



PERGAMON

Personality and Individual Differences 30 (2001) 371–390

PERSONALITY AND
INDIVIDUAL DIFFERENCES

www.elsevier.com/locate/paid

Self-esteem in marriage

Todd K. Shackelford *

Division of Science, Psychology Department, Florida Atlantic University, 2912 College Avenue, Davie, FL 33314, USA

Received 11 May 1998; received in revised form 2 November 1999

Abstract

This research tested two hypotheses about the evolutionary function of self-esteem, with reference to the marital context: Self-esteem evolved as a psychological solution to the adaptive problem of (1) tracking reproductively-relevant costs inflicted by a spouse, and (2) tracking own value as a long-term mate. Two hundred and fourteen individuals evaluated their self-esteem and provided information about marital conflict and marital satisfaction. Couples were interviewed by two interviewers who independently assessed each participant's mate value and physical attractiveness. Results provide support for both hypothesized functions of self-esteem. Key findings include: husbands' self-esteem is negatively correlated with wives' sexual infidelity and with wives' complaints of husbands' abuse and jealousy; wives' self-esteem is negatively correlated with husbands' derogation of wives' physical attractiveness and positively correlated with interviewer ratings of wives' physical attractiveness. Discussion integrates the two hypothesized functions of self-esteem with the "sociometer hypothesis" (M. R. Leary, E. S. Tambor, S. K. Terdal & D. L. Downs, 1995: Self-esteem as an interpersonal monitor. The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518–530) that self-esteem tracks social rejection. © 2001 Elsevier Science Ltd. All rights reserved.

Keywords: Self-esteem; Marriage; Evolutionary psychology; Infidelity; Physical attractiveness

1. Introduction

Over 30,000 scholarly articles, chapters, and books have been published on self-esteem (Mruk, 1995). Several researchers have noted, however, that it is far from clear what self-esteem is and what functions, if any, it serves (Baumeister, 1993; Kernis, 1995; Leary, Tambor, Terdal & Downs, 1995). The discrepancy between the volume of research on self-esteem and our limited understanding of the phenomenon may be due, in part, to the numbers of researchers working independently from one another. Whereas one researcher examines self-esteem as a personality

* Tel.: +1-954-236-1179; fax: +1-954-236-1099.

E-mail address: tshackel@fau.edu (T.K. Shackelford).

variable, another studies it as a social construction, and still another attempts to identify the situational determinants of self-esteem.

One consequence of this conceptual isolation is that particular topics within the self-esteem literature (e.g., adolescent self-esteem) have received considerable attention, whereas other topics have been largely ignored. For example, a search of the self-esteem literature of the past three decades located only three empirical projects that focused on self-esteem in marriage (Luteijn, 1994; Roberts & Donahue, 1994; Wiggins & Lederer, 1984). These three studies find that marital satisfaction is positively related to self-esteem. It would be valuable to extend the understanding of self-esteem in marriage beyond this single finding.

Guided by an evolutionary psychological perspective, I test two hypotheses about the function of self-esteem, with special reference to the marital context. The hypotheses tested in this research, and the analyses conducted to test these hypotheses, are correlational. Although these correlational analyses may suggest causal relationships, no such claims should be made or are implied. Several theoretical perspectives in addition to an evolutionary psychological perspective may be useful in understanding self-esteem in marriage, such as equity theory (Walster, Walster & Berscheid, 1978). However, the present research is specifically designed to test two evolutionary psychological hypotheses about the function of self-esteem. I therefore do not address alternative perspectives such as equity theory. I note, however, that the only scientifically viable explanation for complex functional design and the psychological and behavioral manifestations of this design, is one that invokes evolution by natural selection (Buss, 1995, 1999). In this sense, all psychological theories, including equity theory, are evolutionary psychological theories (Buss, 1995, 1999). An evolutionary psychological perspective differs from traditional psychological theories by, for example, making explicit the assumptions regarding ancestral selection pressures and the resulting functional design of the mind.

1.1. Hypothesis 1: self-esteem tracks costs inflicted by one's spouse

Several studies have documented a negative correlation between the self-esteem of men and women involved in committed romantic relationships and their reports of relationship conflict (Luteijn, 1994; Rusbult, Morrow & Johnson, 1987; Wiggins & Lederer, 1984). These studies employed global measures of conflict. No previous research has examined the *specific content* of marital conflict in relation to self-esteem. In this study, I use a measure that assesses 15 categories of upsetting spousal behavior, including condescension, jealousy, abusiveness, and sexual infidelity (Buss, 1989a). I therefore am able to conduct a more fine-grained analysis of the covariation between sources of conflict and the self-esteem of people involved in a committed relationship.

An evolutionary psychological perspective (Buss, 1995; Tooby & Cosmides, 1992) provides a guide for identifying the sources of marital conflict that are likely to have the greatest impact on self-esteem. One possible function is that self-esteem may negatively track the frequency with which ancestrally relevant costs are inflicted by one's spouse. Ancestrally relevant costs are those costs that are likely to have decreased the relative reproductive success of humans over human evolutionary history. Such costs include sexual infidelities, physical abuse, and derogation of a spouse's value as a long-term mate. Decreased self-esteem, according to this hypothesis, might motivate actions to reduce or eliminate the inflicted costs, or to prevent infliction of such costs in the future.

1.1.1. Prediction 1

From an evolutionary perspective, one of the greatest costs a wife can inflict on her husband is sexual infidelity. A woman's sexual infidelity places her husband at risk of investing in offspring to whom he is genetically unrelated, inflicting damage in reproductive currency from the husband's perspective. Considerable evidence suggests that modern men are descended from ancestral men who invested substantial time and effort in ensuring the sexual fidelity of their partner (Buss, 2000; Buss, Larsen, Westen & Semmelroth, 1992; Buss & Shackelford, 1997; Daly & Wilson, 1988; Daly, Wilson & Weghorst, 1982; Shackelford & Buss, 1996; Wiederman & Allgeier, 1993a).

A husband's sexual infidelity, in contrast, does not compromise his wife's maternity in offspring she produces. His sexual infidelity may nevertheless be linked with reproductive costs for his wife. For example, to gain and maintain sexual access to another woman, a man may invest some portion of his time, energy, and resources in this other woman. These diverted resources will no longer be available for investment in this man's wife and any children he has with her. A man's sexual infidelity does not, however, inflict the tremendous reproductive costs on his wife that his wife's sexual infidelity inflicts on him. If self-esteem tracks spousal cost-infliction, I predict that:

Among the various actions a wife might perform that upsets her husband, one important predictor of low self-esteem in a man will be his wife's sexual infidelity; additionally, a spouse's sexual infidelity will be a better predictor of a man's than of a woman's low self-esteem.

1.1.2. Prediction 2

Cross-culturally, men, more than women, value cues to *reproductive capacity* — ability to produce children — in a potential spouse (Buss, 1989b). Because women and not men face the energy-intensive burdens of gestation, birth, and lactation, a larger portion of women's mate value depends on their capacity for reproduction. A powerful cue to women's reproductive capacity is physical attractiveness (Buss, 1989b; Singh, 1993; Symons, 1979). Those early males who selected as spouses relatively more physically attractive females are likely to have out-reproduced those males who did not attend to this cue to reproductive capacity.

A man's reproductive capacity, in contrast, is less closely linked to his physical attractiveness. Cross-culturally, women place a lower premium than do men on the physical attractiveness of a potential mate (Buss, 1989a). Because physical attractiveness is an especially important domain of men's mate preferences, a husband's derogation of his wife along this key domain inflicts psychological and affective costs on her. Similar costs also might be incurred by a man whose wife derogates his physical attractiveness. The magnitude of these costs is expected to be less for men, however, because physical attractiveness is a relatively less important domain of women's mate preferences. Based on these considerations, I predict that:

Among the various actions a husband might perform that upsets his wife, one important predictor of low self-esteem in a woman will be her husband's derogation of her physical attractiveness; additionally, physical attractiveness derogation by a spouse will be a better predictor of women's than of men's low self-esteem (see Trivers, 1972; Wright, 1994).

1.1.3. Prediction 3

Marital satisfaction and dissatisfaction may represent evolved psychological states that track the costs and benefits associated with a particular marriage (Shackelford & Buss, 1997). If self-esteem

also tracks spousal cost-infliction, then self-esteem and marital satisfaction should positively covary. Several studies document a positive relationship between global marital satisfaction and self-esteem (Luteijn, 1994; Roberts & Donahue, 1994; Wiggins & Lederer, 1984). Roberts and Donahue (1994) found a significant positive relationship between self-esteem and satisfaction with marital sex. I assess global satisfaction, sexual satisfaction, and emotional satisfaction with the marriage. I extend previous research on the relationship between self-esteem and marital satisfaction, and predict that:

Self-esteem will positively correlate with global, sexual, and emotional satisfaction with the marriage.

1.2. Hypothesis 2: self-esteem tracks own mate value

Psychologists have long noted that self-esteem may function as an index of self-perceived mate value (Barkow, 1989; Kenrick, Groth, Trost & Sadalla, 1993; Kiesler & Baral, 1970; Tooby & Cosmides, 1990; Trivers, 1972; Wright, 1994). As Wright (1994) notes, “self-esteem . . . may have been a reliable guide to one’s enduring value on the marriage market” (p. 118).

1.2.1. Prediction 4

Men and women with relatively high self-perceived mate value might presume that any costs they inflict on their spouse will not irreparably damage the marriage. Such people may believe that their high mate value will mitigate the costs they inflict on their partner. They might believe, for example, that their partners are likely to forgive an infidelity, absorbing such costs as the “price to be paid” for maintaining the relationship with the high mate value person (see Hatfield, Traupmann & Walster, 1979). If self-esteem functions as a psychological index of current mate value, and if men and women of relatively high mate value think that any costs they inflict on their spouse might be less consequential than do persons of relatively low mate value, I predict that:

Self-esteem will negatively correlate with estimates that a spouse would end the marriage as a consequence of one’s own infidelity.

1.2.2. Prediction 5

Previous research on the relationship between physical attractiveness and global measures of self-esteem has produced mixed results. Longo and Ashmore (1995) found a positive correlation between self-rated physical attractiveness and self-esteem. Gabriel, Critelli and Ee (1994), however, found no relationship between self-esteem and observer-rated or self-rated physical attractiveness. I employ a four-dimensional measure of self-esteem (Phinney & Gough, 1984; see Section 2) that provides assessments of global self-esteem, physical self-esteem (self-regard for one’s physical attractiveness), social self-esteem (self-regard for one’s impression on others), and intellectual self-esteem (self-regard for one’s intellectual acuity and potential for occupational success).

If self-esteem functions as an index of mate value (Barkow, 1989; Tooby & Cosmides, 1990; Wright, 1994), and given that women’s mate value is more dependent on physical attractiveness than is men’s (Buss, 1989b; Symons 1979), then interviewer ratings of physical attractiveness should positively correlate with women’s physical, social, and general self-esteem. Men’s physical

attractiveness, in contrast, should positively correlate only with physical self-esteem. I do not predict a positive correlation between women's physical attractiveness and intellectual self-esteem, because self-assessments of intellectual ability can be made relatively independent of the face-to-face social interactions that make physical attractiveness a salient variable.

Interviewer ratings of physical attractiveness will positively correlate with men's and women's physical self-esteem; additionally, physical attractiveness ratings will positively correlate with women's, but not men's, global and social self-esteem.

1.2.3. Prediction 6

I operationalize social-esteem as one's impression on others, social poise, and the extent to which one is liked and respected by valued peers. Social self-esteem may index current self-perceived mate value. In the present research, interviewers provide assessments of each participant's social-esteem, potential for success, and overall mate value. Social-esteem and potential for success may represent different facets of mate value. If self-esteem is calibrated to self-perceived mate value, it also should track social-esteem and potential for success (Barkow, 1989).

Interviewer ratings of social-esteem, potential for success, and overall mate value will positively correlate with global, physical, social, and intellectual self-esteem.

To test the predictions about self-esteem in marriage, I secured self-report, spouse-report, and interviewer-report data on a sample of 107 married couples. Previous reports are based on data provided by this sample (e.g., Buss, 1988; Buss, 1989a). The current article, however, presents new analyses conducted to test two hypotheses and six derivative predictions.

2. Method

2.1. Participants

Participants were 214 individuals who had been married less than 1 year. Participants were located through the public records of marriage licenses issued within a large county in the Midwest. All couples married within a 6-month period were contacted by letter and invited to participate in this study. The majority of participants were Caucasian. The mean age of the wives was 25.52 years ($SD = 4.06$; range = 18–36). The mean age of husbands was 26.79 years ($SD = 3.75$; range = 17–41). This was the first marriage for 96% of the sample. Ninety-six percent of couples had no children. Couples had been romantically involved for an average of 44 months ($SD = 24.64$; range = 1 month–8 years). Two-thirds of couples had cohabited prior to marriage for an average of 1.26 years ($SD = 1.8$ years).

2.2. Procedure

Participants participated in three waves of assessment. First, they received through the mail a battery of self-report instruments to be completed at home. Second, participants came to a laboratory session 1 week after receiving the battery of self-report instruments. During this session, spouses were separated to prevent contamination due to discussion. Participants completed measures of self-esteem, marital satisfaction, and spousal sources of upset, and provided estimates

of the likelihood that their partner would divorce them in the event of their own infidelity. Third, couples were interviewed by a male and a female interviewer drawn from a rotating staff of 10 trained interviewers. Participants were asked a standard set of questions about how they met, sources of attraction, and sources of conflict. Immediately following the interview, the interviewers completed an instrument in which they recorded their perceptions of the physical attractiveness, social-esteem, self-esteem, potential for success, and overall mate value of each participant. Confidentiality of all responses was assured.

2.3. Materials

2.3.1. Self-esteem

Participants completed the California Self-Evaluation Scales (CSES; Phinney & Gough, 1984). The CSES includes 20 items assessing four dimensions of self-esteem (sample item in parentheses): *global self-esteem*, a global measure of self-regard (satisfaction with self); *physical self-esteem*, assessing participants' regard for their physical attractiveness (my physical self-image); *social self-esteem*, measuring participants' perceived impression on others (impression I have on others); *intellectual self-esteem*, assessing participants' regard for their intellectual abilities and potential for success (my potential for success). Each item is rated on a 9-point scale, with varying anchors depending on the attribute being rated. For all scales, 1 = extremely low self-esteem on the attribute and 9 = extremely high self-esteem on the attribute. With 20 items total, five items are standardized and summed to produce each of the four dimensions.

I factor analyzed the 20 items for men and women separately, and then for men and women together, to determine whether the four factors emerged for this sample. For each factor analysis, the four factors emerged with only trivial misassignment of items to factors. Alpha reliabilities for the four factors were: global self-esteem, $\alpha = 0.91$; physical self-esteem, $\alpha = 0.90$; social self-esteem, $\alpha = 0.87$; intellectual self-esteem, $\alpha = 0.83$.

2.3.2. Spousal sources of upset

During the session in which spouses were physically separated, participants completed an instrument containing the following instructions: "Below is a list of things that spouses sometimes do that irritate, annoy, anger, or upset each other. Please place an 'X' next to those acts your husband [wife] has performed *within the past year* that have irritated, annoyed, angered, or upset you." Following these instructions were 147 acts, previously nominated by a separate panel (see Buss, 1989a).

Factor analysis (Buss, 1989a) revealed the following 15 factors (sample act in parentheses): *condescending* (he treated me like I was stupid or inferior), *jealous/possessive* (she acted jealous), *neglecting* (he ignored my feelings), *abusive* (she hit me), *sexually unfaithful* (he had sex with another woman), *inconsiderate* (she did not help clean up), *physically self-absorbed* (he fussed too much with his appearance), *moody* (she was moody), *sexually withholding* (he refused to have sex with me), *sexualizing of others* (she talked about how good-looking another man was), *abusive of alcohol/emotionally constricted* (he drank too much alcohol; he hid all his emotions to act tough), *disheveled* (she did not take care of her appearance), *insulting of partner's physical attractiveness* (he told me I was ugly), *sexually aggressive* (she tried to force sex acts on me), and *self-centered* (he was self-centered).

2.3.3. Likelihood of spousal divorce following own infidelity

During the session in which the spouses were separated, each completed an instrument in which they estimated the likelihood that their spouse would end the marriage if they committed each of six types of infidelity with a member of the opposite sex within the next year: flirting, passionately kissing, going on a romantic date, having a one night stand, a brief affair, and a serious affair. Participants provided estimates on separate 11-point scales for each type of infidelity. The low end of the scale indicated '0%', the high end indicated '100%', with the scale marked off in 10% increments.

2.3.4. Marital satisfaction

Participants responded to several questions about their current marital satisfaction. Global marital satisfaction was assessed with the items "How satisfied are you with your current marriage?" (1 = *not at all satisfied*, 7 = *very satisfied*) and "Thinking about all things together, how would you say you feel about your marriage?" (1 = *unsatisfied*, 7 = *extremely satisfied*). Responses to the two items were highly correlated ($r = 0.77$), and were standardized and summed to create an index of global satisfaction ($\alpha = 0.87$). Sexual satisfaction was assessed with the items "How do you feel about your sexual relationship?" (1 = *not at all satisfied*, 7 = *very satisfied*) and "Overall, how satisfied are you with your sex life with your partner?" (1 = *extremely dissatisfied*, 7 = *extremely satisfied*). Responses to the two items were highly correlated ($r = 0.84$), and were standardized and summed to create an index of sexual satisfaction ($\alpha = 0.91$). Emotional satisfaction was assessed with the items "How do you feel about your spouse as a source of encouragement and reassurance?" and "How do you feel about your spouse as someone to confide in about things that are important to you?" (for both items, 1 = *unsatisfied*, 7 = *extremely satisfied*). Responses to the two items were highly correlated ($r = 0.61$), and were standardized and summed to create an index of emotional satisfaction with the marriage ($\alpha = 0.75$).

2.3.5. Interviewer ratings

Each couple was interviewed by a pair of interviewers drawn from a 10-member team. One interviewer was male, the other female. Each interview lasted about 40 min, during which the couple was asked a standard set of questions, including: How did you meet? What are the sources of conflict within your marriage? Immediately following each interview, the interviewers assessed each participant's facial, body, and overall attractiveness, self-esteem, social-esteem, and potential for success on 7-point scales where 1 = low on the attribute and 7 = high on the attribute. Interviewers also provided ratings of each participant's "overall attractiveness as a potential mate (mate value to opposite sex)", with 1 = *extremely low mate value* and 7 = *extremely high mate value*.

The three ratings of physical attractiveness were highly correlated, for both interviewers (mean $r = 0.90$), and were standardized and summed to create an index of interviewer-rated physical attractiveness for each interviewer (both $\alpha s > 0.96$). The two interviewer-rated physical attractiveness composites were highly correlated ($r = 0.65$), and were standardized and summed to create a cross-interviewer index of physical attractiveness ($\alpha = 0.79$).

Across all participants, the two interviewer ratings of self-esteem, social esteem, potential for success, and mate value correlated 0.45, 0.37, 0.54, and 0.53, respectively (all $ps < 0.001$). I standardized and summed the ratings for each attribute to create an index for each attribute. Alpha

reliabilities for the composite interviewer ratings were 0.62 for self-esteem, 0.54 for social-esteem, 0.70 for potential for success, and 0.69 for mate value.

3. Results

3.1. Descriptive statistics and sex differences in self-esteem

Table 1 presents descriptive statistics and results of correlated means *t*-tests for sex differences in self-esteem. Husbands scored significantly higher than their wives on global, physical, and intellectual self-esteem.

3.2. Correlations among the dimensions of self-esteem

Table 2 presents the correlations among the four dimensions of self-esteem. Correlations for men and women appear below and above the diagonal, respectively. The pattern of correlations was similar for men and women, and suggested that the CSES taps four distinct dimensions of self-esteem. For both sexes, the scales shared 25–30% of the variance for which each accounted. For each scale, at least 70% of the variance accounted for was unique to that scale.

Table 1
Descriptive statistics and results of tests for sex differences in self-esteem^a

	Self-esteem			
	Global mean (SD)	Physical mean (SD)	Social mean (SD)	Intellectual mean (SD)
Husbands	7.12 (0.80)	6.75 (0.99)	7.02 (0.76)	7.31 (0.83)
Wives	6.58 (1.29)	6.23 (1.31)	7.01 (0.93)	7.09 (0.90)
<i>t</i> -statistic	4.12	4.63	0.08	2.06
Significance	$p < 0.001$	$p < 0.001$	$p > 0.05$	$p < 0.05$

^a Data were provided by 107 men and 107 women. Each of the four self-esteem dimensions comprises five items. All item responses are scored from 1 to 9, where 1 = low self-esteem to 9 = high self-esteem. SD = Standard deviation. Degrees of freedom for each test = 105. Significance tests for correlated means *t*-tests are two-tailed.

Table 2
Correlations among dimensions of husbands' and wives' self-esteem^a

Self-esteem	Self-esteem			
	Global	Physical	Social	Intellectual
Global		0.69	0.67	0.62
Physical	0.47		0.49	0.39
Social	0.61	0.50		0.60
Intellectual	0.72	0.32	0.63	

^a Data were provided by 107 men and 107 women. Correlations for men appear below the diagonal; correlations for women appear above the diagonal. All correlations are significant at $p \leq 0.001$ (two-tailed).

3.3. Spousal similarity on self-esteem

Table 3 presents the cross-spouse correlations among the dimensions of self-esteem. Significant spousal similarity obtained for all four dimensions. Similarity on physical and social self-esteem was particularly high ($r_s = 0.53$ and 0.37 , respectively; both $p_s < 0.001$). These findings suggest that participants either selected partners who were somewhat similar to themselves, converged on self-esteem over the course of the relationship, or some combination of the two. Eight of 12 off-diagonal (cross-spouse and cross-dimension) correlations also were significantly positive.

3.4. Hypothesis 1: self-esteem tracks costs inflicted by one's spouse

Table 4 presents the correlations of self-esteem of the complainer with complaints made about the spouse, separately for husbands and wives. I computed correlations among the four dimensions of self-esteem with husbands' and wives' complaints about their spouse along the 15 factors of the Buss (1989a) measure. I present correlations between self-esteem and those factors for which at least one significant correlation obtained within each sex.

The most consistent predictor of husbands' self-esteem was their complaints that their wives are sexually unfaithful, supporting Prediction 1. Husbands' complaints about their wives' sexual infidelity correlated -0.31 , -0.25 , -0.25 , and -0.26 with husbands' global, physical, social, and intellectual self-esteem, respectively (all $p_s \leq 0.01$). Wives' complaints about their husbands' sexual infidelity did not significantly predict women's global, physical, social, or intellectual self-esteem (respective $r_s = -0.07$, -0.16 , -0.01 , and 0.03 ; all $p_s > 0.10$). The correlations between complaints about spousal sexual infidelity and own self-esteem were significantly larger for husbands than for wives for global, social, and intellectual self-esteem (Fisher's $r-z$ transformation, followed by a z -test; for global self-esteem, $z = 1.84$, $p = 0.017$; for social self-esteem, $z = 1.76$, $p = 0.02$; for intellectual self-esteem, $z = 2.17$, $p = 0.008$; all p_s one-tailed). The correlations were not significantly different for physical self-esteem, however ($z = 0.67$, $p > 0.10$, one-tailed).

Wives' complaints that their husbands insulted their physical attractiveness was the most consistent predictor of women's self-esteem, supporting Prediction 2. Women's complaints that their husbands derogate their physical attractiveness correlated -0.25 , -0.20 , -0.20 , and -0.23 with wives' global, physical, social, and intellectual self-esteem, respectively (all $p_s \leq 0.05$). Husbands' complaints that their wives insulted their physical attractiveness did not significantly predict men's global, physical, social, or intellectual self-esteem (respective $r_s = -0.09$, -0.11 , 0.01 , and

Table 3
Cross-spouse correlations among dimensions of self-esteem^a

Wife's self-esteem	Husband's self-esteem			
	Global	Physical	Social	Intellectual
Global	0.23*	0.46***	0.36***	0.17
Physical	0.20*	0.53***	0.34***	0.14
Social	0.19	0.45***	0.37***	0.23*
Intellectual	0.17	0.25**	0.23*	0.22*

^a Data were provided by 107 men and 107 women. * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$ (two-tailed).

–0.13; all $ps > 0.10$). The correlations between complaints about spousal derogation of own physical attractiveness and own self-esteem were significantly larger for wives than for husbands for global and social self-esteem (for global self-esteem, $z = 1.19$, $p = 0.059$; for social self-esteem, $z = 1.45$, $p = 0.037$; both ps one-tailed). The correlations were not significantly different for physical or intellectual self-esteem, however (both $zs < 0.75$, both $ps > 0.10$, one-tailed).

I computed exploratory correlations between participants' self-esteem and their spouse's complaints about them, separately for men and women, and controlling for spouse's self-esteem across the four dimensions. No significant relationships emerged between husbands' complaints about their wives' and wives' self-esteem. Table 5 presents correlations of husband's self-esteem with wife's complaints about husband, after partialling out variance attributable to wife's self-esteem across the four esteem dimensions. Relative to women married to men with high self-esteem, women married to men with low self-esteem complained that their husbands are jealous, possessive, abusive, inconsiderate, moody, sexually withholding, abusive of alcohol, and emotionally constricted.

I predicted (Prediction 3) that self-esteem would positively correlate with global satisfaction, sexual satisfaction, and emotional satisfaction with the marriage. Table 6 presents correlations of self-esteem with marital satisfaction, separately for husbands and wives. Men's global, sexual, and emotional satisfaction positively correlated with their global, physical, and social self-esteem, but were unrelated to their intellectual self-esteem. Women's global, sexual, and emotional satisfaction positively correlated with their self-esteem across all four esteem dimensions. The correlations between women's sexual satisfaction and their intellectual self-esteem and between women's emotional satisfaction and their global self-esteem did not, however, reach statistical significance. Prediction 3 therefore received partial support.

Table 4

Correlations of self-esteem of complainer with complaints about spouse^a

Complaint	Self-esteem of complainer			
	Global	Physical	Social	Intellectual
Husband's complaint about wife				
Condescending	–0.25**	–0.09	–0.20*	–0.22*
Jealous/Possessive	–0.23*	–0.16	–0.17	–0.25**
Abusive	–0.16	–0.07	0.03	–0.21*
Sexually unfaithful	–0.31***	–0.25**	–0.25**	–0.26**
Physically self-absorbed	–0.19*	0.01	–0.07	–0.18
Moody	–0.22*	–0.16	–0.18	–0.16
Sexually withholding	–0.20*	–0.18	–0.04	–0.08
Sexualizing of others	–0.21*	–0.01	–0.12	–0.20*
Alcoholic/Emotionally constricted	–0.28**	–0.04	–0.18	–0.16
Disheveled	–0.14	0.04	–0.10	–0.19*
Self-centered	–0.26**	–0.04	–0.08	–0.23*
Wife's complaint about husband				
Moody	–0.09	–0.23*	–0.10	–0.17
Sexualizing of others	–0.18	–0.17	–0.14	–0.31***
Insulting of her attractiveness	–0.25**	–0.20*	–0.20*	–0.23*
Sexually aggressive	–0.20*	–0.14	–0.10	–0.22*

^a Data were provided by 107 men and 107 women; * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$ (two-tailed).

3.5. Hypothesis 2: self-esteem tracks own mate value

I predicted (Prediction 4) that, for both men and women, self-esteem would negatively correlate with estimates that their spouses would end the marriage if they were unfaithful. This prediction received some support for husbands, but no support for wives. Table 7 presents the correlations of husband's self-esteem with his estimates that his wife would divorce him as a consequence of his infidelity. Husbands' self-esteem across all four esteem dimensions significantly and negatively covaried with their estimates of the likelihood that their wives would seek divorce if they flirted with another woman, passionately kissed another woman, or went on a romantic date with another woman.

Table 8 presents the correlations of interviewer ratings of several dimensions of mate value with self-esteem of the rated target, separately for husbands and wives. I predicted (Prediction 5) that interviewer ratings of physical attractiveness would positively correlate with physical self-esteem. I further predicted that physical attractiveness ratings would positively correlate with

Table 5
Partial correlations of husband's self-esteem with wife's complaints about husband^a

Wife's complaint about husband	Husband's self-esteem			
	Global	Physical	Social	Intellectual
Jealous/Possessive	−0.24*	−0.10	−0.04	−0.04
Abusive	−0.17	−0.26**	−0.14	−0.14
Inconsiderate	−0.24*	−0.21*	−0.18	−0.18
Moody	−0.30**	−0.30**	−0.17	−0.14
Sexually withholding	−0.15	−0.25**	−0.24**	−0.11
Alcoholic/Emotionally constricted	−0.23*	−0.18	−0.16	−0.15

^a Variance attributable to wife's self-esteem across all four esteem dimensions is partialled out of all correlations between wife's complaints about husband and husband's self-esteem. After partialling, N (Couples) = 100. * $p \leq 0.05$, ** $p \leq 0.01$ (two-tailed).

Table 6
Correlations of self-esteem with own marital satisfaction^a

Marital satisfaction	Self-esteem			
	Global	Physical	Social	Intellectual
Husband's marital satisfaction				
Global	0.25**	0.33***	0.32***	0.17
Sexual	0.20*	0.31***	0.22*	0.09
Emotional	0.33***	0.22*	0.25**	0.14
Wife's marital satisfaction				
Global	0.37***	0.38***	0.28**	0.38***
Sexual	0.26**	0.25**	0.20*	0.18
Emotional	0.17	0.20*	0.19*	0.22*

^a Data were provided by 107 men and 107 women. * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$ (two-tailed).

women's, but not men's, global and social self-esteem. Table 8 reveals some support for this prediction. Interviewer ratings of men's physical attractiveness significantly correlated only with men's physical self-esteem. Interviewer ratings of women's physical attractiveness significantly correlated with women's global, physical, and social self-esteem. The correlation between global self-esteem and interviewer-rated physical attractiveness was significantly larger for women than for men ($z = 1.73$, $p = 0.02$, one-tailed). The correlation between social self-esteem and interviewer-rated attractiveness was not significantly larger for women than for men, however ($z = 0.74$, $p > 0.05$, one-tailed). As predicted, ratings of women's physical attractiveness were not correlated with their intellectual self-esteem. Nor, however, did these relationships obtain for men.

I predicted (Prediction 6) that interviewer ratings of social-esteem, potential for success, and overall mate value would positively correlate with self-esteem. This prediction was supported, with the exception of the correlations between interviewer ratings of women's social-esteem and

Table 7

Correlations of husband's self-esteem with his estimates that wife would end marriage as a consequence of his infidelity^a

Husband's estimate that wife would end marriage if he was unfaithful	Husband's self-esteem			
	Global	Physical	Social	Intellectual
Flirted	−0.30**	−0.20*	−0.27**	−0.28**
Passionately kissed	−0.33***	−0.23*	−0.27**	−0.28**
Went on romantic date	−0.32***	−0.20*	−0.21*	−0.24**
Had one night stand	−0.22*	−0.16	−0.14	−0.13
Had brief affair	−0.18	−0.15	−0.09	−0.05
Had serious affair	−0.19	−0.20*	−0.09	0.00

^a Data were provided by 107 men. * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$ (two-tailed).

Table 8

Correlations of rated target's self-esteem with interviewer ratings^a

Interviewer rating	Self-esteem of rated target			
	Global	Physical	Social	Intellectual
Interviewer ratings of husband				
Physical attractiveness	0.02	0.36***	0.10	−0.08
Self-esteem	0.27**	0.15	0.34***	0.26**
Social-esteem	0.35***	0.17	0.39***	0.25**
Potential for success	0.26**	0.20*	0.34***	0.33***
Mate value	0.16	0.25**	0.31***	0.21*
Interviewer ratings of wife				
Physical attractiveness	0.26**	0.44***	0.20*	0.11
Self-esteem	0.30**	0.32***	0.35***	0.14
Social-esteem	0.26**	0.29**	0.35***	0.12
Potential for success	0.30**	0.31***	0.32***	0.25**
Mate value	0.26**	0.36***	0.26**	0.14

^a Data were provided by 107 men and 107 women. * $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$ (two-tailed).

mate value with women's intellectual self-esteem; although positive, these relationships were not statistically significant.

Several correlations in Table 8 offer convergent validation of the dimensions of self-esteem assessed by the CSES. Interviewer-rated self-esteem correlated positively with men's global, social, and intellectual self-esteem, and with women's global, physical, and social self-esteem. Interviewer-rated physical attractiveness positively covaried with men's and women's physical self-esteem. Interviewer ratings of participants' social-esteem were significantly positively correlated with husbands' and wives' social self-esteem. Interviewer-rated potential for success significantly and positively covaried with men's and women's intellectual self-esteem. Interviewer-rated overall mate value was positively associated with all four dimensions of men's self-esteem, and with women's global, physical, and social self-esteem.

4. Discussion

The goal of this study was to examine the consequences of self-esteem for marital interaction. I explored two hypotheses about the evolutionary function of self-esteem. Hypothesis 1 stated that self-esteem tracks spousal infliction of ancestrally relevant costs. Hypothesis 2 stated that self-esteem tracks self-perceived mate value. I tested six predictions, three derived from each hypothesis, in a sample of recently married couples. Below, I first discuss the findings regarding sex differences and similarities along the dimensions of self-esteem. I then discuss the status of the two hypothesized functions of self-esteem. Finally, I discuss how self-esteem may simultaneously track spousal cost-infliction and current mate value, in addition to functioning as an interpersonal monitor of social exclusion.

4.1. Sex differences and similarities in self-esteem

Consistent with previous research (Feingold, 1994; Hong, Bianca, Bianca & Bollington, 1993; Wiederman & Allgeier, 1993b; Wiggins & Lederer, 1984), husbands in this sample report significantly higher self-esteem than do their wives, for three of the four dimensions assessed by the CSES. Men and women did not differ in their levels of social self-esteem. I documented significant spousal similarity along all four dimensions of self-esteem. This similarity appears to be particularly strong for physical and social self-esteem. Previous research employing global measures of self-esteem also documents spousal similarity (Schafer & Keith, 1992; Schumm, Figley & Fuhs, 1980). The present research therefore replicates previous research and, in addition, provides evidence that spousal similarity varies along several content domains of self-esteem.

4.2. Hypothesis 1: self-esteem tracks costs inflicted by one's spouse

Self-esteem may track the frequency with which ancestral, reproduction-relevant costs are inflicted by one's spouse. Decreased self-esteem might motivate actions to reduce the inflicted costs, or to prevent future cost-infliction. The present research is the first to examine the relationships between self-esteem and *specific domains* of marital conflict. Participants in this sample reported the occurrence of 15 categories of upsetting spousal behavior.

An evolutionary psychological perspective suggests that sexual infidelity is one of the most severe costs a woman can inflict on her husband. The substantial reproductive and reputational costs of cuckoldry define the selection pressures that have sculpted the remarkably sensitive psychology of sexual proprietariness in modern men (Wilson & Daly, 1992). Working within an evolutionary framework, I predicted that among the various actions a wife can perform that upsets her husband, one important predictor of a man's self-esteem would be his wife's sexual infidelity. I found support for this prediction. Husbands who complain that their wives are sexually unfaithful report significantly lower global, physical, social, and intellectual self-esteem than do husbands who do not complain of wifely sexual infidelity. None of the analogous correlations between women's complaints of husbands' sexual infidelity and women's self-esteem obtained in this sample.

Because these results are correlational, we cannot know the causal direction of the relationship between husbands' self-esteem and wives' sexual infidelity. A wife's sexual infidelity might cause her husband's self-esteem to plummet. Alternatively, women married to men with low self-esteem may be more likely to become extramaritally involved. The latter possibility is consistent with the second hypothesized function of self-esteem, that self-esteem tracks current mate value. If self-esteem accurately tracks mate value, women married to men with low self-esteem might engage in extramarital mating in an effort to identify and acquire a more valuable mate. Finally, a reciprocal relationship may exist between husbands' self-esteem and wives' sexual infidelity. Women married to low mate value men may be more likely to have an affair. Discovery or suspicion of a wife's sexual infidelity might then cause a man to recalibrate his self-perceived mate value downward, causing him to experience lowered self-esteem. Which of these possibilities, if any, accounts for the observed relationship between husbands' self-esteem and wives' sexual infidelity is a topic for future research.

Self-esteem might track spousal infliction of evolutionarily relevant costs, *in addition to* tracking current mate value. On either of these accounts, men's derogation of their spouse's physical attractiveness might produce a decrease in their wives' self-esteem. Because physical attractiveness is a key domain of men's mate preferences, a husband's derogation of his wife along this domain inflicts a psychological cost on her. If she perceives her husband's derogation as valid, she might recalibrate her mate value downward. Alternatively, her husband's derogation of her physical attractiveness may reflect his dissatisfaction with her and the marriage, foreshadowing his intention either to become extramaritally involved or to end the marriage. I predicted that, among the various actions that a man might perform that upsets his wife, one important predictor of a woman's self-esteem will be her husband's derogation of her physical attractiveness. I found support for this prediction. Further research could examine the causal process by which this relationship emerges: Does a husband's derogation of his wife's physical attractiveness cause her to downwardly recalibrate her mate value and, as a consequence, experience lower self-esteem? Does this derogation instead, or in addition, serve as a cue to a woman that her husband is at risk of becoming extramaritally involved or is contemplating divorcing her, in search of a more physically attractive and thus more valuable mate?

Previous research documents a positive relationship between global indexes of self-esteem and marital satisfaction, for both husbands and wives. A single study has investigated the relationship between marital satisfaction and self-esteem, using a two-dimensional measure of marital satisfaction (Roberts & Donahue, 1994). In that study, self-esteem correlated positively with global

and sexual marital satisfaction, for both husbands and wives. I am not aware of any studies that have examined the relationship between self-esteem and marital satisfaction, each multidimensionally measured.

Marital satisfaction and dissatisfaction may function as evolved psychological states that track the costs and benefits of a particular marriage (Shackelford & Buss, 1997). If self-esteem also tracks spousal cost-infliction, then self-esteem and marital satisfaction should be positively correlated. Using multidimensional measures of self-esteem and marital satisfaction, I predicted and found positive correlations of global, physical, and social self-esteem with global, sexual, and emotional satisfaction with the marriage, for both husbands and wives. Additionally, women's global and emotional satisfaction positively correlates with intellectual self-esteem. The present research thus replicates and extends previous research on the relationship between self-esteem and marital satisfaction.

4.3. Hypothesis 2: self-esteem tracks own mate value

Assuming, as many psychologists have, that self-esteem functions as a psychological index of self-perceived mate value (e.g., Barkow, 1989; Kiesler & Baral, 1970; Tooby & Cosmides, 1990; Wright, 1994), and that people of high self-perceived mate value think that any costs they inflict on their spouses are less negatively consequential than do people of low self-perceived mate value, I predicted that men's and women's estimates that their spouses would divorce them following discovered infidelity would negatively covary with their self-esteem. This prediction was supported for men but not women, and only for a subset of the six types of infidelity investigated. Men with higher (relative to lower) self-esteem report significantly lower likelihoods that their wives would divorce them if they flirted with another woman, passionately kissed another woman, or romantically dated another woman. Flirting, kissing, and dating do not necessarily include sexual intercourse. Sexual intercourse is implicit in the suggestion of a one night stand, brief affair, and serious affair.

Men with lower (relative to higher) self-esteem provide higher estimates that their wives would divorce them if they became emotionally — but not necessarily sexually — involved with another woman. Several studies (Buss, 2000; Buss et al., 1992; Shackelford & Buss, 1996; Wiederman & Allgeier, 1993a) document that women are more upset by a long-term partner's emotional infidelity than by his sexual infidelity. Low mate value men may already be compromising their partner's mate preferences, in addition to inflicting 'opportunity costs' on them. Women married to lower mate value men, all else equal, could presumably pair with a relatively more valuable mate. The additional cost infliction associated with emotional infidelity may simply be more than the partners of low mate value men are willing to endure. Low mate value men may be sensitive to this risk, which might explain their higher estimates that their wives would divorce them following their own emotional infidelity.

I calculated exploratory correlations between participants' self-esteem and their spouses' complaints about them, separately for men and women, and controlling for spouses' self-esteem. I found that, relative to women married to high self-esteem men, women married to low self-esteem men complain more of their husbands' jealousy, possessiveness, abusiveness, inconsiderateness, moodiness, sexual withholding, alcohol abuse, and emotional constriction. The findings for husbands' jealousy, possessiveness, and abusiveness are particularly interesting. If self-esteem tracks

mate value, then low mate value men — that is, men reporting low self-esteem — appear to be taking action to reduce the likelihood that their partners will be unfaithful. The findings linking men's self-esteem with wife-abuse are consistent with previous research (Goldstein & Rosenbaum, 1985; Murphy, Meyer & O'Leary, 1994; Russell & Hulson, 1992) and, in addition, provide the first evidence of links between low self-esteem and male sexual jealousy, possessiveness, and wife-abuse.

Assuming that self-esteem tracks current mate value, and given that women's mate value is more closely linked to physical attractiveness than is men's, I predicted that physical attractiveness would positively covary with women's physical, social, and global self-esteem. Men's physical attractiveness, in contrast, was predicted to covary positively with physical self-esteem only. This prediction was supported. Past research documents a positive relationship between global assessments of self-esteem and physical attractiveness. The present findings are consistent with and extend previous research, given the use of multidimensional assessments of self-esteem and attractiveness.

I predicted that as an index of self-perceived mate value, self-esteem should be positively linked with independent assessments of social-esteem, potential for success, and value as a potential mate. I found partial support for this prediction, with the exception that the covariation between women's interviewer-rated social-esteem and mate value, although positive, did not reach statistical significance.

4.4. *Integrating the hypothesized functions of self-esteem*

I found support for the hypothesis that self-esteem tracks spousal cost-infliction. I also found partial support for the hypothesis that self-esteem tracks current mate value. The two hypothesized functions of self-esteem are not mutually exclusive. Self-esteem may track spousal cost-infliction *and* current mate value. From a partner's perspective, a spouse's value as a mate is a function of the ratio of costs incurred to benefits received as a consequence of marriage to that person. A high ratio of costs incurred to benefits received may signal the presence of a relatively low mate value spouse. Because spouse's mate value is a reliable predictor of own mate value (Buss, 1994; Elder, 1969; Taylor & Glenn, 1976; Udry & Eckland, 1984), spousal cost-infliction may prompt a downward recalibration of one's own self-perceived mate value. This downward recalibration might then be manifested in lower self-esteem, if self-esteem tracks current self-perceived mate value. In sum, downward recalibration of own self-perceived mate value might mediate the negative relationship between spousal cost-infliction and decreased self-esteem. Consider the finding that men's self-esteem negatively covaries with complaints of wifely sexual infidelity. This finding is consistent with the hypothesis that self-esteem tracks spousal cost-infliction. This finding does not rule out the possibility, however, that a wife's sexual infidelity prompts her husband to downwardly recalibrate his assessment of her mate value to him. Because his spouse's mate value provides information to him about his own mate value, this man may subsequently downwardly recalibrate his assessment of his own mate value.

Alternatively, spousal cost-infliction may mediate the negative relationship between mate value and self-esteem. Consider the finding that independent assessments of men's potential for success is positively correlated with men's self-esteem. Potential for success is an important component of women's mate preferences and, therefore, of men's mate value. This finding therefore is consistent

with the hypothesis that self-esteem tracks mate value. I cannot eliminate the possibility, however, that men with less potential for success are victims of more severe spousal cost-infliction. Women married to men with less potential for success may be more likely to have an extramarital affair, for example, perhaps in an effort to acquire a more valuable spouse.

Daily diary studies of married couples could provide the necessary information needed to determine whether downward recalibration of own mate value mediates the negative relationship between spousal cost-infliction and self-esteem. Couples would provide information on a daily basis over a period of several months. Daily data on spousal cost-infliction, self-perceived mate value, and self-esteem could be secured. With this more detailed information, more fine-grained analyses could identify the interrelationships of spousal cost-infliction, mate value, and self-esteem.

I provide evidence that self-esteem tracks both spousal cost-infliction and self-perceived mate value. Leary et al. (1995) propose an alternative evolutionary function for self-esteem — that self-esteem indexes social rejection. Having detected current or potential social rejection, the self-esteem system motivates behaviors designed to enhance acceptance by others. Leary et al. provide empirical support for this ‘sociometer hypothesis’ of the evolutionary function of self-esteem. Rejection is a cost that can be inflicted by a spouse on his or her partner. That self-esteem appears to track spousal cost-infliction is therefore consistent with the sociometer hypothesis. The sociometer hypothesis, however, cannot predict which *specific* types of spousal cost-infliction are likely to have the greatest impact on a partner’s self-esteem. An evolutionary psychological, *domain-specific* revision of the sociometer hypothesis can make predictions at this level. According to the sociometer hypothesis, one form of spousal cost-infliction will have the same impact on self-esteem as any other form of spousal cost-infliction. According to a domain-specific reformulation of the sociometer hypothesis, a man’s self-esteem will be especially negatively impacted by his wife’s sexual infidelity. A woman’s self-esteem will be particularly responsive to her husband’s derogation of her physical attractiveness.

The present research also provides partial support for the hypothesis that self-esteem tracks current mate value. Social rejection provides information about a person’s value as a potential mate and, at this level, the sociometer and mate value hypotheses are compatible. The mate value hypothesis, however, is a domain-specific hypothesis that predicts that rejection *by a current mate or by potential mates* will have the greatest negative impact on self-esteem. The sociometer hypothesis does not differentiate rejection by one group from rejection by any other group and so cannot predict when rejection will have the greatest negative impact of self-esteem.

5. Limitations and conclusions

One limitation of this study pertains to the sample of couples, all of whom had married within the previous year. The use of newlywed couples is likely to have produced a range restriction for several of the variables examined, including marital satisfaction and spousal sources of upset. Newlyweds, relative to longer-married people, are likely to be more satisfied with their marriages and to report fewer sources of upset. This range restriction would have attenuated the relationships I discovered. The magnitudes of these results may therefore be lower-bound estimates of the actual relationships between self-esteem, marital satisfaction, and marital conflict.

A second limitation of this study is characteristic of all cross-sectional research. Relative to cross-sectional investigations, longitudinal studies more readily allow valid causal analyses and interpretations. Longitudinal studies of self-esteem (e.g., Alsaker & Olweus, 1992) and of marriage (e.g., Bradbury & Karney, 1993) have been conducted. To my knowledge, however, no study has longitudinally investigated the relevance of self-esteem in marriage. Do the relationships between self-esteem and spousal sources of upset and marital satisfaction change as the marriage moves beyond the newlywed stage? Does self-esteem continue to track marital satisfaction after the first year of marriage? If spousal sources of upset fluctuate over the course of marriage, are these fluctuations tracked by self-esteem? Longitudinal designs have methodological limitations (see, e.g., Karney & Bradbury, 1995), but can nevertheless provide information about the impact of self-esteem on marriage and of marriage on self-esteem that is inaccessible to cross-sectional investigations. Daily diary studies of married couples also could provide valuable information about self-esteem in marriage that cannot be obtained in cross-sectional work.

I generated and offered support for six predictions testing two hypotheses about the evolutionary function of self-esteem, with special reference to marriage. This research suggests that self-esteem may *both* track spousal cost-infliction *and* track self-perceived mate value. Both hypotheses represent domain-specific, evolutionary psychological reformulations of the domain-general hypothesis that self-esteem tracks social rejection.

Acknowledgements

The author thanks David Buss for access to the data used in this article, and Steven Beach, David Buss, Margaret Clark, Phebe Cramer, Frederick Rhodewalt, Bill Swann, and Don Symons for helpful suggestions on an earlier version of the paper.

References

- Alsaker, F. D., & Olweus, D. (1992). Stability of global self-evaluations in early adolescence: A cohort longitudinal study. *Journal of Research on Adolescence*, 2, 123–145.
- Barkow, J. (1989). *Darwin, sex, and status*. New York: Oxford University Press.
- Baumeister, R. F. (1993). *Self-esteem*. New York: Plenum.
- Bradbury, T. N., & Karney, B. R. (1993). Longitudinal study of marital interaction and dysfunction: Review and analysis. *Clinical Psychology Review*, 13, 15–27.
- Buss, D. M. (1988). The evolution of human intrasexual competition. Tactics of mate attraction. *Journal of Personality and Social Psychology*, 54, 616–628.
- Buss, D. M. (1989a). Conflict between the sexes: Strategic interference and the evocation of anger and upset. *Journal of Personality and Social Psychology*, 56, 735–747.
- Buss, D. M. (1989b). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12, 1–49.
- Buss, D. M. (1994). *The evolution of desire*. New York: Basic Books.
- Buss, D. M. (1995). Evolutionary psychology: A new paradigm for psychological science. *Psychological Inquiry*, 6, 1–30.
- Buss, D. M. (1999). *Evolutionary psychology*. Boston: Allyn & Bacon.
- Buss, D. M. (2000). *The dangerous passion*. New York: Free Press.
- Buss, D. M., Larsen, R. J., Westen, D., & Semmelroth, J. (1992). Sex differences in jealousy: Evolution, physiology, and psychology. *Psychological Science*, 3, 251–255.

- Buss, D. M., & Shackelford, T. K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology*, 72, 346–361.
- Daly, M., & Wilson, M. (1988). *Homicide*. Hawthorne, NY: Aldine de Gruyter.
- Daly, M., Wilson, M., & Weghorst, S. J. (1982). Male sexual jealousy. *Ethology and Sociobiology*, 3, 11–27.
- Elder, G. H. Jr (1969). Appearance and education in marriage mobility. *American Sociological Review*, 34, 519–533.
- Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin*, 116, 429–456.
- Gabriel, M. T., Critelli, J. W., & Ee, J. S. (1994). Narcissistic illusions in self-evaluations on intelligence and attractiveness. *Journal of Personality*, 62, 144–155.
- Goldstein, D., & Rosenbaum, A. (1985). An evaluation of the self-esteem of maritally violent men. *Family Relations*, 34, 425–428.
- Hatfield, E., Traupmann, J., & Walster, G. W. (1979). Equity and extramarital sex. In M. Cook, & G. Wilson, *Love and attraction* (pp. 232–324). Oxford: Pergamon.
- Hong, S., Bianca, M. A., Bianca, M. R., & Bollington, J. (1993). Self-esteem: The effects of life satisfaction, sex, and age. *Psychological Reports*, 72, 95–101.
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin*, 118, 3–34.
- Kenrick, D. T., Groth, G. E., Trost, M. R., & Sadalla, E. K. (1993). Integrating evolutionary and social exchange perspectives on relationships: Effects of gender, self-appraisal, and involvement level on mate selection criteria. *Journal of Personality and Social Psychology*, 64, 951–969.
- Kernis, M. H. (1995). *Efficacy, agency, and self-esteem*. New York: Plenum.
- Kiesler, S. B., & Baral, R. L. (1970). The search for a romantic partner: The effects of self-esteem and physical attractiveness on romantic behavior. In K. H. Gergen, & D. Marlow, *Personality and social behavior* (pp. 155–165). Reading: Addison-Wesley.
- Leary, M. R., Tambor, E. S., Terdal, S. K., & Downs, D. L. (1995). Self-esteem as an interpersonal monitor: The sociometer hypothesis. *Journal of Personality and Social Psychology*, 68, 518–530.
- Longo, L. C., & Ashmore, R. D. (1995). The looks-personality relationship: Global self-orientations as shared precursors of subjective physical attractiveness and self-ascribed traits. *Journal of Applied Social Psychology*, 25, 371–398.
- Luteijn, F. (1994). Personality and the quality of an intimate relationship. *European Journal of Psychological Assessment*, 10, 220–223.
- Mruk, C. J. (1995). *Self-esteem*. New York: Springer.
- Murphy, C. M., Meyer, S., & O’Leary, K. D. (1994). Dependency characteristics of partner assaultive men. *Journal of Abnormal Psychology*, 103, 729–735.
- Phinney, C., & Gough, H. (1984). *California self-evaluation scales*. Berkeley, CA: Institute for Personality Assessment and Research.
- Roberts, B. W., & Donahue, E. M. (1994). One personality, multiple selves: Integrating personality and social roles. *Journal of Personality*, 62, 199–218.
- Rusbult, C. E., Morrow, G. D., & Johnson, D. J. (1987). Self-esteem and problem-solving behaviour in close relationships. *British Journal of Social Psychology*, 26, 293–303.
- Russell, R. J., & Hulson, B. (1992). Physical and psychological abuse of heterosexual partners. *Personality and Individual Differences*, 13, 457–473.
- Schafer, R. B., & Keith, P. M. (1992). Self-esteem agreement in the marital relationship. *Journal of Social Psychology*, 132, 5–9.
- Schumm, W. R., Figley, C. R., & Fuhs, N. N. (1980). Similarity in self-esteem as a function of duration of marriage among student couples. *Psychological Reports*, 47, 365–366.
- Shackelford, T. K., & Buss, D. M. (1996). Betrayal in mateships, friendships, and coalitions. *Personality and Social Psychology Bulletin*, 22, 1151–1164.
- Shackelford, T. K., & Buss, D. M. (1997). Marital satisfaction in evolutionary psychological perspective. In R. J. Sternberg, & M. Hojjat, *Satisfaction in close relationships* (pp. 7–25). New York: Guilford.
- Singh, D. (1993). Adaptive significance of female physical attractiveness: Role of waist-to-hip ratio. *Journal of Personality and Social Psychology*, 65, 293–307.

- Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.
- Taylor, P. A., & Glenn, N. D. (1976). The utility of education and attractiveness for females' status attainment through marriage. *American Sociological Review*, *41*, 484–498.
- Tooby, J., & Cosmides, L. (1990). On the universality of human nature and the uniqueness of the individual: The role of genetics and adaptation. *Journal of Personality*, *58*, 17–67.
- Tooby, J., & Cosmides, L. (1992). Psychological foundations of culture. In J. Barkow, L. Cosmides, & J. Tooby, *The adapted mind* (pp. 19–136). New York: Oxford University Press.
- Trivers, R. L. (1972). Parental investment and sexual selection. In B. Campbell, *Sexual selection and the descent of man; 1871–1971* (pp. 136–179). Chicago: Aldine.
- Udry, J. R., & Eckland, B. K. (1984). Benefits of being attractive: Differential payoffs for men and women. *Psychological Reports*, *54*, 47–56.
- Walster, E., Walster, G. W., & Berscheid, E. (1978). *Equity*. Boston: Allyn & Bacon.
- Wiederman, M. W., & Allgeier, E. R. (1993a). Gender differences in sexual jealousy: Adaptationist or social learning explanation? *Ethology and Sociobiology*, *14*, 115–140.
- Wiederman, M. W., & Allgeier, E. R. (1993b). The measurement of sexual-esteem: Investigation of Snell and Papini's (1989) Sexuality Scale. *Journal of Research in Personality*, *27*, 88–102.
- Wiggins, J. D., & Lederer, D. A. (1984). Differential antecedents of infidelity in marriage. *American Mental Health Counselors Association Journal*, *6*, 152–161.
- Wilson, M., & Daly, M. (1992). The man who mistook his wife for chattel. In J. Barkow, L. Cosmides, & J. Tooby, *The adapted mind* (pp. 289–322). New York: Oxford University Press.
- Wright, R. (1994). *The moral animal*. New York: Vintage.