

Original Article

COMPONENTS OF SELF-PERCEIVED MATE VALUE

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Abstract

Self-perceived mate value is an important concept for evolutionary psychology, and yet there has been little investigation into how it should be measured. Past research has relied upon simple measures, such as self-perceived physical attractiveness, or on instruments where people rate the existence of certain traits. Using a sample of 150 individuals, we show that there are at least seven distinct components of self-perceived mate value. We compare these components with self-ratings of physical attractiveness, current income, as well as one existing measure, the Mate Value Inventory (Kirsner et al., 2003). Only some of these components correlate with these variables, and to varying extents for women and men, suggesting the need for a more comprehensive and sex-specific measure of self-perceived mate value. We discuss the context-dependent nature of mate value, and point to the need for future research to provide confirmatory support for our factors. This research represents an important first step into the accurate assessment of mate value.

Keywords: Mate value, Physical attractiveness, Self-perception, Sociometrics, Factor analysis

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Components of Self-Perceived Mate Value

Decisions pertaining to mating rely primarily upon two aspects of behaviour (Penke, Todd, Lenton & Fasolo, 2007). The first, mate choice, refers to the factors that influence the selection of a target for one's mating efforts. The second, mating tactics, refers to the process of deciding how one should allocate their resources (e.g., time, energy, money) when mating. Both of these aspects impact on mate value, in that researchers could focus on the value of a mate and how to successfully obtain that person, or they could examine how individuals influence their own mate value to obtain the best mate possible. In the current work, we focus exclusively on the latter aspect, and specifically examine self-assessment of one's own mate value.

Within the area of self-assessment, there are a wide variety of perspectives. Some researchers (e.g., Landolt, Lalumiere, & Quinsey, 1995) have concentrated on self-perceived mate value and the qualities that are linked to this assessment. Alternatively, one could instead look at the sociometric properties (e.g., the evaluation of self esteem) that are involved in self-perception (e.g., Brase & Guy, 2004; Denissen, Penke, Schmitt, & van Aken, in press). Similarly, one could examine how knowing the abstract value of oneself (e.g., "I am a "6") plays a role in acquiring mates and competing with rivals (Cox & Fisher, in press). A very different perspective could involve phenomena such as the contrast effect, and how it plays a role in establishing mate value (Strout et al., 2008) or even cyclic influences such as hormonal fluctuations (Beaulieu, 2007). Although these different views all pertain to self-assessment of mate value, there has been little linkage of these perspectives. One reason for this disconnect might stem from problems in defining mate value.

Problems in Defining Mate Value

Mate value has been defined theoretically as, "The total value of the characteristics that an individual possesses in terms of the potential contribution to his or her mate's reproductive success" (Waynforth, 2001, p. 207). Kirsner, Figuerdo, and Jacobs (2003) propose that mate value is the genetic quality or fitness of oneself as a sexual partner, which is displayed through observable characteristics. Although the current research is performed from an evolutionary psychological perspective, it is crucial to note from the outset that there is no reason why mate value must be exclusively tied to reproductive success. Elderly individuals, who cannot have children, or younger individuals without any interest in having children still undergo processes related to mate value, and yet the decisions of these populations cannot be adequately covered by evolutionary theories of reproductive success. Moreover, mate value is intrinsic to an individual, and by defining it solely with respect to someone else, the emphasis on the individual, and for example, their self-assessment, is lost. Therefore, we propose that a more appropriate definition of mate value might be *the total sum of characteristics an individual possesses at a given moment and within a particular context that impacts on their ability to successfully find, attract, and retain a mate.*

Measuring the Components of Mate Value

It is important to note that past research has been very narrow in its view of mate

value, such that it has been frequently encapsulated into single items. For women, mate value is often synonymous with physical attractiveness. For example, Singh (2002), and Sugiyama (2004) found female mate value was determined “at a glance” with the simple morphological measure of waist-to-hip ratio (WHR), and they use the term mate value synonymously with physical attractiveness, as mediated by WHR. Similarly, Beaulieu (2007) reported that female mate value is an assessment of a woman’s own physical attractiveness that changes with ovulatory shifts. Although we agree that males place a higher premium on a potential mate’s physical attractiveness than women, it remains undetermined as to how attractiveness is related to female mate value, and whether it is the most significant factor. In other words, as Waynforth (2001) points out, it is unclear whether women’s morphology contains significantly more useful signals of mate value than men’s morphology.

Assessments of men’s mate value reflects the same narrow perspective, with a focus on physical attributes and the ability to accrue resources, the latter which would potentially be allocated towards a mate and any resulting children. For example, Honekopp et al. (2007) suggest that men’s mate value is assessed by their overall physical fitness, and Penke et al. (2007) found it is based on physical condition and overall ability to provide resources. A more dynamic model was created by Waynforth (2001), who documented that women trade-off men’s physical attractiveness for their resources, and although both are part of male mate value, the latter is more important.

It should be noted, though, that not all past research has had this narrow view of mate value. Brase and Guy (2004) report that several factors contribute to mate value, including physical, personality, and demographic factors, of which some are idiosyncratic variations, such as in personality, physique, or other traits that vary within an otherwise uniform population. However, in spite of acknowledging that mate value should be multifaceted, these researchers resorted to one single item for testing self-perceived mate value. Although their item included several features like personality and physical appearance, it rests completely on self-perception of one’s desirability as a mate, which might fall victim to social desirability bias. Presumably, people are reluctant to say that they are or would be a poor mate.

A second reason to expect mate value to encompass more facets than previous considered is because mate value should reflect mate preferences, which are numerous. Mate value ought to reflect mate preferences, especially since mating mimics market theory (see Kurzban & Weeden, 2005 for a review). Furthermore, numerous studies indicate sex differences and similarities in mate preferences. As mentioned, men are thought to place a higher premium on physical attractiveness, and women prefer indicators of resources (Buss & Schmitt, 1993; Feingold, 1992). However, these sex-specific preferences are thought to be secondary to the similarities women and men share. Of the characteristics most preferred for long-term mates, women and men are highly similar; both prefer kindness, intelligence, emotional stability, and a pleasing disposition (Buss, 1989).

Finally, given that mate value should be intimately linked with reproductive success, indicators of parenting ability should be also considered by potential mates. Physical attractiveness is tied to the probability of one successfully having offspring; for example, young women are considered more attractive than older women, perhaps due to fertility (Buss, 1989). However, being able to have children does not automatically indicate that one possesses adequate parenting ability. Moreover, it does not indicate that one necessarily wants children, or would be willing to provide the necessary resources.

Therefore, measures of mate value should include parenting ability, as well as one's desire to have children.

Current study

There are three objectives for the current study. The first, and most important, goal was to explore the underlying components of mate value, with a focus on how one arrives at a self-assessment of their own value. The second goal was to investigate how these components relate to existing measures of mate value that have been used in the literature. Third, we wanted to gather additional evidence for the idea that mate preferences are linked to mate value, at least in terms of women's preference for indicators of resources, and men's preference for physical attractiveness.

Methods

Participants

Forty-four men participated in our study (age, in years, $M = 21.8$, $SD = 3.5$), not including 7 we excluded due to their self-reported non-heterosexual orientation. Eleven men were single, 7 were dating casually, and 26 were in committed romantic relationships. We also tested 106 women (age, $M = 20.6$, $SD = 2.2$), not including 8 we excluded due to their self-reported non-heterosexual orientation. Twenty-nine women were single, 5 were dating casually, and 72 were in committed romantic relationships. All were students enrolled in at least one undergraduate psychology course at a mid-size university in Halifax, Canada. Participants were tested in small groups and were given a small course credit for participation.

Measures and Procedure

Demographics Survey

We created a demographics survey to ascertain the sex, age, current mating relationship status, self-perceived physical attractiveness, number of long-term relationships, number of short-term relationships, and annual income of participants. Participants were also asked, "If you were single, how easy would it be for you to find a short-term mate for romance" and, using the same initial wording, "for sex", and "to find a potential long term mate for marriage." Responses were scored using a Likert-type scale, with 1 = extremely difficult to 7 = extremely easy.

Components of Mate Value Survey (CMVS)

Since mate value should relate to mating success, we initially began by creating the CMVS so that it included the well-cited measure, the "Self Perceived Mating Success Scale" (Landolt, Lalumiere, & Quinsey, 1995). A second reason to include this measure is because self-esteem is a factor that impacts self-assessed mate value and one way to maintain self-esteem is by mating successfully (e.g., Brase & Guy, 2004; Denissen et. al,

in press). This scale is composed of eight items, used to determine how one perceives the reactions they receive from the opposite sex (a list of the non-repetitive items is included in Table 1, under the first factor). Participants respond using a Likert-type scale (1 = strongly disagree, 7 = strongly agree), such that higher scores indicate higher mating success. The scale requires one to understand how they would be assessed by the opposite sex as a mate, and thus, is considered to be a sociometric measure of mate value (Denissen et al., in press.) It should be noted that, although useful, there are several limitations with this scale, three of which have been identified by Camargo (2007). First, it does not provide concrete evidence of mating success in terms of the number of copulations, and thus reflects perceptions that may not be accurate. It also relies purely on one's own perceptions and thus, it may be influenced by one's memory or social desirability. Third, it does not include behavioral components, although mating success itself is highly based on behavior. Note that for brevity, we omitted the reverse-scored items, "Members of the opposite sex are not very attracted to me" and "I do not receive many compliments from members of the opposite sex." Given that these items are included without the negative wording, the exclusion of these items has minimal impact on an exploratory factor analysis. The survey had Cronbach's $\alpha = .83$.

We then used five different approaches to create our measure. First, we turned to the existing literature, as reviewed above, on sex-based differences in mate preferences and created survey items that captured some of these sex-specific preferences (i.e., physical attractiveness, wealth, sex appeal). Second, we predicted that mate value could be related to sociality, such that one who socialized more may have higher mate value, specifically because they will have more opportunity to meet potential mates. Furthermore, sociality is a known and documented mate preference (Buss, 1989; Li, Kenrick, Bailey, & Linsenmeier, 2002). Therefore, we included items related to popularity and socialization. Third, given our idea that mate value should include feelings about parenting, we also included items that dealt with one's perception of parenting ability, as well as the desire to have children. Fourth, since past behavior is the best indicator of future behaviour (Conner & Armitage, 1998) and is what one would use for making accurate self-assessments, we included items dealing with past experiences. We suggest that self-perceived mating success should relate to one's reporting of past experience. Finally, we also included a few control items that addressed issues of self-perceived low desirability as a mate. For this survey, participants responded using a Likert-type scale (1 = strongly disagree, 7 = strongly agree) with some items reverse scored. All items are listed in Table 1 as part of the factor analysis findings.

Mate Value Inventory

For the sake of comparison, we also included the pre-existing multi-dimensional measure of mate value (MVI) created by Kirsner et al. (2003). The MVI was created to explore depressive symptoms in relation to ratings of mate values among self, social partners, and sexual partners. We included it in our study because it is the only published, pre-existing multi-dimensional measure of mate value we could locate. The MVI is a list of 17 traits, where participants are asked, "How well do you feel that these attributes apply to you currently?" with a scale of -3 (extremely low on this trait) to +3 (extremely high on this trait). These traits were ambitious, attractive face, attractive body, desires children, emotionally stable, enthusiastic about sex, faithful to partner, financially secure, generous, good sense of humour, healthy, independent, intelligent, kind and

understanding, loyal, responsible, and sociable. Mate value is the summed score of these items. In our study, reliability for this survey was high, Cronbach's $\alpha = .83$. As for procedure, we used paper-and-pencil administration of surveys. The demographic survey was completed, then the CMVS and then the MVI.

Results

Factor Analysis

Table 1

| Factor | Item | Variance Explained | Cumulative Variance |
|---------------------------|---|--------------------|---------------------|
| Views of the opposite sex | Members of the opposite sex that I like tend to like me back | 26.78% | 26.78% |
| | Members of the opposite sex notice me | | |
| | I receive many compliments from members of the opposite sex | | |
| | I receive sexual invitations from members of the opposite sex | | |
| | Members of the opposite sex are attracted to me | | |
| | I can have as many sexual partners as I choose | | |
| Sociality | I run into friends wherever I go | 11.79% | 38.56% |
| | I have a large network of friends | | |
| | I receive many and frequent invites for social events | | |
| | I consider myself popular | | |
| | I often stay at home because there isn't anything to do* | | |
| Parenting | I want to have children in my lifetime | 8.89% | 47.45% |
| | I would make a good parent | | |
| | It is important that the opposite sex view me as a good parent | | |
| Wealth | I want people to think that I am wealthy | 6.64% | 54.10% |
| | I have a tendency to display my wealth | | |
| Looks | I would like members of the opposite sex to consider me physically attractive | 6.47% | 60.57% |
| | I would like members of the opposite sex to consider me sexy | | |
| Relationship history | After I date someone they often want to date me again | 5.83% | 66.41% |
| | Several members of the opposite sex have had crushes on me in the past 6 months | | |
| Fear of failure | I would like members of the opposite sex to hit on me more than they do | 4.69% | 71.10% |
| | I often worry about not having a date | | |

* indicates item was reverse loaded

We performed an exploratory principal components factor analysis on the CMVS using a varimax rotation, with Kaiser normalization, and factors with eigenvalues greater than one were retained (Hair, Anderson, Tatham & Black, 1998). We used the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy to compare the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients to ascertain whether a factor analysis could proceed. The KMO measure was a moderate .78, indicating that a factor analysis was appropriate. We also performed Bartlett's Test of Sphericity, which yielded significance ($\chi^2(231) = 1435.31, p < .000$), indicating that the data were appropriate for factor analysis.

The acceptable sample size for factor analysis, particularly for factor loading, remains hotly contested in the testing literature (e.g., Mundfrom, Shaw & Ke, 2005). Given that our sample size was 150 people, we adopted the conservative factor loading level of .50 to be considered significant at the $\alpha = .05$ level (Hair et al., 1998). There were 21 items in the CMVS, which had Cronbach's $\alpha = .83$.

The factor analysis revealed 7 components, as listed in Table 1. The first factor was essentially the "views of the opposite sex," and contained all the items included in Landolt et al.'s (1995) Self Perceived Mating Success Scale. It should be noted that although it was expected, the relationship history items did not significantly load on this factor. The other factors, in order of the variance they explained, were "sociality," "parenting," "wealth," "looks," "relationship history," and "fear of failure." Total variance explained was 71.10%.

Comparison Analyses: CMVS with MVI

We correlated each of the 7 factors, by participant sex, with their MVI scores, self-perceived ratings of physical attractiveness, and current and expected income. We included the last two variables, given the emphasis in the mate preference literature on women's physical attractiveness and men's ability to accrue resources.

Women's MVI ($df = 105$ for all reported comparisons, two-tailed) correlated significantly with the 5 of the 7 factors. The significantly correlated factors were views of the opposite sex ($r = .47, p < .000$), sociality ($r = .34, p < .000$), parenting ($r = .33, p = .001$), looks ($r = .36, p < .000$), and relationship history ($r = .29, p = .003$). Men's MVI correlated significantly ($df = 43$ for all reported comparisons, two-tailed) with 3 of the factors. These were views of the opposite sex ($r = .34, p = .03$), sociality ($r = .38, p = .01$), and relationship history ($r = .67, p < .000$). Women and men's MVI also significantly correlated with self-perceived physical attractiveness, $r = .49, p < .000$, and $r = .72, p < .000$, respectively.

Comparison Analyses: CMVS with Self-Rated Physical Attractiveness

We then correlated self-perceived physical attractiveness with the 7 factors. For women, attractiveness significantly correlated with 3 factors: views of the opposite sex ($r = .48, p < .000$), sociality ($r = .31, p < .000$), and looks ($r = .39, p < .000$). For men, it significantly correlated with factors: views of the opposite sex ($r = .46, p = .002$), sociality ($r = .43, p = .004$), relationship history ($r = .45, p = .003$), and negatively with

fear of failure ($r = -.33, p = .04$). Interestingly, attractiveness did not significantly correlate with the parenting factor for either women ($r = .14, p = \text{ns}$) or men ($r = .003, p = \text{ns}$). As well, for neither sex did attractiveness correlate with current income, women ($r = .12, p = \text{ns}$) and men ($r = .11, p = \text{ns}$).

Comparison Analyses: Relationship Experience, CMVS, and MVI

Given that people should use, at least partly, past mating success when performing self-assessment of mate value, we asked participants how many short-term and long-term relationships they have had. We left it to each individual to decide what “short” or “long” meant. For short-term relationships, women reported a range of 0 to 15, $M = 4.50, SD = 3.50, Md = 4$, with 5 women not responding, as compared to men with a range of 0 to 30, $M = 6.39, SD = 6.52, Md = 4.5$, and with 4 missing responses. For long-term relationships, women reported a range of 0 to 5, $M = 1.64, SD = 1.06, Md = 2$, with 3 missing responses, and men had a range of 0 to 10, $M = 1.88, SD = 1.53, Md = 2$, with 2 missing responses.

Women’s number of short-term relationships significantly correlated with views of the opposite sex ($r = .24, p = .02$) and relationship history ($r = .28, p = .005$). It also correlated with how easy they thought it would be for them to locate a short-term mate for romance ($r = .25, p = .01$) and for sex ($r = .26, p = .009$). The number of long-term relationships significantly correlated with wealth ($r = .21, p = .03$) and relationship history ($r = .26, p = .008$). It also correlated with how easy they thought it would be to locate a short-term mate for romance ($r = .32, p < .000$), sex ($r = .29, p = .003$), or a long-term mate for marriage ($r = .24, p = .01$). Note that the number of short-term ($r = .13, p = \text{ns}$) or long-term relationships ($r = .09, p = \text{ns}$) did not significantly correlate with MVI scores.

For men, the number of short-term relationships did not significantly correlate with any of the 7 components on the CMVS (values omitted for brevity), nor with the MVI ($r = .11, p = \text{ns}$). However, the number of long-term relationships significantly correlated with relationship history ($r = .47, p = .002$), negatively with fear of failure ($r = -.34, p = .03$), and with the MVI ($r = .76, p < .000$). It also correlated with how easy they thought it would be to find a short-term mate for romance ($r = .38, p = .02$).

Comparison Analyses: Ease of Locating a Mate, CMVS, and MVI

Finally, for the sake of exploration, we used our demographic survey items pertaining to how easy participants believed it would be for them to find a short-term mate for romance and for sex, and to find a potential long-term mate for marriage. We correlated these values with the seven factors, and with MVI scores.

For ease in finding a mate for a short-term romance, women’s scores significantly correlated with views of the opposite sex ($r = .44, p < .000$), sociality ($r = .21, p = .03$), parenting ($r = .27, p = .006$), relationship history ($r = .34, p < .000$), and negatively with fear of failure ($r = -.28, p = .004$). For ease in finding a mate for short-term sex, women’s scores significantly correlated with views of the opposite sex ($r = .27, p = .006$), looks ($r = .27, p = .006$), and relationship history ($r = .33, p = .001$). For ease in finding a potential long-term mate for marriage, women’s scores significantly correlated with views of the opposite sex ($r = .37, p < .000$), sociality ($r = .23, p = .02$), and parenting ($r = .20, p = .04$).

A highly similar pattern emerged for men. Men's scores for ease in finding a mate for a short-term romance significantly correlated with views of the opposite sex ($r = .56, p < .000$), sociality ($r = .49, p = .001$), relationship history ($r = .74, p < .000$) and negatively with fear of failure ($r = -.35, p = .02$). Ease in finding a mate for short-term sex significantly correlated with views of the opposite sex ($r = .66, p < .000$), sociality ($r = .47, p = .001$), and relationship history ($r = .41, p = .007$). Ease in finding a long-term mate for marriage significantly correlated with sociality ($r = .35, p = .02$) and parenting ($r = .31, p = .04$).

As for the MVI, women's scores significantly correlated with two of these items: short-term romance ($r = .31, p < .000$), and potential mate for marriage ($r = .30, p < .002$), but not significantly with short-term sex ($r = .18, p = \text{ns}$). For men, MVI scores significantly correlated with both of the short-term situations: romance ($r = .56, p < .000$), and (sex $r = .32, p = .04$), but not with long-term marriage ($r = .12, p = \text{ns}$).

Discussion

In this paper, we propose that current conceptualizations of mate value are overly narrow and need to include a wider range of traits. Given that mate preferences are numerous and multi-faceted, and provide the means for assessing mate value, mate value must at least partly reflect these diverse preferences. Mate value does not exist in a vacuum, but rather the traits that underscore it should be those that are preferred by the opposite sex. Moreover, mate value must be composed of factors that impinge upon or indirectly relate to genetic quality or fitness, such that they act as honest signals of one's worth as a mate. This link between mate value and genetic fitness does not exclude the fact that there are social and cultural influences on mate value. Indeed, if one was to modify Tinbergen's (1963) framework, it may be possible to view the genetic basis of mate value as being an "ultimate" level of explanation, while social and cultural influences could act on top of this layer, in a more "proximate" manner. We leave it to future research to examine how mate value is directly related to genetic fitness, and how it could be susceptible to social and cultural factors.

Our primary goal was to explore the components of mate value. In light of our results, we propose there are at least seven factors, as elucidated in Table 1. We make no claims of having determined all possible factors since it is likely that there are other traits that may impact mate value. We leave it to future research to expand on our initial findings and identify new traits and factors that are a component of mate value. Most importantly, we did not fully explore the link between mate preferences and mate value in the current study. For example, one could create a list of all documented preferences and ask individuals to rate themselves on these traits, thereby arriving at an indicator of self-assessed mate value. One could also then ask others to rate these individuals to see if self-assessed mate value is accurate.

The possibility of inaccuracy raises another direction for future research. In the current study, we examined self-perceived mate value, but we did not examine how our measure correlates with other's perceptions of one's mate value. That is, do opposite sex individuals agree with one's self perceived mate value? Given that self-assessed mate value needs to be accurate in order to be useful, these values should strongly correlate. However, further study is needed in this area to determine the amount of variation when

assessing an individual's mate value and the impact of this variation on mate selection and attainment.

It is also important to note that mate value should change over the lifespan, according to one's fertility, relationship status (i.e., romantically involved or not), number and age of children, and so on. Thus, the factors that we have uncovered are those that are part of young adults' mating strategies, and future research needs to examine whether these same factors are important in older populations. The most significant finding in our study is that mate value is based on far more than mere physical attractiveness, and that past indicators of mating success are not necessarily relied upon when making self-assessments of mate value. Past research that has relied exclusively on one item to capture mate value as a variable needs to be re-examined in light of the fact that mate value is a composite of many factors, as shown by the current study.

Obtaining an accurate assessment of one's own mate value is highly important. It is extremely advantageous for one to be able to assess the quality of mate that they will be able to obtain, particularly since one may opt to mate assortatively on dimensions such as educational attainment or ethnicity (see Kurzban & Weeden, 2005, for a review). That is, one must know one's own value in order to determine the difference between their value and that of a potential mate.

The critical nature of mate value suggests that it must fluctuate with context in order to be of use. However, there are various ways to view "context." For example, context could include those of the same-sex in close proximity. Therefore, due to contrast effects (Kenrick, Neuberg, Zierk, & Krones, 1994), one might assess their mate value in relation to potential rivals in the immediate surroundings. Likewise, if an individual is seen in close proximity to more attractive same-sex friends versus less attractive friends, her or his mate value will shift accordingly. Alternatively, the context could be influenced by the pool of potential mates. If one would, in general, be considered as having average mate value and the pool consisted of predominantly low quality mates, one might increase their perception of worth. If the pool was to change such that there was an influx of higher quality mates, one's mate value would similarly shift downward.

Context can also refer to the type of relationship the individual is seeking or being considered for as the criteria for establishing a short-term primarily sexual relationship are different than for short-term romantic relationships, or for long-term relationships leading to marriage (Kenrick, Groth, Trost, & Sadalla, 1993). Our findings show that both women and men are sensitive to these differences, and that different components relate to the difficulty people believe they would experience in locating a mate for a particular form of relationship. As an aside, it is also interesting that women believe their physical attractiveness (as defined by the looks component in the factor analysis) is related to their ability to find a mate for a short-term sexual relationship, although data from Kenrick et al. (1993) has established that men's standards are significantly reduced when seeking sexual relationships. In fact, women's standards for physically attractive mates significantly increase when they are seeking a short-term sexual relationship, which might suggest that they are unaware of men's views and instead, are using their own standards. This type of error is not uncommon and is congruent with errors of cross-sex mind reading (Haselton & Buss, 2000).

It is intriguing that the MVI and our measure, the CMVS, appear to be tapping into different constructs, especially for men. It is not possible to clearly ascertain why this difference exists. Both scales had high levels of reliability, so what they are measuring, they are measuring reliably. One consideration is that the MVI relies on self-assessment

of various traits, and thus, it could be plagued by social desirability. Although the same issue could be present with our study, more context was provided in our items. In addition, some of the items were attitudinal rather than mere self-assessment, which might lead to more honest responding.

We find it curious that the number of short-term and long-term relationships one has experienced is not consistently related to the components in the CMVS, MVI, or with how easy people believe it is for them to locate a mate for short-term romance, sex, or as a long-term mate for marriage. We had expected that people would use their past experiences as a basis, at least in part, for determining their mate value. However, this expectation was not met in the current study, and further investigation needs to determine what information people are actually using to create their self-assessments of mate value. It is possible that human's evolutionary history is a product of our need to mate, and if necessary, individuals will disregard their value and mate with any obtainable partner regardless of quality.

There are several limitations with the current study. Given that we used an exploratory factor analysis, and did so with a sample size of 150, a second study is required to conduct a confirmatory analysis. As well, instead of being conclusive, the present study indicates there is a need for a multi-faceted, theoretically grounded measure of mate value. We are not claiming that we have solved the problem of how to measure mate value, but rather that we have attempted to open the door for future research, and to draw awareness to the need for researchers to clearly establish what mate value actually means, and similarly, how to accurately measure it in future studies.

As has been suggested by others (e.g., Brase & Guy, 2004), mate value is a multi-faceted concept that encompasses more than a female's beauty or a male's resources. We have identified seven factors that influence one's assessment of their own mate value and demonstrated that simplistic measures do not fully evaluate the composite concept known as mate value. While attractiveness and resources are certainly important, they are not the only factors influencing the determination of one's mate value. This research has begun the process of identifying other components, and provides future researchers with a starting point for measuring, exploring, and examining the intricacies associated with the evaluation of ourselves and others as potential mates.

References

- Beaulieu, D. (2007). Avoiding costly mating mistakes: Ovulatory shifts in personal mate value assessment. *Journal of Social and Personal Relationships*, 24, 441-455.
- Brase, G. & Guy, E. (2004). The demographics of mate value and self-esteem. *Personality and Individual Differences*, 36, 471-484.
- Buss, D. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12, 1-49.
- Buss, D. & Schmitt, D. (1993). Sexual strategies theory: an evolutionary perspective on human mating. *Psychological Review*, 100, 204-232.
- Camargo, M. (2007). Hypothesized fitness indicators and mating success. Master's thesis, State University of New York at New Paltz.
- Conner, M. & Armitage, C. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28, 1429-1464.

- Cox, A. & Fisher, M. (in press). A framework for exploring intrasexual competition. *Journal of Social, Evolutionary, and Cultural Psychology*.
- Denissen, J., Penke, L., Schmitt, D. & van Aken, M. (in press). Self-esteem reactions to social interactions: Evidence for sociometer mechanisms across days, people, and nations. *Journal of Personality and Social Psychology*.
- Feingold, A. (1992). Gender differences in mate selection preferences: A test of the parental investment model. *Psychological Bulletin*, 112, 125-139.
- Hair, J., Anderson, R., Tatham, R. & Black, W. (1998). *Multivariate data analysis* (5th Edition). Englewood Cliffs, NJ: Prentice Hall.
- Haselton, M. & Buss, D. (2000). Error management theory: A new perspective on biases in cross-sex mind reading. *Journal of Personality and Social Psychology*, 78, 81-91.
- Honekopp, J., Rudolph, U., Beier, L., Liebert, A. & Muller, C. (2007). Physical attractiveness of face and body as indicators of physical attractiveness in men. *Evolution and Human Behavior*, 28, 106-111.
- Kenrick, D., Groth, G., Trost, M. & Sadalla, E. (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.
- Kenrick, D., Neuberg, S., Zierk, K. & Krones, J. (1994). Evolution and social cognition: Contrast effects as a function of sex, dominance, and physical attractiveness. *Personality and Social Psychology Bulletin*, 20, 210-217.
- Kirsner, B., Figueredo, A. & Jacobs, W. (2003). Self, friends, and lovers: Structural relations among Beck Depression Inventory scores and perceived mate values. *Journal of Affective Disorders*, 75, 131-148.
- Kurzban, R., & Weeden, J. (2005). HurryDate: Mate preferences in action. *Evolution and Human Behaviour*, 26, 227-244.
- Landolt, M., Lalumiere, M. & Quinsey, V. (1995). Sex differences in intra-sex variations in human mating tactics: An evolutionary approach. *Ethology and Sociobiology*, 16, 3-23.
- Li, N., Kenrick, D., Bailey, J. & Linsenmeier, J. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology*, 82, 947-955.
- Mundfrom, D., Shaw, D. & Ke, T. (2005). Minimum sample size recommendations for conducting factor analysis. *International Journal of Testing*, 5, 159-168.
- Penke, L., Todd, P., Lenton, A. & Fasolo, B. (2007). How self-assessments can guide human mating decisions. In G. Geher, & G. Miller (Eds.), *Mating intelligence: New insights into intimate relationships, human sexuality, and the mind's reproductive system* (pp. 37-75). Mahwah, NJ: Lawrence Erlbaum.
- Singh, D. (2002). Female mate value at a glance: Relationship of waist-to-hip ratio to health, fecundity and attractiveness. *Neuroendocrinology Letters*, 23, 81-91.
- Strout, S., Dutton, E., Crooker, E., Hudanish, A. & Jones, S. (2008, May). *Am I hot or not? The effects of social comparison on self-perception of mate value*. Paper presented at the annual conference of the NorthEastern Evolutionary Psychology Society, Manchester, New Hampshire.
- Sugiyama, L. (2004). Is beauty in the context-sensitive adaptations of the beholder? Shiwiar use of waist-to-hip ratio in assessments of female mate value. *Evolution*

and Human Behavior, 25, 51-62.

Tinbergen, N. (1963). On aims and methods in ethology. *Zeitschrift für Tierpsychologie*, 20, 410-433.

Waynforth, D. (2001). Mate choice trade-offs and women's preference for physically attractive men. *Human Nature*, 12, 207-219.