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**Men’s perception of women’s dance movements depends on mating context, but
not men’s sociosexual orientation**

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Abstract

27 We investigated the influence of mating context and sociosexual orientation (interest in
28 sex without emotional involvement) on men's perceptions of women's dance
29 movements. One hundred men aged 18 to 33 ($M = 23.5$, $SD = 3.5$) years viewed brief
30 videos of five "high attractive" and five "low attractive" female dancers (aged 18 to 22
31 years; $M = 19.8$, $SD = 1.2$) from a sample of 84 motion-captured dancers, and judged
32 them on promiscuity and movement harmony. Additionally, half the participants judged
33 the dancers on attractiveness as a long-term mate and the other half on attractiveness
34 as a short-term mate. Men were more attracted to high attractive dancers than to low
35 attractive dancers and judged them higher on attractiveness when choosing as a
36 potential short-term mate. In addition, high attractive dancers were rated higher than low
37 attractive dancers on promiscuity and movement harmony. Specifically, promiscuity
38 judgments predicted men's short-term attractiveness ratings, whereas movement
39 harmony judgments predicted long-term attractiveness ratings. Men's sociosexual
40 orientation did not influence perceptions of female dance movements. Results are
41 discussed with reference to trade-offs in time and energy expenditure on child rearing in
42 men's mate preferences, corroborating the hypothesis that women's body movements
43 inform on these qualities.

44

45 **Keywords:** Evolutionary psychology, body movement, dance attractiveness, mating-
46 context, mating strategy, movement harmony

47

48 Introduction

49 Women's physical attractiveness is prioritized in men's mate preferences and
50 men across cultures report preferences for female facial and bodily characteristics
51 associated with youth, health and fertility (Symons, 1979; Williams, 1975; Kirchengast &
52 Gartner, 2002; Roberts, Havlicek, Flegr, Hruskova, Little, Jones et al., 2004). Most
53 studies of attractiveness perceptions of women have focused on assessments of static
54 representations of faces and bodies. However, recent research corroborates the finding
55 that female body movement (e.g., gait, dance) also affects men's attractiveness
56 perceptions and may, therefore, convey information about mate quality (Hugill, Fink &
57 Neave, 2009; Fink, Hugill & Lange, 2012).

58 Miller, Tybur and Jordan (2007) reported higher tip earnings in female lap
59 dancers in high-fertility days than in low-fertility days. Fink et al. (2012) showed that men
60 judge the dances and walks of the same women higher on attractiveness when they
61 were recorded in days of high fertility than in days of low fertility. It is not clear what cycle
62 changes cause the alteration in men's response, although these may include a
63 combination of hormone-mediated behavioral and sensory changes. Visual and olfactory
64 information was not available to male assessors in the Fink et al. (2012) study. Thus, the
65 researchers concluded that there might be specific quality cues associated with female
66 movement patterns, and that men judge women's movements to be more attractive in
67 days of high fertility because these cues provide information about reproductive
68 potential.

69 Men's emphasis on female physical attractiveness varies with the mating context
70 (Buss, 1989; Buss & Schmitt, 1993; Gangestad & Simpson, 2000): men prioritize
71 physical attractiveness when selecting a short-term mate (STM) more than when

72 selecting a long-term mate (LTM). For example, Confer, Perilloux and Buss (2010) found
73 that men prioritize bodily information when making decisions about a potential STM vs.
74 LTM. Burris, Welling and Puts (2011) found that men are more attracted to attractive,
75 feminine faces when judging women as a potential STM vs. LTM. In contrast to the
76 importance of physical attractiveness in the short-term context, men prioritize traits such
77 as honesty, intelligence, fidelity, and likeability when choosing a long-term mate (Buss &
78 Schmitt, 1993; Fletcher, Tither, O'Loughlin, Friesen, Overall, 2004). Fletcher et al., for
79 example, found that for LTM (relative to STM), men report greater preference for high
80 levels of warmth/trustworthiness over high levels of attractiveness/vitality.

81 These studies suggest that men's mating strategy influences perceptions of
82 female physical attractiveness, but mating context is only rarely considered in studies of
83 male mating preferences and motivation. Men's mating strategies range from the pursuit
84 of brief sexual encounters (short-term) to the pursuit of committed, enduring romantic
85 relationships (long-term), with greater preference for physical attractiveness when
86 choosing a potential short-term mate and greater preference for honesty and parenting-
87 related skills when choosing a potential long-term mate (e.g., Buss, 1989; Buss &
88 Schmitt, 1993).

89 Individual differences in men's sociosexual orientation also affect their evaluation
90 of prospective mates. Simpson and Gangestad (1991) developed the Sociosexual
91 Orientation Inventory (SOI) to measure willingness to engage in sex without emotional
92 bonding (sex without commitment). Sexually unrestricted men (higher SOI scores), who
93 express greater interest in sex without commitment, prioritize information obtained from
94 female bodies more than sexually restricted men (Confer et al., 2010). In addition,
95 sexually unrestricted men — compared to sexually restricted men — judge women with

96 lower Waist-to-Hip Ratios (WHR) and lower Body Mass Indexes (BMI) as more attractive
97 (Swami, Jones, Einon & Furnham, 2009). Both characteristics are indicators of female
98 health and fertility (for a review, see Thornhill & Gangestad, 2008).

99 Successful pursuit of short-term relationships benefited ancestral men's
100 reproductive success more than ancestral women's reproductive success (Buss &
101 Schmitt, 1993), and men should be especially attracted to facial and bodily features
102 signaling current health and fertility in STM contexts. For ancestral women, short-term
103 relationships were associated with greater costs than for ancestral men. Men pursuing a
104 short-term strategy should therefore be sensitive to information signaling a woman's
105 interest in short-term sex. Although there is evidence that men's mating strategy (STM
106 vs. LTM) and sociosexual orientation (restricted vs. unrestricted) influences
107 attractiveness assessments of female facial and bodily characteristics, little is known
108 about whether these effects extend to women's body movements.

109 In humans, dance is a set of dynamic and rhythmical body movements, often
110 assessed as an indicator of mate value or quality (Hanna 1987, 2010). Specifically,
111 dancing ability signals mate quality in terms of health and fertility and may influence
112 men's perceptions of women's attractiveness (Fink et al., 2012). Cazetto, Siega and
113 Urgesi (2012) found that variations of implied motion influenced aesthetic evaluations of
114 female and male bodies, and that harmony and positive perceived emotion judgments
115 predict liking judgments of moving postures (e.g., running, walking).

116 Following the evidence (e.g., Kenrick, Sadalla, Groth & Trost, 1990) that men are
117 more attracted to sexual permissiveness in potential short-term mates than in potential
118 long-term mates, we investigated differences in men's attractiveness perceptions of
119 women's dance movements as a function of male mating context (STM vs. LTM) and

144 the final sample included dance movements of 84 heterosexual women (by self-report),
145 aged 18 to 41 years ($M = 20.6$ years, $SD = 3.80$). All women reported to be non-
146 professional dancers and not currently suffering health problems that might affect their
147 dance performance. Thirty-nine reflective markers were attached to each participant in
148 accordance with the Vicon Plug-In-Gait marker set to capture the major body structures.
149 All participants were instructed to dance for 30 seconds to the same basic drumbeat to
150 eliminate likeability effects, and to dance as they would do in a dance club situation.
151 Motion-capture data were applied to a virtual, featureless, and gender-neutral humanoid
152 character (avatar) using Autodesk MotionBuilder (Autodesk Inc., San Rafael, CA, USA).
153 For presentation in the subsequent pre-study, a 15-sec sequence (for the subsequent
154 main study a 10-sec sequence) was extracted from the middle of each dance recording
155 and converted into .avi format, with a resolution of 784 x 640 pixels at a frame rate of 24
156 fps.

157 In a pre-study, 49 heterosexual (by self-report) male students aged 19 to 30 years
158 ($M = 23.7$ years; $SD = 3.82$) were recruited on the campus of the University to judge the
159 attractiveness of these dancers on a 7-point Likert scale (1 = *very unattractive*, 7 = *very*
160 *attractive*). The videos were presented in serial order and randomized across
161 participants, using MediaLab software (Empirisoft Inc., New York, USA). On the basis of
162 mean attractiveness ratings, two sets of dancers were selected for subsequent study:
163 Set 1 included the five most attractive dancers (high attractive dancers) and Set 2
164 included the five least attractive dancers (low attractive dancers). Attractiveness ratings
165 to the two sets differed significantly (Set 1: $M = 5.03$, $SD = 0.17$; Set 2: $M = 1.92$, $SD =$
166 0.14 ; independent samples t -test, one-tailed $t(8) = 32.02$, $p < .001$).

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168 *Main study*

169 One hundred (self-reported) heterosexual men, aged 18 to 33 years ($M = 23.5$;
170 $SD = 3.45$) were recruited from the student population of the University to judge both
171 sets of dance videos ($k = 10$) for promiscuity and movement harmony (without a specific
172 description of the two attributes) on a 7-point Likert scale (1 = [*not at all*
173 *promiscuous/harmonic*], 7 = [*very promiscuous/harmonic*]). Additionally, 50 of the raters
174 (18-30 years, $M = 23.8$; $SD = 3.08$) were instructed to judge dancer attractiveness as a
175 potential short-term mate (STM), e.g., affair or one-night stand, and the other 50 raters
176 (18-33 years, $M = 23.2$; $SD = 3.79$) were instructed to judge dancer attractiveness as a
177 potential long-term mate (LTM), e.g., committed relationship (also on a 7-point Likert
178 scale). Videos were presented using MediaLab software without audio and in
179 randomized order across participants. At the beginning of the rating task, participants
180 provided informed consent, answered demographic questions (including age,
181 relationship status, and sexual orientation) and completed the revised Sociosexuality
182 Orientation Inventory (SOI-R; Penke & Asendorpf, 2008), a nine-item questionnaire
183 designed to assess interest in short-term sex without commitment. Responses are
184 recorded on a 5-point scale and summarized in a total score, ranging 9 to 45. Lower
185 scores reflect lesser interest in short-term sex (i.e., a more restricted sociosexual
186 orientation). The rating procedure lasted about 10 min; each participant received a
187 payment of 7 Euros and was debriefed subsequently about the study.

188 To corroborate our assumption that dance movements signal mate quality, we
189 asked a 13 new participants (six women) aged 21 to 54 years ($M = 34.0$, $SD = 9.84$) to
190 judge the dancers on health using a 7-point Likert scale (e.g., 1 = *very unhealthy*, 7 =
191 *very healthy*) and 11 new participants (four women), aged 27 to 54 years ($M = 38.0$, SD

192 = 9.48) to judge the dynamic, activity and variety of the dance movements (e.g., 1 = *[not*
193 *at all dynamic/active/varied]*; 7 = *[very dynamic/active/varied]*).

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Results

196 Mean ratings for the three attributes were calculated, separately for the two sets
197 of dancers (high vs. low attractive) and, with regard to ratings of “attractiveness,”
198 separately for STM vs. LTM context. Table 1 reports descriptive statistics ($M \pm 1 SD$) of
199 male ratings of attractiveness (split for the experimental condition STM vs. LTM),
200 promiscuity, and movement harmony judgments, separately for the high attractive and
201 low attractive female dancers. Analyses of reliability indicated substantial consistencies
202 between judgments of female dancer’s attractiveness, promiscuity and harmony (all $\alpha =$
203 .99).

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- Insert table 1 here -

206

207 Mixed-model ANCOVAs with men’s perceptions of attractiveness (STM vs. LTM
208 context), promiscuity and movement harmony as dependent variables, and women’s
209 dance attractiveness (high vs. low attractive) as a within-subjects factor and
210 sociosexuality (SOI-R total score) as a covariate were conducted. There was a main
211 effect of women’s dance attractiveness on men’s attractiveness ratings ($F_{(1,97)} = 12.71, p$
212 $< .01, \eta^2 = .10$). Dancers categorized as highly attractive on the basis of the previous
213 ratings (pre-study) were judged as more attractive than their lower-rated counterparts.
214 Moreover, there was an interaction effect of dancers’ attractiveness (high vs. low) by

215 mating context (STM vs. LTM) ($F_{(1,97)} = 15.11, p < .001, \eta^2 = .12$). Men judged the
216 attractiveness of attractive female dancers particularly high in STM context.

217 Additionally, we found a main effect of women's dance attractiveness on
218 perceived promiscuity ($F_{(1,98)} = 25.98, p < .001, \eta^2 = .21$) and on movement harmony
219 ($F_{(1,98)} = 12.31, p < .01, \eta^2 = .11$). Attractive dancers were rated higher on promiscuity
220 and movement harmony than unattractive dancers.

221 We did not find an effect of male raters' sociosexual orientation on ratings of
222 attractiveness ($F_{(1,97)} = 1.80, p = .18, n.s.$), promiscuity ($F_{(1,98)} < 1, p = .45, n.s.$), or
223 movement harmony ($F_{(1,98)} < 1, p = .55, n.s.$).

224 A multiple regression analysis with men's perceptions of attractiveness
225 (separately for mating context: STM vs. LTM), promiscuity and movement harmony of
226 female dancers revealed that, promiscuity but not movement harmony predicted
227 attractiveness perceptions especially in the STM context ($R^2 = .94, p < .001$), whereas in
228 LTM context, movement harmony but not promiscuity predicted attractiveness
229 perceptions ($R^2 = .95, p < .001$; see Table 2).

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231 - Insert table 2 here -

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233 A further regression analysis with perceived harmony as dependent variable and
234 perceived health, dynamic, activity and variety as predictors indicated that health
235 judgments ($B = 1.53, SE B = .34, \beta = 1.59, p < .01$) and activity judgments ($B = -1.32,$
236 $SE B = .51, \beta = -1.53, p < .05$) predicted the harmony ratings of female dance
237 movements ($R^2 = .88, p < .05$).

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Discussion

240 We investigated men's assessments of previously categorized high attractive and
241 low attractive female dancers in relation to male mating context (STM vs. LTM) and male
242 sociosexual orientation. We found that men's attractiveness perceptions of women's
243 dance movements depend on men's mating context but not on men's sociosexual
244 orientation. Men judged high attractive dancers (but not low attractive dancers) higher on
245 attractiveness when judging them as a potential short-term mate (STM; e.g., a "one-
246 night stand") than when judging them as a potential long-term mate (LTM; e.g., a
247 "committed relationship"). Promiscuity judgments predict attractiveness perceptions of
248 the dancers in the STM context, whereas movement harmony perceptions predict
249 attractiveness ratings in the LTM context. Thus, in addition to mating context-related
250 differences in men's emphasis of female facial and body attractiveness, especially in the
251 STM context, men also show such differential emphasis in their attractiveness
252 assessments of women's dance movements. The results are consistent with research
253 reporting greater attraction to female body attractiveness when choosing a potential
254 STM (Confer et al., 2010) and with research reporting that men compromise on
255 attractiveness in a LTM context more than in a STM context (Kenrick et al., 1990;
256 Regan, 1998).

257 Selection pressures may have shaped men's preferences for female features that
258 signal health and fertility (Buss, 1989). These adaptations are also context-dependent
259 and men appear to have distinct STM and LTM strategies that are differentially activated
260 when selecting a mate in a specific context (Buss & Schmitt, 1993). Men show greater
261 preference for obvious signals of sexual availability when seeking a short-term mate
262 (Oliver & Sedikides, 1992) more than when seeking a long-term mate. This preference

263 could solve the short-term problem for men of securing sexual access to potential
264 mates. This assumption is supported by the fact that men's promiscuity judgments of
265 attractive female dance movements predict the overall attractiveness judgments of the
266 high attractive dancers only in the STM context, whereas in the LTM context men's
267 movement harmony ratings predict the overall attractiveness judgments. Hence, context-
268 related differences in men's preferences for women's dance attractiveness may be
269 produced by adaptations that motivate increased attraction to healthy and fertile women.

270 Women's body attractiveness affects men's attractiveness perceptions of women,
271 and specific bodily characteristics like Waist-to-Hip Ratio (WHR; Singh, 1993) and Body
272 Mass Index (BMI; Tovee, Maisey, Emery & Cornelissen, 1999) predict men's
273 attractiveness perceptions of female bodies. Our results suggest that attractive female
274 dancers display greater variation in their lower body parts (e.g., waist and hips),
275 displaying more hip swings that may draw attention to waist and hips. We speculate that
276 hip swings and variation in lower body movement may draw men's attention to these
277 body areas and that such movement signals interest in short-term sex (promiscuity),
278 whereas harmonic dance movements seem to signal less promiscuous interest, which is
279 more desirable in a LTM context.

280 No previous research has investigated specific movement components of
281 women's dances that affect men's perceptions of women's dance quality. Cazzato and
282 colleagues (2012) reported that harmony ratings of dynamic poses predict "liking"
283 evaluations of the same poses of both sexes. We also found a relationship between
284 perceived movement harmony and attractiveness as well a relationship between
285 movement harmony and health perceptions. Dancers with more harmonic dance
286 movements were perceived to be healthier than dancers displaying less harmonic dance

287 movements. We cannot yet quantify (in kinematic terms) which dance movement
288 characteristics are perceived as harmonic. However, we consider that it is a combination
289 of various features, like health, that contribute to the perception of movement harmony
290 when expressed by dancers. In a study of the biomechanics of men's dance
291 movements, Neave, McCarty, Freynik, Caplan, Hönekopp and Fink (2011) reported that
292 "good" dancers can be characterized by large and variable movements in the trunk and
293 head/neck region. The researchers concluded that such movements signal aspects of
294 vigor and strength, and are therefore preferred by women. There may be similar
295 characteristics of harmonic female dance movements, which men associated with
296 health. This, however, has yet to be demonstrated.

297 The adaptive shift in men's mating psychology — with individuals interested in
298 STM pursuing low-commitment and transient sexual relationships with multiple partner
299 and individuals interested in LTM pursuing single, high-investment relationships (Buss &
300 Schmitt, 1993) — is also reflected in differences in men's sociosexual orientation.
301 Unrestricted men prioritize female body attractiveness more than do restricted men
302 (Confer et al., 2010) and they show a higher ability to assess female coital acceptability
303 on the basis of physical appearance (Townsend & Wasserman, 1998). Thus, we
304 considered self-reported sociosexual orientation of male judges, but failed to detect an
305 effect of men's sociosexual orientation in their evaluations of women's dances.

306 The present study provides an initial approach to addressing mating context
307 (STM vs. LTM)-dependent differences in men's attraction to women's dance
308 movements, with the results indicating that men seeking a potential short-term mate are
309 more attracted to female dancers signaling promiscuity. Our results show that female
310 dance movement also influences men's perceptions of mate quality, including overall

311 attractiveness and individual differences including promiscuity and movement harmony.
312 Movement harmony is furthermore predicted by health judgments, which corroborates
313 our assumption that body movement signals quality in terms of health. Further research
314 is needed to specify which of women's dance movements produce differences in men's
315 attractiveness perceptions and, more precisely, which dance movements demonstrate
316 promiscuity and which movement harmony.

317 Finally, we cannot rule out the possibility that certain characteristics of dance
318 movements drive people's perceptions; i.e., it may be that people make rapid
319 assessments about the quality of a person's dance movements based on features that
320 signal core biological qualities (such as age and health), and subsequently link their
321 attributes to these initial assessments. Rapid trait attributions to movement qualities
322 have been well known since the classic observation by Heider and Simmel (1944), who
323 demonstrated that basic features of objects (size and shape), together with movement,
324 were sufficient to cause social attributions. It would be interesting to deconstruct dance
325 movements into a list of kinematic features and identify which of these features best
326 predict perceptions of movement harmony. Such research would provide detailed
327 information about people's concepts of harmonic movements, and how these concepts
328 are related to assessments of other aspects of social perception.

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References

- 343
344
- 345 Burris, R. P., Welling, L. L. M., & Puts, D. A. (2011). Mate-preference drives
346 mate-choice: men's self-rated masculinity predicts their female partner's preference for
347 masculinity. *Personality and Individual Differences, 51*, 1023-1027.
- 348 Buss, D. M. (1989): Sex differences in human mate preferences: Evolutionary
349 hypotheses tested in 37 cultures. *Behavioral and Brain Sciences, 12*, 1-49.
- 350 Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary
351 perspective on human mating. *Psychological Review, 100*, 204-232.
- 352 Cazzato, V., Siega, S., & Urgesi, C. (2012). "What women like": influence of
353 motion and form on esthetic body perception. *Frontiers in Psychology, 3*, 1-10.
- 354 Confer, J. C., Perilloux, C., & Buss, D. M. (2010). More than just a pretty face.
355 Men's priority shifts toward bodily attractiveness in short-term versus long-term mating
356 contexts. *Evolutionary Psychology, 6*, 134-146.
- 357 Fink, B., Hugill, N., & Lange, B. P. (2012). Women's body movements are a
358 potential cue to ovulation. *Personality and Individual Differences, 53*, 759-763.
- 359 Fletcher, G. J. O., Tither, J. M., O'Loughlin, C., Friesen, M., & Overall, N. (2004).
360 Warm and homely or cold and beautiful? Sex differences in trading off traits in mate
361 selection. *Personality & Social Psychology Bulletin, 30*, 659-672.
- 362 Gangestad, S. W., & Simpson, J. A. (2000). The evolution of mating: Trade-offs
363 and strategic pluralism. *Behavioral and Brian Sciences, 23*, 675-687.
- 364 Hanna, J. L. (1987). *Dance, sex and gender: signs of identity, dominance,*
365 *defiance, and desire*. Chicago, London: University of Chicago Press.

366 Hanna, J. L. (2010). Dance and sexuality: many moves. *The Journal of Sex*
367 *Research, 47*, 212-241.

368 Heider, F., & Simmel, M. (1944). An experimental study in apparent behavior. *The*
369 *American Journal of Psychology, 57*, 243-259.

370 Hugill, N., Fink, B., & Neave, N. (2009). Men's physical strength is associated
371 with women's perceptions of their dancing ability. *Personality and Individual Differences,*
372 *47*, 527-530.

373 Kenrick, D. T., Sadalla, E. K., Groth, G., & Trost, M. R. (1990). Evolution, traits
374 and the stage of human courtship: Qualifying the parental investment model. *Journal of*
375 *Personality, 58*, 97-117.

376 Kirchengast, S., & Gartner, M (2002). Changes in fat distribution (WHR) and body
377 weight across the menstrual cycle. *Collegium Anthropologicum, 26*, 47-57.

378 Miller, G., Tybur, J. M., & Jordan, B. D. (2007). Ovulatory cycle effects on tip
379 earning by lap dancers: Economic evidence for human estrus. *Evolution and Human*
380 *Behavior, 28*, 375-381.

381 Neave, Nick, McCarty, K., Freynik, J., Caplan, N., Hönekopp, J., & Fink, B.
382 (2011). Male dance moves that catch a women's eye. *Biology Letters, 7*, 221-224.

383 Oliver, M. B., & Schedikides, C. (1992). Effects of sexual permissiveness and
384 desirability of partner as a function of low and high commitment to relationship. *Social*
385 *Psychology Quarterly, 55*, 321-333.

386 Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientation: A
387 more differentiated look at sociosexuality and its effects on courtship and romantic
388 relationships. *Journal of Personality and Social Psychology, 95*, 1113-1135.

389 Regan, P. C. (1998). What if you can't get what you want? Willingness to

390 compromise ideal mate selection standards as a function of sex, mate value, and
391 relationship context. *Personality and Social Psychology Bulletin*, 24, 1294-1303.

392 Roberts, S. C., Havlicek, J., Flegr, J., Hruskova, M., Little, A. C., Jones, B. C., et
393 al. (2004). Female facial attractiveness increases during the fertile phase of the
394 menstrual cycle. *Proceedings of the Royal Society of London B*, 271, 270-272.

395 Simpson, J. A., & Gangestad, S. W. (1991). Individual differences in
396 sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality
397 and Social Psychology*, 60, 870-883.

398 Singh, D. (1993). Adaptive significance of female physical attractiveness: role of
399 waist-to-hip ratio. *Journal of Personality and Social Psychology*, 65, 293-307.

400 Swami, V., Jones, J., Einon, D., & Furnham, A. (2009). Men's preferences for
401 women's profile waist-to-hip ratio, breast size, and ethnic group in Britain and South
402 Africa. *British Journal of Psychology*, 100, 313-325.

403 Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford
404 University Press.

405 Thornhill R., & Gangestad, S. W. (2008). *The evolutionary biology of human
406 female sexuality*. New York: Oxford University Press.

407 Tovee, M. J., Maisey, D. S., Emery, J. L., & Cornelissen, P. L. (1999). Visual cues
408 to female physical attractiveness. *Proceedings of the Royal Society of London B*, 266,
409 211-218.

410 Townsend, J. M., & Waserman, T. (1998). Sexual attractiveness: sex differences
411 in assessment and criteria. *Evolution and Human Behavior*, 19, 171-191.

412 Williams, G. C. (1975). *Sex and Evolution*. Princeton, New York: Princeton
413 University Press.

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Tables415 Table 1: Descriptive statistics of men's perceptions of the high attractive and low416 attractive female dancers.

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		High attractive dancers		Low attractive dancers	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Attractiveness	STM	4.94	0.69	2.50	0.83
	LTM	3.98	0.92	2.32	0.82
Promiscuity		4.44	1.03	2.34	0.78
Harmony		4.57	0.95	2.51	0.75

418 Note: STM = short-term mate; LTM = long-term mate

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425 Table 2: Multiple regression analyses for variables predicting men's attractiveness
 426 perceptions depending on mating-context.

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	STM			LTM		
	<i>B</i>	<i>SE B</i>	β	<i>B</i>	<i>SE B</i>	β
Promiscuity	1.57	.22	1.22**	.24	.12	.29
Harmony	-.40	.21	-.32	.57	.12	.72*

428 Note: STM = short-term mate; LTM = long-term mate; * $p < .01$, ** $p < .001$