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## The Influence of Romantic Rejection on Change in Ideal Standards, Ideal Flexibility, and Self-Perceived Mate Value

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## Abstract

Prior research has explored how ideal romantic standards are predictive of future partner characteristics, and how these standards change within relationships, but not how they develop in single individuals. The present study sought to determine whether repeated experiences of romantic rejection and acceptance over time would influence ideal standards and the related constructs of ideal flexibility and self-perceived mate value in a community sample ( $N = 211$ ). As expected, experiences of rejection predicted decreases in ideal standards and self-perceived mate value, and increases in ideal flexibility. Experiences of acceptance did not have an effect. Gender and self-perceived mate value were examined as moderators. Given the predictive nature of ideal standards, findings from this study contribute to a greater understanding of relationship formation processes.

*Keywords:* romantic relationships, ideal standards, ideal flexibility, self-perceived mate value, rejection

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## Chapter 1

### 1 Introduction

According to the Ideal Standards Model (ISM; Fletcher, Simpson, Thomas, & Giles, 1999), people possess conceptualizations of their ideal romantic partner across a range of attributes (e.g., interpersonal warmth, physical appeal, and status and resources). Perceptions of potential or current partners can be compared to these ideal standards to evaluate attraction to, or satisfaction with, these partners, as well as to regulate behavior toward them (e.g., to decide to approach a potential partner, or to attempt to change something about a current partner). For example, recent research suggests that individuals tend to enter new relationships with others possessing traits that closely correspond to their own ideal standards (Campbell, Chin, & Stanton, 2016; Gerlach, Arslan, Schultze, Reinhard, & Penke, 2017). Research has also demonstrated that individuals are more satisfied in relationships when they perceive smaller discrepancies between their ideal standards and partner perceptions (Buyukan-Tetik, Campbell, Finkenauer, Karremans, & Kappen, 2017; Campbell, Simpson, Kashy, & Fletcher, 2001; Fletcher et al., 1999; Fletcher, Simpson, & Thomas, 2000). Further, individuals are more apt to attempt to regulate (i.e., change) their partners when they perceive relatively large discrepancies between ideal standards and partner evaluations (Overall, Fletcher, & Simpson, 2006; Overall, Fletcher, Simpson, & Sibley, 2009). When individuals possess higher, compared to lower, ideal standards, they also report less ideal flexibility (the extent to which a person is willing to deviate from his or her standards; Simpson, Fletcher, & Campbell, 2001), and more positive self-perceived mate value (how one views him or herself as a potential partner; Regan, 1998b).

Ideal standards, however, are not inherently stable. Fletcher, Simpson, and Thomas (2000) found that people tend to change their ideal standards to better fit their perceptions of their partners over the course of their first year together. The researchers speculated that this change occurred because partner perceptions are less malleable than ideals, and people may discover that their initial ideals were not realistic. Yet past research has failed

to address how ideal standards form and change prior to relationship initiation. Standards in singles have been shown to be relatively stable, compared to the standards of those who enter relationships (Gerlach et al., 2017), but prior literature has not addressed factors that may be associated with shifting standards. One variable likely to elicit change is romantic rejection or acceptance. Simpson and colleagues (2001) postulated that repeated experiences of rejection would cause a decline in ideal standards, while repeatedly having romantic advances accepted would increase standards. The goal of the present research is to test this idea in a longitudinal study of singles who reported their experiences of romantic acceptance and rejection over the course of six months.

## 1.1 Ideal Standards and Ideal Flexibility

Thibaut and Kelley (1959) presented the concept of the comparison level (CL), or “the standard against which the [dyad] member evaluates the ‘attractiveness’ of the relationship or how satisfactory it is.” According to interdependence theory, people use this standard to evaluate rewards and costs of a relationship, based on what they believe they deserve. Relationships that exceed the CL are satisfying, and those that do not meet it are dissatisfying. This idea is the core foundation of the Ideal Standards Model (ISM), which Fletcher and colleagues (1999) introduced to more closely examine and define the concept of an ideal.

Fletcher and colleagues (1999) found that romantic partner ideals were composed of three factors: warmth-trustworthiness, vitality-attractiveness, and status-resources. Similar factors have been found in other studies (e.g., Csajbók & Berkics, 2017). Fletcher and colleagues (1999) argued these dimensions are the ones by which people evaluate their partners, and that prioritization varies between individuals. However, these constructs are not entirely distinct from each other, as demonstrated by positive correlations amongst partner ideal dimensions (Csajbók & Berkics, 2017; Fletcher et al., 1999). Therefore, ideal standards can be viewed as a single construct or as separate dimensions. Thus, researchers are able, not only to explore implications of participants’ prioritized characteristics (e.g., high standards in vitality-attractiveness may facilitate short-term mating; Simpson et al., 2001), but also to test broader ideas regarding participants’

overall ideals (e.g., people with high self-perceived mate value have high ideal standards; Regan, 1998b).

While people may have high or low standards (both overall and dimension-specific), individuals tend to differ in the degree to which they are willing to deviate from their standards in a potential partner or current relationship. Ideal flexibility is the extent to which a person is willing to deviate from his or her ideal standards, and the amount of discrepancy he or she can accept between current partner perceptions and ideal standards (Campbell et al., 2001). This concept is closely tied to ideal standards, as individuals report less flexibility when they also report high standards (Campbell et al., 2001), and it is key in understanding the association between ideal standards and a variety of relationship outcomes. For example, people may be more flexible regarding short-term relationships than long-term relationships (Kenrick, Groth, Trost, & Sadalla, 1993; Regan, 1998a; Simpson et al., 2001). Additionally, flexibility should be more malleable than ideal standards; for example, a person may become more flexible after a couple of unsuccessful dates (or less after some successful ones), but such experiences may not change his or her actual standards. Standards are expected to only change after repeated positive or negative dating experiences (Simpson et al., 2001). Thus, I predicted that among singles, ideal standards and ideal flexibility would negatively correlate with each other (Hypothesis 1; H1). Further, ideal flexibility would change to a greater extent than ideal standards (H2).

## 1.2 Self-Perceived Mate Value

Self-perceived mate value is comprised of the characteristics an individual possesses within a particular context that enables him or her to find, attract, and maintain a mate (Fisher, Cox, Bennet, & Gavric, 2008). Various authors have suggested that humans should have evolved a psychological mechanism to track their mate value, to allow them to adjust their mating-related decisions accordingly (e.g., Buss & Schmitt, 1993; Penke, Todd, Lenton, & Fasolo, 2007; Trivers, 1972). Specifically, accurately assessing one's mate value is useful because it enables one to avoid squandering time seeking mates of higher value whom he or she likely will not be able to retain, or mates of lower value

who would be a waste of time and resources (Regan, 1998b). As such, self-perceived mate value helps guide partner preferences.

In an extension of sociometer theory, which proposes that self-esteem is a gauge of social acceptance, Kirkpatrick and Ellis (2001) suggested that there are multiple domains of self-esteem. One such domain is that of mating relationships. They posited that individuals have evolved monitors of success in short- and long-term mating, which influence how they perceive themselves as potential partners, and therefore their general sense of self-esteem. The idea that self-perceived mate value is linked to self-esteem has been empirically supported. Specifically, self-esteem positively correlates with self-perceived mate value (Brase & Guy, 2004; Penke & Denissen, 2008), and several factors related to self-perceived mate value (e.g., self-perceived facial and body attractiveness, self-confidence in appearance, and romantic self-confidence; Bale & Archer, 2013). Kirkpatrick and Ellis (2001) also argued that self-perceived mate value is determined by social feedback concerning one's attractiveness, comparisons to competition, and successes and failures in mating. Thus, self-perceived mate value is viewed as a construct that is a predictor of mate choices, but is also impacted by experiences in the dating market. For example, self-perceived mate value is associated with ideal partner standards and flexibility (e.g., Campbell et al., 2001; Surbey & Brice, 2007), and can be negatively influenced by romantic rejection (e.g., Zhang, Liu, & Ruan, 2015). However, the precise associations between self-perceived mate value, ideal standards and flexibility, and acceptance and rejection remain unclear.

### 1.3 Ideal Standards, Flexibility, and Self-Perceived Mate Value

Both theoretical and empirical literature demonstrate ideal standards, ideal flexibility, and self-perceived mate value are closely related. As previously discussed, ideal standards and ideal flexibility have been shown to have a negative relation with each other, such that people with higher ideals have lower flexibility (Campbell et al., 2001). Simpson and colleagues (2001) suggested that being less flexible about ideals may be associated with people having "loftier" standards and vice versa. Further, people who view themselves

highly on certain dimensions (e.g., warmth-trustworthiness, vitality-attractiveness) should have higher standards on those dimensions. Campbell and colleagues (2001) empirically demonstrated this by showing that self-ratings on ideal standards dimensions, which are highly similar to traits found on more traditional measures of self-perceived mate value (e.g., Mate Value Inventory; Kirsner, Figueredo, & Jacobs, 2003), are highly correlated with ideal standards and flexibility, such that those with high self-ratings have high standards and low flexibility. Campbell and colleagues' (2001) study is the only empirical test of the association between ideal standards, flexibility, and self-perceived mate value using the ISM; however, many other studies demonstrate similar patterns of results.

As noted above, theoretically, basing one's mating standards on one's own mate value is evolutionarily advantageous (Kirkpatrick & Ellis, 2001; Regan, 1998b). Further, many studies have empirically demonstrated that high self-ratings are associated with seeking high-quality mates (Buston & Emlen, 2003; Edlund & Sagarin, 2010; Kenrick et al., 1993; Regan, 1998a; Regan, 1998b; Surbey & Brice, 2007; Tadinac & Hromatko, 2007; Todd, Penke, Fasolo, & Lenton, 2007). Additionally, as Kirkpatrick and Ellis (2001) suggested that individuals' perceptions of themselves as mates is positively related to self-esteem, it is worth noting that individuals who have high self-esteem and feel more positively about themselves have higher hopes and standards for their ideal partners (Brown & Brown, 2015; Murray, Holmes, & Griffin, 1996a; Murray, Holmes, & Griffin, 1996b). Combined, both theoretical and empirical literature provide strong evidence that self-perceived mate value and ideal standards are positively related, and that both constructs are negatively associated with ideal flexibility. As such, I predicted that individuals with high self-perceived mate value would have higher ideal standards than those with low self-perceived mate value (H3), and that individuals with high self-perceived mate value would have lower ideal flexibility than those with low self-perceived mate value (H4).

## 1.4 Social Acceptance and Rejection

In a review of the constructs of social acceptance and rejection, DeWall and Bushman (2011) explained that social acceptance occurs when others signal inclusion in a group, such as through toleration or active pursuit, while social rejection occurs when others signal exclusion, with behaviors ranging from ignoring to active expulsion. Within the context of romantic relationships, a potential partner saying “yes” to a date could be viewed as acceptance, while a “no” could be viewed as rejection. Social rejection often leads to low self-esteem and negative emotions such as hurt feelings, anger, sadness, depression, anxiety (Leary, 2010; Leary & Baumeister, 2000). However, social rejection can also lead to negative behaviors, including, in experimental contexts, delivering noise blasts to a stranger after experiencing rejection from a group of peers (Twenge, Baumeister, Tice, & Stucke, 2001) and, at the extreme, acts of violence, such as school shootings (Leary, Kowalski, Smith, & Phillips, 2003). Further, individuals who are more sensitive to rejection are more likely to have negative mental health outcomes such as depression, anxiety, and loneliness (Gao, Assink, Cipriani, & Lin, 2017). Similarly, rejection from a romantic partner can lead to depression, rumination, sadness, anger, shock, and jealousy (Perilloux & Buss, 2008). Social acceptance is more broadly associated with positive feelings, most notably, high self-esteem (Leary & Baumeister, 2000).

Sociometer theory (Leary & Downs, 1995; Leary & Baumeister, 2000) maintains that self-esteem developed as a monitor, or *sociometer*, that observes the social environment for signs of rejection or exclusion and alerts the individual when cues are detected so that the individual may act accordingly to maintain or acquire inclusion. Low self-esteem is viewed as indicative of exclusion and high self-esteem of inclusion. The theory asserts individuals should be especially attentive to rejection, as ignoring cues of exclusion would be costlier than ignoring those of acceptance. The combination of sociometer theory (Leary & Downs, 1995; Leary & Baumeister, 2000) and Kirkpatrick and Ellis’ (2001) conceptualization of a mating sociometer suggests the possibility that experiences of romantic rejection should lead to decreases in self-esteem, and, more specifically, in self-perceived mate value, while romantic acceptance should cause the opposite. Further,

the close association between self-perceived mate value, ideal standards, and ideal flexibility (e.g., Campbell et al., 2001) suggests that rejection also plays a role in mating criteria.

Minimal research has explored romantic rejection's impact on self-perceived mate value, but what exists generally suggests a negative association. Zhang and colleagues (2015) found that individuals who experienced rejection from the opposite sex experienced a decrease in self-perceived mate value. Pass, Lindberg, and Park (2010) found that men rejected based on status and women rejected based on physical attractiveness – which are attributes particularly relevant to each sex's desirability as a mate – experienced larger decreases in self-esteem than men rejected based on physical attractiveness, women rejected based on status, and control conditions. Kavanagh, Robins, and Ellis (2010) demonstrated that individuals who were romantically accepted experienced an increase in self-esteem, while those rejected experienced a decrease, and that these changes had an impact on mating aspirations. Ruan and Zhang (2012) found that individuals asked to recall a romantic rejection experience reported lower self-esteem and self-perceived mate value than those asked to recall an experience unrelated to rejection.

Regarding rejection's impact on ideal standards and flexibility, Simpson and colleagues (2001) theorized that people who experience many rejections over an extended period are likely to shift their ideal standards downwards. Although research has not explored this idea using the ISM, some literature supports the notion. Reeve, Kelley, and Welling, (2016) found that women who experienced rejection were less choosy than those who experienced acceptance or were neither accepted or rejected. Another study demonstrated that rejected individuals had lower mate expectations than those who experienced acceptance, or were in a control condition (Zhang et al., 2015). Kavanagh and colleagues (2010) found that social rejection caused individuals to lower their mating aspirations in one study, but were unable to replicate the finding. Research showing that romantic rejection decreases self-esteem and self-perceived mate value (e.g., Zhang et al., 2015), both of which are positively associated with relationship ideals (e.g., Campbell et al., 2001; Murray, Holmes, & Griffin, 1996a), also supports the notion that rejection should negatively impact ideal standards. Similarly, Simpson and colleagues (2001) suggest that

individuals who repeatedly experience acceptance from partners should experience an increase in ideal standards. However, findings along these lines are more mixed. Zhang and colleagues (2015) found that individuals who experienced acceptance did not differ from the control condition in their mate expectations. Still, Kavanagh and colleagues (2010) showed that social acceptance caused an increase in global mating aspirations, and Kavanagh, Fletcher, and Ellis (2014) showed that romantically accepted individuals experienced an increase in self-esteem.

Prior literature has not explicitly examined the impact of romantic rejection on ideal flexibility, yet one can speculate on the association between these constructs based on the previously discussed literature. Simpson and colleagues (2001) suggested that lower flexibility is associated with higher standards, and correlational research supports this (Campbell et al., 2001). Simpson and colleagues (2001) also argued that rejected people should expand their range of acceptable partners (i.e., increase their flexibility), and those who experience success should decrease this range. This theoretical foundation, combined with prior research on the relation between rejection experiences and shifts in ideal standards (e.g., Reeve et al., 2016; Zhang et al., 2015), suggests people who experience romantic rejection will likely increase their ideal flexibility, and those who experience romantic acceptance will likely decrease it.

Past literature, both theoretical and empirical, indicates that romantic rejection should cause a decrease in ideal standards, an increase in ideal flexibility, and a decrease in self-perceived mate value, while acceptance should do the reverse. Therefore, I predicted that individuals who experience more rejection would display a decrease in ideal standards over time (H5), though individuals who experience less rejection (i.e., more acceptance) should either experience no change in their ideal standards, or an increase in their ideal standards over time (H6). I further predicted that individuals who experience more rejection would exhibit an increase in ideal flexibility over time, and those who experience less rejection would exhibit a decrease (H7), and that individuals who experience more rejection would demonstrate a decrease in self-perceived mate value over time, while those who experience less rejection would demonstrate an increase (H8).

## 1.5 Self-Perceived Mate Value as a Moderator

While rejection is anticipated to increase flexibility, lower ideals, and decrease self-perceived mate value, these effects may be buffered by self-perceived mate value.

Although prior research has not explored self-perceived mate value as a moderator of rejection, some literature has explored self-esteem as a moderator. Notably, sociometer theory (Leary & Downs, 1995; Leary & Baumeister, 2000) proposes that individuals with low self-esteem should be more sensitive to rejection than those with high self-esteem, as those with low self-esteem must focus on becoming socially included.

Research has supported the notion that self-esteem acts like a buffer in the face of rejection, such that people with high self-esteem feel better about themselves after rejection or failure than those with low self-esteem (Brown, 2010). Individuals with low (versus high) self-esteem are more susceptible to distress, negative self-evaluation, and decreased state self-esteem after imagining being broken up with (i.e., rejected) by a romantic partner (Waller & MacDonald, 2010). Further, rejection sensitivity (a tendency to excessively expect, perceive, and react to rejection) negatively correlates with self-esteem (Blackhart, Fitzpatrick, & Williamson, 2014; Watson & Nescdale, 2012).

Although less research has explored the relation between self-perceived mate value and rejection, self-esteem positively correlates with self-perceived mate value (e.g., Brase & Guy, 2004; Penke & Denissen, 2008), so similar reactions to romantic rejection for individuals with high self-perceived mate value as those with high self-esteem are expected. Additionally, Ruan and Zhang (2012) found that self-esteem mediated the impact of rejection on self-perceived mate value, and that self-perceived mate value mediated self-esteem's impact on mate standards, which further supports the idea that self-perceived mate value may moderate the impact of rejection on ideal standards, ideal flexibility, and self-perceived mate value. When combined with previous research suggesting that people who experience rejection experience a decrease in ideal standards, an increase in ideal flexibility (e.g., Simpson et al., 2001), and a decrease in self-perceived mate value (e.g., Zhang et al., 2015), these findings suggest that people with high levels of self-perceived mate value should be less impacted by rejection, and will

therefore experience less change in their standards, flexibility, and self-perceived mate value than individuals with low self-perceived mate value. Thus, I predicted that individuals with initially high (versus low) self-perceived mate value would experience less change in ideal standards after experiencing high levels of rejection (H9), as well as less change in ideal flexibility (H10) and self-perceived mate value (H11).

## 1.6 The Role of Gender

The role gender plays in the association between ideal standards, ideal flexibility, self-perceived mate value, and romantic rejection and acceptance is unknown. Prior research on the assorted relations between these variables is either absent or mixed. Simpson and colleagues (2001) and Campbell and colleagues (2001) do not mention whether there should be any overall gender differences in the relation between ideal standards and ideal flexibility, nor between those constructs and self-ratings (i.e., self-perceived mate value). Further literature discussing the association between ideal standards and self-perceived mate value does not indicate any gender differences in the relation between the characteristics overall, although there are occasionally discrepancies in the prioritization of certain characteristics (e.g., Buston & Emlen, 2003; Edlund & Sagarin, 2010). For example, Regan (1998b) found that self-perceived mate value was positively correlated with ideal partner preferences in several domains for women, but that this relation only existed for men within the domain of family orientation attributes. With regards to ideal flexibility, Regan (1998a) found that the relation between self-perceived mate value and selectivity was stronger for women than men, though Regan (1998b) did not report a gendered relation between self-assessments on various domains and willingness to compromise, with the exception that men who viewed themselves as having a high social status were less willing to compromise on that dimension.

The relation between gender and changes in self-perceived mate value due to acceptance or rejection is also unclear. Kirkpatrick and Ellis (2001) suggested that because men and women put different weights on long- versus short-term mating strategies, their mating sociometers should respond accordingly. However, the authors did not indicate that there would be any overall differences in sensitivity between men and women's sociometers.

Kavanagh and colleagues (2010) found that women's self-esteem was influenced more by experiences of social acceptance and rejection than men's, which had implications for mating aspirations, as those who experienced acceptance (versus rejection) reported higher self-esteem, which predicted higher mating aspirations. However, Zhang et al. (2015) found that men's self-perceived mate value was more impacted by opposite-sex rejection than women's, and Surbey and Brice (2007) showed men's self-perceived mate value to be more malleable than women's.

Simpson and colleagues (2001) make no theoretical indication of gender differences in the association between rejection and ideal standards and flexibility, and empirical evidence of such a relation is almost non-existent. Some studies gave no indication of gender differences between rejection and mate expectations (Zhang et al., 2015; Kavanagh et al., 2010), while others studied only males or females, so gender differences could not be assessed (e.g., Reeve et al., 2016). However, it is worth noting that although dating scripts and gender roles are changing, men typically initiate dates and use direct dating behaviors more than women (Eaton & Rose, 2011). Women do take initiative in dating environments, but their strategies tend to be more subtle, passive, and indirect than the those used by men (Clark, Shaver, & Abrahams, 1999). Additionally, women report more instances of men overestimating their sexual interest than men report of women. This is postulated to be due to the sexual overperception bias, in which men tend to overperceive potential mates' sexual interest more than women do (Haselton, 2003). These findings suggest that men make more advances and experience more rejection than women, so gender differences in the impact of rejection may be due to differences in the overall number of approaches made. However, proportion of rejection will likely matter, as people who make many advances will likely be less impacted by a small number of rejections than people who make only a few advances.

Combined, prior research on gender's association with the relevant variables does not give a clear indication of whether gender would influence the impact of rejection and acceptance on ideal standards, ideal flexibility, or self-perceived mate value. However, as some literature suggests gender has played a moderating role, research that addresses its role with ideal standards, ideal flexibility, and self-perceived mate value is important for

clarifying the relationships between these constructs. Therefore, the present study will explore whether there are gender differences in each test of the hypotheses.

## 1.7 The Current Study

The present study sought to determine the impact of romantic rejection and acceptance on individuals' ideal standards, ideal flexibility, and self-perceived mate value over an extended period among romantically unattached individuals. Many of the studies previously discussed focused on sociometer theory and the mating sociometer as grounds for why rejection and acceptance should cause change in these constructs. However, no study has explicitly examined the influence of acceptance and rejection on ideal standards, ideal flexibility, and self-perceived mate value using the ISM. Further, no study has used longitudinal data to determine the effect of repeated rejection and acceptance experiences. The present research seeks to fill this void by analyzing data from a six-month longitudinal study that recorded ideal standards, ideal flexibility, and self-perceived mate value at the onset and conclusion, and experiences of acceptance and rejection throughout. All hypotheses for this study were pre-registered prior to analyses and can be found at <https://osf.io/8vygp/>.

## Chapter 2

### 2 Method

Data used in the present research were originally collected for a study that focused on the transition into new romantic relationships by Campbell and colleagues (2016; to view the pre-registration for that study, see [osf.io/9gf4q](https://osf.io/9gf4q)). The local research ethics board reviewed and approved the materials and procedures before study initiation. Campbell and colleagues presented results from analyses on a subset of the overall sample, specifically 38 original participants and their new partners. The current research introduces results from a different subset of the original sample, specifically 211 participants that did not report entering a new romantic relationship during the length of the study.

#### 2.1 Participants

Participants were recruited via posters and newspaper advertisements placed on the University of Western Ontario campus as well as various locations in London, Ontario, including grocery stores and the classified website [www.kijiji.ca](http://www.kijiji.ca). The only screening criterion was that the participants be single at the time of signing up for the study. The initial sample consisted of  $N = 425$  single individuals. Full details concerning the sampling approach can be found in Campbell et al. (2016). For inclusion in the present research, participants must have remained single throughout the entire six-month study and responded to the initial and end-of-study surveys. Of the original 425 participants, 211 participants (132 females) met these qualifications, and 98 (53 females) made at least one advance (i.e., approached someone to ask for a date) in the duration of the study. Age ranged from 16 to 57 ( $M = 22.38$ ,  $SD = 6.14$ ), and the majority of the sample was white (49.8%), followed by Asian (31.3%), East Indian (5.7%), Black North American/African (3.8%), Hispanic (.5%), Other (4.3%) and individuals who selected multiple ethnicities (4.3%). Information about sexual orientation was not collected.

## 2.2 Procedure

Individuals interested in the study contacted the researchers through email to inquire further. Interested participants who met the study's criteria were then sent the letter of information (Appendix A) which provided details about what the study would entail. Participants who provided informed consent (Appendix B) were then sent seven monthly surveys over the course of six months. The first survey (Time 0; T0) contained a wide variety of measures, including demographics and scales assessing self-perceived mate value, ideal standards, and ideal flexibility. This first survey took approximately 30 minutes to complete, and participants were compensated with a \$10.00 CAD Amazon gift card. For participants who remained single, the next five surveys (T1 – T5) included questions regarding participants' recent dating experiences (e.g., number of one-night stands, number of dates). Participants who indicated that they entered a relationship on one of the monthly surveys were then given a different series of questionnaires related to the new relationship, and were given the opportunity to invite their partners to participate in the study (for more information on this aspect of the study, see Campbell et al., 2016 or [osf.io/me7jp/](https://osf.io/me7jp/)). Each completed monthly survey took approximately 10 minutes and upon completion were compensated with a \$5.00 CAD Amazon gift card. The final survey (T6) included most scales from T1 (including ideal standards, ideal flexibility, and self-perceived mate value), and the questions asked on each monthly survey. This survey took approximately 30 minutes to complete and upon completion participants were compensated with a \$10.00 CAD Amazon gift card. Participants were sent a full debriefing form (Appendix C) 48 hours after receiving the final survey, regardless of whether they completed all previous surveys or the final survey.

## 2.3 Materials

### 2.3.1 Ideal standards

Ideal standards were measured using the 17-item short form of the Ideal Standards Scale (ISS; Fletcher et al., 1999; Appendix D). Participants filled out this questionnaire twice – first when they began the study (T0) and again, six months later (T6). Cronbach's  $\alpha$  at T0

was .84, and .88 at T6. On both occasions, participants were asked to rate a series of attributes based on how important they were in describing one's ideal partner in a close, romantic relationship. Attributes were rated on a 7-point Likert scale, ranging from "very unimportant" to "extremely important," and included traits such as "understanding," "adventurous," and "good job." While this scale can be broken down into three subscales representative of warmth-trustworthiness, vitality-attractiveness, and status-resources, the present research focused on overall scores. Participants' scores were averaged and then mean-centered for analyses. High scores indicate high standards and low scores indicate low standards.

### 2.3.2 Ideal flexibility

The same 17 items from the short form of the Ideal Standards Scale (Fletcher et al., 1999; Appendix D) were used to measure ideal flexibility at T0 ( $\alpha = .89$ ) and T6 ( $\alpha = .92$ ).

Participants were asked to consider their ideal partner and think about the extent to which a potential partner would have to match those ideals for the relationship to be happy and successful. Participants were asked to rate each of the attributes on a 10-point scale, ranging from "0 = 0-10% of my ideal partner" to "9 = 91-100% of my ideal partner". For example, someone who viewed "understanding" as an extremely important trait could choose 9, meaning that the partner would have to match that characteristic 91-100% to be satisfactory. These scores were averaged and mean-centered for analyses, then reverse-coded so that low scores would indicate low flexibility and high scores high flexibility.

### 2.3.3 Self-perceived mate value

Once again, the 17-item short form of the Ideal Standards Scale (Fletcher et al., 1999; Appendix D) was used to measure self-perceived mate value at T0 ( $\alpha = .83$ ) and T6 ( $\alpha = .90$ ). Participants were asked to rate how characteristic each attribute was of themselves on a 7-point Likert scale ranging from "not at all characteristic" to "very characteristic." Although this scale has not been traditionally used as a measure of self-perceived mate value, it is highly similar to other measures of self-perceived mate value, such as the Mate Value Inventory (MVI; Kirsner et al., 2003), which includes highly similar items

(e.g., ISS has “nice body” and “understanding” while MVI has “good body and “kind and understanding”). Ultimately, the ISS features items representative of qualities desirable in a mate, so one can reasonably conclude that a person who rates him or herself highly on this scale considers him or herself to be a desirable mate, and therefore has high self-perceived mate value. Participants’ scores were averaged and mean-centered for analyses, with high scores indicating high self-perceived mate value, and low scores indicating the opposite.

### 2.3.4 Rejection and acceptance

On each of the five monthly surveys (T1-T5) and the sixth, final survey (T6), participants were asked a series of questions regarding their recent dating experiences (Appendix E). Amongst these, participants were asked how many times they had made a successful advance towards a potential partner (“i.e. how many people agreed to go out with you, called you, etc.”), and how many times they made an unsuccessful advance (“i.e. how many people DID NOT agree to go out with you, call you, etc.”). These responses were summed across all six surveys to create scores representing total number of rejected (i.e., unsuccessful) advances and total number of accepted (i.e., successful) advances. These two scores were then summed to generate the total number of advances made overall. Each of these three numbers (total rejected, accepted, and overall advances) were then averaged across the number of months each participant responded to the monthly survey, as most participants did not reply to every survey. Then, the average number of rejected advances was divided into the average number of total advances, to produce a score representing the proportion of rejected advances that participants made across all the months they responded to the surveys. This value was then mean-centered for analyses. High scores represent high levels of rejection, while low scores represent low levels of rejection (i.e., high acceptance). Follow-up analyses involved the overall number of advances, number of rejected advances, and number of accepted advances, which were also mean-centered.

## 2.4 Data Analytic Strategy

The pre-registration of the analytic strategy can be viewed at [osf.io/8vygp/](https://osf.io/8vygp/). Please note that the order of hypotheses and explorations has changed between the pre-registration and this document. Additionally, normality tests were not included in the pre-registration. Therefore, any data that do not meet normality checks were analyzed both as-is and after being corrected. Most analyses were conducted in SPSS 24, except for the cross-lagged panel designs, which were conducted in MPlus 7.4 (Muthén & Muthén, 2015), and the simple slopes analyses, which were conducted in R 3.4, using the `reghelper` 0.3.3 package (Hughes, 2017).

### 2.4.1 Confirmation of assumptions of normality

Multiple assumptions of normality were tested. First, the skewness and kurtosis of all variables were examined – those with a skewness of  $\pm 2$ , and kurtosis of  $\pm 7$  were deemed acceptable (West, Finch, & Curran, 1995). Scatterplots between independent and dependent variables were visually analyzed to confirm that linear (versus curvilinear) relationships exist. Histograms of the standardized residuals from every analysis were visually assessed to establish multivariate normality. Variance Inflation Factor (VIF) values were examined for every analysis, with the expectation that all values were less than 10. Homoscedasticity was evaluated by plotting standardized residuals against the relevant outcome variables and ensuring an equal distribution of all points across the independent variable's values (Chatterjee & Hadi, 2012). Violations of assumptions were addressed depending on the assumption that was violated.

### 2.4.2 Pearson product-moment correlation

Hypotheses 1, 3, and 4 were analyzed using Pearson product moment correlations. Similarly, explorations were examined with this method, but men and women were analyzed separately, and the resulting coefficients compared using a Fisher's Z transformation. The variables used in these analyses were ideal standards, ideal flexibility, and self-perceived mate value at both T0 and T6.

### 2.4.3 Linear multiple regression

Hypotheses 5-11 were analyzed using linear multiple regression. Hypotheses 5-8 involved predicting change in ideal standards, ideal flexibility, or self-perceived mate value after experiences of rejection, while H9-11 imitated these analyses, but included self-perceived mate value at T0 as a moderator. For hypotheses 5-8, proportion of rejection and either ideal standards (H5-6), ideal flexibility (H7) or self-perceived mate value (H8) at T0 were used as predictor variables, and the respective T6 variable was used as the outcome variable. By controlling for the relevant T0 variables, the T6 outcome variable of each analysis was a measure of residualized change from T0 to T6 – this will simply be referred to as “change” for brevity. These same variables were used for H9-11, but self-perceived mate value and the interaction between self-perceived mate value and rejection were also included as predictor variables in each analysis.

Explorations were also analyzed using linear multiple regression. For each analysis conducted for H5-11, another analysis was run which included gender as a covariate or moderator, as well as any interaction terms between gender and the variables in question. An example equation is displayed below. Rejection is written as REJ, gender as GEN, ideal standards as IDEAL, and self-perceived mate value as SPMV.

$$\text{IDEAL}(T6) = \text{IDEAL}(T0) + \text{REJ} + \text{GEN} + \text{SPMV} + (\text{SPMV} \times \text{REJ}) + (\text{SPMV} \times \text{GEN}) + (\text{REJ} \times \text{GEN}) + (\text{SPMV} \times \text{REJ} \times \text{GEN})$$

Simple slopes analyses were run if any interaction term was found to be statistically significant.

### 2.4.4 Cross-lagged panel design

Hypothesis 2 was analyzed using a cross-lagged panel design. Ideal standards and ideal flexibility at T6 were correlated with each other, and regressed onto ideal standards and ideal flexibility at T0, which were also correlated with each other. The regression coefficient between T0 and T6 for ideal standards was compared to the regression coefficient between T0 and T6 for ideal flexibility. This was done by running the model

twice – once with all paths freed, and once with the paths between ideals at T0 and T6 and flexibility at T0 and T6 constrained. The chi square difference value was examined to determine if the constrained model was statistically significantly different from the original. To explore gender differences, the dataset was grouped by gender and the aforementioned paths were constrained for both males and females, and the chi square value for this model compared to one in which all paths were free. A chi square critical value chart was consulted to determine significance (because of this, exact  $p$ -values are not known).

## Chapter 3

### 3 Results

#### 3.1 Tests of Assumptions of Normality

All variables were analyzed for skewness and kurtosis, with the expectation that skewness should be in the range of  $\pm 2$ , and kurtosis in the range of  $\pm 7$  (West et al., 1995). Total, rejected, and accepted advances did not fall within the acceptable range of skewness and kurtosis (all positively skewed), so outliers were examined. Participants were excluded if they had numbers of total, accepted, or rejected advances three standard deviations above the mean. After removing three outliers (two women), all skewness and kurtosis values fell within the desired range (apart from rejected advances, which had a skewness of 2.08, but this was close enough to 2 that it was considered acceptable for the present analyses). After removing outliers, tests of normality found the data were acceptably normally distributed, and met assumptions of a linear relationship, multivariate normality, no multicollinearity, and homoscedasticity (Chatterjee & Hadi, 2012).

#### 3.2 Pre-Registered Analyses Without Outliers

Analyses were conducted as indicated in the pre-registration, but with the three outliers discovered in the normality tests removed (these exclusions were not pre-registered; all tests presented here are two-tailed). Although values used in analyses were mean-centered, means and standard deviations of the raw scores for ideal standards, ideal flexibility, and self-perceived mate value can be viewed in Table 1. Consistent with H1, ideal standards and ideal flexibility were negatively correlated at both T0,  $r(206) = -.73, p < .001$ , and T6,  $r(195) = -.57, p < .001$ . However, H2 was not supported, as the difference between the constrained and unconstrained versions of the cross-lagged panel design did not meet statistical significance  $\Delta\chi^2(1) = 1.874, p > .05$ , indicating that ideal flexibility and ideal standards do not uniquely change to different extents over time. Self-perceived

mate value positively correlated with ideal standards,  $r(205) = .48, p < .001$ , and negatively correlated with ideal flexibility  $r(205) = -.56, p < .001$  at T0, which supports H3 and H4, respectively. No gender differences were found in these correlations.

A series of multiple regression analyses were run to test hypotheses 5 to 8. The overall regression models for predicting change in ideal standards,  $F(2, 92) = 12.14, p < .001, R^2 = .21$ , ideal flexibility,  $F(2, 89) = 27.50, p < .001, R^2 = .39$ , and self-perceived mate value  $F(2, 86) = 17.32, p < .001, R^2 = .29$ , were statistically significant. All analyses supported H5-8, which proposed that increased experiences of rejection would lead to decreases in ideal standards and self-perceived mate value, and increases in flexibility (see Table 2). However, counter to what was expected in H9-11, self-perceived mate value did not moderate rejection such that increased levels of self-perceived mate value at T0 decreased change in ideal standards, ideal flexibility, and self-perceived mate value after experiences of rejection. Gender was also a significant predictor of change in self-perceived mate value when included in the model alongside proportion of rejection,  $b = .19, \beta = .21, t(85) = 2.16, p < .05$ . Specifically, being female significantly predicted an increase in self-perceived mate value over time.

**Table 1: Means and standard deviations of ideal standards, ideal flexibility, and self-perceived mate value for people who did and did not make advances.**

	People who made advances				People who did not make advances			
	T0		T6		T0		T6	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Ideal standards	84.88	13.70	71.56	33.77	85.08	11.67	79.93	20.74
Ideal flexibility	65.23	22.38	53.12	30.55	66.01	19.90	62.58	25.19
Self-perceived mate value	85.32	12.00	73.06	34.41	78.25	12.80	77.06	21.05

*Note.* Outliers were not included in these analyses. *Ns* for participants who did advance range from 89-95, those who did not range from 106-113.

**Table 2: Regression coefficients and tests of significance for analyses involving proportion of rejection**

Variable	<i>b</i>	<i>b</i> 95% CI [LL, UL]	SE( <i>b</i> )	$\beta$	<i>t</i>	<i>p</i>
<b>Ideal standards</b>						
Intercept	9.19E-5	[-.23, .23]	.12		.001	.999
Ideals at T0	.60	[.30, .89]	.15	.38	4.05	.000
Proportion of rejection	-1.05	[-1.79, -.30]	.38	-.26	-2.77	.007
<b>Ideal flexibility</b>						
Intercept	-3.76E-5	[-.23, .23]	.11		.000	1.00
Flexibility at T0	.60	[.43, .76]	.09	.58	7.00	.000
Proportion of rejection	.86	[.13, 1.6]	.37	.19	2.33	.022
<b>Self-perceived mate value</b>						
Intercept	7.135E-5	[-.16, .16]	.08		.001	.999
Self-perceived mate value at T0	.56	[.33, .79]	.12	.44	4.84	.000
Proportion of rejection	-.79	[-1.30, -.27]	.26	-.28	-3.03	.003

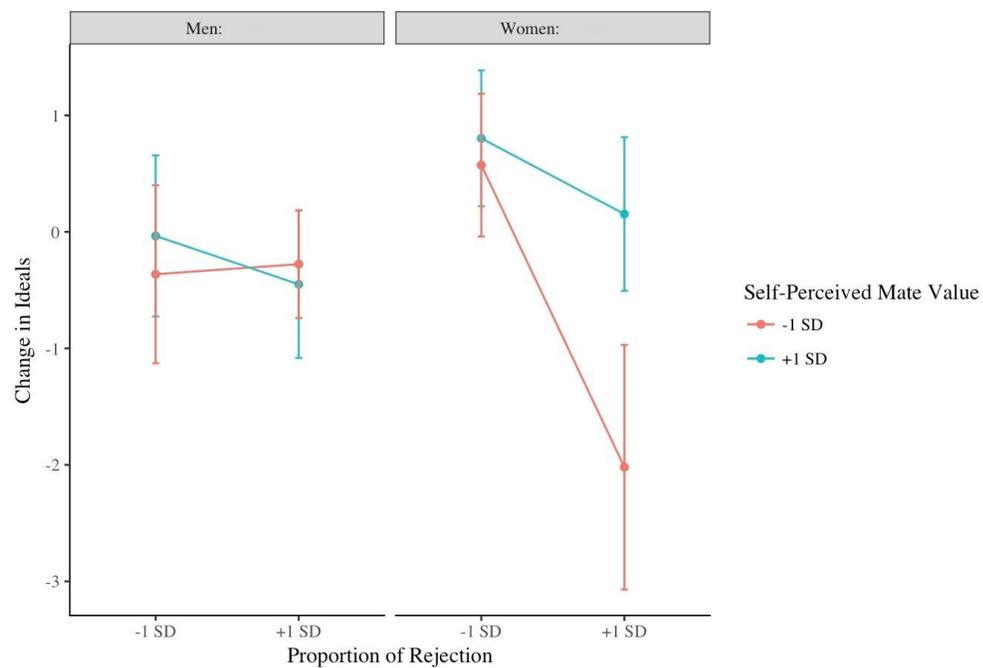
*Note.* All analyses are two-tailed.

Gender and self-perceived mate value did not moderate the association of rejection with change in ideal flexibility and self-perceived mate value, but they did influence change in ideal standards (see Table 3 and Figure 1). After establishing the statistical significance of the overall regression model,  $F(8, 86) = 5.75, p < .001, R^2 = .35$ , simple slopes analyses were run to explore this effect. Women with initially low self-perceived mate value (1 SD below the mean at T0) who experienced high levels of rejection (1 SD above the mean) had significantly lower ideal standards at T6 (controlling for ideal standards at T0) than those who experienced low levels of rejection,  $b = -4.16, SE_b = 1.03, t(86) = -4.04, p < .001$ . Further, after experiencing high levels of rejection, women with initially low self-perceived mate value had significantly lower ideal standards at T6 than men with initially low self-perceived mate value,  $b = -.87, SE_b = .28, t(86) = -3.10, p < .01$ , and women with initially high self-perceived mate value,  $b = 1.55, SE_b = .44, t(86) = 3.49, p < .001$ .

**Table 3: Regression coefficients for analyses on gender and self-perceived mate value as moderators of proportion of rejection's impact on change in ideal standards**

Variable	$b$	$b$		$\beta$	$t$	$p$
		95% CI	SE( $b$ )			
Intercept	-.21	[-.45, .04]	.12		-1.68	.096
Ideal standards at T0	.42	[.08, .75]	.17	.26	2.49	.015
Self-perceived mate value at T0	.43	[.03, .83]	.20	.24	2.12	.037
Proportion of rejection	-1.35	[-2.17, -.53]	.41	-.33	-3.27	.002
Gender	.08	[-1.66, .33]	.12	.06	.64	.522
Rejection x SPMV	.72	[-.37, 1.82]	.55	.13	1.31	.193
SPMV x Gender	.40	[.07, .73]	.17	.22	2.39	.019
Rejection x Gender	-1.17	[-1.99, -.34]	.42	-.26	-2.80	.006
Rejection x Gender x SPMV	1.40	[.30, 2.49]	.55	.24	2.53	.013

*Note.* All analyses are two-tailed.



**Figure 1: Gender and self-perceived mate value as moderators of proportion of rejection's impact on change in ideal standards. Error bars represent the 95% confidence interval.**

### 3.3 Pre-Registered Analyses

Outliers were not accounted for in the pre-registration. Therefore, all aforementioned analyses were run with outliers to determine if any differences existed. All hypothesis tests were one-tailed and explorations two-tailed, as indicated in the pre-registration. Directionality and significance did not substantially change for the majority of analyses, although many tests had a lower statistical significance when the outliers were included. As before, the overall regression models for predicting change in ideal standards,  $F(2, 95) = 10.50, p < .001, R^2 = .18$ , ideal flexibility,  $F(2, 92) = 26.25, p < .001, R^2 = .36$ , and self-perceived mate value,  $F(2, 89) = 13.16, p < .001, R^2 = .23$  were statistically significant, with proportion of rejection predicting decreases in ideal standards and self-perceived mate value, and increases in ideal flexibility (see Table 4). Only one test became significant when outliers were included in analyses: men with initially high self-perceived mate value who experienced low levels of rejection had significantly lower ideal standards at T6 than women with initially high self-perceived mate value,  $b = .51, SE_b = .24, t(89) = 2.15, p < .05$ . Results from all analyses can be viewed in more detail at [osf.io/qy93h/](https://osf.io/qy93h/)

**Table 4: Regression coefficients and tests of significance for analyses involving proportion of rejection – outliers included**

Variable	<i>b</i>	<i>b</i>		SE( <i>b</i> )	$\beta$	<i>t</i>	<i>p</i>
		95% CI [LL, UL]					
<b>Ideal standards</b>							
Intercept	1.98E-5	[-.24, .24]		.12		.000	.50
Ideals at T0	.58	[.28, .89]		.15	.35	3.78	.000
Proportion of rejection	-1.00	[-1.75, -.24]		.38	-.24	-2.61	.003
<b>Ideal flexibility</b>							
Intercept	-2.11E-5	[-.23, .23]		.11		.000	.50
Flexibility at T0	.60	[.43, .77]		.09	.58	6.99	.000
Proportion of rejection	.73	[.01, 1.44]		.36	.17	2.02	.023

**Self-perceived mate value**

Intercept	-3.73E-7	[-.17, .17]	.08		.000	.50
Self-perceived mate value at T0	.52	[.29, .76]	.12	.41	4.36	.000
Proportion of rejection	-.66	[-1.18, -.13]	.26	-.23	-2.50	.007

*Note.* All analyses are one-tailed.

### 3.4 Follow-up Analyses

Results suggest that experiencing rejection over time predicts decreases in ideal standards and self-perceived mate value, and increases in ideal flexibility. However, to ensure that rejection was responsible for this effect, and not advancing behavior, several follow-up analyses were conducted. First, the total number of advances ( $M = 8.19$ ,  $SD = 10.30$ ) individuals made was added as a covariate to analyses where rejection was the only predictor variable (aside from the relevant T0 control variable; for example, proportion of rejection, ideal standards at T0, and total number advances would predict ideal standards at T6). When controlling for total advances, overall regression models for predicting change in ideal standards,  $F(3, 91) = 27.80$ ,  $p < .001$ ,  $R^2 = .47$ , ideal flexibility,  $F(3, 88) = 24.55$ ,  $p < .001$ ,  $R^2 = .46$ , and self-perceived mate value,  $F(3, 85) = 19.63$ ,  $p < .001$ ,  $R^2 = .41$ , remained statistically significant. However, the proportion of rejection was no longer a statistically significant predictor of changes in ideal standards or ideal flexibility, though rejection still negatively predicted changes in self-perceived mate value (see Table 5). Results also suggested that increases in advances predicted a decrease in ideal standards and self-perceived mate value, and an increase in ideal flexibility (this directionality remains the same if proportion of rejection is removed from analyses).

**Table 5: Regression coefficients and tests of significance for analyses involving overall number of advances and proportion of rejection**

Variable	<i>b</i>	<i>b</i> 95% CI [LL, UL]	SE( <i>b</i> )	$\beta$	<i>t</i>	<i>p</i>
<b>Ideal standards</b>						
Intercept	7.06E-5	[-.19, .19]	.010		.001	.999
Ideals at T0	.60	[.36, .84]	.12	.38	5.00	.000
Proportion of rejection	-.57	[-1.20, .06]	.32	-.14	-1.79	.078
Total advances	-.07	[-.08, -.05]	.01	-.53	-6.76	.000
<b>Ideal flexibility</b>						
Intercept	-2.57E-5	[-.21, .21]	.11		.000	1.000
Flexibility at T0	.61	[.45, .77]	.08	.60	7.56	.000
Proportion of rejection	.58	[-.13, 1.29]	.36	.13	1.63	.107
Total advances	.04	[.02, .06]	.01	.28	3.45	.001
<b>Self-perceived mate value</b>						
Intercept	6.11E-5	[-.15, .15]	.07		.001	.999
Self-perceived mate value at T0	.56	[.35, .77]	.11	.45	5.33	.000
Proportion of rejection	-.56	[-1.04, -.07]	.24	-.20	-2.29	.024
Total advances	-.03	[-.05, -.02]	.01	-.36	-4.19	.000

*Note.* All analyses are two-tailed.

To further explore the finding that advancing behavior appeared to be responsible for these results, the total numbers of accepted ( $M = 5.13$ ,  $SD = 6.27$ ) and rejected advances ( $M = 3.06$ ,  $SD = 4.69$ ) were used as predictors of ideal standards, ideal flexibility, and self-perceived mate value at T6 (controlling for the respective T0 variables)<sup>1</sup>. Overall regression models were statistically significant for predicting change in ideal standards,  $F(3, 91) = 29.00$ ,  $p < .001$ ,  $R^2 = .49$ , ideal flexibility,  $F(3, 88) = 25.39$ ,  $p < .001$ ,  $R^2 = .46$ , and self-perceived mate value,  $F(3, 85) = 17.90$ ,  $p < .001$ ,  $R^2 = .39$ . In every analysis, the number of rejected advances significantly predicted change in the outcome variable,

<sup>1</sup> Hierarchical multiple regression confirmed that these were the best fitting models, opposed to models with accepted advances but not rejected advances, or without any type of advances included. Models with rejected advances but not accepted advances had the best fit overall, but we have included accepted advances in the presented analyses for comparison purposes.

while the number of accepted advances did not (see Table 6). Although these analyses were not pre-registered, they are still in the predicted direction of the original hypotheses (i.e., more rejection leads to a decrease in ideal standards and self-perceived mate value, and an increase in ideal flexibility). Due to the complexity of interpreting a four-way interaction, gender and self-perceived mate value were not examined as moderators using the total numbers of accepted and rejected advances instead of proportion of rejection. The previously discussed analyses using proportion of rejection are considered acceptable for interpreting any moderation effects.

**Table 6: Regression coefficients and tests of significance for analyses involving total numbers of rejected and accepted advances**

Variable	<i>b</i>	<i>b</i>		SE( <i>b</i> )	$\beta$	<i>t</i>	<i>p</i>
		95% CI [LL, UL]					
<b>Ideal standards</b>							
Intercept	4.32E-5	[-.18, .18]		.09		.000	1.000
Ideals at T0	.60	[.37, .84]		.12	.38	5.08	.000
Accepted advances	-.02	[-.06, .03]		.02	-.08	-.68	.499
Rejected advances	-.14	[-.20, -.08]		.03	-.53	-4.54	.000
<b>Ideal flexibility</b>							
Intercept	2.18E-6	[-.21, .21]		.11		.000	1.000
Flexibility at T0	.60	[.44, .76]		.08	.59	7.52	.000
Accepted advances	-.01	[-.06, .04]		.03	-.04	-.31	.758
Rejected advances	.11	[.04, .18]		.04	.37	3.09	.003
<b>Self-perceived mate value</b>							
Intercept	3.61E-5	[-.15, .15]		.08		.000	1.000
Self-perceived mate value at T0	.57	[.35, .78]		.11	.45	5.29	.000
Accepted advances	-.01	[-.05, .03]		.02	-.07	-.49	.623
Rejected advances	-.07	[-.12, -.02]		.03	-.37	-2.80	.006

*Note.* All analyses are two-tailed.

Gender did not significantly influence any analyses involving the total numbers of accepted and rejected advances when included as a covariate (this was also true if proportion of rejection was used instead of accepted and rejected advances, with the exception of gender significantly predicting change in self-perceived mate value, which is stated above). Further, a cross-lagged panel design revealed that gender does not significantly influence the extent to which ideal standards change relative to ideal flexibility over time. The correlations between ideal standards, flexibility, and self-perceived mate value at T0 and T6 for each gender are presented in Table 7; gender differences between correlations are not statistically significant.

**Table 7: Correlation matrix for males (upper diagonal) and females (lower diagonal)**

Variable	1	2	3	4	5	6
Ideal standards at T0 (1)		-.78**	.50**	.27*	-.49**	.38**
Ideal flexibility at T0 (2)	-.70**		-.61**	-.27*	.53**	-.41**
Self-perceived mate value at T0 (3)	.48**	-.53**		.13	-.30*	.59**
Ideal standards at T6 (4)	.47**	-.47**	.28**		-.73**	-.61**
Ideal flexibility at T6 (5)	-.47**	.62**	-.42**	-.48**		-.51**
Self-perceived mate value at T6 (6)	.31**	-.38**	.64**	.44**	-.60**	

*Note.* \*\* Correlation significant at .01 level, \* Correlation significant at .05 level (two-tailed). Male *ns* range from 67-78, female *ns* from 126-130.

Some participants in the study did not make any advances, but reported information about their ideal standards, ideal flexibility, and self-perceived mate value at T0 and T6 ( $n = 113$ ). The dataset was divided to assess differences between those who did and did not make advances. An analysis of the cross-lagged panel design showed that the act of advancing does not appear to impact the extent to which ideal standards change relative

to ideal flexibility over time. The correlations between ideal standards, flexibility, and self-perceived mate value at T0 and T6 for those who did make an advance and those who didn't are presented in Table 8; differences between correlations are not statistically significant except for those between ideal standards and flexibility at T6, *Fisher's Z* = -2.24,  $p < .05$ .

**Table 8: Correlation matrix for people who made advances (upper diagonal) and those who did not (lower diagonal)**

Variable	1	2	3	4	5	6
Ideal standards at T0 (1)		-.76**	.55**	.38**	-.53**	.29**
Ideal flexibility at T0 (2)	-.70**		-.65**	-.41**	.59**	-.33**
Self-perceived mate value at T0 (3)	.47**	-.52**		.29**	-.42**	.46**
Ideal standards at T6 (4)	.41**	-.38**	.20**		<b>-.69**</b>	.63**
Ideal flexibility at T6 (5)	-.45**	.60**	-.37**	<b>-.47**</b>		-.67**
Self-perceived mate value at T6 (6)	.41**	-.45**	.70**	.48**	-.52**	

*Note.* \*\* Correlation significant at .01 level (two-tailed). *Ns* for participants who did advance range from 89-95, those who did not range from 105-113. Bolded correlations are significantly different from each other at .05 level (two-tailed).

Finally, in other related research, it has been hypothesized that men would make more advances than women, and be rejected more than women (see [osf.io/d9cpg](https://osf.io/d9cpg)). To assess whether men made more advances than women, and whether they were accepted or rejected more, three independent Welch's *F*-tests were conducted (Welch's test was used because Levene's test for homogeneity of variance was violated). Post hoc tests were not run, as there were only two groups (men and women). For ease of interpretation, variables were not mean centered in these analyses. As expected, men ( $M = 12.00$ ,  $SD = 12.99$ ) made more overall advances than women ( $M = 4.90$ ,  $SD = 5.52$ ), *Welch's F*(1, 56.27) = 11.36,  $p = .001$ ,  $d = .71$ . Further, men ( $M = 5.25$ ,  $SD = 5.75$ ) experienced more

rejected advances than women ( $M = 1.18$ ,  $SD = 2.27$ ), *Welch's*  $F(1, 54.51) = 19.509$ ,  $p < .001$ ,  $d = .93$ , but men ( $M = 6.75$ ,  $SD = 7.71$ ) also had more advances accepted than women ( $M = 3.73$ ,  $SD = 4.29$ ), *Welch's*  $F(1, 65.11) = 5.34$ ,  $p < .05$ ,  $d = .48$ . These findings are consistent with the hypotheses that men would make more overall advances and be rejected more than women, although it is worth noting that determining whether men are rejected more is due to them making more advances overall or some other factor needs to be explored further.

## Chapter 4

### 4 Discussion

The purpose of this study was to determine the association of romantic rejection and acceptance with changes in ideal standards, ideal flexibility, and self-perceived mate value in a longitudinal context using the ISM. Findings from this study provided mixed support for the hypotheses. Broadly, ideal standards, ideal flexibility, and self-perceived mate value correlated with each other in the expected directions, change in each construct was predicted by experiences of rejection over time, and gender and self-perceived mate value minimally impacted these findings.

As anticipated, ideal standards and self-perceived mate value positively correlated with each other, and negatively correlated with ideal flexibility (H1, H3, and H4). These effects were found at both T0 and T6. The negative association between ideal standards and ideal flexibility is consistent with theoretical and empirical literature (Campbell et al., 2001; Simpson et al., 2001), such that as ideal standards increase, flexibility decreases, and vice versa. Similarly, ideal flexibility and self-perceived mate value have also been shown to be negatively related (Campbell et al., 2001). The positive link between ideal standards and self-perceived mate value is consistent with previous research that shows individuals who consider themselves desirable partners seeking higher-quality mates (Buston & Emlen, 2003; Edlund & Sagarin, 2010; Kenrick et al., 1993; Regan, 1998a; Regan, 1998b; Surbey & Brice, 2007; Tadinac & Hromatko, 2007; Todd et al., 2007). Thus, the present study provides more evidence for the strength and directionality of the relations between these constructs. Additionally, this is only the second study to compare these variables using the ISM (the first being Campbell et al., 2001), and the strong relations between the constructs provide further support for the model.

Against expectations, ideal flexibility did not change more than ideal standards over time (H2). Simpson and colleagues (2001) suggested that ideal standards should change less easily than ideal flexibility, but such result did not emerge in the present study. Gerlach

and colleagues (2017) found that ideals were more stable over time for those who didn't enter a relationship than those who did, so it is possible that the present null finding is simply representative of that stability. Interestingly, there were no differences in the stability of ideal standards and flexibility between those who did and did not make advances during the study, although it would be logical for standards and flexibility to change more for those who did make advances, and especially among those who experienced rejection in response to advances. However, a potential reason for these findings is that the present study did not account for other individuals making advances towards the participants, so people who did not report making advances were not necessarily disengaged from the dating market, and those who did make advances may have been more active than they reported.

Consistent with hypotheses, increased experiences of rejection predicted decreases in self-perceived mate value and ideal standards, and increases in ideal flexibility over time (H5, H7, H8). This is the first study to empirically support Simpson and colleagues' (2001) idea that repeated experiences of rejection cause a decline in ideal standards. This study also shows that repeated experiences of rejection predict increases in ideal flexibility, which was suggested by Simpson and colleagues' (2001), but has never been empirically tested. These results suggest individuals repeatedly rejected over time are more willing to deviate from their standards in the type of partner they would be willing to accept. Further, the finding that rejection is associated with lower self-perceived mate value over time is consistent with prior literature showing that rejection decreases self-esteem and self-perceived mate value (Kavanagh et al., 2010; Pass et al., 2010; Ruan & Zhang, 2012; Zhang et al., 2015), but the present study is the first to demonstrate this effect longitudinally. Combined, these findings suggest that repeated experiences of rejection predict changes not only in individuals' perceptions of themselves, but also what they desire in a romantic partner. This may occur because multiple experiences of rejection repeatedly signal the disinterest of individuals advanced upon, which could cause participants to reevaluate their own worth as potential mates, as well as the types of people with whom they are likely to enter a relationship. Decreasing standards and increasing flexibility is likely advantageous, as doing so widens the dating pool and leads to an increased chance of experiencing acceptance.

Experiences of acceptance did not predict changes in ideal standards (H6), ideal flexibility, or self-perceived mate value. Although Simpson and colleagues (2001) also suggested repeated experiences of acceptance would increase standards, prior literature has demonstrated that acceptance has mixed effects on mate expectations (e.g., Kavanagh et al., 2014; Zhang et al., 2014). Accordingly, it is unsurprising that acceptance did not influence changes in ideal standards, as well as the other constructs. Sociometer theory suggests that people should be more attuned to rejection than acceptance (Leary & Downs, 1995; Leary & Baumeister, 2000), as ignoring rejection is costlier than ignoring acceptance, which may further account for these findings. Acceptance may primarily function as a reaffirmation of the status quo, rather than a reason to increase standards. However, the type of person accepting the advance may be influential – repeated experiences of acceptance from potential partners of relatively high mate value may cause an increase in ideal standards and self-perceived mate value, and a decrease in ideal flexibility, while acceptances from similar or lower mate value individuals may not cause changes in these constructs.

Contrary to hypotheses, self-perceived mate value did not moderate rejection's impact on change in ideal standards, ideal flexibility, or self-perceived mate value (H9, H10, H11). This study was the first to explore self-perceived mate value as a moderator of rejection's impact on change in these constructs, as prior literature has primarily examined self-esteem as a moderator of rejection. One possibility for the null findings is that high self-perceived mate value is an effective buffer against singular experiences of rejection, but not repeated experiences, as documented in this study. Indeed, sociometer theory suggests that people with high self-esteem should be less attuned to experiences of rejection than those with low self-esteem, but repeated instances of rejection should increasingly trigger the sociometer and begin causing decreases in self-esteem. Given the close association between self-esteem and self-perceived mate value (Brase & Guy, 2004; Kirkpatrick & Ellis, 2001), this is likely true for self-perceived mate value as well. As the present study examined multiple instances of rejection, any buffering effects initially high self-perceived mate value had may not have been evident after six months of acceptance and rejection experiences. Future research should examine self-perceived mate value as a

moderator of both singular and multiple experiences of rejection to explore this notion further.

Gender did not influence many outcomes when included in analyses. This is unsurprising, as prior literature on gender differences in these constructs was mixed or absent (e.g., Regan, 1998b; Simpson et al., 2001; Zhang et al, 2015). However, results did indicate that men reported higher numbers of overall, accepted, and rejected advances than women, which is consistent with prior research which shows men tend to initiate more dates and exhibit more direct dating behaviors than women (Eaton & Rose, 2011). Interestingly, gender was a significant moderator in a three-way interaction with initial self-perceived mate value and rejection, such that the ideal standards of women with initially low self-perceived mate value were more impacted by high levels of rejection than women with initially high levels of self-perceived mate value, and men with initially low self-perceived mate value. This finding is an intriguing addition to the mixed literature on gender differences, as it is the first indication that the ideal standards of women with low self-perceived mate value are particularly sensitive to experiences of rejection. However, this result should be interpreted cautiously, given that the sample size of this study is far lower than ideal for properly detecting a three-way interaction (Heo & Leon, 2010).

## 4.1 Implications

The current study has several theoretical implications. First, the present results provide strong support for certain aspects of the ISM, as ideal standards positively correlated with self-perceived mate value, and ideal flexibility negatively correlates with ideal standards and self-perceived mate value. Further, this is the first study to empirically support the notion that repeated experiences of rejection over time will decrease ideal standards and self-perceived mate value, and increase ideal flexibility. However, the ISM posits that repeated experiences of acceptance will cause the opposite effect from rejection, but the present study did not demonstrate any effects of romantic acceptance. Further, the ISM predicts that ideal flexibility will change more than ideal standards, but that was also not supported here. This study also has implications for literature on the mating sociometer,

as self-perceived mate value does not appear to moderate the influence of rejection on the aforementioned constructs. However, as mentioned previously, this may be due the present study's focus on repeated versus singular rejection experiences, so self-perceived mate value's role as a moderator should be explored further. The general lack of gender differences in this study suggests that the relations between overall ideal standards, ideal flexibility, self-perceived mate value, and romantic rejection do not differ between men and women, although gender differences likely exist in specific domains (e.g., attractiveness-vitality, status-resources). Broadly, the current research provides support for multiple aspects of the ISM, but raises questions regarding the role of romantic acceptance on change in ideal standards, ideal flexibility, and self-perceived mate value over time, the extent to which ideal standards and ideal flexibility change relative to each other, and the role of self-perceived mate value as a moderator of romantic rejection's impact on those constructs.

The present findings also have implications for relationship initiation and relationship satisfaction. Two longitudinal studies (Campbell et al., 2016; Gerlach et al., 2017) have demonstrated that ideal partner preferences of single individuals are predictive of characteristics of future partners. This, combined with the present study's findings that experiences of rejection impact ideal standards, as well as ideal flexibility and self-perceived mate value, suggests that experiences of rejection while single may influence partner selection. Although future research is needed, these findings suggest that individuals who experience high levels of rejection may lower their ideal standards and enter relationships with partners of lower mate quality than initially desired. Additionally, those individuals may end up with lower-quality mates than those who do not experience high levels of rejection. Reducing one's standards and preferences may impact relationship quality, as people who enter relationships with partners who match their new, lower standards may experience less relationship satisfaction than those who enter relationships with partners who match their initial, unadjusted standards.

Although additional research must be conducted, the present study may have intriguing implications for online dating and dating applications. Experiences of acceptance and rejection can occur more quickly and more often on dating websites or apps than in

offline dating environments. If people are similarly affected by experiences of rejection on dating sites and apps as they are offline, then actions such as messaging higher numbers of people or more frequently “swiping right” may occur after repeated rejections (or lack of matches), while those who experience less rejection may become more conservative in their selection practices. These potential variations in online behavior could easily lead to differences in offline dates and eventual relationships between those who experience high levels of rejection online, and those who do not, which, in turn, may impact mate selection and have consequences for relationship satisfaction.

## 4.2 Limitations

While the present study contributes many novel findings to the relationships literature, it does have several notable limitations. First, due to the longitudinal nature of the study, high attrition likely impacted the data. Specifically, many participants did not complete every monthly survey, so data on the true number of accepted and rejected advances is unavailable. It is possible that some people who were categorized as never having made an advance did make advances but did not fill out surveys for those months. Additionally, while the initial sample included 211 participants, only 95 were used in analyses involving the impact of rejection on change in ideal standards, flexibility, and self-perceived mate value, which is lower than desired. The remaining 116 participants either did not respond to the monthly surveys or did not report making any advances during the monthly surveys. The generalizability of the study is also limited, as the sample is predominantly white, and the sexual orientation of participants is unknown.

The present study’s focus was on experiences of accepted and rejected advances, but it did not account for advances made towards the participants, which may also predict change in standards, flexibility, and self-perceived mate value. Participants who are routinely approached likely have high ideals and self-perceived mate value, and low flexibility, while those who are never approached may report the opposite. The present study also did not account for who participants were approaching. Rejection from a long-time crush may be much more impactful than rejection from a stranger at a bar, or, rejection from an extremely high quality potential mate may have less of an effect on an

individual than rejection from someone of similar or lower mate quality. Additionally, the present research did not inquire about the type of relationship being sought by participants; it is possible that those seeking casual relationships would be less impacted by rejection than those desiring more serious commitments. The order in which individuals are accepted and rejected may also have an effect – a series of rejected advances in one evening may not be as damaging if the night ends in one acceptance, while one early acceptance may easily be forgotten if followed by many rejections. Further, explicit definitions of accepted and rejected advances were not included in the study, so participants may have had different interpretations of what counted as an accepted or rejected advance, which may have influenced their reports. Ultimately, the present study provides a broad perspective on how acceptance and rejection impact change in ideal standards, ideal flexibility, and self-perceived mate value, but it does not explore the nuances of the context in which each experience of rejection or acceptance occurs, which would be useful and informative in increasing the understanding of the associations between these constructs.

### 4.3 Future Directions

Future research with larger and more diverse sample would help solidify the strength and generalizability of the findings. Further, the contextual details surrounding experiences of acceptance and rejection would provide a deeper understanding of how rejection and acceptance influence ideal standards, ideal flexibility, and self-perceived mate value, both in specific instances and over extended periods of time. Future research should also strive to acquire more detailed information regarding the context of accepted and rejected advances made towards participants.

Although acceptance and rejection have already been experimentally manipulated in many contexts, they have not been used to test the ISM. Future research should examine how ideal standards, ideal flexibility, and self-perceived mate value are affected when participants are randomly assigned to rejection or acceptance conditions in a controlled experimental environment. An experimental setting would also provide an opportunity

for testing self-perceived mate value as a potential moderator, as repeated experiences of acceptance and rejection would not be confounding factors.

How the present findings apply to online dating and dating apps is unknown. The current study did not explicitly define what an accepted or rejected advance was, but did allude to direct interactions (e.g., agreeing to go out, calling). However, dating sites and apps often require an initial mutual match before direct interactions can occur. Future research should explore whether a lack of matches has the same effect as a direct rejection, and if acceptance has a more meaningful impact on relevant constructs, as it is easier to evaluate individuals who did indicate interest than those who did not. Additionally, the impact of different rejection techniques frequently used in online and app dating (e.g., ghosting) should be explored. More broadly, the influence of experiences of acceptance and rejection in different environments both online and offline should be explored (e.g., singles bar versus classroom, Tinder versus eHarmony). Further, future research should also examine how the directness of acceptance or rejection (e.g., a verbal statement of disinterest versus no longer replying to calls) influences relevant constructs.

#### 4.4 Conclusion

Using the ISM, the present study demonstrates the first evidence that repeated experiences of romantic rejection over time decrease ideal standards and self-perceived mate value and increase ideal flexibility. Despite limitations, this study provides firm grounding for future research in this area and has multiple implications for understanding how ideals and relationships are established. Given the predictive nature of ideal standards in singles (Campbell et al., 2016; Gerlach et al., 2017), the findings of this study regarding the role of rejection in the development of ideal standards and related constructs provide a valuable contribution to the body of knowledge on relationship formation.

## References

- Bale, C., & Archer, J. (2013). Self-perceived attractiveness, romantic desirability and self-esteem: A mating sociometer perspective. *Evolutionary Psychology, 11*, 68-84.
- Blackhart, G. C., Fitzpatrick, J., & Williamson, J. (2014). Dispositional factors predicting use of online dating sites and behaviors related to online dating. *Computers in Human Behavior, 33*, 113-118.
- Brase, G. L., & Guy, E. C. (2004). The demographics of mate value and self-esteem. *Personality and Individual Differences, 36*, 471-484.
- Brown, J. D. (2010). High self-esteem buffers negative feedback: Once more with feeling. *Cognition and Emotion, 24*, 1389-1404.
- Brown, M. A., & Brown, J. D. (2015). Self-enhancement biases, self-esteem, and ideal mate preferences. *Personality and Individual Differences, 74*, 61-65.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review, 100*, 204-232.
- Buston, P. M., & Emlen, S. T. (2003). Cognitive processes underlying human mate choice: The relationship between self-perception and mate preference in Western society. *Proceedings of the National Academy of Sciences, 100*, 8805-8810.
- Buyukcan-Tetik, A., Campbell, L., Finkenauer, C., Karremans, J. C., & Kappen, G. (2017). Ideal standards, acceptance, and relationship satisfaction: Latitudes of differential effects. *Frontiers in Psychology, 8*, 1-11.
- Campbell, L., Chin, K., & Stanton, S. C. (2016). Initial evidence that individuals form new relationships with partners that more closely match their ideal preferences. *Collabra: Psychology, 2*, 1-7.
- Campbell, L., Simpson, J. A., Kashy, D. A., & Fletcher, G. J. (2001). Ideal standards, the self, and flexibility of ideals in close relationships. *Personality and Social Psychology Bulletin, 27*, 447-462.
- Chatterjee, S., Hadi, A. S., (2012). *Regression analysis by example* (5<sup>th</sup> ed.). New York: John Wiley & Sons.
- Clark, C. L., Shaver, P. R., & Abrahams, M. F. (1999). Strategic behaviors in romantic

- relationship initiation. *Personality and Social Psychology Bulletin*, 25, 709-722.
- Csajbók, Z., & Berkics, M. (2017). Factor, factor, on the whole, who's the best fitting of all?: Factors of mate preferences in a large sample. *Personality and Individual Differences*, 114, 92-102.
- DeWall, C. N., & Bushman, B. J. (2011). Social acceptance and rejection: The sweet and the bitter. *Current Directions in Psychological Science*, 20, 256-260.
- Eaton, A. A., & Rose, S. (2011). Has dating become more egalitarian? A 35-year review using Sex Roles. *Sex Roles*, 64, 843-862.
- Edlund, J. E., & Sagarin, B. J. (2010). Mate value and mate preferences: An investigation into decisions made with and without constraints. *Personality and Individual Differences*, 49, 835-839.
- Fletcher, G. J., Simpson, J. A., & Thomas, G. (2000). Ideals, perceptions, and evaluations in early relationship development. *Journal of Personality and Social Psychology*, 79, 933-940.
- Fletcher, G. J., Simpson, J. A., Thomas, G., & Giles, L. (1999). Ideals in intimate relationships. *Journal of Personality and Social Psychology*, 76(1), 72-89.
- Fisher, M., Cox, A., Bennett, S., & Gavric, D. (2008). Components of self-perceived mate value. *Journal of Social, Evolutionary, and Cultural Psychology*, 2, 156-168.
- Gao, S., Assink, M., Cipriani, A., & Lin, K. (2017). Associations between rejection sensitivity and mental health outcomes: a meta-analytic review. *Clinical Psychology Review*, 57, 59-74.
- Gerlach, T. M., Arslan, R. C., Schultze, T., Reinhard, S. K., & Penke, L. (2017). Predictive validity and adjustment of ideal partner preferences across the transition into romantic relationships. *Journal of Personality and Social Psychology*. Advance Online Publication.
- Haselton, M. G. (2003). The sexual overperception bias: Evidence of a systematic bias in men from a survey of naturally occurring events. *Journal of Research in Personality*, 37, 34-47.
- Heo, M., & Leon, A. C. (2010). Sample sizes required to detect two-way and three-way

- interactions involving slope differences in mixed-effects linear models. *Journal of Biopharmaceutical Statistics*, 20, 787-802.
- Hughes, J. (2017). reghelper: Helper Functions for Regression Analysis. R package version 0.3.3 [Computer software]. Retrieved from <https://CRAN.R-project.org/package=reghelper>
- Kavanagh, P. S., Robins, S. C., & Ellis, B. J. (2010). The mating sociometer: A regulatory mechanism for mating aspirations. *Journal of Personality and Social Psychology*, 99, 120-132.
- Kavanagh, P. S., Fletcher, G. J., & Ellis, B. J. (2014). The mating sociometer and attractive others: A double-edged sword in romantic relationships. *The Journal of Social Psychology*, 154, 126-141.
- Kenrick, D. T., Groth, G. E., Trost, M. R., & Sadalla, E. K. (1993). Integrating evolutionary and social exchange perspectives on relationships: Effects of gender, self-appraisal, and involvement level on mate selection criteria. *Journal of Personality and Social Psychology*, 64, 951-969.
- Kirkpatrick, L. A., & Ellis, B. J. (2001). An evolutionary–psychological approach to self-esteem: Multiple domains and multiple functions. In G.J. Fletcher & M.S. Clark, (Eds.), *Blackwell Handbook of Social Psychology: Interpersonal Processes* (pp. 411-436). Blackwell Publishers, Ltd.
- Kirsner, B. R., Figueredo, A. J., & Jacobs, W. J. (2003). Mate Value Inventory-11 [Database record]. Retrieved from PsycTESTS.
- Leary, M. R., & Downs, D. L. (1995). Interpersonal functions of the self-esteem motive. In *Efficacy, Agency, and Self-Esteem* (123-144). Springer: Boston, MA.
- Leary, M. R., & Baumeister, R. F. (2000). The nature and function of self-esteem: Sociometer theory. *Advances in Experimental Social Psychology*, 32, 1-62.
- Leary, M. R., Kowalski, R. M., Smith, L., & Phillips, S. (2003). Teasing, rejection, and violence: Case studies of the school shootings. *Aggressive Behavior*, 29, 202-214.
- Leary, M. R. (2010). Affiliation, acceptance, and belonging: The pursuit of interpersonal connection. In Fiske, S. T., Gilbert, D. T., & Lindzey, G. (Eds.) *Handbook of Social Psychology* (pp. 864-896). John Wiley & Sons, Inc.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996a). The benefits of positive illusions:

- Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology*, *70*, 79-98.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996b). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. *Journal of Personality and Social Psychology*, *71*, 1155-1180.
- Muthén, L. K., & Muthén, B. O. (2015) MPlus [Computer software]. Retrieved from [www.StatModel.com](http://www.StatModel.com)
- Overall, N. C., Fletcher, G. J., & Simpson, J. A. (2006). Regulation processes in intimate relationships: The role of ideal standards. *Journal of Personality and Social Psychology*, *91*, 662-685.
- Overall, N. C., Fletcher, G. J., Simpson, J. A., & Sibley, C. G. (2009). Regulating partners in intimate relationships: The costs and benefits of different communication strategies. *Journal of Personality and Social Psychology*, *96*, 620-639.
- Pass, J. A., Lindenberg, S. M., & Park, J. H. (2010). All you need is love: Is the sociometer especially sensitive to one's mating capacity?. *European Journal of Social Psychology*, *40*, 221-234.
- Penke, L., Todd, P. M., Lenton, A. P., & Fasolo, B. (2007). How self-assessments can guide human mating decisions. In Geher, G. & Miller, M. (Eds.) *Mating intelligence: Sex, Relationships, and the Mind's Reproductive System* (pp. 37-75). New York: Psychology Press
- Penke, L., & Denissen, J. J. (2008). Sex differences and lifestyle-dependent shifts in the attunement of self-esteem to self-perceived mate value: Hints to an adaptive mechanism?. *Journal of Research in Personality*, *42*, 1123-1129.
- Perilloux, C., & Buss, D. M. (2008). Breaking up romantic relationships: Costs experienced and coping strategies deployed. *Evolutionary Psychology*, *6*, 164-181.
- Regan, P. C. (1998a). Minimum mate selection standards as a function of perceived mate value, relationship context, and gender. *Journal of Psychology & Human Sexuality*, *10*, 53-73.
- Regan, P. C. (1998b). What if you can't get what you want? Willingness to compromise

- ideal mate selection standards as a function of sex, mate value, and relationship context. *Personality and Social Psychology Bulletin*, *24*, 1294-1303.
- Reeve, S. D., Kelly, K. M., & Welling, L. L. (2016). The effect of mate value feedback on women's mating aspirations and mate preference. *Personality and Individual Differences* *115*, 77-82.
- Ruan, L. J., & Zhang, L. (2012). The influence of mate-rejection on self-perceived mate value: Testing the mating sociometer. *Advances in Psychology*, *2*, 243-249.
- Simpson, J. A., Fletcher, G. J., & Campbell, L. (2001). The structure and function of ideal standards in close relationships. In G.J. Fletcher & M.S. Clark, (Eds.), *Blackwell Handbook of Social Psychology: Interpersonal Processes* (pp. 86-106). Blackwell Publishers, Ltd.
- Stinson, D. A., Cameron, J. J., Hoplock, L. B., & Hole, C. (2015). Warming up and cooling down: Self-esteem and behavioral responses to social threat during relationship initiation. *Self and Identity*, *14*, 189-213.
- Surbey, M. K., & Brice, G. R. (2007). Enhancement of self-perceived mate value precedes a shift in men's preferred mating strategy. *Acta Psychologica Sinica*, *39*, 513-522.
- Tadinac, M., & Hromatko, I. (2007). Own mate value and relative importance of a potential mate's qualities. *Studia Psychologica*, *49*, 251-263.
- Thibaut, J. W., & Kelley, H. H., (1959). *The social psychology of groups*. New Brunswick, U.S.A: Transaction Publishers.
- Todd, P. M., Penke, L., Fasolo, B., & Lenton, A. P. (2007). Different cognitive processes underlie human mate choices and mate preferences. *Proceedings of the National Academy of Sciences*, *104*, 15011-15016.
- Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual Selection and the Descent of Man: 1871- 1971* (pp. 136-179). Chicago: Aldine.
- Twenge, J. M., Baumeister, R. F., Tice, D. M., & Stucke, T. S. (2001). If you can't join them, beat them: Effects of social exclusion on aggressive behavior. *Journal of Personality and Social Psychology*, *81*, 1058-1069.
- Waller, K. L., & MacDonald, T. K. (2010). Trait self-esteem moderates the effect of

initiator status on emotional and cognitive responses to romantic relationship dissolution. *Journal of Personality*, 78, 1271-1299.

Watson, J., & Nesdale, D. (2012). Rejection sensitivity, social withdrawal, and loneliness in young adults. *Journal of Applied Social Psychology*, 42, 1984-2005.

West, S.G., Finch, J.F., & Curran, P.J. (1995) Structural equation models with nonnormal variables: Problems and remedies. In: R.H. Hoyle (Ed.) *Structural Equation Modeling: Concepts, Issues and Applications* (pp. 56-75). Newbery Park, CA.

Zhang, L., Liu, S., Li, Y., & Ruan, L. J. (2015). Heterosexual rejection and mate choice: A sociometer perspective. *Frontiers in Psychology*, 6, 1-11.

# Appendices

## Appendix A: Letter of Information

### LETTER OF INFORMATION

Western University

Title of Project: **Western Singles Study**

We are inviting you to participate in a research study, conducted by Dr. Lorne Campbell of the Department of Psychology at Western University.

Our research focuses on the thoughts, feelings, preferences and behaviors of individuals who are single. Approximately 400 people will take part in this research.

If you agree to participate, you will be sent an email that includes a link to an online survey. This survey will consist of a number of questionnaires asking about your thoughts, feelings, preferences and behaviors. The survey will be entirely online and will take approximately 30 minutes to complete. After completing this Time 1 survey, you will be sent a \$10 Amazon gift certificate via email.

You will then be sent an online survey via email once per month for the next 5 months. Each of these surveys will take approximately 5-10 minutes to complete, and you will be emailed a \$5 Amazon gift certificate for each survey that you complete.

If you become involved in a romantic relationship over the course of the study, you will receive an online survey that asks about your perceptions of your relationship. You will receive a \$10 Amazon gift certificate via email for completing this survey. We will also ask you for your partner's email address so that we can invite him/her to participate in the study. Note that your partner would be under no obligation to participate in the study, and you are under no obligation to share his/her contact information with us. If your partner would rather not participate in the study, you will continue to receive your online surveys, however your partner will not receive any surveys.

If your partner agrees to participate, he/she will also be sent an online survey asking about his/her thoughts, feelings, preferences and behaviors. Your partner will receive a \$10 Amazon gift certificate for completing this survey. Then, 3 months later, both you and your partner will be sent one final online survey via email. This follow-up survey will take approximately 30 minutes to complete and both you and your partner will receive a \$10 Amazon gift certificate for completing this survey.

For example, if you become involved in a romantic relationship in Month 2 of the study, and your partner agrees to participate, you will stop receiving your monthly surveys. Instead, both you and your partner will receive one online survey at that time, and one

final online survey 3 months later. If, on the other hand, you do not become involved in a relationship over the 6-month course of the study, you will simply receive a short online survey once per month for 6 months.

All of your responses to the surveys will remain private and confidential (i.e. they will not be shared with your partner or anyone else). There are no known risks involved with participating in this study. You will receive up to \$45 in Amazon gift certificates in appreciation of your contribution.

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions or withdraw from the study at any time without loss of promised compensation.

You will receive written information about the purpose of the study at the end of the study. If you have any questions about the research or want to obtain information about results, feel free to contact Dr. Bethany Butzer (Email: [REDACTED])

All data collected will be used for research purposes only and stored in a secure location viewed only by authorized researchers. All possible measures will be taken to protect your confidentiality and you will not be identified individually with any responses you provide during your participation.

If you have any questions about the conduct of this study or your rights as a research participant you may contact the Director of the Office of Research Ethics, Western University, [REDACTED], email: [REDACTED].

You will be provided with a copy of this letter.

## **Appendix B: Letter of Consent**

### **LETTER OF CONSENT**

Title of Project: **Western Singles Study**

**Principal Investigator:** Dr. Lorne Campbell

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

*Note that because the proposed study is entirely online, participants will provide consent online by checking a box. In other words, the Letter of Information will be provided at the beginning of the Time 1 survey. The above paragraph will appear at the bottom of the Letter of Information, and participants will check off a box indicating their consent.*

## Appendix C: Debriefing Form

### DEBRIEFING FORM

Title of Research: **Western Singles Study**

Thank you for participating in this research. You have made an important contribution to a developing body of knowledge in psychology. Now that your participation is complete, we can tell you more about the study you have just participated in.

The current study was designed to investigate whether the qualities that individuals say they ideally desire in a romantic partner actually influence their mate selections. In other words, do people end up dating the types of people they say they want to date?

While some studies have shown that ideal mate standards influence relationship initiation (Burriss, Welling, & Puts, 2011; DeBruine et al., 2006; Pérusse, 1994), other studies have challenged the role that ideal preferences play in actual mate selection (Eastwick & Finkel, 2008; Eastwick, Finkel, & Eagly, 2011). One major limitation of existing research in this area is that mate preferences are often measured retrospectively, *after* participants become involved in a relationship. In addition, studies that have attempted to evaluate the link between ideal mate standards and actual relationship initiation have tended to focus on short-term situations, such as speed dating contexts.

The present study aimed to resolve the inconsistencies in this research area by examining ideal mate preferences and actual relationship initiation over an extended period of time (6 months) in a sample of individuals who were single at the initial testing session (i.e. not involved in a romantic relationship). Along these lines, we recruited approximately 400 single individuals to participate in an online survey that asked them to identify the characteristics of their ideal mate (e.g. outgoing, dresses well, good job, sexy, etc.). These participants were also asked to complete an online survey every month for the next 5 months.

If, over the course of the study, a participant became involved in a romantic relationship, his/her partner was also invited to participate in the study. If the partner agreed to participate, both partners were sent an online questionnaire at that time, as well as a follow-up survey 3 months later. These questionnaires assessed the attributes of the new partner, as well as how the new relationship progressed over time. Thus, we were able to examine whether the new partner possessed the types of characteristics that the original participant said they valued in an ideal mate.

This study will contribute to research in this area by determining whether people enter into relationships with individuals who closely match their ideal mate preferences (or particular ideal preferences, and not others), and/or whether relationships develop more positively when greater ideal consistency exists. That is, do people end up dating the type of person they say they want to date? And if so, does their relationship progress more positively over time?

If you have any further questions, please feel free to contact Dr. Bethany Butzer (e-mail: [REDACTED]).

**For more information on this topic, some references are provided below.**

Burriss, R.P., Welling, L.L.M., & Puts, D.A. (2011). Mate-preference drives mate-choice: Men's self-rated masculinity predicts their female partner's preference for masculinity. *Personality and Individual Differences, 51*, 1023-1027.

Eastwick, P. W., Finkel, E. J., & Eagly, A.H. (2011). When and why do ideal partner preferences affect the process of initiating and maintaining close relationships? *Journal of Personality and Social Psychology, 101*, 1012-1032.

Note: If you have any questions about your rights as a research subject, you should contact the Director of the Office of Research Ethics at [REDACTED] or [REDACTED].

## Appendix D: Ideal Standards, Ideal Flexibility, and Self-Perceived Mate Value Scales

*This scale is a combination of: Ideal Standards Scale (Fletcher et al., 1999) and Interpersonal Qualities Scale (IQS; Murray, Holmes & Griffin, 1996a). Participants filled out the items 3 times, once for each set of instructions below. Items with asterisks represent items from the short form of the Ideal Standards Scale, which was used in the present research.*

### *Ideal Importance:*

**Instructions:** Please rate each attribute (listed below) in terms of how **important** it is to **you** in describing your **ideal partner** in a close, romantic relationship. When thinking about your **ideal partner**, envision someone who you **realistically** could be in a relationship with. If an attribute is not important to you, do not rate it as highly as something that is important to you. Use this scale:

1	2	3	4	5	6	7
very unimportant			extremely important			

### *Ideal Flexibility:*

**Instructions:** Now think about your **ideal partner** once again. Think about the extent to which a potential romantic partner (e.g., a person you might want to date) would have to **match** your **ideal partner** in order for you to have a successful and happy relationship with the potential romantic partner.

If, for example, a romantic partner would have to match your **ideal partner** almost perfectly on a given attribute, choose 9 (meaning that the partner would have to match your **ideal** between 90-100% on this attribute). If a romantic partner would have to match your **ideal** about half-way to be satisfactory, choose 4 (meaning that the partner would have to match your **ideal** 40-50% on this attribute). If a romantic partner would not have to match your **ideal** at all on a given attribute, choose 0.

Use this scale:

- 0 = 0-10%** of my ideal partner  
**1 = 11-20%** of my ideal partner  
**2 = 21-30%** of my ideal partner  
**3 = 31-40%** of my ideal partner  
**4 = 41-50%** of my ideal partner  
**5 = 51-60%** of my ideal partner  
**6 = 61-70%** of my ideal partner  
**7 = 71-80%** of my ideal partner  
**8 = 81-90%** of my ideal partner  
**9 = 91-100%** of my ideal partner

*Self-Perceived Mate Value:*

Instructions: Please indicate how characteristic each attribute listed below is of **you**. Use this scale:

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
<b>not at all</b>			<b>moderately</b>			<b>very</b>
<b>characteristic</b>			<b>characteristic</b>			<b>characteristic</b>

1. understanding\*
2. adventurous\*
3. good job\*
4. supportive\*
5. nice body\*
6. financially secure\*
7. considerate \*
8. outgoing\*
9. nice house or apartment\*
10. kind\*
11. sexy\*
12. ambitious
13. a good listener\*
14. attractive\*
15. successful\*
16. sensitive\*
17. good lover\*
18. dresses well\*
19. kind and affectionate
20. open and disclosing
21. patient
22. understanding
23. responsive to my needs
24. tolerant and accepting

25. critical and judgmental
26. lazy
27. controlling and dominant
28. emotional
29. moody
30. thoughtless
31. irrational
32. distant
33. complaining
34. childish
35. self-assured
36. sociable or extraverted
37. intelligent
38. witty
39. traditional

## Appendix E: Monthly Survey

Have you become involved in a romantic relationship since completing your last survey?

Yes No

*If the participant responds “yes,” he/she will complete the “Original Participant Relationship Survey” described below.*

*If the participant responds “no,” he/she will complete the following questions:*

1. Have you been involved in any one-night stands since you completed your last survey?

Yes No

If yes, how many? \_\_\_\_\_

2. Have you approached anyone to go out with you since you completed your last survey (i.e. giving someone your number, asking them on a date, etc.)?

Yes No

3. Approximately how many times were your advances **successful** (i.e. how many people agreed to go out with you, called you, etc.)?

Text Box

4. Approximately how many times were your advances **unsuccessful** (i.e. how many people DID NOT agree to go out with you, call you, etc.)?

Text Box

5. Have you gone on a date with anyone since you completed your last survey (whether you initiated the date or not)?

Yes No

If yes, please provide the initials of the person, or people, you have dated and the number of dates you have had with this person (or each person).

Initials:

Number of Dates:

## Curriculum Vitae

**Name:** Nicolyn H. Charlot

**Post-secondary Education and Degrees:**

The University of Western Ontario  
London, Ontario, Canada  
2018 – 2022, Ph.D. in Social Psychology (Expected)

The University of Western Ontario  
London, Ontario, Canada  
2016 - 2018 M.Sc. in Social Psychology

University of Hawai‘i at Mānoa  
Honolulu, Hawai‘i, United States  
2012 – 2016, B.A. in Psychology with Honours

**Honours and Awards:**

University of Hawai‘i at Mānoa Honors Thesis Prize  
2016

Undergraduate Research Opportunities Program Award (\$1,717)  
2014

Assoc. Students of University of Hawai‘i Research Award (\$605)  
2014

**Related Work Experience**

Teaching Assistant  
The University of Western Ontario  
2016 – 2018

Summer Research Intern  
Northwestern University  
2015

Research Assistant  
University of Hawai‘i at Mānoa  
2014

Research Assistant  
University of Minnesota – Twin Cities  
2013

Research Assistant  
University of Hawai‘i at Mānoa  
2012 – 2013