



Articles

The Structure and Content of Long-Term and Short-Term Mate Preferences

Peter K. Jonason*^a, Gregory D. Webster^b, Amanda N. Gesselman^b

[a] University of Western Sydney, Milperra, Australia. [b] University of Florida, Gainesville, FL, USA.

Abstract

This study addresses two limitations in the mate preferences literature. First, research all-too-often relies on single-item assessments of mate preferences precluding more advanced statistical techniques like factor analysis. Second, when factor analysis could be done, it exclusively has done for long-term mate preferences, at the exclusion of short-term mate preferences. In this study ($N = 401$), we subjected 20 items designed to measure short- and long-term mate preferences to both principle components ($n = 200$) and confirmatory factor analysis ($n = 201$). In the long-term context, we replicated previous findings that there are three different categories of preferences: physical attractiveness, interpersonal warmth, and social status. In the short-term context, physical attractiveness occupied two parts of the structure, social status dropped out, and interpersonal warmth remained. Across short- and long-term contexts, there were slight changes in what defined the shared dimensions (i.e., physical attractiveness and interpersonal warmth), suggesting prior work that applies the same inventory to each context might be flawed. We also replicated sex differences and similarities in mate preferences and correlates with sociosexuality and mate value. We adopt an evolutionary paradigm to understand our results.

Keywords: mate preferences, Confirmatory Factor Analysis, personality, sex differences

Interpersona, 2013, Vol. 7(2), 167–179, doi:10.5964/ijpr.v7i2.125

Received: 2013-06-02. Accepted: 2013-11-07. Published (VoR): 2013-12-20.

*Corresponding author at: School of Social Sciences and Psychology, University of Western Sydney, Milperra, NSW 2214, Australia. E-mail: p.jonason@uws.edu.au



This is an open access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/3.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

What men and women want in mates has consumed poets and professors alike for years. Many magazines devote much of their pages to discussing such issues and doling out advice. Movies, TV, and music content commonly focuses on themes of love and sex. The “obsession” with this topic should be of little surprise; the most important questions in life revolve around love and sex. These questions have received considerable attention from researchers (Buss, 1989; Eagly, 1987; Li, Bailey, Kenrick, & Linsenmeier, 2002; Sprecher, Sullivan, & Hatfield, 1994; Wiederman & Dubois, 1998) because choosing mates has consequences in terms of reproductive fitness and psychosocial outcomes (Buss & Schmitt, 1993; DeLamater, 1987). Despite this long history and important consequences, the research has been limited in some important psychometric and theoretical ways.

First, nearly all the research has used single-item measures. For instance, the vast majority of work on mate preferences (e.g., Buss, 1989; Jonason, 2009; Sprecher, Sullivan, & Hatfield, 1994; except Buss & Barnes, 1986) provided individuals with a list of adjectives or traits they might want in their mates. Analyses focused on examining sex differences in each trait. Such analyses can be limited in reliability, validity, and generalizability. For instance, asking about a mate’s “ambition” and “wealth” are treated as equivalent measures of preferences for social status, but knowledge would be better served by focusing more on the “forest” and less on the “trees”. We would argue

that mate preferences for individual items (i.e., the trees) are likely just (imperfect) indicators of a preference for some latent trait (i.e., the forest). Even sophisticated methods like the budget-allocation technique (Jonason, Valentine, Li, & Harbeson, 2011; Li et al., 2002; Li & Kenrick, 2006) rely on a handful (≈ 5) of traits chosen by the authors, thus limiting their results despite the utility of ipsative scales (over normative ones) in revealing people's decision-making priorities. We contend that what is needed to better understand mate preferences is to use factor analysis to understand the latent structure of mate preferences so that our knowledge (1) does not rely on intuitively chosen items and (2) is not subject to the well-known limitations of single-item assessments.

Second, when factor analytic techniques have been done they tended to focus on long-term mate preferences (Buss & Barnes, 1986; Campbell, Simpson, Kashy, & Fletcher, 2001; Fletcher, Simpson, Thomas, & Giles, 1999; Fletcher, Tither, O'Loughlin, Friesen, & Overall, 2004). Short-term mating is just as paramount to understanding mate preferences as long-term mate preferences (Buss & Schmitt, 1993). Men and women should be similar in their long-term mate preferences because both sexes invest heavily in each other whereas in the short-term, the sexes should differ because they are in a competitive rather than a cooperative relationship (Li et al., 2002; Li & Kenrick, 2006). For instance, both men and women value faces more than bodies in long-term mating contexts, whereas the inverse is true in short-term mating contexts (Confer, Perilloux, & Buss, 2010; Jonason, Raulston, & Rotolo, 2012); faces are considered a more stable trait that conveys important information about a person's personality (i.e., long-term mate preference) whereas the body provides detail more related to genetic quality (i.e., short-term mate preferences). Therefore, by assessing the content of short-term and long-term mate preferences separately, we might provide better detail about men and women's mate preferences.

Structure \times Temporal Context

What might we expect to find in terms of mate preferences in the short- and long-term context? According to work on long-term mate preferences there should be three dimensions: physical attractiveness, interpersonal warmth, and social status (Campbell et al., 2001; Fletcher et al., 1999, 2004). Physical attractiveness is valued more in short-term contexts more than long-term contexts (Li et al., 2002; Li & Kenrick, 2006). Therefore, we expect preferences for attractive mates should occupy a larger portion of the factor structure in the short-term context than the long-term context.

Interpersonal warmth, or the personality of mates, has been measured many ways. For instance, it has been assessed with indicators of interest in kindness, generosity, and sense of humor (Bressler & Balshine, 2006; Stewart, Stinnett, & Rosenfeld, 2000; Wiederman & Dubois, 1998). Preferences for such a mate should be important in both mating contexts. Having desirable personality traits makes individuals appealing as a mate, especially in the long-term (Buss, 1989). Such traits may provide prosocial and hedonic benefits, thereby leading to more enduring relationships. For instance, a mate with a sense of humor is likely to be seen as a fun person one wants to be around and, thus, increasing potential courtships as well as pairbonds. Similarly, being generous may create a sort of social currency that also brings people around a person, therefore, increasing the odds of a mateship and pairbond forming. Being high on prosocial personality traits may facilitate mating for both sexes and is likely instrumental in forming long-term bonds.

In contrast to the other two aspects of mate preferences, social status may be particularly important in the long-term context (Jonason, Li, & Madson, 2012). Social status likely conveys a long-term benefit over a short-term one. Casual sex relationships are based mostly on physical attraction (Li & Kenrick, 2006). Prioritizing social status in short-term mates may not be particularly valuable in any other context than a "for-pay" sexual encounter.

The benefits of social status are likely to provide important tangible qualities (e.g., housing, traveling) but those rewards are not immediately extractible or realized unlike the potential benefits derived from a genetically fit or fecund mate.

Individual Differences

Not all people desire physical attractiveness, interpersonal warmth, and social status equally. Based on parental investment theory (Trivers, 1972), men are expected to value physical attractiveness more than women do (Buss, 1989; Feingold, 1990; Greitemeyer, 2005), and this difference should be largest in the long-term context. Based on sexual strategies theory (Buss & Schmitt, 1993) we predict that women should place a greater emphasis on interpersonal warmth than men do (de Sousa Campos, Otta, & Siqueria, 2002; Feingold, 1992; Greitemeyer, 2005; Harrison & Saeed, 1977) and that this difference should be strongest in the short-term context. Women should also want mates who have social status more than men do in long-term contexts (Bryan, Webster, & Mahaffey, 2011; Buss, 1985; Cameron, Oskamp, & Sparks, 1977; Lance, 1998; Pawlowski & Koziel, 2002; Townsend, Kline, & Wasserman, 1995; Townsend & Levy, 1990; Townsend & Wasserman, 1998).

Beyond sex differences, we expect sociosexuality to inform mate preferences. Sociosexuality is a measure of mating strategies describing individual differences in sexual attitudes, beliefs, and behaviors (Penke & Asendorpf, 2008; Simpson & Gangestad, 1991; Webster & Bryan, 2007). Those who are *unrestricted* in sociosexuality tend to be willing to engage in short-term mating. Unrestricted people are likely to prioritize traits related to physical attractiveness because it tends to be highly sought in short-term encounters (Buss & Schmitt, 1993; Gangestad & Simpson, 2000; Jonason, Valentine, & Li, 2012; Li & Kenrick, 2006; Simpson & Gangestad, 1992). We expect mate preferences to be positively correlated with preferences for physically attractive partners in general and to be negatively linked to preferences for desirable personality traits in both contexts.

Those with higher mate value can afford to have higher standards (Buston & Emlen, 2003; Edlund & Sagarin, 2010; Kenrick, Groth, Trost, & Sadalla, 1993; Regan, 1998). Mate value reflects a composite of a number of physical and psychological traits that individuals desire in their mates; individuals with high mate value are considered to be more desirable as mates than those with lower mate value. Based on economic models of mating psychology (Kenrick et al., 1993; Li et al., 2002), we predict that (self-perceived) mate value will be correlated with desire for all of the mate preference factors in the long-term context but just physical attractiveness in the short-term mating context. This is because the greatest investment goes into long-term mate preferences for both sexes (Buss & Schmitt, 1993; Li et al., 2002) and short-term mating focuses on physical attractiveness (Buss & Schmitt, 1993; Li & Kenrick, 2006). In other words, individuals use their value on the market to buy those traits they value the most in long- and short-term mates. For long-term mates, there is a range of things individuals want (Buss, 1989) and, therefore, one's value should go towards buying access to a range of traits. In contrast, physical attractiveness is the most important trait in the short-term mating context and, therefore, individuals should use their mate value to buy this trait in their mates.

Mate preferences are a highly debated topic to this day (Schmitt et al., 2012). There are two main paradigms to understand mate preferences. Sociocultural researchers contend that (1) sex differences in mate preferences are a function of a division of labor throughout human history (i.e., thousands or even hundreds of years), (2) physical attractiveness does not indicate anything meaningful about a person's genes or fecundity, and (3) often are informed by feminist, post-modernistic approaches to psychology (Eagly, 1987; Hill, 1945; Howard, Blumstein, & Schwartz, 1987; Hoyt & Hudson, 1981; Hudson & Henze, 1969). In contrast, evolutionary psychologists contend that (1) sex

differences are a function of context-specific adaptations to sexual conflicts over evolutionary history (i.e., millions of years), (2) physical attractiveness is a proxy for fitness and fecundity, and (3) are informed by well-tested assumptions from evolutionary biology (Perilloux, Webster, & Gaulin, 2010; Singh, 1993, 1995; Singh & Luis, 1995; Symons, 1979; Thornhill & Gangestad, 1994; Thornhill & Möller, 1997). Although we do not concern ourselves with the origin question here, we do find ourselves drawn to the evolutionary model given its *a priori* assumptions, cross-cultural generality, content-rich predictions, and parsimony with biology. We adopt an evolutionary paradigm in the design of this study to make sense of our results.

Method

Participants

We solicited volunteers to participate in an online study on romantic relationships through fliers posted at a campus health center and in academic departments at a mid-sized university in the southwest United States. Participants were 401 heterosexuals (69% female, 31% male) aged 18–52 years ($M = 21.67$, $SD = 4.94$) who completed an online survey; 56% were in a committed romantic relationship. Only participants from unique IP addresses were included in analyses.

Measures and Procedure

The first author and a research assistant created a list of 20 items to measure various aspects of mate preferences (see Tables 1 and 3) drawn from prior studies (e.g., Buss, 1989; Jonason, Raulston, & Rotolo, 2012; Li et al., 2002). We did not attempt to include every potential synonym of the words and traits we are interested in. Instead, we sought a list that had heterogeneity. Participants were asked how much they valued each trait in a partner using a 5-point scale (1 = *not at all*; 5 = *a lot*), and did so for both long- and short-term contexts. In the long-term context, participants were told to “Assume that this is someone who you are committed to and might even consider marrying.” In the short-term context, participants were told to “Assume that this is someone who you know only superficially and are interested in them for sexual reasons.” Such definitions of these two mating contexts have been used before (Li et al., 2002; Li & Kenrick, 2006).

We assessed mating strategy using the seven-item Sociosexuality Orientation Index (Simpson & Gangestad, 1991). Participants responded to questions like “With how many partners have you had sex on one and only one occasion?” and “I can imagine myself being comfortable and enjoying casual sex with different partners.” Items were standardized (z-scored) before averaging into an index (Cronbach’s $\alpha = .78$; $M = 0.00$, $SD = 0.60$).

Participants’ own mate value was assessed using the 22-item Mate-Value Inventory (Kirsner, Figueredo, & Jacobs, 2003). A sample item asks agreement (1 = *not at all*; 7 = *very much*) with the statement: “I am a person with a good sense of humor.” Items were averaged into an index of participants mate-value ($\alpha = .88$; $M = 5.60$, $SD = 1.11$).

Results

First, we split the file in half maintaining the same ratio of men to women in the full sample (70% women; 30% men). Using 200 of the participants, we examined the latent dimensions of long- and short-term mate preferences, and then ran a series of separate principle components analyses (PCAs) for each. Table 1 contains the results for long-term mates.

Table 1

Principle Components Analyses With Oblique Rotations for Traits Desired in Long-Term Mates

Trait	Initial Solution			Secondary Solution			Tertiary Solution		
	Component			Component			Component		
	1	2	3	1	2	3	1	2	3
Their hips	.87	-.43	.07	.79					
Their waist size	.76	-.36	.10	.86			.80		
Nice body	.76	-.05	.27	.81			.84		
Their chest/breasts	.75	-.19	-.05	.72					
Their nose	.74	-.03	.00	.70					
Facial beauty	.74	-.05	.23	.72					
Physical fitness	.71	.05	.19	.75					
Weight	.70	-.14	.22	.82			.90		
Their arms	.69	-.03	-.13						
Their eyes	.65	.01	.05						
Presence of hair	.60	-.08	.13						
Height	.56	.11	-.17						
Social status	.53	.22	-.71						-.80
Wealth	.51	.21	-.76						-.82
Education/intelligence	.36	.41	-.07						
Job/employment	.30	.54	-.71						-.72
Ambition	.17	.48	-.02						
Sense of humor	.12	.72	.31		.71			.72	
Kindness	.07	.83	.25		.82			.83	
Sincerity	.04	.85	.38		.84			.85	
% Variance explained	35.05	13.94	7.16	35.35	18.66	11.17	29.79	23.87	14.08
Eigen Value	7.01	2.79	1.43	4.24	2.24	1.32	2.68	2.15	1.27

Note. Bolded items were retained for subsequent analyses.

Initially, there appeared to be a three-factor solution. When we reran the analysis with only those items loading $\geq .70$, we found a three-factor solution in the secondary solution. To ensure that each of the dimensions had an equivalent number of items, we retained the three items that loaded the best for a tertiary PCA. The three factors reflected preferences for physical attractiveness, interpersonal warmth, and social status. These labels were chosen as they reflect prior work (Campbell et al., 2001; Fletcher et al., 1999, 2004). When the three-items were averaged within their respective factors, they showed acceptable internal consistency, especially for three-item scales (α s = .81, .73, and .69, respectively). Using the second half of the sample ($N = 201$), we conducted a confirmatory factor analyses (CFAs). We compared one- and three-factor models for long-term mate preferences; the three-factor model fit the data better than a one-factor modelⁱ (Table 2).

Table 3 contains the same PCA for short-term mate preferences. In descending order, the three factors reflected preferences for overall attractiveness, interpersonal warmth, and physical traits. When the 3-items were averaged within their respective factors, they showed good internal consistency (α s = .93, .86, and .93, respectively). While Factors 1 and 2 appeared for both long- and short-term contexts, they were composed of different items. For instance, the attractiveness dimension for long-term mates was composed of valuing the mates' weight, body, and waist size, whereas the same dimension for short-term mates was composed of valuing a nice body, facial beauty, and physical fitness. Nevertheless, the three-factor model fit the data better than a one-factor model again.

Table 2

Confirmatory Factor Analyses Verifying the Three Dimensional Structure of Long-Term and Short-Term Mate Preferences

	χ^2	df	NFI	CFI	RMSEA [90% CI]
Long-term mates					
One factor model	569.57**	27	.47	.48	.22 [.21, .24]
Three factor model	59.10**	24	.95	.97	.06 [.04, .08]
Difference	510.47**	3			
Short-term mates					
One factor model	1,369.33**	27	.54	.54	.35 [.34, .37]
Three factor model	94.90**	24	.97	.98	.09 [.07, .10]
Difference	1,274.43**	3			

** $p < .01$.

Table 3

Principle Components Analyses With Oblique Rotations for Traits Desired in Short-Term Mates

Trait	Initial Solution			Secondary Solution			Tertiary Solution		
	Component			Component			Component		
	1	2	3	1	2	3	1	2	3
Nice body	.90	-.12	-.37	.89			.90		
Facial beauty	.90	-.06	-.40	.91			.92		
Physical fitness	.84	.06	-.36	.87			.91		
Their arms	.82	.05	.53	.79					
Their chest/breasts	.81	-.21	.70	.79		.74			.83
Their nose	.81	-.03	.62	.79					
Their waist size	.80	-.23	.70	.75		.78			.93
Weight	.79	-.20	-.30	.75					
Their hips	.78	-.20	.74	.77		.80			.97
Their eyes	.78	.08	.48	.75					
Height	.70	.06	-.27	.67					
Presence of hair	.70	-.08	.36	.66					
Social status	.52	.52	.23						
Wealth	.50	.70	.40		.43				
Job/employment	.16	.70	.27		.79				
Education/intelligence	.15	.75	.05		.70				
Sense of humor	.10	.77	-.27		.68				
Kindness	.03	.88	-.21		.84				.87
Ambition	.02	.79	.13		.84				.88
Sincerity	.01	.87	-.12		.88				.91
% Variance explained	36.67	21.10	6.63	40.35	27.81	10.06	47.79	26.52	11.11
Eigen Value	7.93	4.22	1.33	4.44	3.06	1.11	4.30	2.34	1.00

Note. Bolded items were retained for subsequent analyses.

In [Table 4](#) we replicate and extend what we know about sex differences and similarities in mate preferences. Men value physical attractiveness more than women do but this effect is strongest in the long-term context. Women value interpersonal warmth more than men do but this effect is strongest in the short-term context. Together these suggest women place a lesser value in physical attractiveness in long-term mates whereas men place a lesser

value in interpersonal warmth in short-term mates. Women valued social status more than men did and men valued physical characteristics more than women did.

Table 4

Descriptive Statistics and Sex Differences for the Mate Preferences Dimensions

	<i>M (SD)</i>			<i>t</i>	<i>d</i>
	Overall	Women	Men		
Long-term mates					
Physical attractiveness	3.27 (0.94)	3.05 (0.92)	3.79 (0.78)	-7.70**	-0.77
Interpersonal warmth	4.73 (0.46)	4.81 (0.38)	4.54 (0.56)	5.47**	0.55
Social Status	3.17 (0.91)	3.29 (0.90)	2.91 (0.88)	3.96**	0.40
Short-term mates					
Physical attractiveness	3.94 (1.02)	3.86 (1.03)	4.13 (0.99)	-2.50*	-0.25
Interpersonal warmth	3.76 (1.10)	4.04 (0.93)	3.12 (1.19)	8.34**	0.84
Physical traits	3.22 (1.27)	2.90 (1.21)	3.94 (1.08)	-8.19**	-0.82

Note. *d* is Cohen's *d*.

* $p < .05$. ** $p < .01$.

Last, we examined correlations among our six mate preference dimensions and measures of sociosexuality and mate value. Unrestricted sociosexuality was positively associated with preferences for physical attractiveness in the short-term ($r(399) = .29, p < .01$) and long-term context ($r(399) = .14, p < .05$); negatively correlated with interpersonal warmth in the short- ($r(398) = -.12, p < .05$) and long-term ($r(399) = -.41, p < .01$); and correlated with preferences for physical traits in the short-term ($r(398) = .26, p < .01$). Higher levels of perceived mate value were associated with greater value placed in having long-term mates who were attractive ($r(399) = .16, p < .05$), interpersonally warm ($r(399) = .10, p < .05$), and who had social status ($r(398) = .10, p < .05$). Mate value correlated with preferences for a physically attractive mate ($r(399) = .21, p < .01$) and one who was interpersonally warm ($r(398) = .12, p < .05$) in the short-term; mate value was not correlated with preferences for physical traits ($r = .09$).

Discussion

Social-personality psychologists have studied mate preferences for decades (Buss, 1989; Eagly, 1987; Li et al., 2002; Sprecher, Sullivan, & Hatfield, 1994; Wiederman & Dubois, 1998). Importantly, by making the distinction between long- and short-term mating we provide some unique insights. By running separate factor analyses, we were able to show that not only did the content of mate preferences differ by mating context, but that each context has three primary dimensions. Prior attempts to factor analyze the latent structure of mate preferences has revealed a 3-factor structure, but it concerned itself with long-term mate preferences (Campbell et al., 2001; Fletcher et al., 1999, 2004). We extended this work by using the same data analysis technique, but examined the content and structure of mate preferences across the fundamentally important distinction of temporal context (Buss & Schmitt, 1993). Therefore, we have provided the first (that we know of) factor analysis of short-term mate preferences and the first comparison of the content of mate preferences in these two contexts instead of assuming the content and structure are the same as appears to have been done. Additionally, we replicated sex differences/similarities and individual difference correlations with sociosexuality and mate value as a means of testing the emergent dimensions we uncovered in our factor analyses.

Given the central role of physical attractiveness in casual sex (Li & Kenrick, 2006), we expected, and found, that it occupies more (i.e., 2/3 of the dimensions) dimensional space. In contrast, physical attractiveness plays a less central role in long-term relationships (Li et al., 2002) and, accordingly, occupies less space in the factor structure. In as much as short-term mating is done for physical enjoyment through physical attraction, preferences for specific physical attributes may act as a separate component to just being physically attractive. In this context, individuals may have more elaborate preferences for the physical features of their mates than previously understood. Preferences for physically attractive mates in the long-term may act as a threshold. That is, the mate simply needs to have an adequate amount of physical appeal and, therefore, the physical preferences in the long-term are less elaborate than in the short-term. Indeed, physical attractiveness is devalued in both sexes in the long-term context (Buss, 1989; Li et al., 2002; Li & Kenrick, 2006). In addition, we found that social status drops out as an important part of the mate preference structure in the short-term context. This may be a function of the delayed benefits associated with social status (Jonason, Li, & Madson, 2012). Concurrently, social status remains important in long-term mate preferences.

Consistent with parental investment theory (Trivers, 1972) and sexual strategies theory (Buss & Schmitt, 1993), men expressed stronger preferences for physically attractive mates, especially in the long-term. This appears to reflect women valuing this trait less in the long-term than in the short-term whereas men's interest stays relatively constant. This sex difference, however, is inconsistent with other work suggesting smaller sex differences as men and women converge in their long-term mate preferences (Li et al., 2002). The variation of the physical feature preference factor in the short-term mating context and the physical attractiveness factor in the long-term mating context may explain this inconsistency. Past research may have overlooked this difference by failing to examine the numerous factors within physical attractiveness.

We also examined the relationships among mating strategies and “value” on the mating market with these mate preference dimensions. Those with a short-term mating strategy are often interested in attractive mates at the exclusion of other traits (Li & Kenrick, 2006; Simpson & Gangestad, 1992). Sociosexuality scores were positively correlated with preferences for physically attractive mates in both long- and short-term contexts, and physical features in short-term mates. In addition, having more mate value should relate to increased preferences for all traits (Buston & Emlen, 2003; Regan, 1998). For instance, women who are attractive are said to “want it all” (Buss & Shackelford, 2008). Consistent with that prediction, we found that self-reported mate value was positively related to all our mate preference dimensions.

Our results could be taken as an exercise in developing and validating a measure of mate preferences. Our goal was not to do this and we feel far more work would be needed to validate any such measure. Despite this, a standard, efficient measure of individual differences in mate preferences might be worth pursuing and we offer ours as a tentative measure as a stand-in. A single measure would mean sociocultural and evolutionary researchers are no longer comparing “apples and oranges” and, instead, will all be speaking the same “language”. This should minimize arguments over minutia and enable comparisons between studies. However, developing a standard measure might prove increasingly difficult if one endorses the idea that each relationship is a negotiated solution—and, thus, potentially infinite in variety—as opposed to fixed kinds (Jonason, Valentine, & Li, 2012).

Limitations and Conclusions

This study had a number of limitations. First, it was a single study and, thus, future research is needed to assess the validity, replicability, and generalizability of the factor structures presented here. While the present factor

structure might not hold up in future studies, we provide some unique insights into mate preferences in reference to the latent structure and content of long- and short-term mate preferences.

Second, we used older, one-dimensional measures of mate value and sociosexuality. The mate value measure we used does not consider the possibility that the qualities that grant people value in the mating market could differ in the long- and short-term contexts (Li, Tan, Lewis, & Yong, 2013). In addition, it is merely a measure self-perceived mate value as opposed to a more objective measure like bilateral symmetry of the face, level of education, or height. Similarly, modern conceptualizations of sociosexuality suggest there are at least three dimensions to describe individual differences in mating strategies (Penke & Asendorpf, 2008; see also Webster & Bryan, 2007). By using these measures, we might find stronger correlations than we did when examining individual differences. Nevertheless, the older, shorter measures are still in use today (Jonason & Buss, 2012).

Last, we may have imposed some experimenter bias. It is possible that the actual structure of men and women's mate preferences in the long-term and short-term contexts may differ themselves. This study had an insufficient sample size to test whether the sex of the participant moderated the structure of mate preferences. Moreover, by imposing the same list of traits on each mating context, we have failed to tap other aspects of the content of short-term mate preferences hitherto unknown. Alternatively, we have assumed that individual's preferences for mates are either/or short- or long-term in nature; an assumption that may be flawed (Jonason, Li, & Cason, 2009). A person could view target mates as sources of both short- and long-term mates as reflected in Strategic Pluralism (Gangestad & Simpson, 2000). Future work might benefit from such tests.

Despite these limitations, we revealed some novel findings in relation to mate preferences, replicated prior work on mate preferences (Campbell et al., 2001; Fletcher et al., 1999, 2004), and confirmed theoretical predictions from evolutionary psychological models of mate preferences (Buss & Schmitt, 1993; Kenrick et al., 1993; Li & Kenrick, 2006). Past research has assumed the content of mate preferences are the same because identical inventories were used to assess mate preferences in each context. We have revealed this may be a mistaken assumption because (1) the content of the same latent dimensions did not have identical indicators, (2) preferences for social status only emerged in the long-term context, and (3) a new dimension of preferences for physical features of short-term mates emerged. Perhaps more psychometrically robust and theoretically-derived assessments of mate preferences will better settle some of the arguments between sociocultural (e.g., Eagly, 1987) and evolutionary psychologists (e.g., Buss, 1985).

Notes

i) We compared our three-dimensional models to one-dimensional models as parsimony tests. One should not invoke complicated, multidimensional structures when simpler structures fit the data better. A one-dimensional model reflects simple, gestalt preferences for mates with desirable qualities.

Acknowledgements

We thank Bryan Koenig for help designing the instrument and James P. Middleton for reviewing this paper in advance of submission.

References

- Bressler, E., & Balshine, S. (2006). The influence of humor on desirability. *Evolution and Human Behavior*, 27, 29-39. doi:10.1016/j.evolhumbehav.2005.06.002
- Bryan, A. D., Webster, G. D., & Mahaffey, A. L. (2011). The big, the rich, and the powerful: Physical, financial, and social dimensions of dominance in mating and attraction. *Personality and Social Psychology Bulletin*, 37, 365-382. doi:10.1177/0146167210395604
- Buss, D. M. (1985). Human mate selection. *American Scientist*, 73, 47-51.
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *The Behavioral and Brain Sciences*, 12, 1-49. doi:10.1017/S0140525X00023992
- Buss, D. M., & Barnes, M. (1986). Preferences in human mate selection. *Journal of Personality and Social Psychology*, 50, 559-570. doi:10.1037/0022-3514.50.3.559
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204-232. doi:10.1037/0033-295X.100.2.204
- Buss, D. M., & Shackelford, T. K. (2008). Attractive women want it all: Good genes, economic investment, parenting proclivities, and emotional commitment. *Evolutionary Psychology*, 6, 134-146.
- 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 of the United States of America*, 100, 8805-8810. doi:10.1073/pnas.1533220100
- Cameron, C., Oskamp, S., & Sparks, W. (1977). Courtship American style: Newspaper Ads. *The Family Coordinator*, 26, 27-30. doi:10.2307/581857
- Campbell, L., Simpson, J. A., Kashy, D. A., & Fletcher, G. J. O. (2001). Ideal standards, the self, and flexibility of ideals in close relationships. *Personality and Social Psychology Bulletin*, 27, 447-462. doi:10.1177/0146167201274006
- Confer, J. C., Perilloux, C., & Buss, D. M. (2010). More than just a pretty face: Men's priority shifts towards bodily attractiveness in short-term versus long-term mating contexts. *Evolution and Human Behavior*, 31, 348-353. doi:10.1016/j.evolhumbehav.2010.04.002
- DeLamater, J. (1987). A sociological perspective. In J. H. Geer & W. T. O'Donohue (Eds.), *Theories of human sexuality* (pp. 237-255). New York, NY: Plenum Press.
- de Sousa Campos, L., Otta, E., & Siqueria, J. O. (2002). Sex differences in mate selection strategies: Content analyses and responses to personal advertisements in Brazil. *Evolution and Human Behavior*, 23, 395-406. doi:10.1016/S1090-5138(02)00099-5
- Eagly, A. H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Lawrence Erlbaum.
- 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. doi:10.1016/j.paid.2010.07.004

- Feingold, A. (1990). Gender differences in effects of physical attractiveness on romantic attraction: A comparison across five research paradigms. *Journal of Personality and Social Psychology*, 59, 981-993. doi:10.1037/0022-3514.59.5.981
- Feingold, A. (1992). Gender differences in mate selection preferences: A test of the parental investment model. *Psychological Bulletin*, 112, 125-139. doi:10.1037/0033-2909.112.1.125
- Fletcher, G. J. O., Simpson, J. A., Thomas, G., & Giles, L. (1999). Ideals in intimate relationships. *Journal of Personality and Social Psychology*, 76, 72-89. doi:10.1037/0022-3514.76.1.72
- Fletcher, G. J. O., Tither, J. M., O'Loughlin, C., Friesen, M., & Overall, N. (2004). Warm and homely or cold and beautiful? Sex differences in trading off traits in mate selection. *Personality and Social Psychology Bulletin*, 30, 659-672. doi:10.1177/0146167203262847
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *The Behavioral and Brain Sciences*, 23, 573-587. doi:10.1017/S0140525X0000337X
- Greitemeyer, T. (2005). Receptivity to sexual offers as a function of sex, socioeconomic status, physical attractiveness, and intimacy of the offer. *Personal Relationships*, 12, 373-386. doi:10.1111/j.1475-6811.2005.00121.x
- Harrison, A. A., & Saeed, L. (1977). Let's make a deal: An analysis of revelations and stipulations in lonely hearts advertisements. *Journal of Personality and Social Psychology*, 35, 257-264. doi:10.1037/0022-3514.35.4.257
- Hill, R. (1945). Campus values in mate selection. *Journal of Home Economics*, 37, 554-558.
- Howard, J. A., Blumstein, P., & Schwartz, P. (1987). Social or evolutionary theories? Some observations on preferences in human mate selection. *Journal of Personality and Social Psychology*, 53, 194-200. doi:10.1037/0022-3514.53.1.194
- Hoyt, L. L., & Hudson, J. (1981). Personality characteristics important in mate preference among college students. *Social Behavior and Personality*, 9, 93-96. doi:10.2224/sbp.1981.9.1.93
- Hudson, J. W., & Henze, L. F. (1969). Campus values in mate selection: A replication. *Journal of Marriage and the Family*, 31, 772-775. doi:10.2307/349321
- Jonason, P. K. (2009). The value of physical attractiveness: Modeling biological and social variables. *The Journal of Social Psychology*, 149, 229-240. doi:10.3200/SOCP.149.2.229-240
- Jonason, P. K., & Buss, D. M. (2012). Avoiding entangling commitments: Tactics for implementing a short-term mating strategy. *Personality and Individual Differences*, 52, 606-610. doi:10.1016/j.paid.2011.12.015
- Jonason, P. K., Li, N. P., & Cason, M. J. (2009). The "booty call": A compromise between men and women's ideal mating strategies. *Journal of Sex Research*, 46, 460-470. doi:10.1080/00224490902775827
- Jonason, P. K., Li, N. P., & Madson, L. (2012). It's not all about the *Benjamins*: Understanding preferences for mates with resources. *Personality and Individual Differences*, 52, 306-310. doi:10.1016/j.paid.2011.10.032
- Jonason, P. K., Raulston, T., & Rotolo, A. (2012). More than just a pretty face and a hot body: Multiple cues in mate-choice. *The Journal of Social Psychology*, 152, 174-184. doi:10.1080/00224545.2011.586654
- Jonason, P. K., Valentine, K. A., & Li, N. P. (2012). Human mating. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (2nd. ed., Vol. 2, pp. 371-377). Oxford, United Kingdom: Academic Press.

- Jonason, P. K., Valentine, K. A., Li, N. P., & Harbeson, C. L. (2011). Mate-selection and the Dark Triad: Facilitating a short-term mating strategy and creating a volatile environment. *Personality and Individual Differences, 51*, 759-763. doi:10.1016/j.paid.2011.06.025
- Kenrick, D. T., Groth, G. E., Trost, M. R., & Sadalla, E. K. (1993). Integrating evolutionary and social exchange perspectives on relationship: Effects of gender, self-appraisal, and involvement level on mate selection criteria. *Journal of Personality and Social Psychology, 64*, 951-969. doi:10.1037/0022-3514.64.6.951
- Kirsner, B. R., Figueredo, A. J., & Jacobs, W. J. (2003). Self, friends, and lovers: Structural relations among Beck Depression Inventory scores and perceived mate values. *Journal of Affective Disorders, 75*, 131-148. doi:10.1016/S0165-0327(02)00048-4
- Lance, L. M. (1998). Gender differences in heterosexual dating: A content analysis of personal ads. *Journal of Men's Studies, 6*, 279-288.
- Li, N. P., Bailey, J. M., Kenrick, D. T., & Linsenmeier, J. A. W. (2002). The necessities and luxuries of mate preferences: Testing the tradeoffs. *Journal of Personality and Social Psychology, 82*, 947-955. doi:10.1037/0022-3514.82.6.947
- Li, N. P., & Kenrick, D. T. (2006). Sex similarities and differences in preferences for short-term mates: What, whether, and why. *Journal of Personality and Social Psychology, 90*, 468-489. doi:10.1037/0022-3514.90.3.468
- Li, N. P., Tan, J. H., Lewis, D. L., & Yong, J. C. (2013). *The multidimensional mate-value scale*. Unpublished manuscript.
- Pawlowski, B., & Koziel, S. (2002). The impact of traits offered in personal advertisements on response rates. *Evolution and Human Behavior, 23*, 139-149. doi:10.1016/S1090-5138(01)00092-7
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology, 95*, 1113-1135. doi:10.1037/0022-3514.95.5.1113
- Perilloux, H. K., Webster, G. D., & Gaulin, S. J. C. (2010). Signals of genetic quality and maternal investment capacity: The dynamic effects of fluctuating asymmetry and waist-to-hip ratio on men's ratings of women's attractiveness. *Social Psychological and Personality Science, 1*, 34-42. doi:10.1177/1948550609349514
- Regan, P. C. (1998). 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. doi:10.1177/01461672982412004
- Schmitt, D. P., Jonason, P. K., Byerley, G. J., Flores, S. D., Illbeck, B. E., O'Leary, K. N., & Qudrat, A. (2012). A reexamination of sex differences in sexuality: New studies reveal old truths? *Current Directions in Psychological Science, 21*, 135-139. doi:10.1177/0963721412436808
- Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology, 60*, 870-883. doi:10.1037/0022-3514.60.6.870
- Simpson, J. A., & Gangestad, S. W. (1992). Sociosexuality and romantic partner choice. *Journal of Personality and Social Psychology, 60*, 31-51.
- Singh, D. (1993). Adaptive significance of female physical attractiveness: Role of waist-to-hip ratio. *Journal of Personality and Social Psychology, 65*, 293-307. doi:10.1037/0022-3514.65.2.293

- Singh, D. (1995). Female judgment of male attractiveness and desirability for relationships: Role of waist-to-hip ratio and financial status. *Journal of Personality and Social Psychology*, *69*, 1089-1101. doi:10.1037/0022-3514.69.6.1089
- Singh, D., & Luis, S. (1995). Ethnic and gender consensus for the effect of waist-to-hip ratio on judgment of women's attractiveness. *Human Nature*, *6*, 51-65. doi:10.1007/BF02734135
- Sprecher, S., Sullivan, Q., & Hatfield, E. (1994). Mate selection preferences: Gender differences examined in a national sample. *Journal of Personality and Social Psychology*, *66*, 1074-1080. doi:10.1037/0022-3514.66.6.1074
- Stewart, S., Stinnett, H., & Rosenfeld, L. B. (2000). Sex differences in desired characteristics of short-term and long-term relationship partners. *Journal of Social and Personal Relationships*, *17*, 843-853. doi:10.1177/0265407500176008
- Symons, D. (1979). *The evolution of human sexuality*. New York, NY: Oxford University Press.
- Thornhill, R., & Gangestad, S. W. (1994). Human fluctuating asymmetry and sexual behavior. *Psychological Science*, *5*, 297-302. doi:10.1111/j.1467-9280.1994.tb00629.x
- Thornhill, R., & Möller, A. P. (1997). Developmental stability, disease, and medicine. *Biological Reviews of the Cambridge Philosophical Society*, *72*, 497-548. doi:10.1017/S0006323197005082
- Townsend, J. M., Kline, J., & Wasserman, T. H. (1995). Low investment copulation: Sex differences in motivations and emotional reactions. *Ethology and Sociobiology*, *16*, 25-51. doi:10.1016/0162-3095(94)00027-5
- Townsend, J. M., & Levy, G. D. (1990). Effects of potential partners' physical attractiveness and socioeconomic status on sexuality and partner selection. *Archives of Sexual Behavior*, *19*, 149-164. doi:10.1007/BF01542229
- Townsend, J. M., & Wasserman, T. H. (1998). Sexual attractiveness: Sex differences in assessment criteria. *Evolution and Human Behavior*, *19*, 171-191. doi:10.1016/S1090-5138(98)00008-7
- 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, IL: Aldine.
- Webster, G. D., & Bryan, A. D. (2007). Sociosexual attitudes and behaviors: Why two factors are better than one. *Journal of Research in Personality*, *41*, 917-922. doi:10.1016/j.jrp.2006.08.007
- Wiederman, M. W., & Dubois, S. L. (1998). Evolution and sex differences in preferences for short-term mates: Results from a policy capturing study. *Evolution and Human Behavior*, *19*, 153-170. doi:10.1016/S1090-5138(98)00006-3