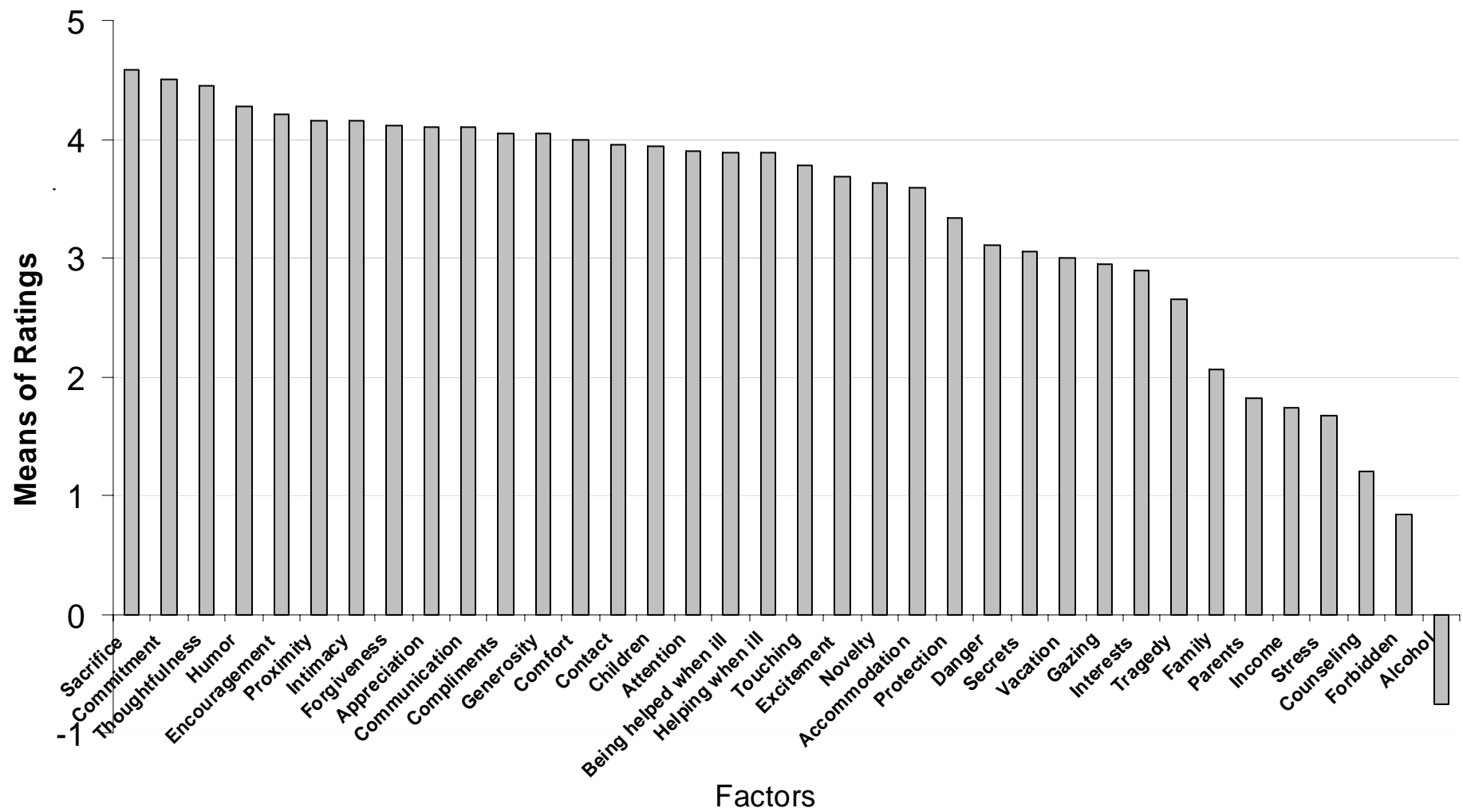


Figure 2. Mean factor ratings in Study 2, shown in order from the highest rated to the lowest rated factor. See Table 2 for a key to the factor names