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Measuring The Effectiveness Of Benefit-Provisioning And Cost-Inflicting Mate Retention Tactics Through Relationship Outcomes

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MEASURING THE EFFECTIVENESS OF BENEFIT-PROVISIONING AND COST-INFLICTING MATE RETENTION TACTICS THROUGH RELATIONSHIP OUTCOMES

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DEDICATION

This is dedicated to my cat, Periwinkle “Winkie” Wartooth.

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CHAPTER 1 INTRODUCTION

From an evolutionary psychology perspective, much of the literature on human mating tends to focus on mate choice and initial mate attraction, perhaps most notably the research on cross-cultural universals in mate preferences (Buss, 1989) and the literature on the importance of physical attractiveness (Sugiyama, 2015). From a social psychology perspective, attraction and relationship formation is also a very common topic of research (Reis, 2007). While mate preferences and mate attraction are very important processes, they leave the area of mate retention neglected.

Mate value and attraction

Sex differences in mate preferences. That said, it is understandable that mate attraction has been more heavily emphasized in the literature because to fully comprehend mate retention, one must first have a good knowledge base on attraction and relationship initiation. From an evolutionary perspective, attraction is largely influenced by reproductive fitness (the ability to survive and reproduce successfully) and hence what traits a potential mate might possess that signal good genes to be passed on to offspring and/or the ability to contribute to child-rearing. These desired traits are often different between the sexes because men and women have faced different selection pressures during human evolutionary history. One of these common differences that affects mating preferences concerns minimal parental investment between the sexes. According to parental investment theory (Trivers, 1972), women's minimal investment in offspring involves gestation, childbirth, and lactation while men's minimal investment in offspring is one copulatory act.

Because of this asymmetry in minimal investment, the sexes approach mating differently and have developed their own mating psychologies. For a woman, it is more reproductively

advantageous to find a long-term mate who is willing and able to invest resources to help her with her heavy investment in child-rearing and thus increase the chances of offspring survival. For men, it is more reproductively advantageous (relative to women) to focus on health and youth (i.e. physical attractiveness) in a mate as such traits are associated with fertility and the ability to carry a pregnancy to term. Mate preferences align with these adaptive strategies as it has been found cross-culturally that men seem to place more importance on physical attractiveness while women place more importance on earning potential/income (as this relates to the ability to invest resources; Buss, 1989; Buss, Shackelford, Kirkpatrick, & Larsen, 2001; Hill, 1945; Hoyt & Hudson, 1981; Hudson & Henze, 1969; McGinnis, 1958; Toro-Morn & Sprecher, 2003; Weiderman & Allegeier, 1992).

Another discrepancy in mating strategies described by the parental investment theory (Trivers, 1972) concerns the degree of choosiness between men and women. Women are only capable of getting pregnant once a year while men are potentially able to impregnate multiple women per year and thus have higher reproductive potential. Therefore, because women face this lowered reproductive potential relative to men, it is costlier for them to choose a poor-quality mate (e.g. a mate that deserts her or with high mutation load). For men, choosing a poor-quality mate is not as costly because his single sexual act does not imply the same level of commitment to parental investment as it does for women. Due to these circumstances, women have evolved to be much more selective when choosing a mate than men. This has been reflected in studies that compare the list of criteria that women and men create for an ideal mate, and women consistently list more requirements for an ideal mate than men do (Buss & Schmitt, 1993; Kenrick, Groth, Trost, & Sadalla, 1993; Woodward & Richards, 2005; Todd, Penke, Fasolo, & Lenton, 2007). Another consequence of these biological constraints is the tendency for males to pursue more

short-term mating opportunities (perhaps concurrently with one another) than women (Trivers, 1972). Men have more to gain in terms of reproductive success (in terms of being able to produce a greater number of offspring than women) from such a strategy, and indeed it has been found cross-culturally that men prefer multiple short-term mates more so than women (Buss, 1989; Schmitt, 2003).

Sex similarities in mate preferences. While these differences in mating psychology between the sexes are important, there also exist similarities between the sexes in mate choice and attraction. In some cases, these similarities arise partially as a consequence of these aforementioned differences. For example, while men may benefit from a mating strategy that emphasizes quantity over quality, they may also face the cost of paternity uncertainty or even complete reproductive failure when they engage in a series of short-term matings with women who are not sexually exclusive with them. Therefore, it may be beneficial for a man to choose a long-term mate who is sexually faithful to him to ensure paternity of offspring and thus his reproductive success. This is a reciprocal arrangement as a long-term exclusive relationship guarantees paternity for men while for women it secures investment of resources in her and her children, promoting her reproductive success. Both sexes are maximizing their reproductive success, but for different reasons (sexually exclusive long-term relationships are a common solution to fitness-related problems, although humans are adapted to pursue many alternative mating strategies; see Buss and Schmitt, 1993, for review).

Because human infants and children take such a long time to physically develop and mature to the point of independence compared to offspring of other primates (Kaplan, Hill, Lancaster, & Hurtado, 2000), it is important for dyad members to form a strong bond and demonstrate cooperation to motivate each member to remain in the relationship to optimize the

chances of offspring surviving to reproductive maturity (Fisher, 1989). Certain traits make this more possible to achieve than others, and therefore people seeking long-term relationships look for these traits in a potential mate. These desirable traits are often similar between the sexes, especially in long-term mating contexts, and include kindness, similar levels of physical attractiveness, and similar social status, and values (Buss, 1989). The full list of traits desired in a mate are rarely found in one person, so trade-offs are often made. For instance, Shackelford, Schmitt, and Buss (2005) identified trade-offs in four dimensions of mate preferences: dependable and stable versus health and good looks, love versus status, intelligence versus desire for children, and sociability versus similar religion. Furthermore, people are often constrained by their own mate value (or degree of desirability to the opposite sex based on physical and personality attributes), as they are unlikely to attract someone that is of considerably higher objective mate value compared to themselves and therefore homogamy is often observed in couples (Domingue, Fletcher, Conley, & Boardman, 2014). Moderate genetic homogamy (in other words some genetic similarity but not too much) also increases fertility (Thiessen & Gregg, 1980).

Mate retention

Now that mate value and initial attraction have briefly been introduced, attention will be turned to the focus of the current research: mate retention. As mentioned previously, mate retention has received far less attention than mate choice and attraction. However, this is not to say that theoretical frameworks have not been developed to understand mate retention. For instance, Rusbult's (1983) investment model states that relationships endure based on the amount of investment put into the relationship, the sunk costs associated with leaving a relationship, and the amount of available alternative partners. Another example is interdependence theory, which

focuses on how much one member of a dyad depends on the other, with the corollary that mutual levels of dependence on one another is more likely to lead to relationship continuation (Kelley & Thibaut, 1978). While these theoretical approaches do seem to successfully partially explain how individuals retain a mate, they paint an incomplete picture, namely one that lacks how mate retention functions in fitness-related, or evolutionary, terms. That is, ideas such as amount of investment can be applied to other types of dyadic relationships (such as close friendships) other than long-term romantic relationships, and ignore the unique circumstances related to reproduction; therefore, they cannot fully describe this unique type of dyad.

From an evolutionary perspective, mate retention is important in terms of reproductive success as partner abandonment from a long-lived relationship can result in wasted investment in time and resources into a mate who is no longer available, reduced reproductive potential upon trying to find a new mate due to older age, and possible drop in mate value simply because of partner abandonment (Daly & Wilson, 1983). Additionally, the fact that romantic jealousy has evolved as an emotion supports the notion that mate poaching, infidelity, and abandonment from a relationship were recurring adaptive problems and that jealousy has evolved as a potential deterrent of such occurrences (Buss, Larsen, Westen, & Semmelroth, 1992; Daly et al., 1982; Schmitt & Buss, 2001; Symons, 1979). This activated jealousy in the face of real or imagined relationship threats manifests itself in behaviors known as mate retention tactics (Buss, 1988). Examples of mate retention tactics include calling a mate unexpectedly to make sure he or she is where he or she said he or she would be, derogating the appearance and/or status of potential rivals, improving one's own appearance to distract the partner from others, and buying gifts for a partner to entice her to stay (Shackelford, Goetz, & Buss, 2005).

A sizeable portion of the literature on human mate retention relies upon the Mate Retention Inventory (MRI) which was developed by Buss (1988) and inquires extensively about these different tactics. Specifically, the MRI contains 19 tactics that are commonly used by both men and women to retain their mates. These tactics are vigilance, concealment of mate, monopolization of time, jealousy induction, punishing mate's infidelity threat, emotional manipulation, commitment manipulation, derogation of competitors, resource display, sexual inducements, appearance enhancement, love and care, submission and debasement, verbal possession signals, physical possession signals, possessive ornamentation, derogation of mate, intrasexual threats, and finally violence against rivals. The MRI has been used to reliably measure mate retention tactics in American college undergraduates (Buss, 1988b), in married couples (Buss & Shackelford, 1997), and across cultures (Lopes, Shackelford, Santos, Farias, & Segundo, 2016). However, some studies rely on other measures to assess mate retention, such as the level of jealousy exhibited by individuals (Sidelinger & Booth-Butterfield, 2007). This has been considered an acceptable measure of mate retention because romantic jealousy has been thought to have evolved to facilitate the thwarting of relationship threats, often arising from same-sex potential mate poachers (Buss, 2000).

Relationship between mate retention and mate value. Since humans seem to pursue mates that are of the highest value after considering their own mate value, would they not invest more effort into retaining such high-quality mates once they have successfully attracted them? Additionally, it is likely that one's own mate value influences mate retention. While the body of literature on this topic is relatively limited, there have been diverse associations found between the two. Overall, the intensity of mate retention behaviors performed by an individual seems to increase with partner mate value (Buss & Shackelford, 1997). However, some research seems to

suggest that this is primarily driven by the perceived discrepancy in mate value between the self and one's partner rather than by the mate value of the partner alone (Conroy-Beam, Goetz, & Buss, 2016).

The relationship between mate retention and mate value is further complicated when examining the role of sex. Although both sexes have been known to engage in mate retention tactics, it seems that men do it more frequently and more intensely (Buss & Shackelford, 1997). In additional support of greater male mate retention efforts, women seem to report less intense mate retention; furthermore, it only seems to be a concern for women mated to men of high mate value (Krems, Neel, Neuberg, Puts, & Kenrick, 2016). This is likely due to the sex difference in overall choosiness as predicted by parental investment theory (Trivers, 1972). Specifically, women seem to be more likely to initiate relationship dissolution (DeLecce & Weisfeld, 2016; Morris, Reiber, & Roman, 2015) and typically have greater access to attractive alternatives or "back-up mates" should their current relationship become undesirable (Buss, Conroy-Beam, Goetz, & Asao, 2016). This sex difference is even observed at the commitment level of marriage, as women are more likely to both initiate divorce and ponder divorce/express unhappiness with their choice of mate even when they remain with their partner (Kalmijn & Poortman, 2006; Todd, Penke, Fasolo, & Lenton, 2007; Weisfeld, et al., 2011). The factors that drive the intensity of male mate retention efforts, however, seem to be somewhat unclear. Some research suggests that the male's own mate value determines mate retention intensity (Miner, Starratt, & Shackelford, 2009) while other work seems to suggest that the potential mate value of the woman has a larger effect on men's mate retention strategies (Starratt & Shackelford, 2012).

One reason for the confusion regarding the relationship between mate retention tactics and mate value is that the MRI covers a very broad spectrum of behavior. For example, taking

one's partner out to a nice meal at a fancy restaurant and threatening suicide if one's partner ever abandons the relationship are both considered mate retention tactics; however, it is very likely that taking one's partner out to eat is more effective at keeping him or her in the relationship than threatening suicide. For this reason, it is necessary to determine the level of effectiveness for different tactics. Buss (1988) attempted to achieve this by having American undergraduates rate the perceived effectiveness of all the tactics and subsequently created lists of most and least effective tactics. Buss and Shackelford (1997) later tested these tactics in married couples as only focusing on the undergraduate population may somewhat limit the degree to which these findings can be generalized. Despite these efforts, it is still possible that perceptions may differ from actual relationship behavior as well as outcomes, and later research attempted to refine categorizations of mate retention tactics with this in mind.

Benefit-provisioning versus cost-inflicting mate retention tactics. Because women are the choosier sex when it comes to both initial mate choice and deciding to remain in a long-term relationship due to the asymmetry in parental investment (Todd et al., 2007; Weisfeld, et al., 2011), and because this is likely the reason why previous research reports more intense mate retention efforts by men (Buss & Shackelford, 1997), a theoretical framework has been developed to categorize male mate retention efforts in terms of whether they are benefit-providing or cost-inflicting (McKibbin, et al., 2007; Miner, Shackelford, & Starratt, 2009; Shackelford, Goetz, Buss, Euler, & Hoier, 2005).

This type of categorization was inspired by attempts to predict female-directed violence (as defined by a wide range of behaviors from verbal threats to pushing to choking; see Dobash, Dobash, Cavanagh, & Lewis, 1996) and sexual coercion in romantic relationships (Goetz and Shackelford, 2006; Shackelford, et al., 2005). According to Shackelford and colleagues (2005),

male mate retention tactics that are associated with violence involve being overly vigilant about the mate's whereabouts, monopolizing her time, concealing her from others (including family and friends), punishing threats of infidelity such as yelling at her for showing real or imagined interest in another man, and other types of emotional manipulation such as claiming he would kill himself or "die" if she ever left him. From the man's perspective, such tactics are very effective at keeping his mate from committing infidelity or leaving the relationship for another man as they largely limit the number of opportunities in which contact with other males could occur. From the woman's perspective, use of such tactics impedes her autonomy in terms of sexual choice (especially when sexual coercion occurs), mobility, social contacts, and pursuit of her own interests (Wilson, Johnson, & Daly, 1995). Therefore, such tactics, especially if they lead to violence and bodily injury, can be severely cost-inflicting for women.

Other research has further explored the function of these cost-inflicting mate retention tactics. Specifically, McKibbin and colleagues (2007) conducted a series of experiments in which they investigated the reasons why men derogate their partners (usually by denigrating their physical attractiveness, implying promiscuity, and derogating other qualities about them). They hypothesized and found support for the notion that men engage in partner-directed derogation as a mate retention tactic intended to make the woman feel that she is not a valuable mate and is incapable of finding any other mate. The result is a drop in perception of self-worth and self-esteem which ultimately is thought to lead to decreased chances of her abandoning the relationship. Partner-directed insults also positively correlate with the previously mentioned cost-inflicting tactics such as monopolization of a partner's time.

Once these tactics associated with domestic violence and sexual coercion were identified, research turned toward examining the opposite. In other words, what mate retention tactics were

associated with providing benefits to a partner rather than inflicting costs? And more specifically, what factors determine whether a man will be more inclined to use benefit-provisioning or cost-inflicting mate retention tactics? Research into these questions has revealed some consistent patterns. In terms of benefit-provisioning, mate retention tactics that most often fit this description are buying one's partner expensive gifts, taking her out to dinner at a fancy restaurant, and complimenting her on her appearance (Miner, Starratt, & Shackelford, 2009). The use of such tactics makes a woman more likely to remain in the relationship because these benefits bestowed upon her entice her to stay and give the impression that alternative partners will not treat her as well (Miner et al., 2009). Benefit-provisioning tactics are very low risk, unlike cost-inflicting behaviors which carry the risk of increased likelihood of relationship defection; however, not all men can afford the high costs of such a low-risk strategy.

Therefore, male mate value factors heavily into which mate retention style men use. Recall that men's mate value is more dependent on their earning potential and access to resources compared to women (Buss, 1989), and because mate retention often incorporates highlighting the features that contribute to one's mate value, men use different strategies based on whether they possess relatively high or low mate value. Men who are of high mate value have high earning potential and access to many resources, therefore they are more likely to choose a benefit-provisioning mate retention strategy and remind the partner of their high mate value through buying her expensive gifts and providing other resources to her. Men who are of low mate value, on the other hand, lack access to resources and are incapable of providing substantial benefits to their partner. In this case, it might be more feasible for men to take the focus away from their own low mate value and instead highlight any flaws of their partner and/or simply not allow her to interact socially with others to prevent her from getting access to men of potentially

higher mate value. This may effectively lower the female partner's self-esteem, which would make her think she cannot attract anyone else and/or prevent her from meeting a better mate. Such a strategy is costly, however, in that being treated in this way could increase the likelihood of relationship defection to escape the treatment (Miner & Shackelford, 2010; Miner, et al., 2009). It could be said, then, that men of low mate value are likely to take on a high-risk mate retention strategy, which is consistent with previous literature suggesting that men of low socioeconomic status have little to lose so they are more likely to engage in risky behavior including violence against male rivals and female romantic partners if they perceive it necessary to prevent infidelity or relationship defection (Daly & Wilson, 1993; Fox, Benson, DeMaris, & Wyk, 2002; Wilt & Olson, 1996).

Miner and colleagues (2009) provided evidence to support their argument that this relationship between male mate value and mate retention style does indeed exist as men who were of higher mate value (had higher earning potential) were more likely to use benefit-provisioning strategies and those who were of lower mate value were more likely to use cost-inflicting strategies. Other research has used this classification system for mate retention strategies and found comparable results. Among married couples, men who were considered to be low mate value (especially by their wives) were more likely to use cost-inflicting mate retention behaviors compared to men considered to be of high mate value (Holden, et al., 2014). In terms of effectiveness, it has been documented that the use of cost-inflicting mate retention tactics is associated with lower relationship satisfaction among married couples (Shackelford & Buss, 2000). In another study using married couples in Croatia, it was revealed that the use of benefit-provisioning mate retention tactics by both men and women was associated with higher relationship satisfaction compared to those using cost-inflicting strategies, but that this

relationship was even stronger when such tactics were used by men (Salkicevic, Stanic, & Grabovac, 2014).

The current research

The literature to date has categorized human mate retention strategies more clearly into benefit-provisioning or cost-inflicting since its development in the 1980s, and it has explored their effectiveness to some degree. However, attempts at discerning effectiveness have been based only on perceptions of relationship satisfaction (to the author's knowledge). The current research investigated the effectiveness of benefit-provisioning versus cost-inflicting mate retention tactics based on relationship outcomes, specifically the likelihood of separation. The dissolution of a dyad is a much more objective measure than perceptions of relationship satisfaction, which can fluctuate over relatively short periods for various reasons (e.g. hormonal influences from the ovulatory cycle, adverse life events; Larson, Haselton, Gildersleeve, & Pillsworth, 2013: Schulz, Cowan, Pape Cowan, & Brennan, 2004). Therefore, the current research utilized two studies to see if mate retention strategies predict relationship outcomes. In Study 1, this was explored in a sample of individuals who have recently experienced a breakup of a non-marital romantic relationship. In Study 2 this was explored in a cross-cultural sample of married couples who either have or have not experienced a period of separation in their marriage.

CHAPTER 2 STUDY 1 -- METHODS

Study 1

This study tested how type of mate retention strategy predicts relationship dissolution among romantic non-marital relationships. This study involved a survey in which participants, who recently experienced a breakup, indicated what types of mate retention tactics they and their recent ex-partners used the most before the breakup occurred. Additionally, they reported on many factors surrounding the breakup itself, such as who initiated it, what emotions were experienced afterwards, what behaviors were performed as a reaction, and how long it took participants to cope with the loss of the ex-partner.

Based on the literature on benefit-provisioning and cost-inflicting mate retention strategies, it was hypothesized that 1a) individuals who frequently used cost-inflicting mate retention tactics during their relationship will be more likely to report their ex-partner abandoning the relationship and therefore initiating the breakup. Likewise, this also encompasses that those reporting that their ex-partner frequently used cost-inflicting tactics will be more likely to report initiating the breakup (1b). Also, based on the literature on greater female choosiness, it was hypothesized that 2) this relationship just described will be moderated by sex such that the use of cost-inflicting tactics by men will be more likely to result in their ex-partners abandoning the relationship. Additionally, based on the literature on mate value, it was predicted that 3) male mate value will be negatively correlated with the use of cost-inflicting mate retention tactics before the breakup occurred; that is, men of overall lower mate value will be more likely to have employed the use of cost-inflicting retention tactics.

Method

Participants

450 participants were recruited to complete an online survey study via Mechanical Turk although the sample determined by a power analysis was 406. Specifically, the software G*Power was used in which a logistic regression was used as the type of statistical test, with power set to .80. Effect sizes from previous research have been small (see Holden et al., 2014 for an example), so this was not factored into the power analysis. Participants were over 18, heterosexual, and had experienced a romantic breakup within the last year. The majority of participants were American (90% in this sample); however, samples from Mechanical Turk tend to be relatively diverse in nature (Casler, et al., 2013). Another consequence of using Mechanical Turk is that attention checks were incorporated into the surveys of interest at various points. For example, participants were given the item "Please choose purple as the response for this item" with the response choices containing a few other colors along with purple. With the use of such attention checks, it was found that some participants were not correctly completing surveys (e.g. putting the same number for all responses) so the final sample was 421.

Out of these 421 participants, there were 278 men and 143 women. The mean age was 32.43 (range 20-63), and the average relationship length reported before the breakup was 1.5 years. The ethnic makeup of the sample was 69% Caucasian, 18.6% Asian, 7.4% African American, 2.9% Hispanic, 1% Native American, and 1.2% identified as "Other." In terms of educational background, most participants had some type of education beyond high school, most commonly a bachelor's degree, with only 22.1% having only a high school diploma. The most commonly reported income level was between $31,000 and $50,000 per year. See Table 3 for other descriptives for the sample.

Materials

Two main instruments were used for this study. The first was the Relationship Dissolution Questionnaire (RDQ), which is a self-report measure that inquires about emotions and behaviors experienced as a result of a non-marital breakup as well as includes items on mate value of the self and the ex-partner based on characteristics such as physical attractiveness, intelligence, and sense of humor (see DeLecce & Weisfeld, 2016). This instrument was largely based on one used by Perilloux & Buss (2008) in terms of items on emotions and behaviors, but was expanded to include a subscale measuring mate value (of both the participant completing the survey and of the ex-partner as reported by the participant) and other items related to the process of the breakup itself (e.g. who initiated it, relationship length before breakup). Variables in the RDQ are measured using a Likert-type scale ranging from 1-10 with 1 indicating "not at all" and 10 indicating "very much so." Here is an example of what an item would look like: "Please rate your most recent ex-partner's level of physical attractiveness." All six items of the mate value subscale are phrased in this manner and inquire about popularity, ambitiousness, kindness, intelligence, and sense of humor—in addition to physical attractiveness. In total, the RDQ contains 4 subscales: one on mate value, one focused on causes of the breakup, one on post-breakup emotions, and one on post-breakup behaviors. There also is a section at the beginning assessing "breakup demographic" information such as the length of the relationship before the breakup occurred and how long ago the breakup occurred.

The second instrument was the Mate Retention Inventory-Short Form (MRI-SF; Buss, Shackelford, & McKibbin, 2008), which is a condensed version of the original instrument known as the Mate Retention Inventory (Buss, 1988). The short form was reduced from its original 104 items measuring 19 different mate retention tactics down to 38 items (two items per each of the 19 tactics). The mate retention tactics covered in this instrument are as follows: vigilance,

concealment of mate, monopolization of time, jealousy induction, punishment of mate's infidelity threat, emotional manipulation, commitment manipulation, derogation of competitors, resource display, sexual inducements, appearance enhancement, love and care, submission and debasement, verbal possession signals, physical possession signals, possessive ornamentation, derogation of mate, intrasexual threats, and violence against rivals (Buss, 1988). Each item is measured on a 4-point likert-type scale ranging from 0-3 that assesses how often each tactic is performed. The first option, 0, corresponds to the response "Never performed this act," while increasing number choices correspond to increasing performance of the tactic (rarely and sometimes, respectively) to the maximum of 3 which corresponds to "Often performed this act." Alpha reliabilities for each of the tactic composites (e.g. just the section measuring commitment manipulation or just the section measuring violence against rivals) on the short form range from $\alpha = .40$ to $\alpha = .87$. For all 38 items on the MRI-SF total score, however, overall $\alpha = .90$ (Buss, et al., 2008). Because the MRI-SF covers a wide range of diverse types of tactics, the total score may not be the best measure to use, especially when some of the tactics have positive impacts on the relationship while others have negative impacts.

Therefore, mate retention tactics were divided into benefit-provisioning and cost-inflicting as described by Miner and colleagues (2009). Those divisions are as follows: direct guarding, intersexual negative inducements (jealousy induction, punishing a mate's infidelity threat, emotional manipulation, commitment manipulation, and derogation of competitors), and intrasexual negative inducements (derogation of mate to same-sex others, intrasexual threats, and violence against rivals) are considered cost-inflicting tactics while positive inducements (resource display, sexual inducements, appearance enhancement, love and care, and submission and debasement) and public signals of possession (verbal possession signals, physical possession

signals, and possessive ornamentation) are considered benefit-provisioning tactics (see Table 1 and Table 2 for items associated with tactic categories). If cost-inflicting tactics are indeed related to lower relationship satisfaction (Holden, et al., 2014), then it is likely that they occur more frequently in relationships that eventually dissolve than ones that remain intact.

Procedure

Participants completed both the RDQ and the MRI-SF followed by a set of demographic questions online via Mechanical Turk. They filled out the survey at their convenience and were compensated with $1.50 for their time and inconvenience.

Data Analysis

Hypothesis 1a & 1b: Mate retention tactics and breakup initiation. Mate retention tactics that were reported before the breakup experienced were categorized in terms of benefit-provisioning or cost-inflicting. This was achieved by following Miner and colleagues (2009) in which first the scores were averaged for the items for each subcategory associated with cost-inflicting tactics (direct guarding, intersexual negative inducements, intrasexual negative inducements) and subsequently the averages of these three subcategories were averaged together to create a mean cost-infliction score. The same procedure was conducted to calculate a mean benefit-provisioning score. Additionally, a cost-inflicting and benefit-provisioning score was computed for both participants themselves and for the tactics that they reported their ex-partners used.

Then, using logistic regression, it was examined whether these averaged scores predicted relationship dissolution. Specifically, a logistic regression model was conducted in a hierarchical fashion and included the cost-inflicting and benefit-provisioning tactics that participants reported to use themselves as well as the cost-inflicting and benefit-provisioning tactics reported for ex-

partners to predict the odds of participants initiating the breakup (Hypothesis 1a and 1b). In other words, the outcome was self-initiated breakup based on mate retention tactic type. In addition, the covariates of age, race (this was made dichotomous in the form of Caucasian and non-Caucasian to aid in interpretation), relationship length, length of time elapsed since the breakup, and current relationship status were included in analyses.

Hypothesis 2: Moderation by sex. Once this step of the analysis was conducted, the next step of the hierarchical logistic regression was to see whether hypotheses 1a and 1b were moderated by sex. The propensity for type of mate retention tactic to affect the probability of dissolution should vary between the sexes given their different reproductive potentials (Trivers, 1972). The greater degree of choosiness exhibited by females in mating decisions should be seen in a logistic regression that tests for an interaction between cost-inflicting tactics and gender, with the use of cost-inflicting tactics by males expected to be more likely to lead to relationship dissolution. Furthermore, previous literature suggests that men engage in more mate retention efforts overall (Miner et al., 2009).

Hypothesis 3: Male mate value. Although many measures of personal characteristics are included in the RDQ to tap into mate value (physical attractiveness, intelligence, sense of humor, ambitiousness, kindness, and popularity), it was expected that for men this will be most strongly predicted by ambitiousness, intelligence, and popularity (characteristics linked to status, which is very important to male mate value). Specifically, multiple regression was used to examine whether those of lower ambitiousness, intelligence, and popularity were more likely to use cost-inflicting tactics (or their ex-partners were more likely to report their use of these types of tactics).

CHAPTER 3 STUDY 1 -- RESULTS AND DISCUSSION

Results

Logistic regression predicting self-initiated dissolution from self and ex-partner mate retention tactics

To determine if cost-inflicting tactics and benefit-provisioning tactics predicted self-initiated dissolution, a hierarchical logistic regression was conducted that included the demographic covariates of age, race (in dichotomous form), gender, length of relationship before dissolution occurred, time elapsed since dissolution, and current relationship status as well as the benefit-provisioning score and cost-inflicting score for participants and these same scores for their ex-partners (as Step 1). The overall model for Step 1 was significant ($\chi^2(10) = 46.67$, $p < .001$) as it explained 15.8% of variance and classified 76.4% of cases correctly. In terms of tactics, the use of benefit-provisioning tactics by participants themselves decreased the odds of them dissolving the relationship by .531 ($p = .021$). Also, increased cost-inflicting tactics reported to be used by ex-partners made participants 2.443 times more likely to initiate the breakup with such ex-partners ($p = .003$). Two covariates were significant as well: age, with increasing age of participants making it 1.044 times more likely that they would initiate the breakup ($p = .010$) and length of relationship, with increasing length decreasing the odds of participant-initiated dissolution by .715 ($p = .006$). Refer to Table 4 for more detail.

Logistic regression predicting self-initiated dissolution from mate retention tactics with the inclusion of interactions between tactics and gender

To determine whether the use of mate retention tactics and the likelihood of dissolution was moderated by participants' sex, Step 2 of the previous hierarchical logistic regression model included the variables of interest (benefit-provisioning self and ex-partner scores, cost-inflicting

self and ex-partner scores, and gender), interaction terms, and the demographic covariates. Four interaction terms were created, one that interacted participant gender and the benefit-provisioning score of the self, one that interacted participant gender and the benefit-provisioning score of the ex-partner, one that interacted participant gender and the cost-inflicting score of the self, and lastly one that interacted participant gender and the cost-inflicting score of the ex-partner. The overall model for Step 2 was significant ($\chi^2(14) = 58.87$, $p < .001$, 19.6% variance explained, 77.9% of cases classified correctly) and revealed a significant interaction. This interaction was that between gender and benefit-provisioning score of the ex-partner ($p = .006$). To aid in the interpretation of this interaction, it was graphed using a simple slopes technique (Refer to Figure 1). This made it clear that women were 5.027 times more likely to initiate a breakup with a male ex-partner that exhibited increased use of benefit-provisioning tactics (See Table 5 and Figure 1).

Multiple regression predicting cost-infliction score from male mate value

Men's own cost-inflicting score. To see if low male mate value was associated with increased use of cost-infliction tactics, multiple regression analyses were performed. The predictors were proxies for male mate value, including ratings of intelligence, ambitiousness, popularity, education level, and income level. The outcome variable was cost-inflicting tactics score. Two analyses were run, one to predict male participants' own cost-infliction scores, and one to predict women's ex-partner's cost-infliction scores. It should be noted that although participants reported on their ex-partners' personality characteristics (e.g. intelligence and ambition), they did not report on their ex-partners' education and income levels, therefore such variables could not be included in ex-partner mate value analysis. The first multiple regression analysis predicting male participants' cost-infliction scores was not significant.

Women's cost-inflicting score for their male ex-partners. The second multiple regression analysis in which women's perceptions of their male ex-partners' mate value predicted the ex-partners' cost-infliction scores was significant (r = .274, $F(3, 138) = 3.74$, p = .013). The predictors in this model were women's rating of their ex-partner's level of ambitiousness, intelligence, and popularity (as these are related to status and/or earning potential). Even though ambitiousness and intelligence were not significant as predictors, they were in the predicted direction, such that higher levels on these traits predicted lower cost-infliction scores ($p < .10$ for intelligence). The only significant predictor in the model was popularity rating, with higher popularity actually predicting higher cost-infliction scores (b = .051, $t(141) = 2.36$, p = .020). For more detail on male mate value analyses, refer to Table 6.

Discussion

The results of this study mostly supported the hypotheses. The use of cost-inflicting tactics did increase the odds of relationship dissolution; however, this was only the case for perceptions of mate retention tactics used by ex-partners as reported by participants. To be more specific, participants were more likely to initiate a breakup with an ex-partner that used a high rate of cost-inflicting tactics. Therefore, *Hypothesis 1* was partly supported as *hypothesis 1b* was supported even though *hypothesis 1a* was not.

This finding was indeed moderated by sex, but not in the direction predicted by *Hypothesis 2.* Instead, it was revealed that women were more likely to dissolve relationships if they perceived that their male ex-partners performed frequent benefit-provisioning mate retention tactics. This was the opposite pattern of what was predicted, and possible explanations for this finding will be addressed in the general discussion section.

The role of male mate value on the use of cost-inflicting tactics was not as expected for *Hypothesis 3*. Men's own reports of their mate value were not significantly related to their own reports of their use of cost-inflicting tactics. However, female participants' perceptions of their male ex-partners' mate value and mate retention tactics were significantly associated. Specifically, higher ratings of popularity for their ex-partners were associated with greater use of cost-inflicting tactics, which was unexpected as popularity should be related to status. Perhaps being too popular provides males greater opportunity to flirt with other women besides their partner, which is considered a cost-inflicting tactic.

There were several covariates involved in the analyses but only participants' age and length of relationship before the breakup occurred were significant. As participants' age increased, so did their likelihood of initiating relationship dissolution. However, as the length of the relationship increased, the likelihood of participants' dissolving relationships decreased. There are a few possibilities as to why this may be the case, and they will be discussed in more detail in the general discussion.

Another issue in this study is that the reports of breakup experiences were one-sided, which leaves open the possibility for biased perceptions. The fact that participants reported that their ex-partners were more likely to abandon them when they performed more benefit-provisioning behaviors while only perceptions of their ex-partners' cost-inflicting tactics made dissolution more likely supports this suspicion. Participants could be displaying a self-enhancement bias (Brown, 1986), which is a common perceptual illusion. On the other hand, participants could consciously be aware of their faults and what role they played in the breakup and could simply be motivated to report otherwise due to concerns about social desirability (van de Mortel, 2008), which is a common phenomenon in self-report research. To rectify this issue,

Study 2 includes reports from both partners in marital relationships and examines the influence of one partner's behavior on the other.

CHAPTER 4 STUDY 2 -- METHODS

Study 2

For this study, the effectiveness of cost-inflicting versus benefit-provisioning mate retention tactics will be examined in a cross-cultural sample of married couples. Although all the couples were still married at the time of data collection, some had experienced a period of separation at some point in their marriage while others had not. Therefore, the role of mate retention strategies in the occurrence of a separation period will be explored. Couples in this study were previously recruited to provide data on marital dynamics via self-report by both husbands and wives. Specifically, it is hypothesized that 1) the use of cost-inflicting behaviors will be make the chances of separation more likely; this should be the case for individuals' reports of their own cost-inflicting tactics (1a) and for their perceptions of their spouse's use of cost-inflicting tactics (1b). It is also hypothesized that 2) husbands' use of cost-inflicting tactics will be more predictive of separation than the same tactics used by wives. Further, it is hypothesized that 3) men who are of lower status (those not well off financially) will be more likely to use cost-inflicting mate retention strategies.

Method

Participants

Participants consisted of over 1,000 married couples from America, Britain, and China, and Russia that were previously recruited (in other words, archival data; see Weisfeld, et al., 2011) to complete a survey study on marital dynamics. These couples were recruited via snowball or convenience sampling (Bailey, 1987) and these data have been used in numerous previous publications (Dillon, et al., 2014; Dillon, et al., 2015; Lucas, et al., 2004; Lucas, et al., 2008; Nowak, et al., 2014; Weisfeld, et al., 1992; Weisfeld, et al., 2011; Wendorf, Lucas,

Imamoglu, Weisfeld, & Weisfeld, 2011), which suggests that the samples from each country are nonrandom and might not necessarily be representative of all marriages from that given country. Couples ranged in age from 18-91, and were married for approximately 13 years on average (with most of them reporting their current marriage as their first marriage). See Table 9 for descriptives for each country's sample.

Materials

This study used the multidimensional Marriage and Relationship Questionnaire (MARQ) to measure numerous variables of marital dynamics (Russell & Wells, 1991). The MARQ is a self-report measure consisting of 179 items that have been divided into 12 subscales and they are as follows: Roles (division of labor), Values (modern or traditional), Family Ties (closeness to relatives), Partnership (emotional support), Love (physical and emotional closeness), Attractiveness (self and partner), Sexual Jealousy (infidelity concerns and possessiveness), Conciliation (appeasement), Personal Problems (emotional regulation), Circumstantial Problems (financial), Partner Problems (undesirable partner behavior), and Relationship Problems (separation ideation). The questions that tap into these subscales use a 5-point Likert-type scale to measure participant responses (e.g. "do you find sexual fulfillment in your marriage?" with responses ranging from "not at all" to "very much"). These subscales have shown Cronbach's alpha ratings between .55 and .90 based on a sample of 1250 married couples (Russell & Wells, 1993). The MARQ also contains some questions regarding demographic information such as age and length of marriage. It should also be noted that given the cross-cultural nature of the sample, the MARQ was translated and back-translated to fit the language and dialect used in each country represented in the sample.

In this study, items from the MARQ will be matched with similar items from the MRI-SF in order to categorize them into benefit-provisioning or cost-inflicting mate retention strategies. Benefit-provisioning items seemed to fit the existing MRI-SF categories more neatly (e.g. love and care, submission and debasement) and include examples such as "Are you kind to your spouse?" and "Does your marriage have a romantic side?". Examples of items categorized as cost-inflicting from the MARQ did not fit the existing MRI-SF categories quite as well and included items that are objectively cost-inflicting yet not part of the existing categories. For instance, the MARQ includes an item that asks, "Is your spouse really nasty to you?" which is a bit vague compared to most MRI-SF items.

Procedure

Participants completed the MARQ questionnaire at their own homes, with each member of the couple filling it out privately in separate rooms. Completed surveys were then placed in separate sealed envelopes which were then placed into a larger envelope to ensure organization and confidentiality of responses.

Data Analysis

Hypotheses 1a & 1b. Mate retention variables were investigated as predictors of separation using logistic regression (to compute odds ratio of separation or not). The variables of interest were those related to benefit-provisioning (e.g. displaying kindness, engaging in romantic activities) and those related to cost-inflicting (e.g. sexual coercion, acting nasty) mate retention that have been known to drive what type of mate retention tactics are used (Miner et al., 2009). Items from the MARQ were categorized as either benefit-provisioning or cost-inflicting rather than associated with subdivisions like in the MRI-SF (see Table 7 for item categorization). Additionally, these two categories were created for respondents' own behaviors and their reports

of their spouses' behaviors. Responses in each category were averaged so that each respondent had a mean benefit-provisioning score for the self, a mean benefit-provisioning score for the spouse's perceived tactics, a mean cost-inflicting score for the self, and a mean cost-inflicting score for the spouse's perceived tactics. Then these scores were used as predictors in a logistic regression to predict separation.

Hypothesis 2. These logistic regression analyses described above were run separately for husbands and wives to check for any sex differences, as women are usually more likely to face certain costly mate retention tactics from their partner, such as sexual coercion, than men and are more likely to initiate separation or dissolution when their partner displays problematic behavior. To further evaluate sex differences, the items in benefit-provisioning and cost-inflicting tactics were included in logistic regression in their raw form (unsummed) to see which specific items have the most predictive power, and if it differs by sex. To account for the dyadic nature of these data and the fact that one spouse's behavior may have an effect on the other, actor-partner interdependence models (APIM; Cook & Kenny, 2005) were utilized using MPlus (Muthén & Muthén, 2017).

Hypothesis 3. To test associations between the use of cost-inflicting tactics and low male mate value, financial circumstances and earning potential were used as a proxy for male mate value and MARQ items (see Table 8 to see these specific items) measuring these characteristics were entered into multiple regression analyses to see if they predicted cost-inflicting scores for husbands.

CHAPTER 5 STUDY 2 – RESULTS AND DISCUSSION

American Sample Results

Logistic regression predicting separation from averaged scores of cost-inflicting and benefit-provisioning tactics

Husbands. Because of the inconsistent coding in the original MARQ items, items measuring cost-inflicting tactics that husbands reported as performed themselves were recoded so that higher numbers indicated increased cost-infliction. After recoding, the items were averaged to create a mean cost-inflicting score for the self. This same procedure of averaging and recoding was used to create a mean score for perceived cost-infliction performed by the respondent's wife. This procedure was then extended to produce both scores for benefit-provisioning performed by the self and perceived benefit-provisioning by wives.

After creation of all four mean scores, they were entered into logistic regression analyses to see how well they predicted the likelihood of separation. The first model was to predict the odds of husbands reporting a period of separation from husbands reports of their own and their spouse's mate retention tactics. Demographic covariates (age, length of marriage, and number of children) were also included to see if they had an effect on the chance of separation. The overall model was significant ($\chi^2(7) = 34.07$, $p < .001$) as it explained 15.7% of variance and classified 87.8% of cases correctly. The only significant predictor was husbands' perceptions of wives' benefit-provisioning; specifically, the more perceived benefit-provisioning, the odds of separation decreased by .338 ($p = .001$).

Wives. Items related to benefit-provisioning and cost-inflicting tactics were recoded in order to create a mean score for self-performed benefit-provisioning and cost-inflicting and perceptions of husbands' benefit-provisioning and cost-inflicting using that same procedure that

was done for husbands. Once averaged scores were created, the four scores and the same set of demographic covariates were entered into a logistic regression model to predict the odds of wives reporting a period of separation based on their own and their spouse's mate retention tactics. This model was also significant ($\chi^2(7) = 27.56$, $p < .001$), explained 13.4% of variance, and classified 89.4% of cases correctly. Out of the demographic covariates, only the wife's age predicted the odds of separation, with it becoming .916 times less likely with increasing age ($p = .036$). In terms of tactics, only wives' perception of their husbands' cost-infliction was significant such that higher cost-infliction made separation 2.288 times more likely ($p = .015$). See Table 10 for more details on this set of analyses.

Logistic regression predicting separation from husbands' individual mate retention-related MARQ items

Husband's own cost-inflicting tactics items. Two cost-inflicting logistic regression analyses were run for such tactics. In the first analysis for husbands, individual cost-inflicting items practiced by themselves were used as predictor variables to predict the odds of separation in the first logistic regression analysis. In this analysis, the model was not significant ($\chi^2(2) = 2.17$, $p = .338$). The two predictors in this model were the items, "Do you feel possessive about your spouse?" and, "Do you take your spouse for granted?" to measure cost-inflicting tactics of the self for husbands.

Husband's perceptions of their spouse's cost-inflicting tactics items. In the second logistic regression analysis with individual variables, husbands' perceptions of wives' cost-inflicting tactics were entered as individual variables to predict the likelihood of separation. This overall model was significant and therefore fit better than the one involving husbands' own cost-inflicting tactics ($\chi^2(4) = 17.10$, $p = .002$), as it explained 7.9% of variance and classified 88.1%

of cases correctly. However, the only predictor that was significant was the item "Is your spouse really nasty to you?", with increasing nastiness making separation 1.826 times more likely (p = .002).

Husband's own benefit-provisioning tactics items. Just as was done with cost-inflicting tactics, two logistic regression analyses were run to compare the predictive ability of husbands' own benefit-provisioning tactics as well as the perceived benefit-provisioning of their wives on the odds of separation. For the model using variables related to husbands' own benefit-provisioning, it was statistically significant ($\chi^2(6) = 28.16$, $p < .001$) as it explained 13% of the variance and classified 88.1% of cases correctly. Despite the significance of the overall model, only two of the predictor variables were significant. The first was the item "Are you the first to make up after a row?", with increasing inclination to be the first to make up making separation 1.474 times more likely (p = .046). The second significant item was "Do you enjoy cuddling your spouse?" as increased enjoyment of cuddling decreased the odds of separation by .659 (p = .028).

Husband's perceptions of their spouse's benefit-provisioning tactics items. The model using husbands' perceptions of their wives' benefit-provisioning also was statistically significant ($\chi^2(3) = 31.85$, $p < .001$), explained 14.2% of variance, and classified 87.4% of cases correctly. Two out of the three predictors were significant; one was the item "Do you find sexual fulfillment in your marriage?", and which increased sexual fulfillment in the marriage resulted in a .561 decrease in the odds of separation (p = .001). The other item in this model was the greatest contributor of all the items filled out by husbands to the likelihood of separation, and it was "Does your wife pay enough attention to her appearance?". Specifically, the more husbands thought their wives paid attention to their appearance, separation odds decreased and became

.279 times less likely (p = .003). Put another way, separation became 3.584 times more likely if wives neglected their appearance. Refer to Table 11 for individual MARQ item analyses for husbands.

Logistic regression predicting separation for wives' individual mate retention-related MARQ items

Wives' own cost-inflicting tactics items. Just as was done for husbands, logistic regression analyses were performed for wives' individual variables categorized as cost-inflicting and practiced by the self and also for wives' perceived cost-inflicting tactics their husbands practice. In both cases, these were used to predict the odds of separation. For cost-inflicting tactics performed by the wife herself, the overall model was not significant ($\chi^2(2) = 2.16$, p = .340).

Wives' perceptions of their spouse's cost-inflicting tactics items. The analysis for cost-inflicting tactics perceived to be performed by husbands as reported by wives did reveal significant results, with the overall model explaining 11% of the variance in the odds of separation and classifying 88.6% of cases correctly ($\chi^2(4) = 23.49$, $p < .001$). As for individual predictors, only two were significant. The first significant item (and most powerful predictor of separation for wives) was "Have you had sex against you will?" and separation was 1.844 times more likely with increased sexual coercion ($p < .001$). The other significant item was "Is your spouse really nasty to you?", and separation was 1.505 times more likely when wives reported that their husband was nasty to them (p = .027).

Wives' own benefit-provisioning tactics items. The benefit-provisioning tactics were used to predict odds of separation in two logistic regression analyses for both wives own performance of tactics and for their perceptions of their husbands' tactics. The overall model for

wives' own benefit-provisioning tactics was significant ($\chi^2(6) = 19.96$, $p = .003$); it explained 9.5% of the variance and classified 89% of cases correctly. However, only one item was significant in the model, and it was "Do you like to cuddle your spouse?". As enjoyment of cuddling increased, the odds of separation decreased by .638 ($p = .020$).

Wives' perceptions of their spouse's benefit-provisioning tactics items. The model for wives' perceptions of their husbands' benefit-provisioning tactics was also significant ($\chi^2(3) = 20.63$, $p < .001$), explained 9.5% of variance, and classified 88% of cases correctly. Despite the significance of the overall model, only one individual item was significant. The item "Is your husband kind to you?" was associated with the odds of separation as odds decreased by .604 with increased ratings of husbands' kindness by their wives ($p = .006$). Refer to Table 14 for full report of wives' individual items analyses.

APIM analyses

Cost-infliction scores for self. To get a better understanding of moderation by sex and given the non-independence of this type of data, actor-partner interdependence model (APIM) analyses were conducted to examine actor-partner effects. Four of these were run, the first of which involved the averaged scores of cost-inflicting tactics for the self for each spouse to predict the occurrence of separation as the dependent variable. In this model, neither actor nor partner effects were significant.

Cost-infliction scores for the spouse. The second model included averaged scores for husbands' ratings of their wives cost-infliction tactics and vice versa as independent models to predict to same outcome of separation. There were significant actor and partner effects for this model. Specifically, the higher husbands' ratings of their wife's cost-infliction as indicated by the summed score, the higher the likelihood of husbands reporting a period of separation ($\beta =$

.002, $p < .001$; actor effect). The same was observed for wives, as their scores for their perceptions of their husband's cost-infliction increased, so did the likelihood that wives reported a period of separation ($\beta = .205$, $p < .001$; actor effect). Partner effects were also significant such that the higher husband's ratings of cost-infliction tactics for their wife, the higher the likelihood that wives reported a period of separation ($\beta = .002$, $p = .001$; partner effect); and the higher the wife's ratings of the husband's cost-infliction the higher the likelihood of husbands reporting a period of separation ($\beta = .172$, $p < .001$; partner effect). See Table 17 and Figure 2 for APIM analyses concerning cost-inflicting tactics.

Benefit-provisioning scores for the self. A third and fourth model were run to test for effects concerning benefit-provisioning tactics as well. The third APIM model for American couples involved spouses' reports of their own benefit-provisioning tactics (in the form of averaged scores of tactics) on their reports of experiencing separation. The model revealed significant actor and partner effects for both spouses. For husbands, as their own benefit-provisioning score increased, their likelihood of reporting a separation decreased ($\beta = -.001$, $p = .004$; actor effect). For wives, the same finding applied, as their benefit-provisioning score increased they were less likely to report a period of separation ($\beta = -.162$, $p = .004$; actor effect). Similar results were seen for partner effects; as husbands' own benefit-provisioning score increased the odds of the wife reporting a separation decreased ($\beta = -.002$, $p = .001$; partner effect) and vice versa for wives' scores on husbands' reports of separation ($\beta = -.186$, $p < .001$; partner effect).

Benefit-provisioning scores for the spouse. The final APIM model tested effects for ratings of the spouse's benefit-provisioning averaged tactic scores on the odds of separation. Significant findings for both types of effects were found in this model as well. As the husband's

ratings of the wife's benefit-provisioning increased, the odds of him reporting a separation decreased (β = -.002, p < .001; actor effect). As the wife's ratings of the husband's benefit-provisioning increased, the odds of her reporting a separation also decreased (β = -.218, p < .001; actor effect). Additionally, as the husband's ratings of the wife's benefit-provisioning increased, the likelihood of the wife reporting a period of separation decreased (β = -.002, p = .003; partner effect). The same was true of the wife's ratings of the husband's benefit-provisioning on the likelihood of the husband reporting a separation; as benefit-provisioning increased the odds of separation decreased (β = -.165, p = .002; partner effect). See Table 17 and Figure 3 for benefit-provisioning tactics APIM analyses.

Multiple regression predicting cost-infliction scores from male mate value

Husband's own cost-inflicting score. Male mate value in this case was defined by financial status/earning potential and items measuring this trait in the MARQ were used in two multiple regression analyses as predictor variables. In the first analysis, the dependent variable was husbands' self-reported use of cost-inflicting tactics (averaged score). This model was not statistically significant.

Wife's score for husband's cost-infliction. However, the second model that used the same independent variables to predict wives' perceptions of their husbands' cost-infliction was significant (r = .296, F(5, 398) = 7.66, p < .001). Two of the four predictor variables were significant. Specifically, the regression coefficient for the item "Are you happy with your role in life?" indicated that the happier husbands reported being with their role, the lower the score of their wives' perceptions of husbands' cost-infliction (b = -.143, t(403) = -4.36, p < .001). See Table 18 and 19 for more information on male mate value analyses.

Chinese Sample Results

Logistic regression predicting separation from averaged scores of cost-inflicting and benefit-provisioning tactics

Husbands. This analysis was conducted in the same manner as for the American sample. A logistic regression model was run to see the effect of averaged mate retention scores (one's own cost-inflicting score, one's own benefit-provisioning score, score for perception of spouse's cost-infliction, and score for spouse's benefit-provisioning) and demographic covariates (age, duration of marriage, number of children) on the ability to predict separation for husbands. The model was significant ($\chi^2(7) = 41.26$, $p < .001$; 22.8% of variance explained; 88.3% of cases classified correctly). Among the predictors in the model for husbands, the one with the most predictive power was the husband's own benefit-provisioning score, with increasing score making the odds of separation .172 times less likely ($p < .001$). Another significant predictor was the averaged score for husbands' perceptions of their wives' cost-infliction, with increased cost-infliction from their point of view making separation 2.913 times more likely ($p = .002$).

Wives. The model for wives included the same demographic covariates and averaged tactic scores as the above model that was run for husbands. The model for wives was significant ($\chi^2(7) = 46.19$, $p < .001$), explained 25.1% of variance, and classified 89.3% of cases correctly. In terms of covariates, wives' age was significant such that as age increased the odds of separation decreased by .921 ($p = .037$). The covariate of duration of marriage was also significant such that as length of marriage increased, so too did the odds of separation by 1.050 ($p = .034$). In terms of tactic-related predictors, wives' own cost-infliction score was significant as increasing cost-infliction increased the odds of separation by 1.891 ($p = .005$). Also, wives' own benefit-provisioning score was significant as increased benefit-provisioning made separation .146 times less likely ($p < .001$). In addition, the score for their perceptions of their

husbands' cost-infliction was also significant as increasing cost-infliction by husbands in their point of view made separation 3.291 times more likely (p = .001). Refer to Table 10 for more details of the two logistic regression models involving averaged tactic scores for both husbands and wives.

Logistic regression predicting separation for husbands' individual mate retention-related MARQ items

Husbands' own cost-inflicting tactics items. To get a better understanding of possible sex differences, a logistic regression model with all of the items considered cost-inflicting for the self were included to predict the odds of separation for husbands. The overall model was significant ($\chi^2(2) = 7.32$, p = .026) as it explained 3.3% of variance and classified 85.3% of cases correctly. Of the predictors, one was significant. This item was, "Do you feel possessive about your spouse?", and as possessiveness increased the odds of separation also increased by 1.266 (p = .042).

Husbands' perceptions of their spouse's cost-inflicting tactics items. To cover all the cost-inflicting aspects for husbands, another logistic regression model was run with the items that husbands reported being cost-inflicting for them if their wives performed such behaviors. This model was also significant ($\chi^2(4) = 43.33$, $p < .001$), explained 18.9% of variance, and classified 86.6% of cases correctly. All four items within the model were significant. The first item, "Do you wish your spouse was more sexually responsive?", revealed that as the desire for sexual responsivity increased the odds of separation decreased by .715 (p = .037). For the second item, "Is your spouse really nasty to you?", increasing nastiness made the odds of separation 1.659 times more likely (p = .003). For the third item, increased possessiveness increased the odds of separation by 1.528 (for the item "Does your spouse feel possessive about you?"; p = .001).

Lastly, increased sexual coercion by wives increased the odds of separation by 1.383 (for the item "Have you had sex against you will?"; $p = .020$).

Husbands' own benefit-provisioning tactics items. Two logistic regression models were also run for husbands' items related to benefit-provisioning: one for their own benefit-provisioning behaviors and one for their perceptions of their wives' benefit-provisioning behaviors. For husbands' own benefit-provisioning, the overall model was significant ($\chi^2(6) = 42.83$, $p < .001$), explained 18.5% of variance, and classified 86.3% of cases correctly. Of the individual predictors in the model, the item "Are you kind to your spouse?" had the most predictive power, as increased levels of kindness decreased the likelihood of separation by .519 ($p < .001$). Four other items were also significant. The first of these, "Do you take much trouble over your appearance?", revealed that as attention to appearance increased then the odds of separation decreased by .713 ($p = .029$). The second item, "Do you give in when there is a disagreement?", significantly predicted the odds of separation such that increased likelihood of giving in decreased the chance of separation by .498 ($p = .002$). However, for the third item "Are you the first to make up after a row?", an increased inclination to make up first actually increased the odds of separation by 1.476 ($p = .040$) even though that could be closely associated with giving in when there is a disagreement. The last significant item, "Do you enjoy cuddling your spouse?" showed that as enjoyment of cuddling increased the odds of separation decreased by .592 ($p = .001$).

Husbands' perceptions of their spouse's benefit-provisioning tactics items. For the model using items measuring husbands' perceptions of their wives' benefit-provisioning, the model was also significant ($\chi^2(3) = 51.61$, $p < .001$), explained 22.1% of variance, and classified 87.7% of cases correctly. As for individual items, two were significant. The item "Do you find

sexual fulfillment in your marriage?" decreased the odds of separation by .430 with increasing fulfillment ($p < .001$). Also, for the item "Is your spouse kind to you?", the odds of separation actually increased by 1.648 with increasing levels of spousal kindness ($p = .016$). To see more details of these logistic regression analyses for husbands in terms of individual items regarding mate retention tactics, refer to Table 12.

Logistic regression predicting separation for wives' individual mate retention-related MARQ items

Wives' own cost-inflicting tactics items. The same procedure for husbands' individual MARQ items was also conducted for wives' individual items. The first of these analyses was the logistic regression model which included wives' own cost-inflicting tactic items to predict separation. The overall model was significant ($\chi^2(2) = 13.60$, $p = .001$) as it explained 6.3% of variance and classified 87.9% of cases correctly. One of the two predictors in the model were significant. For the item "Do you feel possessive about you spouse?", greater possessiveness increased the likelihood of separation by 1.453 ($p = .001$).

Wives' perceptions of their spouse's cost-inflicting tactics items. The logistic regression model for wives' perceptions of their husbands' cost-infliction was also significant ($\chi^2(4) = 34.74$, $p < .001$) as it explained 16.5% of variance and classified 87.8% of cases correctly. Also, as for individual items in the model, two were significant. The first one, "Is your spouse really nasty to you?", predicted separation such that as wives' perceptions of nastiness by their husbands increased, the odds of separation became 1.868 times more likely ($p = .001$). The second significant item, "Have you had sex against your will?", predicted separation such that as sexual coercion by husbands increased, separation became 1.780 times more likely ($p < .001$).

Wives' own benefit-provisioning tactics items. The first benefit-provisioning logistic regression involved wives' own tactics of this nature. The overall model was significant ($\chi^2(6) = 22.33$, $p = .001$), explained 10.6% of variance, and classified 87.7% of cases correctly. Three of the six items in the model were significant. For the item, "Do you enjoy cuddling your spouse?", as enjoyment of cuddling increased then the odds of separation decreased by .609 ($p = .009$). For the item, "Do you take much trouble over your appearance?", as appearance enhancement increased the odds of separation decreased by .694 ($p = .042$). Lastly, for the item "Are you kind to your spouse?", as kindness increased then the odds of separation decreased by .670 ($p = .046$).

Wives' perceptions of their spouse's benefit-provisioning tactics items. For wives' perceptions of their husbands' benefit-provisioning, the overall model was also significant ($\chi^2(3) = 47.78$, $p < .001$), explained 21.3% of variance, and classified 88.7% of cases correctly. As for individual items in the model, this was the only model in which all predictors were significant. For the item "Do you find sexual fulfillment in your marriage?", as sexual fulfillment increased, the odds of separation decreased by .476 ($p = .001$). For the item "Is your spouse kind to you?", as kindness ratings increased, the odds of separation counterintuitively increased and became 1.863 times more likely ($p = .002$). For the item "Does your spouse pay enough attention to his appearance?", separation became 2.097 times more likely with increasing attention to appearance ratings ($p = .030$). To see more details of these logistic regression analyses for wives in terms of individual items regarding mate retention tactics, refer to Table 15.

APIM analyses

Cost-inflicting scores for the self. Just as was done for the American sample, APIM analyses were run to check for actor-partner effects. The first model that included husbands' and wives' own cost-infliction scores to predict separation yielded significant actor effects. As the

husband's own cost-infliction score increased, so too did the odds of him reporting a period of separation (β = .152, p < .001; actor effect). For wives, the same finding was revealed; as her own cost-infliction score increased so did the odds of her reporting a period of separation (β = .164, p < .001; actor effect). No significant partner effects were found for this model.

Cost-inflicting scores for the spouse. The second model that included scores for husbands' and wives' ratings of their spouse's cost-infliction to predict separation also yielded significant effects. As the husband's ratings of his wife's cost-infliction increased, then so did the chances of him reporting a separation period (β = .208, p < .001; actor effect). The same was true for wives; as the ratings of her husband's cost infliction increased, so did the odds of her reporting separation (β = .219, p < .001; actor effect). Along the same vein, as the husband's rating of the wife's cost-infliction increased, the more likely the wife was to report a separation too (β = .077, p = .037; partner effect). Lastly, as the wife's rating of her husband's cost-infliction increased, so too did the likelihood of the husband reporting a separation (β = .069, p = .038; partner effect). See Table 17 and Figure 4 for more detail on cost-inflicting APIM analyses for Chinese couples.

Benefit-provisioning scores for the self. APIM analyses were also run for own and spouses' benefit-provisioning scores. For the model testing one's own benefit-provisioning scores, significant actor effects were revealed. For husbands, as his own benefit-provisioning score increased then the odds of him reporting a separation decreased (β = -.205, p < .001; actor effect). Similarly, as the wife's own benefit-provisioning score increased, the odds of her reporting a separation decreased (β = -.213, p < .001; actor effect). No significant partner effects were revealed in this model.

Benefit-provisioning scores for the spouse. In the final model concerning benefit-provisioning scores for the spouse, no significant actor or partner effects were identified. For more information on APIM analyses for benefit-provisioning tactics in Chinese couples, see Table 17 and Figure 5.

Multiple regression predicting cost-infliction scores from male mate value

Husband's own cost-infliction score. Using the same procedure as for the American sample, the items related to financial circumstances as a measure of male mate value were entered into multiple regression analyses to predict both husbands' own averaged cost-infliction scores and scores of their wives' perceptions of their cost-infliction. The model predicting husbands' own cost-inflicting scores was significant (r = .249, $F(5, 396) = 5.25$, $p < .001$). Out of the model's predictors, only one was significant. This was the item "Are you happy with your role in life?", and the happier husbands reported being with their role, the lower their cost-infliction score (b = -.202, $t(401) = -4.50$, $p < .001$).

Wife's score for husband's cost-infliction. The second model in which the male mate value items predicted scores for wives' perceptions of their husbands cost-infliction was not significant. For more details of the male mate value analyses, see Tables 18 and 19.

British Sample Results

Logistic regression predicting separation from averaged scores of cost-inflicting and benefit-provisioning tactics

Husbands. Following the same procedure as with the samples from the other two countries, logistic regression analyses for averaged scores of mate retention tactics (for self and perceptions of the spouse) along with covariates were conducted for both husbands and wives. For husbands, the overall model was significant ($\chi^2(7) = 34.67$, $p < .001$), explained 8.6% of

variance, and classified 89.7% of cases correctly. Three out of the seven predictors were significant. In terms of mate retention tactics, increased cost-infliction by wives as reported by husbands increased the odds of separation by 2.023 (p = .006) while increased benefit-provisioning by their wives decreased the odds of separation by .609 (p = .028). As for covariates in the model, husband's age was significant in that increasing age decreased the odds of separation by .947 (p = .049).

Wives. The logistic regression model for wives' averaged tactics was also significant ($\chi^2(7) = 62.64$, $p < .001$) as it explained 14.8% of variance and classified 89.5% of cases correctly. Out of the seven predictors, only two were significant. The only averaged tactics score that was significant was the score for wives' perceptions of their husbands' cost-infliction such that increasing cost-infliction made separation 2.990 times more likely ($p < .001$). The other significant predictor was the wife's age such that increasing age decreased the odds of separation by .938 (p = .026). For more detail, refer to Table 10.

Logistic regression predicting separation for husbands' individual mate retention-related MARQ items

Husbands' own cost-inflicting tactics items. Next, the individual MARQ items that correspond to cost-inflicting tactics (for self and spouse) were entered into logistic regression models to predict the odds of separation. For husbands' own cost-infliction tactics, the model was not significant ($\chi^2(2) = 4.73$, p = .094)

Husbands' perceptions of their spouse's cost-inflicting tactics items. However, the model with the spouse's cost-infliction according to husbands was significant ($\chi^2(4) = 28.07$, $p <$ .001), explained 4.4% of variance, and classified 89.9% of cases correctly. Of the predictors within the model, only one was significant. The significant item was "Is your spouse really nasty

to you?", and increasing ratings of nastiness increased the likelihood of separation by 1.582 ($p <$ .001).

Husbands' own benefit-provisioning tactics items. Two logistic regression models were performed for benefit-provisioning tactics as reported by husbands in the same manner as was done for cost-inflicting tactics. The first model that included husbands' own benefit-provisioning tactics was significant ($\chi^2(6) = 28.11$, $p < .001$), explained 4.5% of variance, and classified 89.8% of cases correctly. Out of the six predictor items, only one was significant. For the item "Are you kind to your spouse?", increasing levels of kindness decreased the likelihood of separation by .586 ($p < .001$).

Husbands' perceptions of their spouse's benefit-provisioning tactics items. The second model with husbands' reports of wives' benefit-provisioning was also significant ($\chi^2(3) =$ 34.95, $p < .001$) as it explained 5.4% of variance and classified 89.7% of cases correctly. This time, two of the three predictors were significant. The item "Is your spouse kind to you?" was significant such that as kindness increased, the likelihood of separation decreased by .672 ($p =$ .001). The item "Do you find sexual fulfillment in your marriage?" was also significant such that increasing levels of fulfillment decreased the odds of separation by .779 ($p = .005$). For a more detailed description of individual MARQ item analyses for husbands, consult Table 13.

Logistic regression predicting separation for wives' individual mate retention-related MARQ items

Wives' own cost-inflicting tactics items. This procedure for individual MARQ mate retention tactics was repeated for wives in the British sample. The cost-inflicting model for tactics performed by the self was not significant ($\chi^2(2) = 1.52$, $p = .468$).

Wives' perceptions of their spouse's cost-inflicting tactics items. However, the model that included wives' perception of their husbands' cost-infliction was significant ($\chi^2(4) = 74.50$, $p < .001$), explained 11.1% of variance, and classified 89.1% of cases correctly. Additionally, three of the four predictors were significant. The first significant item, "Do you wish your spouse was more sexually responsive to you?", made separation 1.307 times more likely as wives' wishes for husbands' being more sexually responsive increased ($p = .002$). For the second significant item "Is your spouse really nasty to you?", as nastiness ratings increased separation became 1.868 times more likely ($p < .001$). For the last significant item in the model, "Have you had sex against your will?", as sexual coercion by husbands increased, the odds of separation also increased by 1.270 ($p = .021$).

Wives' own benefit-provisioning tactics items. The logistic regression model for wives' own benefit-provisioning tactics was significant ($\chi^2(6) = 45.86$, $p < .001$) as it explained 7% of variance and classified 88.7% of cases correctly. Three out of the six predictor items were significant. For the item "Do you enjoy cuddling your spouse?", as enjoyment of cuddling increased, the odds of separation decreased by .689 ($p < .001$). For the item "Do you hold hands?", it was revealed that the more likely couples were to hold hands, the likelihood of separation became less likely by .835 ($p = .034$). Finally, for the item "Are you the first to make up after a row?", as wives were more likely to initiate making up, separation became 1.364 times more likely ($p = .006$).

Wives' perceptions of their spouse's benefit-provisioning tactics items. The model predicting separation from wives' perceptions of their husbands' benefit-provisioning was also significant ($\chi^2(3) = 61.64$, $p < .001$). The variance explained was 9% and 89% of cases were classified correctly. Two of the three items in the model were significant. For the item "Is your

spouse kind to you?", as ratings of husbands' kindness increased, the odds of separation decreased by .524 (p < .001). For the second item, "Do you find sexual fulfillment in your marriage?", as fulfillment increased for wives, the odds of separation decreased by .818 (p = .011). For more details on wives' individual MARQ items related to mate retention tactics, refer to Table 16.

APIM analyses

Cost-infliction scores for the self. APIM analyses were run for British samples as well to account for non-independence between husbands and wives. The first model that included cost-infliction scores for the self for each spouse to predict the occurrence of separation revealed significant partner effects. Specifically, as the husband's own cost-infliction score increased, so did the odds of his wife reporting a period of separation (β = .040, p .025, partner effect). For wives, as her own cost-infliction score increased, the odds of her husband reporting a period of separation also increased (β = .041, p = .026; partner effect). No actor effects were found for this model.

Cost-infliction scores for the spouse. The second model that included averaged cost-infliction ratings for each respondent's spouse yielded both significant actor and partner effects. For husbands, the more cost-infliction they perceived their wife to perform, the higher the likelihood that they would report separation (β = .145, p < .001; actor effect). For wives, too, the more they reported cost-infliction by their husbands the more likely they were to report an occurrence of separation (β = .157, p < .001; actor effect). Additionally, the more husbands reported cost-infliction by their wives, the more likely the wives were to report a period of separation (β = .091, p < .001; partner effect). Similarly, the more wives reported cost-infliction by their husbands, the more likely the husbands were to report separation (β = .104, p < .001;

partner effect). To see the APIM analyses on cost-inflicting tactics for British couples, consult Table 17 and Figure 6.

Benefit-provisioning scores for the self. Two more models on respondents' own benefit-provisioning score and those they reported for their spouse were run for British couples as well. In the model concerning each spouse's own benefit-provisioning score, there were both significant actor and partner effects. Specifically, as husbands reported more benefit-provisioning, they were less likely to report separation (β = -.095, p < .001; actor effect). For wives, as their own benefit-provisioning score increased, their likelihood of reporting separation decreased as well (β = -.094, p < .001; actor effect). As husbands' own benefit-provisioning scores increased, the odds of their wife reporting a period of separation decreased (β = -.074, p < .001; partner effect). Lastly, as wives' own benefit-provisioning scores increased, the odds of their husband reporting a separation decreased (β = -.079, p < .001; partner effect).

Benefit-provisioning scores for the spouse. The model investigating ratings of the spouse's benefit-provisioning tactics also revealed significant actor and partner effects. For husbands, as their ratings of their wife's benefit-provisioning increased then the odds of them reporting a separation period decreased (β = -.139, p < .001; actor effect). A similar effect was found for wives; as their ratings of their husband's benefit-provisioning increased, they were less likely to report a period of separation (β = -.138, p < .001; actor effect). Partner effects were found to be in the same direction as actor effects in this model. As husbands' ratings of their wife's benefit-provisioning increased, the less likely their wives were to report separation (β = -.097, p < .001; partner effect). As wives' ratings of their husband's benefit-provisioning increased, the less likely husbands were to report a period of separation (β = -.102, p < .001;

partner effect). Consult Table 17 and Figure 7 for benefit-provisioning tactics APIM analyses for British couples.

Multiple regression predicting cost-inflicting scores from male mate value

Husband's own cost-infliction score. The same set of MARQ items used to measure male mate value for the American and Chinese samples were also used in this sample to predict cost-infliction scores for husbands and wives' reports of their husbands' cost-infliction scores in multiple regression analyses. The model for husbands' own cost-inflicting averaged scores was significant (r = .271 , F(5, 1310) = 20.83, p < .001). Specifically, the regression coefficient for the item "Is money a problem in your marriage?" indicated that as money became less of a problem, the cost-inflicting scores of husbands increased (b = -.141, t(1315) = -5.99, p < .001). For the item, "Do you consider yourselves well off?", the regression coefficient revealed that the more husbands thought they were well off then the higher their cost-infliction scores (b = .095, t(1315) = 2.96, p = .003). Additionally, the regression coefficient for the item "Are you happy with your role in life?" indicated that as husbands got happier with their role in life, the lower their cost-inflicting scores became (b = -.093, t(1315) = -3.89, p < .001). Lastly, for the item, "How much of the joint income do you earn?", it was found that as income increased so too did cost-infliction scores (b = .104, t(1315) = 4.06, p < .001).

Wife's score for husband's cost-infliction. The regression model predicting scores for wives' perceptions of husbands' cost-inflicting scores was also significant (r = .260, F(5, 1311) = 18.98, p < .001). The coefficient for the item "Is money a problem in your marriage?" indicated that as money became less of a problem, cost-infliction perceptions of wives for their husbands increased (b = -.064, t(1316) = -4.04, p < .001). The regression coefficient for the item, "Are you content with where you live?", revealed that the more content husbands were with

where they lived the lower their wives' perceptions of their cost-infliction (b = -.032, t(1316) = -2.29, p = .022). The coefficient for the item "Are you happy with your role in life?" revealed that as husbands became happier with their role in life, scores for wives' perceptions of cost-infliction decreased (b = -.085, t(1316) = -5.30, p < .001). Lastly, for the item, "How much of the joint income do you earn?", as husbands contributed more to the joint income, the lower their wives' perceptions of their cost-infliction (b = -.036, t(1316) = -2.08, p = .038). Refer to Tables 18 and 19 for these multiple regression analyses.

Russian Sample Results

The same set of analyses were run for a sample of Russian couples (N = 405). Averaged scores were used to predict odds of separation, individual items were also used to predict separation, and male mate value items were used to predict cost-infliction scores for husbands. However, none of these analyses were significant. Therefore, they will not be included in tables or figures nor discussed further.

Discussion

American sample

The application of the benefit-provisioning and cost-inflicting framework on mate retention was generally successful in predicting the effectiveness of such tactics. *Hypothesis 1a* was not supported as tactics performed by the self, either benefit-provisioning or cost-inflicting, did not predict the likelihood of separation. *Hypothesis 1b*, on the other hand, was supported as increased use of cost-inflicting tactics as perceived by one's spouse increased the odds of separation.

As for sex differences, there was found to be a difference between husbands and wives in terms of the predictive power of cost-inflicting tactics on the odds of separation, which supports

Hypothesis 2. That is, the use of cost-inflicting tactics by the husband from the wife's point of view significantly increased the odds of separation. Upon analysis of individual cost-inflicting tactics, the use of sexual coercion by husbands was the strongest predictor of separation for wives. For husbands, rather than cost-inflicting tactics by their spouse, the strongest predictor of separation was lack of wives' benefit-provisioning from their perspective, as the use of benefit-provisioning tactics significantly decreased the odds of separation. These findings were echoed upon examination of individual tactics rather than just scores for each type. The use of cost-inflicting tactics did not predict separation as well as the lack of benefit-provisioning, especially appearance enhancement by their wives. Even after controlling for the issue of non-independence among married couples through APIM analyses, wives' perceptions of their husbands' cost-infliction was more influential on the incidence of separation than any other measure of cost-inflicting tactics (including those reported by husbands and wives for themselves, or for husbands reports of wives).

Hypothesis 3 was also supported as low male mate value was associated with higher use of cost-inflicting tactics (again, according to wives' reports and not their own). The measure used to assess male mate value in this study was financial status/earning potential as reported by husbands, and this measure did significantly predict the use of cost-inflicting tactics, especially when husbands indicated that they were not satisfied with their role in life (which relates to status).

One more significant finding emerged, and it was not specifically hypothesized beforehand. For wives, their age significantly predicted the incidence of separation such that increasing age actually decreased the odds of separation. Possible explanations for this finding will be addressed in the general discussion section.

Chinese sample

As far as the role of types of mate retention tactics to predict separation is concerned, both *Hypotheses 1a and 1b* were partially supported. The use of cost-inflicting tactics by the self was significant for wives as was predicted by Hypothesis 1a, as increased cost-inflicting tactics by wives through their own self-reports did indeed increase the odds of separation. This was not the case for husbands though. Additionally, the use of benefit-provisioning tactics self-reported by both spouses decreased the odds of separation, which still fits with the expected pattern of Hypothesis 1a. Hypothesis 1b was supported for both husbands and wives, as the odds of separation increased when their perceptions of their spouses' cost-infliction increased.

The findings from the Chinese sample support *Hypothesis 2* in that cost-inflicting tactics were more of a concern and influence on wives in relation to experiencing a period of separation compared to husbands. More specifically, wives seem most likely to experience separation when they are often subjected to sexual coercion by their husbands. This was the most predictive item for American wives as well. However, the Chinese wives diverge from the American wives in that although husbands' cost-infliction does significantly contribute to the likelihood of separation, the strongest contributor was their own benefit-provisioning tactics. Upon examination of specific benefit-provisioning tactics, the most predictive item regarded the wife enjoying cuddling with her husband as this decreased the odds of separation. For husbands, separation was most significantly related to their own-benefit provisioning in the same way as it was for wives. Specifically, such tactics decreased the odds of separation and analysis of individual items in this category revealed that kindness toward their wives had the most predictive power in decreasing the likelihood of separation. After factoring in dyadic data analysis through the APIM, it seems that for Chinese couples cost-infliction tactics, especially by

the husband as perceived by the wife, better predicted separation than wives' use of cost-infliction tactics.

Regarding *Hypothesis 3*, male mate value predicted husbands' own cost-infliction scores but not scores for their wives' perceptions of their cost-infliction. As money became less of a problem, their cost-infliction scores decreased. Similarly, the happier husbands were in their role in life, the lower their cost-infliction scores. Both findings are in accord with Hypothesis 3.

Similar to the American couples, some demographic variables were important in predicting separation for Chinese couples. Once again, this was only the case for wives. As their age increased, the likelihood that they reported a separation decreased. However, as wives' duration of marriage increased, so too did the odds of separation. Such variables will be addressed in the general discussion section.

British sample

Just as with the American and Chinese samples, cost-inflicting mate retention tactics did positively predict the odds of separation which supports *Hypothesis 1*. Specifically, cost-inflicting tactics performed by the self did not significantly predict the likelihood of separation for neither husbands nor wives; therefore, *Hypothesis 1a* was not supported. However, cost-inflicting tactics performed by the spouse positively predicted the likelihood of separation for both husbands and wives which supports *Hypothesis 1b*.

Another similarity between the American and Chinese samples is that these results support *Hypothesis 2* in that cost-inflicting tactics were more indicative of separation when they were performed by men, from the wives' perspectives. In fact, for wives, cost-inflicting tactics by husbands was the strongest predictor of separation. For specific cost-inflicting tactics, the husband being really nasty toward the wife had the biggest impact on the

likelihood of separation. After accounting for non-independence with the APIM, the role of wives' perceptions of their husbands' cost-infliction was further reinforced as it had the strongest effect on separation likelihood out of all the cost-infliction averaged scores.

For husbands, both types of mate retention tactics performed by wives contributed to the odds of separation, increasing them with cost-infliction and decreasing them with benefit-provisioning. Despite both types of tactics impacting the odds of separation, upon examination of individual items, the one that was the strongest predictor was the husband's own reports of his kindness such that increasing kindness decreased the odds of separation.

As for the role of male mate value, *Hypothesis 3* was supported in that both husbands' own reports of their cost-inflicting and wives' reports of their husbands' cost-inflicting were associated with financial earnings/status. According to both husbands and wives, as husbands were more content with their role/status in life, the lower their cost-infliction scores.

Just like with the American and Chinese couples, the covariate of age significantly predicted the likelihood of separation. For British couples, both the husband's age and the wife's age were significant. For both spouses, as their ages increased, then the odds of separation decreased. Age has been an important factor in all the samples analyzed so it will be addressed in more detail in the general discussion section.

Across all three cultures, similar findings were revealed that generally supported the theoretical framework of Miner and colleagues (2009). There were, however, some cultural idiosyncrasies that are addressed in more detail in the general discussion section.

CHAPTER 6 GENERAL DISCUSSION

The present studies confirmed the effectiveness of mate retention tactics as described by the benefit-provisioning and cost-inflicting theoretical framework (Miner, et al., 2009). This was the first research (to the author's knowledge) to test mate retention tactic effectiveness through the direct observation of relationship dissolution or separation rather than relying on relationship satisfaction as a proxy for effectiveness. The hypotheses of this research were largely supported across both studies (and across cultures), as cost-inflicting tactics were more likely to lead to separation; this finding was more pronounced when men engaged in cost-inflicting tactics, and male mate value was negatively associated with the tendency to use cost-inflicting tactics.

Cost-inflicting versus benefit-provisioning tactics

In Study 1, it was revealed that self-reported use of cost-inflicting tactics did not impact the odds of relationship dissolution. Instead, self-reported use of benefit-provisioning tactics increased the likelihood of ex-partner abandonment. This is the opposite of *hypothesis 1a* which had an expectation that cost-inflicting tactics would increase the odds of ex-partner abandonment. However, *hypothesis 1b* was supported in that participants' reports of increased cost-inflicting tactics used by their ex-partner was associated with greater likelihood of participants dissolving the relationship.

In Study 2, the same pattern was revealed in married couples who experienced a period of separation. Once again, husbands and wives' own cost-inflicting behavior did not impact the odds of separation (which did not support *hypothesis 1a*) generally speaking; whereas perceptions of the spouse's increased use of cost-inflicting tactics did increase the odds of separation (for wives) in accord with *hypothesis 1b*.

There are speculations as to why the opposite pattern of that expected for hypothesis 1a occurred in Study 1. Given the counterintuitive finding that increased benefit-provisioning was associated with increased odds of ex-partner-initiated dissolution, this fits with Ellis and Malamuth's (2000) discrete systems model of love and anger in which behaviors associated with increasing feelings of love and commitment between partners operate independently of those associated with increasing feelings of anger/upset between partners. That is, partners who exhibit high levels of love-boosting behaviors are not any less likely to engage in anger-provoking behaviors toward their partners. This also fits with previous research that has found that, especially for males, both positive and negative types of mate retention tactics increase for individuals who are of low status or detect a threat to their relationship (Shackelford, et al., 2005). This line of reasoning is also supported by the finding in Study 1 of the current research that women were more likely to break up with male partners that exhibited high levels of benefit-provisioning. Therefore, male participants in Study 1 could be having better memory for the benefit-provisioning behaviors they performed than for the cost-inflicting ones that they also performed at around the same period as a last-ditch effort to keep their ex-partner from leaving. This memory bias could work to maintain a positive image of the self, especially as a buffer to the drop in self-esteem and/or status associated with being abandoned by a romantic partner.

Benefit-provisioning tactics were important in Study 2 as well, especially in that they decreased the odds of experiencing a period of separation over the course of marriage. The use of such tactics was beneficial for both spouses as indicated both by logistic regression results and APIM results, and the ones that had the biggest influence on the incidence of separation were those related to displays of love and physical affection (e.g. cuddling, holding hands, sexual fulfillment). Perhaps these physical affection activities increase levels of oxytocin, which in turn

reinforces the emotional intensity of the bond between spouses (Schneiderman, Zagoory-Sharon, Leckman, & Feldman, 2012). Additionally, physical affection (both sexual and non-sexual in nature) can reduce levels of stress and cortisol (Holt-Lunstad, Birmingham, & Light, 2008); thus, it could be speculated that it is especially beneficial for people who have many other sources of stress (e.g. career, children) as the marriage could serve as a buffer for the hassles of day-to-day life. Having the marriage serve this buffer role could also reinforce the value of the marriage and motivate one to maintain it.

Moderation by sex

In both studies, it was found that the relationship between mate retention tactics and the odds of separation was moderated by sex. However, this was only the case for women's perceptions of their male partner's use of tactics rather than men's self-reports of their own tactics. In Study 1, there was a significant interaction between participant gender and reports of the ex-partner's benefit-provisioning tactics such that women were more likely to break up with male partners that they perceived as frequently engaging in benefit-provisioning tactics (thought to reflect an uptake in both types of tactics as a reaction to an impending breakup). In Study 2, wives were more likely to report a period of separation in their marriage when they perceived greater cost-inflicting tactics performed by their husbands.

The findings across these two studies support greater female choosiness as predicted by parental investment theory (Trivers, 1972). It also corroborates the large body of literature that found evidence of greater female choosiness in both initial mate selection (Kenrick, Groth, Trost, & Sadalla, 1993; Woodward & Richards, 2005; Todd, Penke, Fasolo, & Lenton, 2007) and relationship maintenance (DeLecce & Weisfeld, 2016; Kalmijn & Poortman, 2006; Weisfeld, et al., 2011).

Additionally, husbands in Study 2 were more concerned about benefits they perceived that their wives were lacking to provision rather than direct costs. Furthermore, the strongest impact on the likelihood of separation for husbands was the lack of appearance enhancement by wives (as perceived by their husbands). This also supports parental investment theory (Trivers, 1972) in terms of sex differences in mating preferences; specifically, that men place greater emphasis on physical attractiveness as it signals fertility and women place greater emphasis on resource provisioning as it signals ability/willingness to engage in paternal investment. In Study 2 of the present research, when husbands felt that their wives were no longer taking care of their bodies or maintaining their health to the point that their physical appearance suffered (which could impede on women's fertility and hence mate value), they were more likely to report a period of separation from such wives.

For wives, they were more concerned about the perceived direct costs inflicted upon themselves by their husbands than the lack of benefits, especially sexual coercion. This is in alignment with the importance that women place on free choice in mating arrangements and one of the most costly outcomes of intersexual competition for women is when they are robbed of that autonomy and ability to "be the gatekeepers" of sexual access (Wilson, Daly, & Scheib, 1997).

The role of male mate value

Across both studies, male mate value was associated with cost-inflicting mate retention tactics as predicted by Hypothesis 3. In Study 1, females' perceptions of their male ex-partners' mate value in terms of their popularity predicted cost-inflicting tactics. In more detail, higher popularity ratings positively predicted cost-inflicting tactics. As mentioned earlier, higher male popularity could make it easier for men to engage in the cost-inflicting behavior of flirting with

other women to make their partner jealous. In Study 2, husbands' self-reports of their mate value in terms of their status/role negatively predicted their wives' perceptions of their use of cost-infliction.

The findings (at least in Study 2) are in accord with Miner and colleagues' (2009) research on the role of male mate value in types of mate retention. Indeed, they found that men who are of higher mate value are more likely to use benefit-provisioning tactics, and that men who are of low mate value/status are especially likely to use cost-inflicting tactics. The findings across both studies also corroborate the hypothesis put forth by Daly and Wilson (1988) that men who are of low status will be more likely to use violence (including sexual coercion) to retain a mate as they lack the resources to engage in benefit-provisioning tactics such as buying gifts for their partner. Men of low status are also more likely to engage in risky behavior (Daly & Wilson, 1988) and men who engage in a mate retention strategy marked by violence run the risk of partner defection to escape such violence. In Study 1 especially, this was indeed the case as women were more likely to desert an ex-partner that they perceived to be engaging in cost-inflicting tactics (of which violence is an example). Perhaps men who lack the ability to provision benefits can successfully retain mates through violence in short-term contexts, but such a strategy can be problematic in long-term contexts.

The role of age

Across both studies, there were significant covariates in the models that were used in analyses. Although it was not originally hypothesized, there was a theme in that age continuously showed to be significant across various analyses, which indicates that it plays an important role and should also be addressed. In Study 2, age was the strongest predictor of separation for wives, in the direction that increasing age was associated with decreased odds of separation. In Study 1,

it was shown that participants were more likely to break up with their partners as their age increased.

It is likely that these findings reflect how important a woman's age is to her mate value. As was previously discussed, men are more concerned about a mate's physical attractiveness as it signals health and fertility. Because only women have a finite fertile period in their lives that is ended abruptly by menopause (Menken & Larsen, 1986), age is an excellent indicator of fertility, and often physical attractiveness in women is possible due to being of a relatively young age. Previous research has found this to be the case as, in general, men prefer women who are younger than themselves (Buss, 1989) and that this preference for mates that are younger becomes more exaggerated as men age themselves (Kenrick & Keefe, 1992). In other words, men prefer women who are in the age range of peak fertility (approximately 23-28; Symons, 1979) regardless of their own age. When the men are young themselves, they prefer women who are slightly younger or even the same age; however, this preference does not change as they themselves age and they prefer mates of greater and greater age differences from themselves that are still within the peak age range of fertility (Kenrick & Keefe, 1992).

In the case of the current research, the findings align with sex differences in age preferences of a mate from an evolutionary perspective. Wives in Study 2 were less likely to report separation as they aged, which could reflect the fact that their increasing age is decreasing their mate value and therefore cannot afford to be as choosy and initiate separation from their husbands. Participants in Study 1 were more likely to initiate breakups from their partners as their own ages increased. Because there were more male than female participants in Study 1 (66% to 34% respectively) and that analyses specific to each sex showed that increasing age only made men more likely to break up with their partners, this could be reflecting the age preference

of men in that they are breaking up with their aging partners in the hopes of acquiring a younger mate in the future. However, the extent to which men can manage this strategy is heavily dependent upon their own mate value which depends on status. The pattern from Study 1, that men were more likely to break up with partners as their own age increased but their partners were also less likely to abandon them, supports this speculation too. Men typically accrue resources and higher status as they age, and they very well could afford to breakup with their aging partner due to their increased status with age.

The significance of age in the present research also corroborates the moderation by sex findings by reinforcing sex differences in mate preferences. In initial mate selection, women often have more specific criteria in mind when seeking a long-term mate relative to men, and part of this criteria includes personality traits. Concern over traits could be a clue as to what types of mate retention tactics a potential mate may engage in once a relationship is established. This is important information for women to take into consideration in order to have a mate who is the least likely to inflict serious costs upon her, as costs inflicted upon women by men are often more severe than those inflicted upon men by women (Henning & Feder, 2004). Therefore, the decision to remain with a mate should be more influenced by personality traits and behaviors of the mate for women. For men, on the other hand, their reproductive success is more enhanced by having a mate who is fertile. Therefore, from an evolutionary perspective, a woman's age should be given more weight in the decision to remain with a mate than what types of mate retention tactics she uses. The current results do, indeed, conform to this notion.

An alternative explanation for the significance of age in the results could simply be due to a cohort effect. Especially in Study 2, the odds of experiencing a period of separation decreased with age, and this could reflect that couples who are older have been together longer

and their relationship is stable enough to stand the test of time. Because couples in Study 2 ranged in age from 20 to 89, it is likely that the younger couples at the time of data collection had not been married long enough to test the stability of their relationship and some may have divorced in subsequent years; couples still married in their 80s and able to participate in the study would be in stable marriages because unstable ones would have been weeded out through the years by that point. Yet still, older couples could have more traditional values about marriage such as being opposed to divorce.

The role of culture

The discussion of the results thus far does fit the broad patterns found in American, British, and Chinese samples; however, this is not to say that cultural differences did not arise. There were indeed some cultural differences and they also should be addressed. Perhaps the biggest difference was that of American couples in Study 2 compared to British and Chinese couples. Although husbands in all three cultures placed importance on their wives' appearance in the decision to stay with their partner, American husbands seemed to place a larger emphasis on it than the other cultures. The biggest effect size overall in Study 2 was found for American husbands being much more likely to experience a period of separation from wives who did not maintain their physical attractiveness to their preferred standards.

Another difference that distinguished the American couples from the others is that displays of kindness by either spouse had no significant impact on the incidence of separation. For the other cultures, displays of kindness generally decreased the odds of separation, especially when displayed by husbands. It would seem intuitive that kindness would help to strengthen a marital bond, and past research using the same cross-cultural data has found that kindness is the strongest ingredient necessary to ameliorate marital conflict (Dillon, et al., 2015). This also

supports longitudinal research on married couples that concluded that the lack of kindness, rather than the display of aggressiveness and contempt per se, is most indicative of impending divorce (Gottman, 1994).

Perhaps the decreased importance placed on kindness and the increased importance placed on physical attractiveness in America relative to other countries (at least based on this data) is a reflection of its highly individualistic nature. Even though individualism is usually associated with Western cultures and collectivism is associated with Eastern cultures (Triandis, 1995), there is variability among Western countries and previous research has ranked the United States as the most individualistic of modern societies (Forbes, Zhang, Doroszewicz, & Haas, 2009; Oyserman, Coon, & Kemmelmeier, 2002). Therefore, the personal desires of the individual may be emphasized even more heavily in America than in Britain. Such values in America could potentially change the function of marriage so that it is a way to increase one's own happiness or even status relative to others. When the marriage is no longer serving this function, then couples may feel it is best to end it in search of other more personally fulfilling endeavors. In more Eastern cultures such as China, on the other hand, an emphasis on social obligations to others (including spouses) and the avoidance of conflict is the norm and assertiveness can even be viewed as shameful (Forbes, et al., 2009; Xu, Farver, Schwartz, & Chang, 2004). Therefore, it would be expected that married couples would spend more time putting their own desires aside and displaying kindness for the good of the marriage. The present results fit this pattern, as kindness was considered more important for China, and for Britain which is individualistic but less so than America, which valued kindness considerably less than the other nations.

Limitations

The current research is not without its limitations. In Study 1, the data collected depended upon self-reports from participants to describe themselves and their ex-partners, which could possibly lead to inaccurate or biased perceptions of ex-partner mate retention tactic reports. Biases could be especially relevant since approximately 75% of the sample did not initiate the breakup, therefore a "dumpee effect" could be in place in that the reports in Study 1 are mainly reflections of people who got dumped rather than a balanced look at both sides of a breakup. This could also be why there were more male participants than female ones (as women are more likely to initiate breakups according to previous literature). Study 2 was an attempt to control for this problem as it included self-reports from both husbands and wives. Despite this, in Study 2, the biggest limitation for the American sample was that it was not very representative of the American population, as only 11.8% of the sample reported experiencing a period of separation. Additionally, these couples were very homogenous in that they all reported being relatively happy in their marriages, which is not representative of the population, especially in light of the over 50% divorce rate in America (Kennedy & Ruggles, 2014).

Another limitation of Study 2 is that it did not use the same instrument as Study 1 (the first study used the MRI-SF while the second study used the MARQ) which introduces the possibility that not exactly the same concepts were being measured across both studies. This would be hard to pin down, however, due to the multidimensional nature of both the MRI-SF and the MARQ as well as the multi-dimensional nature of the items considered cost-inflicting and benefit-provisioning for both. An additional difficulty with the MARQ is its limited focus on items related to easily observable behaviors compared to the MRI-SF that could make it hard to estimate the frequency of mate retention tactic use. Many items relate to how spouses feel or think about one another, which may not always directly translate into behavior. For example, one

such item is “Would you feel lost without your spouse?”, and it could be matched up with the cost-inflicting Emotional Manipulation category of the MRI-SF in terms of feelings, however this does not necessarily mean that the respondent will act on such feelings in front of his or her spouse. This makes it potentially problematic to include as a mate retention tactic item. Whereas in the MRI-SF, the item is made clear in terms of what behavior comes with such feelings as it reads, “Pleaded that I could not live without my partner.”

On a similar note, tactics on the MRI-SF that are considered to be cost-inflicting or benefit-provisioning by Miner and colleagues (2009) could be viewed differently in other contexts. For instance, the category of Commitment Manipulation was categorized as cost-inflicting; however, it included the item “Asked my partner to marry me” which can be benefit-provisioning in the context of a relationship in which both partners desire to further their commitment in such a manner

At a broader level, perhaps the biggest limitation was the cross-sectional nature of the research as this feature makes generalizability questionable. Also, participants of both studies were primarily (although not entirely) WEIRD (western, educated, industrialized, rich, and democratic) in nature, which also can pose problems for generalizability of the results (Ceci, Kahan, & Braman, 2010).

Future Directions

To get a better understanding of how mate retention tactics may or may not lead to relationship dissolution, future research should examine this in a longitudinal study. Specifically, couples in exclusive romantic relationships could provide information about their mate retention tactics and relationship satisfaction in an intake session and then one year later they could complete a follow-up survey on their current mate retention tactics (to track any changes) and if

the couple is still together or not. Mate retention tactics between couples who stay together could be compared to those who break up to look for differences in types of tactics most frequently used. Such a design could also be used to track married couples and what tactics are used between couples who stay together versus those who get divorced. Differences between the two types of couples (married vs unmarried) could be examined as the greater expected commitment in marriage may produce different relationship dynamics.

Another direction for future research could be to try out different categorizations of mate retention tactics other than what was used in the current research. The aim of the current research was to see how well this specific type of categorization by Miner and colleagues (2009) predicted mate retention effectiveness, and other categorizations could be more useful. This could especially be true for cross-cultural research, as some behaviors (not the most obviously costly ones) may be considered cost-inflicting by one culture and benefit-provisioning by another. An example of this situation was demonstrated by Lopes and colleagues (2016) in which a Brazilian sample completed the MRI-SF and reported that the categories of emotional manipulation, commitment manipulation, and derogation of competitors were actually considered benefit-provisioning. This is contrary to the categorization of tactics used by Miner and colleagues (2009) which places these types of tactics under the cost-inflicting category. The results of the present research suggest this might be the case as well. The existing categorizations that have been tested are based on American ideals, and therefore the emphasis on individualism and the need to be independent. While emotional manipulation is intended to be viewed as a way to guilt someone into staying in a relationship with a person who may be perceived as overly needy by Western standards, it could be interpreted differently. In more collectivist cultures it could be a signal of the willingness to maintain the relationship as a unit as this idea is preferred

over independence in such contexts. In the future, different combinations of categorizations could be tested simultaneously to see which has better statistical power in predicting mate retention effectiveness.

Still other avenues for future research exist. Now that mate retention tactics have been shown to have differential effectiveness, a next step could be to find out what factors mediate the types of tactics individuals choose to use in their relationships. One possibility is attachment style. It could be speculated that those who are securely attached would be more interested in maintaining a long-term relationship and this would motivate them to engage in more effective mate retention tactics such as displaying love and care (and other benefit-provisioning tactics). Conversely, those who are insecurely attached (especially with an avoidant attachment style) tend to be more short-term oriented in their relationships (Schmitt, 2005) and may choose tactics that are more cost-inflicting in nature (either consciously or not) to ensure their relationships are indeed short-term. Even among the two types of insecure attachment there could be different preferred tactics. One speculation is that avoidant individuals may be more likely to use the cost-inflicting tactic of Jealousy Induction to signal to their current mate that they have plenty of other offers and that their relationship is therefore nothing special. On the other side of this attachment spectrum, anxiously attached individuals may be more likely to use the cost-inflicting tactic of Emotional Manipulation to signal to their mate that their relationship is so important to them and their devotion so strong that they would be willing to end their own lives if the relationship ended. These are just a few ideas concerning mediating factors and possibilities abound.

Conclusion

The current research has successfully shown that mate retention tactics are not all the same and that some are more likely to lead to relationship dissolution or separation than others.

Tactics that entice partners to remain in the relationship, such as buying gifts or enhancing one's appearance to look more attractive for one's partner, decrease the odds of separation. Conversely, tactics that inflict costs on partners, especially in the form of violence and sexual coercion as a way to manipulate their partner into staying, actually increase the odds of separation. Gender plays a large role in this set of findings due to asymmetry between the sexes in parental investment. This leads to greater female choosiness, and in the present research it is manifested in the form of women being more likely to leave partners who frequently engage in cost-inflicting mate retention behaviors. Furthermore, this relationship between gender and mate retention tactics is more pronounced when male mate value is factored into the picture. Those of low male mate value and/or status are more likely to use cost-inflicting tactics toward their female partners, which in turn increases the already heightened odds of female-initiated relationship dissolution.

APPENDIX A

Table 1. Mate retention tactic categorization of cost-inflicting items within the MRI-SF.

Category	Tactic	Item
Direct Guarding	Vigilance	Called to make sure my ex-partner was where they said they would be
		Snooped through my ex-partner's personal belongings
	Concealment of Mate	Did not take my ex to party where other attractive people were present
		Took my ex away from gathering where attractive others were around
	Monopolize Time	Insisted that my ex-partner spend all their free time with me
		Spent all my free time with my ex so they could not meet anyone else
Intersexual Neg. Inducements	Jealousy Induction	Talked to someone else at a party to make my ex jealous
		Showed interest in someone else to make my ex angry
	Punish Threat to Cheat	Became angry when my ex flirted too much
		Threatened to break up if my ex ever cheated on me
	Emo. Manipulation	Pleaded that I could not live without my ex-partner
		Told my ex-partner that I was dependent on them
	Commit. Manipulation	Told my ex that we needed a total commitment to each other
		Asked my ex-partner to marry me
	Derogate Competitors	Pointed out to my ex the flaws of someone else
		Told my ex-partner that another same-sex member was stupid
Intrasexual Neg. Inducements	Derogation of Mate	Told members of the same sex that my ex was a pain
		Told others of the same sex that my ex was not a nice person
	Intrasexual Threats	Stared coldly at someone who was looking at my ex-partner
		Gave someone a dirty look when that person looked at my ex
	Violence on Rivals	Got my friends to beat up someone who was interested in my ex
		Slapped someone who made a pass at my ex-partner

Table 2. Mate retention tactic categorization of benefit-provisioning items within the MRI-SF.

Category	Tactic	Item
Positive Inducements	Resource Display	Bought my ex-partner an expensive gift
		Took my ex-partner out to a nice restaurant
	Sexual Inducements	Performed sexual favors to keep my ex-partner around
		Had a physical relationship with my ex-partner to deepen our bond
	Enhance Appearance	Made myself extra attractive for my ex-partner
		Made sure that I looked nice for my ex-partner
	Love and Care	Displayed greater affection for my ex-partner
		Complimented my ex-partner on their appearance
	Submission and Debasement	Gave in to my ex-partner's every wish
		Went along with everything my ex-partner said
Public Signals of Possession	Verbal Possession Signals	Told my same sex friends how much my ex-partner and I were in love
		Bragged about my ex-partner to other people of the same sex
	Physical Possession Signals	Held my ex-partner's hand while attractive others were around
		Put my arm around my ex-partner in front of others
	Possessive Ornamentation	Gave my ex-partner jewelry to signify that they were taken
		Asked my ex-partner to wear my ring

Table 3. Descriptives for target variables.

Variable	Self		Ex-partner	
Mate retention averaged scores	Mean	SD	Mean	SD
Cost-inflicting scores	1.52	0.53	1.67	0.57
Benefit-provisioning scores	2.22	0.65	2.11	0.60
Male mate value items				
Ambitiousness	6.33	2.56	6.04	2.61
Intelligence	7.62	1.69	6.68	1.92
Popularity	5.23	2.59	6.44	2.14
	N	%	*N*	%
Breakup inititaion	104	24.7	317	75.3

Table 4. Step 1 of hierarchical logistic regression results for predicting odds of self-initiated relationship dissolution from self and ex-partner mate retention tactics.

Variable	*B*	S.E.	Wald	ExpB	*p*
Length of time elapsed since breakup	.037	.117	.100	1.038	.752
Length of relationship	-.335**	.121**	7.62**	.715**	.006**
Current relationship status	.130	.104	1.57	1.139	.211
Age	.043*	.017*	6.62*	1.044*	.010*
Race/Ethnicity	.204	.270	.572	1.227	.450
Gender	-.314	.255	1.52	.730	.218
Cost-inflicting tactics (self)	-.687	.371	3.42	.503	.064
Benefit-provisioning tactics (self)	-.632*	.274*	5.32*	.531*	.021*
Cost-inflicting tactics (ex-partner)	.893**	.300**	8.84**	2.443	.003**
Benefit-provisioning tactics (ex-partner)	.307	.274	1.26	1.360	.261
		$X^2(10) = 46.67$; $p < .001$***			

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 5. Step 2 of hierarchical logistic regression results for predicting odds of self-initiated relationship dissolution from self and ex-partner mate retention tactics after addition of interaction terms.

Variable	*B*	S.E.	Wald	ExpB	*p*
Length of time elapsed since breakup	.017	.120	.020	1.017	.887
Length of relationship	-.305*	.123*	6.17*	.737*	.013*
Current relationship status	.108	.105	1.06	1.115	.303
Age	.040*	.017*	5.33*	1.040*	.021*
Race/Ethnicity	.299	.275	1.18	1.349	.277
Gender	-3.15**	1.13**	7.73**	.043**	.005**
Cost-inflicting tactics (self)	-1.34*	.603*	4.94*	.262*	.026*
Benefit-provisioning tactics (self)	-.356	.415	.733	.701	.392
Cost-inflicting tactics (ex-partner)	.901*	.406*	4.92*	2.46*	.027*
Benefit-provisioning tactics (ex-partner)	-.321	.350	.840	.725	.360
Cost-inflicting self * Gender	1.070	.762	1.97	2.92	.160
Benefit-provisioning self * Gender	-.754	.569	1.76	.470	.185
Cost-inflicting ex * Gender	-.322	.619	.270	.725	.604
Benefit-provisioning ex * Gender	1.62**	.582**	7.71**	5.027**	.006**
			$X^2(14) = 58.87$; $p < .001$***		

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 6. Multiple regression results for predicting cost-inflicting scores from male mate value.

Variable	*b*	S.E.	*β*	*t*	*p*	r^2	*F*	*p*
Predicting men's own scores from mate value								
						.025	1.37	.235
Yearly Income	-.026	.025	-.070	-1.07	.288			
Education Level	.066	.034	.125	1.96	.051			
Ambitiousness	-.001	.016	-.003	-.043	.966			
Intelligence	-.027	.021	-.083	-1.30	.196			
Popularity	.016	.016	.074	1.04	.301			
Predicting women's male ex-partners' scores								
						.075*	3.74*	.013*
Ambitiousness	-.025	.020	-.120	-1.25	.212			
Intelligence	-.048	.026	-.165	-1.81	.073			
Popularity	.051*	.022*	.205*	2.36*	.020*			

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 7. Mate retention tactic categorization for MARQ items

	Self	Spouse
Cost-inflicting tactics	(15) Do you feel possessive about your spouse?	(83) Do you wish your spouse was more sexually responsive to you?
	(31) Do you take your spouse for granted?	(152) Is your spouse really nasty to you?
		(38) Does your spouse feel possessive about you?
		(130) Have you had sex against your will?
Benefit-provisioning tactics	(93) Do you enjoy cuddling your spouse?	(65) Do you find sexual fulfillment in your marriage?
	(81) Do you hold hands?	(64) Is your spouse kind to you?
	(75) Do you take much trouble over your appearance?	(112) Does your spouse pay enough attention to his/her appearance?
	(45) Do you give in when there is a disagreement?	
	(24) Are you the first to make up after a row?	
	(19) Are you kind to your spouse?	

Table 8. MARQ items used to assess financial status/earning potential.

(13) Is money a problem in your marriage?
(82) Do you consider yourselves well off?
(103) Are you content with where you live?
(129) Are you happy with your role in life?
(04) How much of the joint income do you earn?

Table 9. Descriptives for target variables.

Variable	American (*N* = 420)		Chinese (*N* = 419)		British (*N* = 1357)	
Mate retention tactics averaged scores	Mean	SD	Mean	SD	Mean	SD
Cost-inflicting score (husbands-self)	2.69	0.77	2.00	0.85	2.92	0.83
Benefit-provisioning score (husbands-self)	3.82	0.47	2.95	0.44	3.66	0.46
Cost-inflicting score (husbands-spouse)	2.21	0.48	2.38	0.57	2.30	0.50
Benefit-provisioning score (husbands-spouse)	3.38	0.56	2.37	0.32	3.39	0.56
Cost-inflicting score (wives-self)	2.65	0.75	2.12	0.85	2.74	0.81
Benefit-provisioning score (wives-self)	3.76	0.50	3.08	0.42	3.65	0.48
Cost-inflicting score (wives-spouse)	2.05	0.54	2.39	0.56	2.09	0.55
Benefit-provisioning score (wives-spouse)	3.39	0.56	2.29	0.36	3.37	0.57
Demographic covariates						
Age (husbands)	42.35	10.81	39.84	7.60	38.47	12.44
Age (wives)	39.94	10.31	38.05	6.97	36.14	12.01
Length of marriage (years)	15.32	11.26	13.94	7.76	13.17	10.43
Number of children	2.14	1.44	1.03	0.36	1.74	1.43
Male mate value items (for husbands)						
Is money a problem in your marriage?	3.71	1.04	2.09	1.07	3.61	1.07
Do you consider yourselves well off?	3.61	0.79	3.11	0.68	3.23	0.76
Are you content with where you live?	3.87	1.10	2.97	1.13	3.79	1.10
Are you happy with your role in life?	3.85	0.88	3.75	0.94	3.64	1.03
How much of the joint income do you earn?	3.84	0.84	3.45	0.76	4.06	0.86
	N	%	*N*	%	*N*	%
Experienced separation period	50	11.80	55	13.45	144	10.85

Table 10. Logistic regression results for mate retention tactics predicting the odds of separation.

Variable	Husbands					Wives				
American	*B*	S . E .	Wald	ExpB	*p*	*B*	S . E .	Wald	ExpB	*p*
Age	-.046	.033	1.97	.955	.160	-.087*	.042*	4.37*	.916*	.036*
Length of marriage	.031	.030	1.04	1.032	.308	.058	.039	2.24	1.06	.134
Number of children	.062	.135	.212	1.064	.645	.150	.140	1.15	1.162	.283
Cost-inflict (self)	-.394	.226	3.04	.674	.081	-.022	.233	.009	.978	.924
Benefit-provision (self)	-.287	.346	.690	.750	.406	-.447	.364	1.51	.639	.219
Cost-inflict (spouse)	.425	.384	1.23	1.530	.268	.828*	.341*	5.90*	2.288*	.015*
Benefit-provision (spouse)	-1.09**	.317**	11.71**	.338**	.001**	-.454	.350	1.68	.635	.195
	$\chi2(7) = 34.07$***					$\chi2(7) = 27.56$***				
Chinese										
Age	-.070	.040	3.00	.933	.083	-.083*	.040*	4.36*	.921*	.037*
Length of marriage	.018	.023	.591	1.018	.442	.048*	.023*	4.51*	1.050*	.034*
Number of children	.159	.630	.063	1.172	.801	-.304	.771	.156	.738	.693
Cost-inflict (self)	.235	.231	1.04	1.265	.307	.637**	.228**	7.78**	1.891**	.005**
Benefit-provision (self)	-1.76***	.465***	14.38***	.172***	<.001***	-1.92***	.515***	13.94***	.146***	<.001***
Cost-inflict (spouse)	1.069**	.342**	9.76**	2.913**	.002**	1.19**	.372**	10.26**	3.291**	.001**
Benefit-provision (spouse)	-.010	.574	.000	.990	.986	.092	.531	.030	1.096	.863
	$\chi2(7) = 41.26$***					$\chi2(7) = 46.19$***				
British										
Age	-.054*	.028*	3.86*	.947*	.049*	-.064*	.028*	4.98*	.938*	.026*
Length of marriage	.046	.029	2.51	1.047	.113	.046	.030	2.35	1.047	.126
Number of children	.023	.104	.049	1.023	.825	.026	.103	.062	1.026	.803
Cost-inflict (self)	.070	.156	.199	1.072	.656	.001	.151	.000	1.001	.994
Benefit-provision (self)	-.486	.278	3.06	.615	.080	-.480	.277	3.001	.618	.083
Cost-inflict (spouse)	.705**	.257**	7.51**	2.023**	.006**	1.095***	.236***	21.46***	2.99***	<.001***
Benefit-provision (spouse)	-.496*	.225*	4.86*	.609*	.028*	-.453	.232	3.83	.636	.050
	$\chi2(7) = 34.67$***					$\chi2(7) = 62.64$***				

Note: * p <.05; ** p < .01; *** p < .001

Table 11. Logistic regression results for individual mate retention tactics predicting the odds of separation for American husbands.

Variable	*B*	S.E.	Wald	ExpB	*p*
Cost-inflicting (self)					
Do you feel possessive about your spouse?	-.122	.128	.904	.885	.342
Do you take your spouse for granted?	-.173	.155	1.25	.841	.264
			$\chi 2(2) = 2.17$		
Cost-inflicting (spouse)					
Do you wish spouse was more sexually responsive?	.177	.156	1.28	1.193	.257
Is your spouse really nasty to you?	.602**	.191**	9.94**	1.826**	.002**
Does your spouse feel possessive about you?	-.068	.144	.225	.934	.635
Have you had sex against your will?	.284	.231	1.51	1.329	.220
			$\chi 2(4) = 17.10$**		
Benefit-provisioning (self)					
Do you enjoy cuddling your spouse?	-.417*	.190*	4.83*	.659*	.028*
Do you hold hands?	-.237	.181	1.72	.789	.190
Do you take much trouble over your appearance?	-.234	.158	2.18	.792	.140
Do you give in when there is a disagreement?	.208	.245	.719	1.231	.397
Are you the first to make up after a row?	.388*	.194*	3.98*	1.474*	.046*
Are you kind to your spouse?	-.300	.222	1.82	.741	.178
			$\chi 2(6) = 28.16$***		
Benefit-provisioning (spouse)					
Do you find sexual fulfillment in your marriage?	-.579**	.167**	11.94**	.561**	.001**
Is your spouse kind to you?	-.169	.207	.669	.844	.414
Does your spouse pay attention to appearance?	-1.28**	.426**	9.00**	.279**	.003**
			$\chi 2(3) = 31.85$***		

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 12. Logistic regression results for individual mate retention tactics predicting the odds of separation for Chinese husbands.

Variable	*B*	S.E.	Wald	ExpB	*p*
Cost-inflicting (self)					
Do you feel possessive about your spouse?	.236*	.116*	4.12*	1.266*	.042*
Do you take your spouse for granted?	.201	.135	2.24	1.223	.134
			$\chi2(2) = 7.32$*		
Cost-inflicting (spouse)					
Do you wish spouse was more sexually responsive?	-.336*	.161*	4.37*	.715*	.037*
Is your spouse really nasty to you?	.506**	.171**	8.79**	1.659**	.003**
Does your spouse feel possessive about you?	.424**	.133**	10.17**	1.528**	.001**
Have you had sex against your will?	.324*	.139*	5.45*	1.383*	.020*
			$\chi2(4) = 43.33$***		
Benefit-provisioning (self)					
Do you enjoy cuddling your spouse?	-.525**	.163**	10.35**	.592**	.001**
Do you hold hands?	.045	.167	.072	1.046	.788
Do you take much trouble over your appearance?	-.338*	.155*	4.77*	.713*	.029*
Do you give in when there is a disagreement?	-.697**	.230**	9.21**	.498**	.002**
Are you the first to make up after a row?	.389*	.189*	4.24*	1.476*	.040*
Are you kind to your spouse?	-.656***	.170***	14.88***	.519***	<.001***
			$\chi2(6) = 42.83$***		
Benefit-provisioning (spouse)					
Do you find sexual fulfillment in your marriage?	-.844***	.225***	14.06***	.430***	<.001***
Is your spouse kind to you?	.499*	.207*	5.80*	1.648*	.016*
Does your spouse pay attention to appearance?	.454	.364	1.55	1.575	.213
			$\chi2(3) = 51.61$***		

Note: * $p < .05$; ** $p < .01$; $p < .001$

Table 13. Logistic regression results for individual mate retention tactics predicting the odds of separation for British husbands.

Variable	*B*	S.E.	Wald	ExpB	*p*
Cost-inflicting (self)					
Do you feel possessive about your spouse?	-.007	.075	.010	.993	.922
Do you take your spouse for granted?	.211*	.098*	4.63*	1.234*	.031*
			$\chi2(2) = 4.73$		
Cost-inflicting (spouse)					
Do you wish spouse was more sexually responsive?	.170	.091	3.49	1.185	.062
Is your spouse really nasty to you?	.459***	.103***	19.70***	1.582***	<.001***
Does your spouse feel possessive about you?	.016	.080	.041	1.016	.840
Have you had sex against your will?	.135	.154	.770	1.145	.380
			$\chi2(4) = 28.07$***		
Benefit-provisioning (self)					
Do you enjoy cuddling your spouse?	-.109	.131	.693	.897	.405
Do you hold hands?	-.126	.096	1.73	.881	.189
Do you take much trouble over your appearance?	.046	.099	.212	1.047	.645
Do you give in when there is a disagreement?	-.119	.149	.639	.888	.424
Are you the first to make up after a row?	-.131	.119	1.22	.877	.270
Are you kind to your spouse?	-.534***	.149***	12.92***	.586***	<.001***
			$\chi2(6) = 28.11$***		
Benefit-provisioning (spouse)					
Do you find sexual fulfillment in your marriage?	-.249**	.088**	8.03**	.779**	.005**
Is your spouse kind to you?	-.398**	.121**	10.86**	.672**	.001**
Does your spouse pay attention to appearance?	-.367	.269	1.86	.693	.173
			$\chi2(3) = 34.95$***		

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 14. Logistic regression results for individual mate retention tactics predicting the odds of separation for American wives.

Variable	*B*	S.E.	Wald	ExpB	*p*
Cost-inflicting (self)					
Do you feel possessive about your spouse?	-.037	.128	.084	.964	.773
Do you take your spouse for granted?	.236	.169	1.95	1.267	.162
			$\chi 2(2) = 2.16$		
Cost-inflicting (spouse)					
Do you wish spouse was more sexually responsive?	.178	.140	1.62	1.195	.203
Is your spouse really nasty to you?	.409*	.184*	4.92*	1.505*	.027*
Does your spouse feel possessive about you?	.076	.137	.309	1.079	.579
Have you had sex against your will?	.612***	.168***	13.35***	1.844***	<.001***
			$\chi 2(4) = 23.49$***		
Benefit-provisioning (self)					
Do you enjoy cuddling your spouse?	-.449*	.194*	5.38*	.638*	.020*
Do you hold hands?	-.128	.174	.538	.880	.463
Do you take much trouble over your appearance?	.263	.192	1.89	1.301	.170
Do you give in when there is a disagreement?	.281	.271	1.07	1.324	.301
Are you the first to make up after a row?	-.352	.235	2.25	.703	.133
Are you kind to your spouse?	-.138	.234	.348	.871	.555
			$\chi 2(6) = 19.96$**		
Benefit-provisioning (spouse)					
Do you find sexual fulfillment in your marriage?	-.268	.150	3.20	.765	.074
Is your spouse kind to you?	-.503**	.182**	7.61**	.604**	.006**
Does your spouse pay attention to appearance?	-.603	.358	2.83	.547	.093
			$\chi 2(3) = 20.63$***		

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 15. Logistic regression results for individual mate retention tactics predicting the odds of separation for Chinese wives.

Variable	*B*	S.E.	Wald	ExpB	*p*
Cost-inflicting (self)					
Do you feel possessive about your spouse?	.374**	.116**	10.46**	1.453**	.001**
Do you take your spouse for granted?	.236	.150	2.45	1.266	.117
			$\chi2(2) = 13.60$**		
Cost-inflicting (spouse)					
Do you wish spouse was more sexually responsive?	-.071	.181	.155	.931	.694
Is your spouse really nasty to you?	.625**	.184**	11.50**	1.868**	.001**
Does your spouse feel possessive about you?	.210	.143	2.16	1.233	.142
Have you had sex against your will?	.577***	.161***	12.86***	1.780***	<.001***
			$\chi2(4) = 34.74$***		
Benefit-provisioning (self)					
Do you enjoy cuddling your spouse?	-.495**	.188**	6.91**	.609**	.009**
Do you hold hands?	-.172	.171	1.01	.842	.315
Do you take much trouble over your appearance?	-.365*	.180*	4.13*	.694*	.042*
Do you give in when there is a disagreement?	-.186	.210	.782	.831	.377
Are you the first to make up after a row?	-.187	.170	1.22	.829	.270
Are you kind to your spouse?	-.400*	.201*	3.97*	.670*	.046*
			$\chi2(6) = 22.33$**		
Benefit-provisioning (spouse)					
Do you find sexual fulfillment in your marriage?	-.741**	.220**	11.36**	.476**	.001**
Is your spouse kind to you?	.622**	.201**	9.61**	1.863**	.002**
Does your spouse pay attention to appearance?	.740*	.342*	4.70*	2.097*	.030*
			$\chi2(3) = 47.78$***		

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 16. Logistic regression results for individual mate retention tactics predicting the odds of separation for British wives.

Variable	*B*	S.E.	Wald	ExpB	*p*
Cost-inflicting (self)					
Do you feel possessive about your spouse?	.047	.070	.460	1.049	.498
Do you take your spouse for granted?	.096	.094	1.06	1.101	.303
			$\chi2(2) = 1.52$		
Cost-inflicting (spouse)					
Do you wish spouse was more sexually responsive?	.268**	.085**	9.82**	1.307**	.002**
Is your spouse really nasty to you?	.625***	.103***	36.96***	1.868***	<.001***
Does your spouse feel possessive about you?	.129	.076	2.88	1.137	.090
Have you had sex against your will?	.239*	.103*	5.35*	1.270*	.021*
			$\chi2(4) = 74.50$***		
Benefit-provisioning (self)					
Do you enjoy cuddling your spouse?	-.373***	.104***	12.79***	.689***	<.001***
Do you hold hands?	-.181*	.085*	4.48*	.835*	.034*
Do you take much trouble over your appearance?	.130	.101	1.66	1.139	.198
Do you give in when there is a disagreement?	-.153	.140	1.18	.858	.277
Are you the first to make up after a row?	.310**	.112**	7.65**	1.364**	.006**
Are you kind to your spouse?	-.150	.134	1.25	.861	.263
			$\chi2(6) = 45.86$***		
Benefit-provisioning (spouse)					
Do you find sexual fulfillment in your marriage?	-.201*	.079*	6.42*	.818*	.011*
Is your spouse kind to you?	-.645***	.111***	33.61***	.524***	<.001***
Does your spouse pay attention to appearance?	-.197	.198	.986	.822	.321
			$\chi2(3) = 61.64$***		

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 17. APIM results for predicting separation from self and spousal mate retention tactic scores.

Mate retention tactic	Report of separation			
	Husband		Wife	
American	*β*	*p*	*β*	*p*
Husband's own cost-infliction score	.000	.634	.000	.830
Wife's own cost-infliction score	.011	.829	.025	.633
Husband's cost-infliction score for spouse	.002***	<.001***	.002**	.001**
Wife's cost-infliction score for spouse	.172***	<.001***	.205***	<.001***
Husband's own benefit-provisioning score	-.001**	.004**	-.002**	.001**
Wife's own benefit-provisioning score	-.186***	<.001***	-.162**	.004**
Husband's benefit-provisioning score for spouse	-.002***	<.001***	-.002**	.003**
Wife's benefit-provisioning score for spouse	-.165**	.002**	-.218***	<.001***
Chinese				
Husband's own cost-infliction score	.152***	<.001***	.029	.446
Wife's own cost-infliction score	.027	.444	.164***	<.001***
Husband's cost-infliction score for spouse	.208***	<.001***	.077*	.037*
Wife's cost-infliction score for spouse	.069*	.038*	.219***	<.001***
Husband's own benefit-provisioning score	-.205***	<.001***	-.047	.229
Wife's own benefit-provisioning score	-.042	.232	-.213***	<.001***
Husband's benefit-provisioning score for spouse	.001	.986	.041	.298
Wife's benefit-provisioning score for spouse	.042	.295	.001	.986
British				
Husband's own cost-infliction score	.028	.144	.040*	.025*
Wife's own cost-infliction score	.041*	.026*	.026	.145
Husband's cost-infliction score for spouse	.145***	<.001***	.091***	<.001***
Wife's cost-infliction score for spouse	.104***	<.001***	.157***	<.001***
Husband's own benefit-provisioning score	-.095***	<.001***	-.074***	<.001***
Wife's own benefit-provisioning score	-.079***	<.001***	-.094***	<.001***
Husband's benefit-provisioning score for spouse	-.139***	<.001***	-.097***	<.001***
Wife's benefit-provisioning score for spouse	-.102***	<.001***	-.138***	<.001***

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 18. Multiple regression results for predicting husband's own cost-inflicting scores from male mate value.

	r^2 = .012		F = 0.96		p = .443
American	*b*	S.E.	*β*	*t*	*p*
Is money a problem in your marriage?	-.040	.043	-.055	-.930	.353
Do you consider yourselves well off?	.077	.058	.080	1.34	.182
Are you content with where you live?	.012	.040	.017	.288	.773
Are you happy with your role in life?	-.069	.049	-.080	-1.41	.160
How much of the joint income do you earn?	-.025	.046	-.028	-.549	.583
	r^2 = .062***		F = 5.25***		p < .001***
Chinese	*b*	S.E.	*β*	*t*	*p*
Is money a problem in your marriage?	.026	.040	.033	.642	.521
Do you consider yourselves well off?	.015	.065	.012	.234	.815
Are you content with where you live?	.052	.038	.070	1.40	.163
Are you happy with your role in life?	-.202***	.045***	-.224***	-4.50***	<.001***
How much of the joint income do you earn?	.007	.055	.006	.128	.898
	r^2 = .074***		F = 20.83***		p < .001***
British	*b*	S.E.	*β*	*t*	*p*
Is money a problem in your marriage?	-.141***	.024***	-.184***	-5.99***	<.001***
Do you consider yourselves well off?	.095**	.032**	.088**	2.96**	.003**
Are you content with where you live?	-.045*	.021*	-.061*	-2.16*	.031*
Are you happy with your role in life?	-.093***	.024***	-.116***	-3.89***	<.001***
How much of the joint income do you earn?	.104***	.026***	.109***	4.06***	<.001***

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Table 19. Multiple regression results for predicting scores for wives' perceptions of their husbands' cost-infliction from male mate value.

	r^2 = ..088***		F = 7.66***		p < .001***
American	*b*	S.E.	*β*	*t*	*p*
Is money a problem in your marriage?	-.026	.029	-.050	-.877	.381
Do you consider yourselves well off?	.006	.039	.008	.147	.884
Are you content with where you live?	-.033	.027	-.068	-1.21	.227
Are you happy with your role in life?	-.143***	.033***	-.238***	-4.36***	<.001***
How much of the joint income do you earn?	-.009	.031	-.015	-.298	.766
	r^2 = .018		F = 1.48		p = .195
Chinese	*b*	S.E.	*β*	*t*	*p*
Is money a problem in your marriage?	.034	.027	.066	1.25	.211
Do you consider yourselves well off?	.045	.043	.054	1.04	.300
Are you content with where you live?	.021	.025	.042	.815	.415
Are you happy with your role in life?	-.054	.030	-.091	-1.78	.076
How much of the joint income do you earn?	.027	.037	.037	.735	.463
	r^2 = .068***		F = 18.98***		p < .001***
British	*b*	S.E.	*β*	*t*	*p*
Is money a problem in your marriage?	-.064***	.016***	-.125***	-4.04***	<.001***
Do you consider yourselves well off?	.021	.022	.029	.974	.330
Are you content with where you live?	-.032*	.014*	-.064*	-2.29*	.022*
Are you happy with your role in life?	-.085***	.016***	-.159***	-5.30***	<.001***
How much of the joint income do you earn?	-.036*	.017*	-.056*	-2.08*	.038*

Note: * p < .05; ** p < .01; *** p < .001

APPENDIX B

Figure 1. Interaction effect between benefit-provisioning scores of ex-partners and participant gender on the odds of participants initiating the breakup.

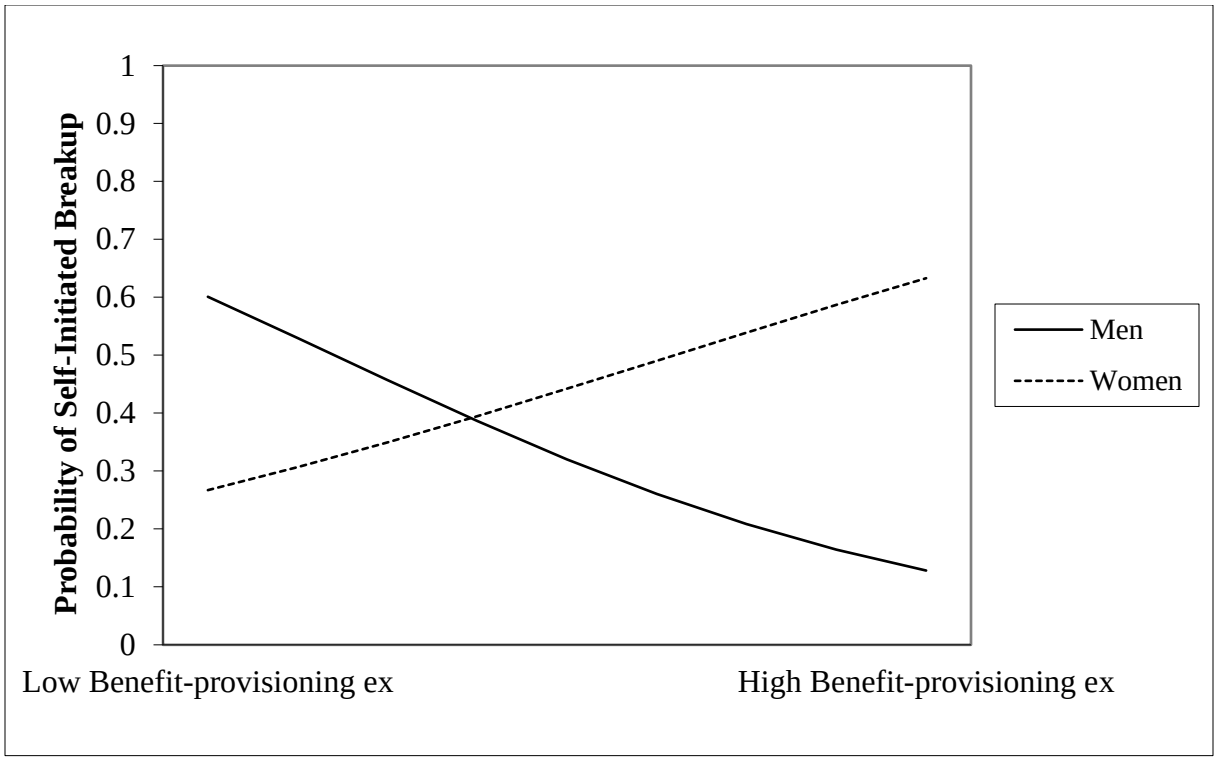
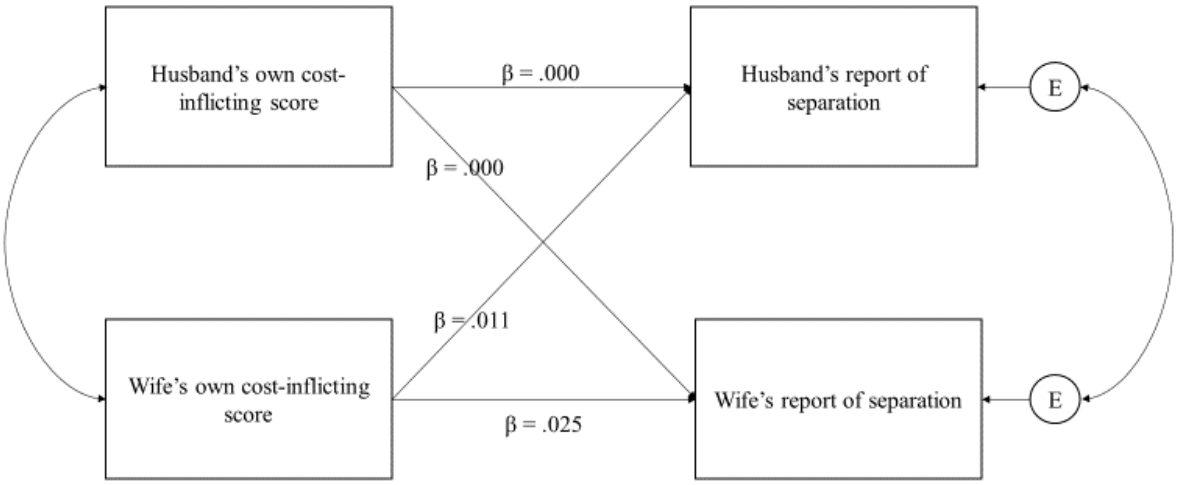
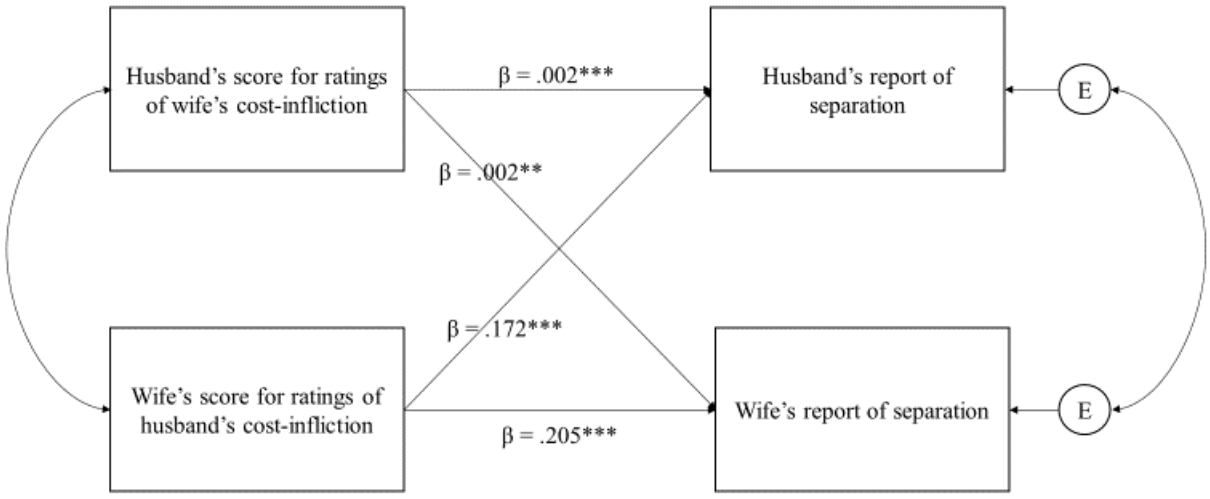


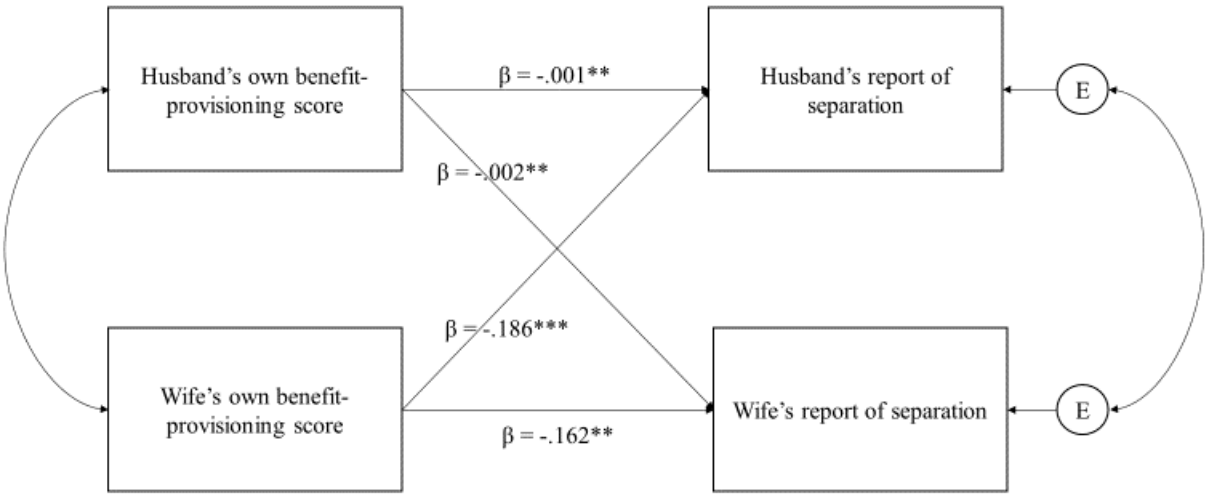
Figure 2. Actor-partner interdependence models for cost-inflicting tactics for American couples.

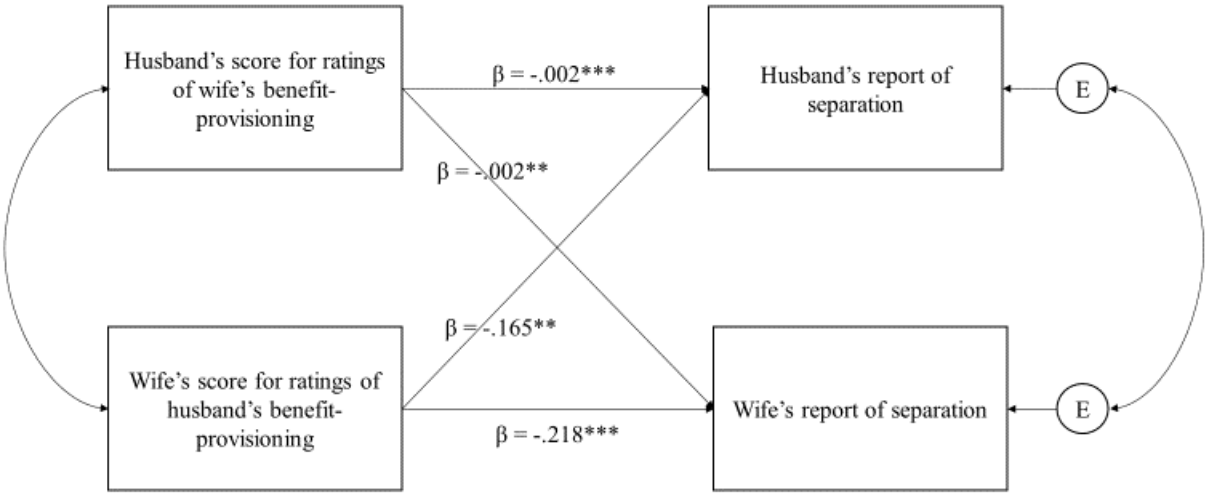




Note: * $p < .05$; ** $p < .01$; *** $p < .001$

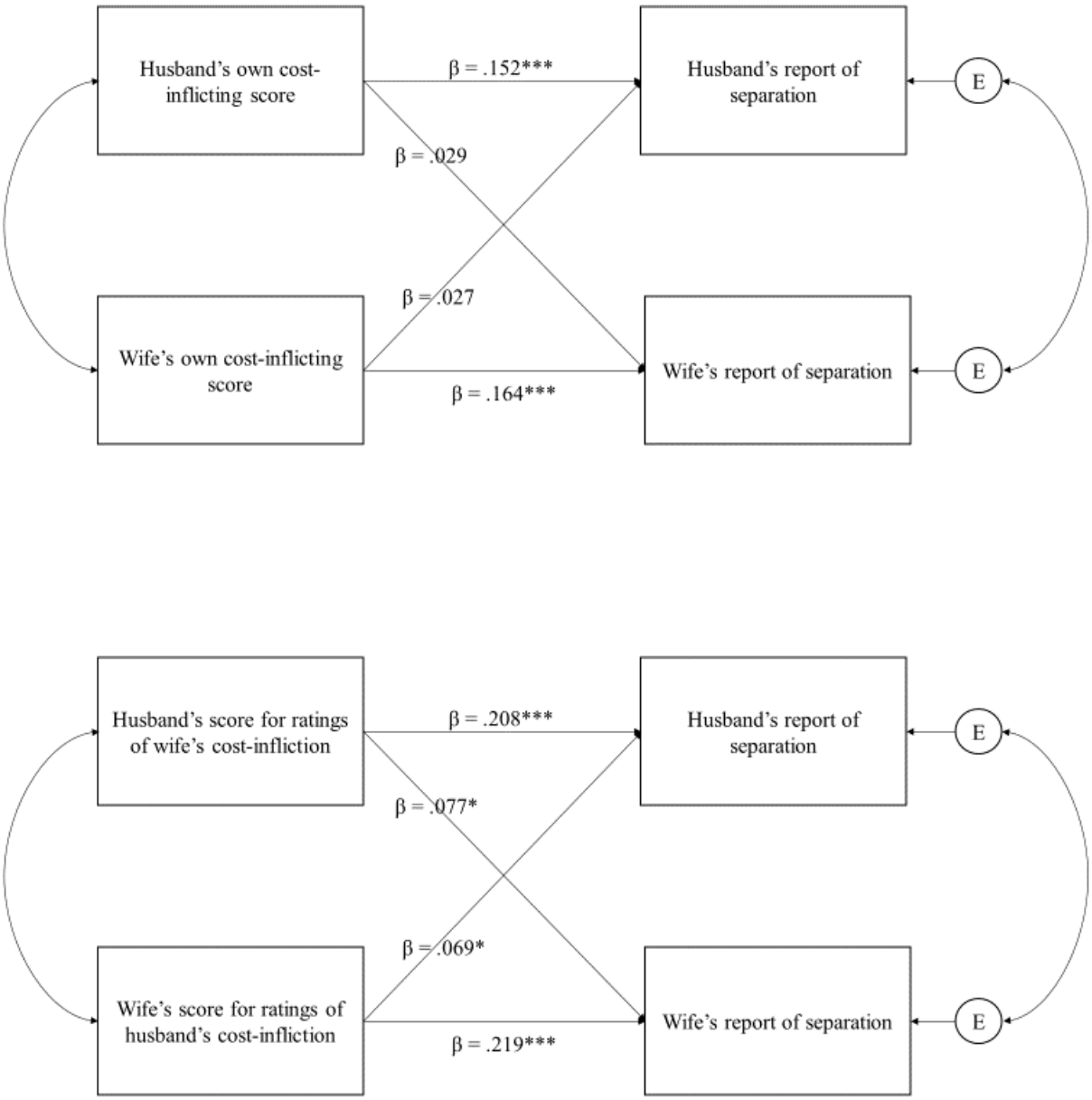
Figure 3. Actor-partner interdependence models for benefit-provisioning tactics for American couples.





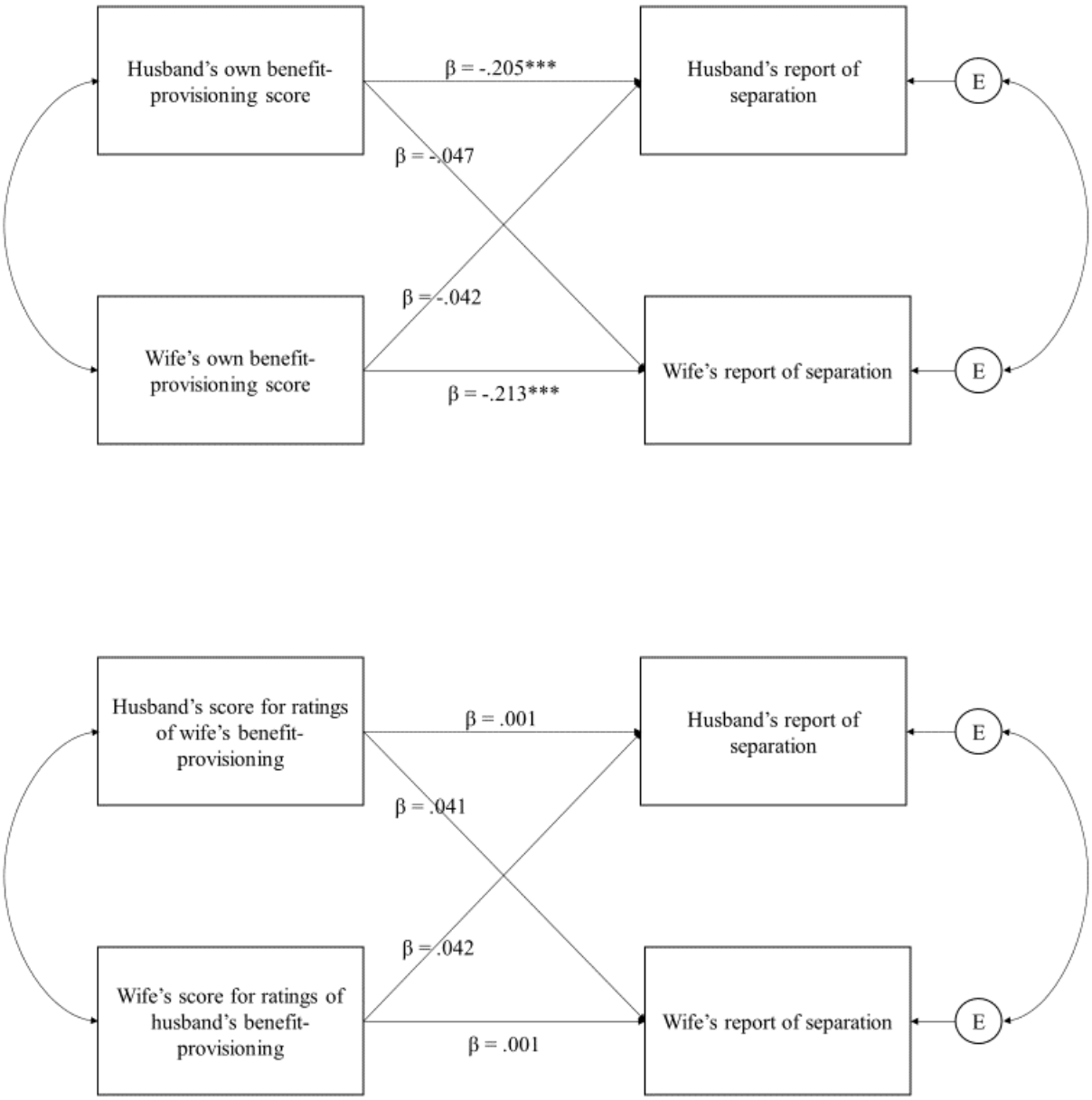
Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 4. Actor-partner interdependence models for cost-inflicting tactics for Chinese couples.



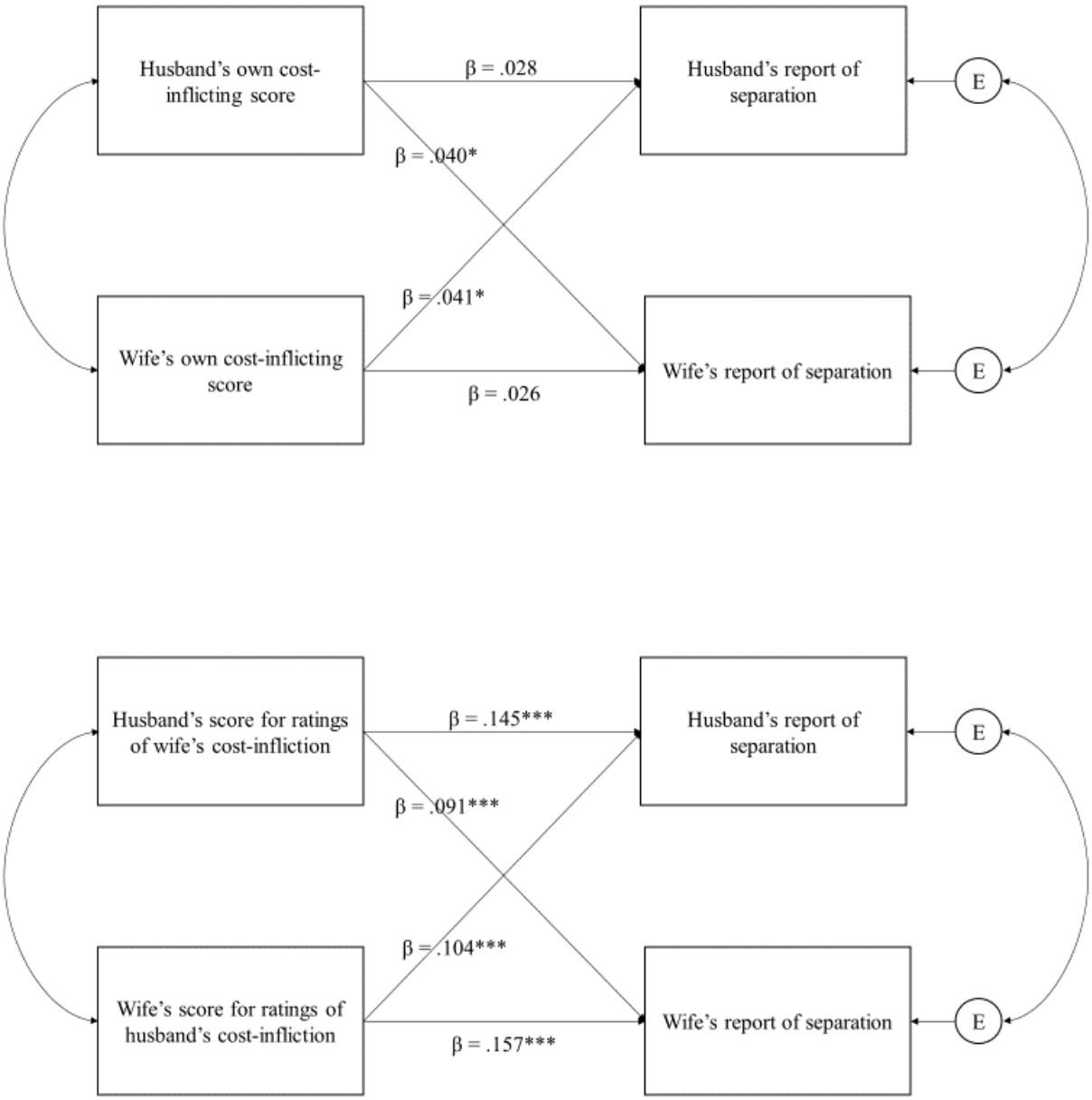
Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 5. Actor-partner interdependence models for benefit-provisioning tactics for Chinese couples.



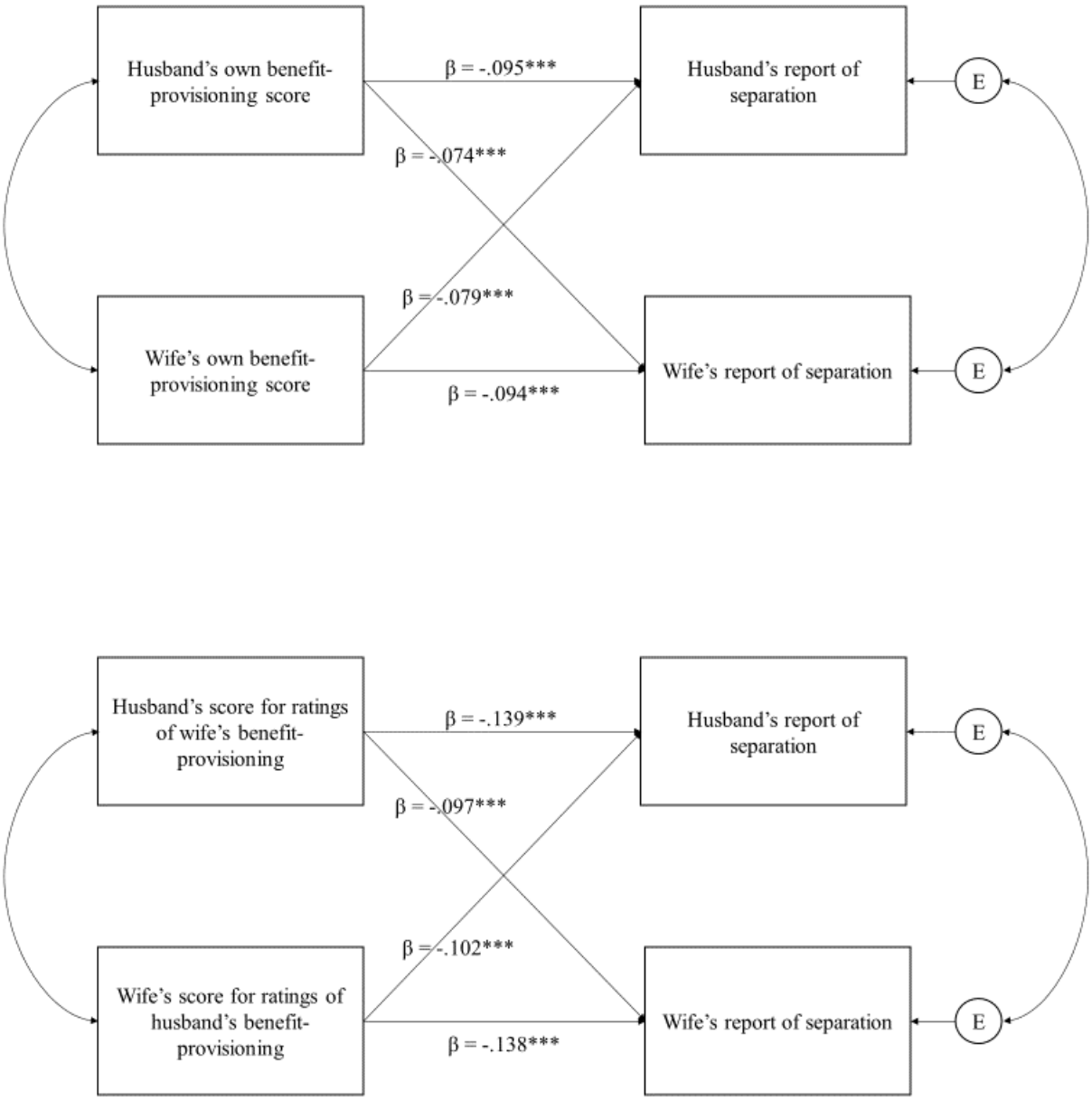
Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 6. Actor-partner interdependence models for cost-inflicting tactics for British couples.



Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Figure 7. Actor-partner interdependence models for benefit-provisioning tactics for British couples.



Note: * $p < .05$; ** $p < .01$; *** $p < .001$

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ABSTRACT

MEASURING THE EFFECTIVENESS OF BENEFIT-PROVISIONING AND COST-INFLICTING MATE RETENTION TACTICS THROUGH RELATIONSHIP OUTCOMES

by

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Mate retention has received much less research attention compared to mate choice and attraction. Even the research that has been done on mate retention often only aims to identify what constitutes as mate retention tactics. In the current studies, the effectiveness of mate retention strategies is explored by measuring relationship outcomes of tactics unlike previous research that measures effectiveness through perceptions of relationship satisfaction. In Study 1, individuals who have experienced a nonmarital breakup reported on their own and their ex-partners' mate retention tactics before the breakup to see which ones predicted the outcome of relationship dissolution. Tests for moderation by participant sex and male mate value were also included. Results revealed that, in accord with the theoretical framework put forth by Miner et al., (2009), tactics that inflict costs upon an individual that are performed by participants' ex-partners increase the odds of dissolution, especially for female participants reporting on their male ex-partners. This was even more pronounced when male ex-partners were of low mate value. In Study 2, the cost-inflicting/benefit-provisioning mate retention framework (Miner, et al., 2009) was applied to predict a period of separation in married couples from America, China,

and Britain. Results were generally consistent with this theoretical framework, moderation by spousal sex was revealed such that cost-inflicting tactics were more strongly linked to separation when performed by husbands, and low male mate value was negatively associated with the use of cost-inflicting tactics. Discussion integrates these findings across the two different relationship types (non-marital versus marital) and across cultures. Limitations and future directions are also addressed.

AUTOBIOGRAPHICAL STATEMENT

Tara DeLecce earned a Bachelor of Arts degree in Psychology with a minor in Spanish from Pennsylvania State University (Altoona) in 2007. She then went on to earn a Master in Science degree in Evolutionary Psychology from Brunel University in London, United Kingdom, in 2011. In the fall of 2013, she entered the Cognitive, Developmental, and Social Psychology Graduate program at Wayne State University. There, she also completed minors in both evolution and statistics. The next step in her academic career is a position as a postdoctoral researcher at Oakland University working with Dr. Todd Shackelford. Her research interests include human sperm competition, conflict in romantic relationships, and the influence of hormones on social behaviors, especially in the context of romantic relationships.