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Spousal mate retention in the newlywed year and three years later

Farnaz Kaighobadi^{a,*}, Todd K. Shackelford^a, David M. Buss^b^a Department of Psychology, Florida Atlantic University, 2912 College Ave., Davie, FL 33314, USA^b Department of Psychology, University of Texas, Austin, 1 University Station, Austin, TX 78712, USA

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ABSTRACT

The function of mate retention tactics is to prevent a long-term partner from defecting from the relationship and to ward off potential mate poachers. These tactics include Concealment of Mate, Appearance Enhancement, and Violence against Rivals. The current research is the first to investigate the performance of husband's and wife's mate retention tactics over time. We assessed 49 husbands and 65 wives on their performance of 19 mate retention tactics once as newlyweds and again four years into the marriage. With this unique dataset, we investigated (1) the cross-time stability of husbands' and wives' performance reports of mate retention tactics and (2) sex differences in performance reports of mate retention tactics over time. The results indicated that (1) husbands' and wives' performance reports of mate retention tactics as newlyweds correlate positively with their performance reports of mate retention tactics three years later, (2) husbands' and wives' performance reports of mate retention tactics decreases after three years of marriage, and (3) sex differences in performance reports of mate retention tactics persist over time. Discussion offers speculations on the stability and change found in mate retention performance, suggests potential correlates of mate retention performance, and addresses limitations of this research.

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1. Introduction

Over human evolutionary history women and men both risked costs associated with a long-term partner's infidelity (partial loss of reproductively-relevant resources) or outright defection (total loss of reproductively-relevant resources) from the relationship. Although these dual threats are adaptive problems for both sexes, some of the costs associated with failure to successfully solve this problem are partially sex-differentiated (Buss, 1988, 2000; Daly, Wilson, & Weghorst, 1982; Symons, 1979). Ancestral women faced the recurrent problems of paternal investment and acquisition and retention of resources with which to raise offspring. The costs to ancestral women of a partner's partial or total defection from the relationship included the loss of current or future economic resources and loss of protection, which would render such women and their children more vulnerable to exploitation (Buss & Duntley, 2008). Ancestral men, in contrast, faced the adaptive problem of paternity uncertainty as a consequence of fertilization occurring internally within women. Female sexual infidelity, which puts the man at risk for genetic cuckoldry and unwitting investment in offspring to whom he is not genetically related, carried substantial reproductive costs for ancestral men. The costs included the

loss of time, resources, and alternative mating opportunities (Buss, 1988, 2000; Symons, 1979).

Buss (1988) used an act nomination procedure (Buss & Craik, 1983) to identify 104 mate retention acts and subsequently categorized these acts into 19 tactics, the performance of which could be assessed by the Mate Retention Inventory (MRI). Buss investigated sex differences in performance frequency of mate retention tactics in a sample of college students. The results indicated that men and women differed in the performance reports of several tactics: Men reported more frequent performance of Resource Display (e.g., "Spent a lot of money on my partner"), Concealment of Mate (e.g., "Refused to introduce my partner to my same-sex friends"), Submission and Debasement (e.g., "Told my partner that I would change in order to please her"), Intrasexual Threats (e.g., "Told other men to stay away from my partner"), and Violence against Rivals (e.g., "Hit a man who made a pass on my partner"). Women reported more frequent performance of Appearance Enhancement (e.g., "Made myself 'extra attractive' for my partner") and Infidelity Threat (e.g., "Flirted with someone in front of my partner"). Buss and Shackelford (1997) investigated sex differences in performance frequency of mate retention tactics in a sample of married couples. Husbands reported more frequent performance of Resource Display, Submission and Debasement, and Intrasexual Threats, whereas wives reported more frequent performance of Appearance Enhancement, Verbal Possession Signals (e.g., "Bragged about my partner to other women"), and Punishment

* Corresponding author. Address: Department of Psychology, Florida Atlantic University, 2912 College Avenue, Davie, FL 33314, USA. Tel.: +1 714 293 1058.
E-mail address: fkaighob@fau.edu (F. Kaighobadi).

of Infidelity Threat (e.g., “Yelled at my partner after he showed interest in another woman”).

Evidence for the validity and reliability of the MRI has been secured in research on the congruence of self-reports with spousal-reports (Shackelford, Goetz, & Buss, 2005), in cross-cultural studies (e.g., Kardum, Hudek-Knezevic, & Gracanin, 2007), and in research addressing the mate retention behaviors of homosexual couples (e.g., VanderLaan & Vasey, 2008). Previous research has also investigated sex differences in, and predictors of, mate retention in a single assessment. No previous research has investigated the cross-time stability of the performance of mate retention tactics. The current research investigates married men's and women's performance reports of mate retention tactics first as newlyweds and then again after four years of marriage. We were interested in investigating the stability of mate retention performance reports and sex differences in mate retention performance reports over time. Because some mate retention tactics are modestly linked with relatively stable features of individuals, such as personality traits (e.g., de Miguel & Buss, under review), we expected to identify positive correlations between mate retention performance reports as newlyweds and four years into the marriage.

Most divorces occur in the early years of the marriage (Kreider & Fields, 2001). Because the participants in this research were still married after four years, they are likely to have negotiated successfully the “rules” of their marriage, including interactions with opposite-sex others. Thus, we expect that the mate retention performance reports of both husbands and wives may have decreased from the newlywed year to the fourth year of marriage. Furthermore, because the sex differences in performance reports of particular mate retention tactics may have been driven by different selection pressures on each sex during human evolutionary history (Buss, 1988; Buss & Shackelford, 1997), we expected to identify similar sex differences at both times.

In summary, the current research explores the cross-time stability of mate retention tactics and sex differences in the selection and performance frequency of mate retention tactics reported by husbands and wives. We expected to find that husbands and wives continue to report using particular mate retention tactics over time, and that both sexes would report a decrease in performance frequency of mate retention tactics from the newlywed year to the fourth year of marriage.

2. Methods

2.1. Participants

The participants at the newlywed year were 107 couples identified and solicited by letter from the public records of marriage licenses issued within a large county in the Midwestern United States (see Buss, 1991, 1992, for details). Four years into marriage, 49 men and 65 women who remained married participated in the research. Because one goal of this research was to investigate stability in the performance frequency of mate retention tactics over time, we did not include responses of people who participated only as newlyweds. The mean age of husbands in the newlywed year was 27.0 years ($SD = 3.34$) and the mean age of wives was 25.8 ($SD = 4.10$). Different subsets of these data have been used to conduct different analyses designed to test different hypotheses (e.g., Buss & Shackelford, 1997; Shackelford et al., 2005).

2.2. Materials

Participants completed a survey packet that included the Mate Retention Inventory (MRI; Buss, 1988). The MRI assesses the frequency of husband's and wife's performance of 104 mate retention

acts in the past month, with responses ranging from 0 (*never*) to 3 (*often*). According to the taxonomy developed by Buss, these acts are organized into 19 tactics.

2.3. Procedure

The procedures included two separate episodes of assessment, once in the newlywed year and again after four years of marriage. Several instruments were mailed to the newlywed participants to be completed at home, including the MRI. At the four year follow-up, participants were mailed a packet of surveys that included many of the same measures they completed three years earlier. Participants were instructed to complete the surveys on their own, and to mail them back to the researchers in the stamped, pre-addressed envelope provided to them. Participants were paid \$30 for their participation in the newlywed year and \$25 for their participation at the four-year follow-up.

3. Results

Following Buss (1988), we calculated scores for husbands' and for wives' performance reports of mate retention on each of the 19 tactics by averaging responses to the constituent acts. Alpha reliabilities for the 19 tactics were unimpressive but acceptable (given the relatively small number of participants, and given that tactics include relatively few acts; see Buss, 1988; Buss & Shackelford, 1997) for both sexes and at both assessments (average α reliabilities: newlywed men = 0.64, newlywed women = 0.60, year-four men = 0.61, year-four women = 0.54). Table 1 presents the means, standard deviations, and alpha reliabilities for the 19 tactics at each assessment period and for husbands and wives.

3.1. Mate retention in the newlywed year and three years later

We assessed the stability of mate retention performance frequency by correlating scores on each of the 19 tactics at the newlywed year with parallel scores in the fourth year of marriage. To reduce the risk of Type I error associated with the conduct of multiple statistical analyses, we reduced alpha from .05 to .01. The results indicated that husbands' performance reports of 15 tactics at the newlywed year correlated positively with their performance reports of these tactics in the fourth year of marriage. The correlations were greater than .40 for 16 tactics (see Table 2). Wives' performance frequency reports on 16 tactics in the newlywed year correlated positively with their performance reports of these tactics in the fourth year of marriage. The correlations were greater than .40 for 15 tactics (see Table 2).

We used paired-samples *t*-tests to assess the difference in mean tactic performance frequency reports over time, for both husbands and wives. The results indicated that husbands' mate retention performance reports of 10 tactics decreased from the newlywed year to fourth year of marriage. Wives' mate retention performance reports of 11 tactics decreased from the newlywed year to the fourth year of marriage (see Table 3).

3.2. Sex differences in mate retention performance reports over time

We investigated sex differences in mate retention tactic performance frequency reports with independent-samples *t*-tests. Newlywed husbands reported more frequent performance of Resource Display and Submission and Debasement, whereas newlywed wives reported more frequent performance of Appearance Enhancement. These sex differences persisted after four years of marriage. In addition, after four years of marriage (but not in the newlywed year), wives reported more frequent performance of

Table 1
Means, standard deviations, and alpha reliabilities for mate retention tactics.

Mate retention tactic	Year 1						Year 4					
	<i>M_h</i>	<i>SD_h</i>	<i>α_h</i>	<i>M_w</i>	<i>SD_w</i>	<i>α_w</i>	<i>M_h</i>	<i>SD_h</i>	<i>α_h</i>	<i>M_w</i>	<i>SD_w</i>	<i>α_w</i>
Vigilance	.55	.40	.75	.59	.59	.58	.39	.26	.47	.46	.35	.71
Concealment of Mate	.07	.18	.13	.14	.36	.78	.02	.07	–	.04	.15	.70
Monopolize Mate's Time	.36	.44	.70	.39	.46	.75	.14	.26	.60	.32	.43	.73
Infidelity Threat	.23	.38	.75	.25	.41	.74	.13	.18	–	.19	.31	.54
Punish Infidelity Threat	.29	.45	.80	.41	.50	.80	.17	.33	.74	.22	.31	.60
Emotional Manipulation	.32	.36	.70	.35	.42	.77	.17	.19	.36	.21	.28	.65
Commitment Manipulation	.87	.66	.46	.65	.51	.21	.43	.52	.35	.41	.51	.21
Derogation of Competitors	.29	.29	.62	.37	.37	.71	.14	.30	.75	.15	.19	.52
Resource Display	1.81	.40	.62	1.5	.39	.49	1.49	.53	.77	1.15	.47	.66
Sexual Inducements	.99	.59	.71	.89	.55	.65	.86	.48	.53	.87	.57	.64
Appearance Enhancement	1.5	.55	.67	2.10	.60	.76	1.25	.61	.73	2.02	.64	.80
Love and Care	2.57	.38	.58	2.60	.33	.47	2.28	.63	.77	2.39	.36	.39
Submission and Debasement	.96	.50	.66	.71	.41	.53	.84	.55	.64	.58	.42	.48
Verbal Possession Signals	1.41	.51	.64	1.52	.46	.46	1.15	.56	.70	1.30	.40	.29
Physical Possession Signals	1.97	.47	.67	1.91	.53	.74	1.74	.63	.78	1.69	.52	.68
Possessive Ornamentation	.64	.64	.66	.59	.57	.59	.37	.44	.55	.33	.36	.23
Derogation of Mate	.09	.23	.60	.14	.20	.18	.11	.28	.71	.12	.23	.41
Intrasexual Threats	.19	.41	.86	.11	.21	.62	.07	.24	.72	.03	.10	.46
Violence against Rivals	.05	.26	.88	.00	.02	–	.03	.11	.27	.01	.05	–

Note: *n*_{husbands} = 49, *n*_{wives} = 65.

Table 2
Correlations of mate retention performance frequency reports in the newlywed year and four years into marriage.

Mate retention tactic	Husbands	Wives
Vigilance	.51*	.49**
Concealment of Mate	–.12	.67**
Monopolize Mate's Time	.71**	.53**
Infidelity Threat	.30	.79**
Punish Infidelity Threat	.70**	.67**
Emotional Manipulation	.64**	.61**
Commitment Manipulation	.34	.44**
Derogation of Competitors	.40*	.43**
Resource Display	.48*	.16
Sexual Inducements	.51**	.54**
Appearance Enhancement	.77**	.66**
Love and Care	.32	.39*
Submission and Debasement	.43*	.42**
Verbal Possession Signals	.59**	.43**
Physical Possession Signals	.59**	.57**
Possessive Ornamentation	.46*	.49**
Derogation of Mate	.60**	.64**
Intrasexual Threats	.70**	.15
Violence against Rivals	.47**	–.02

Note: *n*_{husbands} = 49, *n*_{wives} = 65.

* *p* < .01.

** *p* < .001.

Monopolize Mate's Time than husbands did (e.g. "Would not let my partner go out without me"; see Table 4).

4. Discussion

Mate retention tactics are hypothesized to function to prevent partner infidelity and to ward off would-be mate poachers (Buss, 1988; Buss & Shackelford, 1997). This is the first research to investigate the stability of mate retention performance reports over time. Husbands' and wives' performance reports of mate retention tactics in the newlywed year correlates positively with their performance reports of mate retention tactics in the fourth year of marriage. The performance of mate retention tactics is linked with stable characteristics of men and of women, including personality traits (de Miguel & Buss, under review; Goetz et al., 2005) and perceived attractiveness (Buss & Shackelford, 1997; Goetz et al., 2005), and these links may help to explain why the selection of mate

retention tactics remains relatively stable over time and for both sexes.

Both husbands' and wives' mate retention performance reports decreased from the newlywed year to the fourth year of marriage. Couples who have remained married for four years may have negotiated successfully the rules of their relationship and, therefore, may have established a level of trust not present at the beginning of the marriage. Future research might investigate other correlates of decreases or increases in the performance reports of mate retention tactics. For example, the perceived mate value of oneself and of a spouse may decrease over time, resulting in a decrease in the frequency of mate retention performance (e.g., Miner, Starratt, & Shackelford, 2009). Marital satisfaction also may predict changes in cost-inflicting mate retention performance (see, e.g., Shackelford & Buss, 2000). On the other hand, the sudden detection of cues to infidelity or interest in one's mate from a potential mate poacher renders the problem of mate retention more salient, and could prompt a corresponding increase in effort devoted to mate retention.

Men and women sometimes perform different mate retention tactics. The current results document newlywed husbands' more frequent use of Resource Display and Submission and Debasement and newlywed wives' more frequent use of Appearance Enhancement. These sex differences persisted after four years of marriage. These sex differences in mate retention performance reports parallel sex differences in mate preferences. Women's greater preference for a long-term partner who can invest resources (e.g., Buss, 1989), for example, may be driving men's more frequent performance of the Resource Display mate retention tactic. Men's greater preference for a long-term partner's physical attractiveness (e.g., Buss, 1989) may be driving women's more frequent performance of the Appearance Enhancement mate retention tactic.

Shackelford et al. (2005) investigated the agreement between self-reports and spousal-reports of mate retention performance. They found that husbands' and wives' self-reports of their mate retention performance correlate positively and strongly, indicating that men and women can provide a reliable account of their spouse's mate retention performance. Thus, we have some confidence that self-reports of mate retention behaviors used in this study are reliable measures of actual mate retention performance of husbands and wives. Because of the longitudinal nature of this study, 50% of the participants were lost to attrition by the fourth year of marriage. Thus, we were unable to secure data from both members of the couples over time and unable to investigate

Table 3
Changes in mate retention performance frequency reports from the newlywed year to four years into marriage.

Mate retention tactic	Changes in mate retention tactics (from year 1 to year 4)					
	Husbands			Wives		
	<i>M_{diff}</i>	<i>SD_{diff}</i>	<i>t</i>	<i>M_{diff}</i>	<i>SD_{diff}</i>	<i>t</i>
Vigilance	.13	.36	2.30	.13	.36	2.64
Concealment of Mate	.05	.20	1.65	.10	.28	2.86**
Monopolize Mate's Time	.22	.31	4.84**	.07	.43	1.27
Infidelity Threat	.10	.36	1.83	.06	.25	1.87
Punish Infidelity Threat	.12	.32	2.64	.18	.37	3.84**
Emotional Manipulation	.15	.28	3.81**	.15	.33	3.54**
Commitment Manipulation	.44	.70	4.16**	.27	.51	4.09**
Derogation of Competitors	.09	.32	1.97	.14	.29	3.91**
Resource Display	.32	.49	4.51**	.33	.57	4.67**
Sexual Inducements	.14	.54	1.75	.02	.55	.29
Appearance Enhancement	.20	.41	3.30**	.05	.51	.80
Love and Care	.22	.51	2.89**	.22	.38	4.49**
Submission and Debasement	.12	.57	1.48	.13	.45	2.38
Verbal Possession Signals	.26	.49	3.67**	.22	.46	3.79**
Physical Possession Signals	.23	.52	3.11**	.23	.49	3.75**
Possessive Ornamentation	.31	.60	3.44**	.28	.50	4.28**
Derogation of Mate	-.02	.23	-.62	.02	.19	.67
Intrasexual Threats	.12	.30	2.88**	.08	.22	2.94*
Violence against Rivals	.01	.23	.37	.00	.06	-.44

Note: *n*_{husbands} = 49, *n*_{wives} = 65.

* *p* < .01.

** *p* < .001.

Table 4
Sex differences in mate retention performance frequency reports at the newlywed year and four years into marriage.

Mate retention tactic	Sex differences					
	Year 1			Year 4		
	<i>M_{diff}</i>	<i>SD_{diff}</i>	<i>t</i>	<i>M_{diff}</i>	<i>SD_{diff}</i>	<i>t</i>
Vigilance	-.04	.07	-.59	-.06	.06	-1.02
Concealment of Mate	-.07	.06	-1.37	-.02	.02	-.76
Monopolize Mate's Time	-.03	.09	-.37	-.17	.07	-2.69*
Infidelity Threat	-.02	.07	-.25	-.06	.05	-1.40
Punish Infidelity Threat	-.11	.09	-1.25	-.05	.06	-.90
Emotional Manipulation	-.03	.08	-.39	-.05	.05	-1.04
Commitment Manipulation	.22	.11	1.83	.02	.10	.17
Derogation of Competitors	-.05	.06	-.89	-.01	.05	-.24
Resource Display	.33	.07	4.41**	.33	.09	3.48*
Sexual Inducements	.10	.11	.88	-.01	.10	-.14
Appearance Enhancement	-.63	.11	-5.60**	-.77	.12	-6.43**
Love and Care	-.03	.07	-.38	-.11	.09	-1.08
Submission and Debasement	.25	.09	2.94*	.26	.09	2.85*
Verbal Possession Signals	-.11	.09	-1.17	-.15	.09	-1.66
Physical Possession Signals	.06	.09	.65	.05	.11	.47
Possessive Ornamentation	.05	.12	.42	.03	.08	.44
Derogation of Mate	-.05	.04	-1.16	-.01	.05	-.27
Intrasexual Threats	.09	.06	1.32	.05	.03	1.26
Violence against Rivals	.04	.03	1.11	.03	.01	1.56

Note: *n*_{husbands} = 49, *n*_{wives} = 65.

* *p* < .01.

** *p* < .001.

cross-spouse correlations. The current research investigated the performance reports of mate retention tactics of people who had remained married for at least four years. Future research might investigate the mate retention performance of couples who divorce early in the marriage. Comparing the selection and frequency of mate retention tactics performed by people who remain married after several years with the selection and frequency of mate retention tactics performed by people who divorce early in the marriage may identify “successful” mate retention tactics – that is, tactics that contribute to the successful retention of a mate.

The current research is the first to investigate married men's and women's mate retention tactics over time. The selection of particular mate retention tactics remains stable over the three-

year assessment period, suggesting that the performance of particular tactics may be related to stable traits of members of the couple or stable characteristics of their marriage. However, the frequency with which most tactics are performed decreased over the years for both husbands and wives. This finding suggests, for example, that couples who remain married may have successfully negotiated the interpersonal rules and boundaries for the marriage, perhaps especially including interactions with potential rivals for their spouses' affection. Relatedly, the buildup of trust and the deepening of commitment over time may render the heavy use of mate retention tactics less necessary for at least some couples. The current results also provide evidence for sex differences in specific mate retention tactics that persist across at least the first

four years of marriage. Finally, the results of the current research provide evidence of the cross-time reliability of the Mate Retention Inventory in a sample of married men and women.

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