

[in press, *Personality and Individual Differences*, March 2017]

**ENDORSEMENT OF EXISTENCE VALUES PREDICTS MATE RETENTION
BEHAVIORS**

Guilherme S. Lopes
Yael Sela
Todd K. Shackelford
Oakland University, United States

Postal addresses:

Oakland University, Rochester, MI – 48309, United States

E-mail addresses:

Guilherme S. Lopes (gslopes@oakland.edu)

Yael Sela (ysela@oakland.edu)

Todd K. Shackelford (shackelf@oakland.edu)

Corresponding author:

Guilherme S. Lopes

Oakland University

Department of Psychology

218 Pryale Hall

Rochester, Michigan 48309

E-mail: gslopes@oakland.edu

Abstract

People deploy mate retention behaviors to thwart a long-term romantic partner's infidelity. Cost-Inflicting mate retention behaviors (e.g., inducing a partner's jealousy) are riskier than Benefit-Provisioning mate retention behaviors (e.g., showing love and care for a partner), because the former increase the odds of a partner's defection or retaliation. Individual differences in endorsement of Existence values—i.e., valuing personal stability, health, and survival—may be associated with the type of mate retention behaviors people perform. We hypothesized that individuals who endorse Existence values more (versus less), would perform less frequent Cost-Inflicting mate retention behaviors (controlling for performance of Benefit-Provisioning mate retention behaviors; Hypothesis 1), and more frequent Benefit-Provisioning mate retention behaviors (controlling for performance of Cost-Inflicting mate retention behaviors; Hypothesis 2). Participants ($n = 164$), each in a heterosexual, romantic relationship of at least three months duration, completed a survey that included the Mate Retention Inventory-Short Form and the Basic Values Survey. Endorsement of Existence values was negatively associated with performance of Cost-Inflicting mate retention behaviors (supporting Hypothesis 1), and positively associated with performance of Benefit-Provisioning mate retention behaviors (supporting Hypothesis 2). We situate these results within an evolutionary framework on mate retention, and discuss their theoretical and applied utility.

Keywords: *values; mate retention; cost-inflicting behaviors; sex differences; evolutionary psychology.*

Endorsement of Existence Values Predicts Mate Retention Behaviors

Infidelity often carries great costs for the betrayed partner (Buss, 2015). A man whose long-term partner is sexually unfaithful risks cuckoldry (i.e., unwitting investment in a child to whom he is genetically unrelated; Buss & Shackelford, 1997), and a woman whose long-term partner is emotionally unfaithful risks losing partner-provisioned resources (Buss, 2015). Over human evolutionary history, the costs associated with a partner's infidelity may have selected for psychological mechanisms in both men and women that motivate efforts to retain a long-term partner—i.e., mate retention behaviors: behaviors deployed to reduce the risk of partner infidelity or relationship defection (Buss, 1988). Mate retention behaviors are organized into two domains: *Cost-Inflicting* (i.e., behaviors that reduce the likelihood of partner infidelity by inflicting costs on a partner) and *Benefit-Provisioning* (i.e. behaviors that reduce the likelihood of partner infidelity by increasing a partner's relationship satisfaction; Miner, Starratt, & Shackelford, 2009).

Cost-Inflicting and Benefit-Provisioning domains reflect strategies to retain a long-term mate (Miner et al., 2009). Accordingly, their performance frequencies are moderately positively correlated (e.g., Lopes, Shackelford, Santos, Farias, & Segundo, 2016; Sela, Mogilski, Shackelford, Zeigler-Hill, & Fink, 2016). These strategies, however, differ in important ways. For example, Cost-Inflicting behaviors are riskier to perform (relative to Benefit-Provisioning behaviors) because they may increase the odds of partner's defection or retaliation (e.g., Miner et al., 2009). Therefore, individuals who prioritize stability and security in relationships are expected to perform more Benefit-Provisioning (relative to Cost-Inflicting) behaviors.

Several individual differences influence the performance frequency of mate retention behaviors, including personality dimensions (e.g., de Miguel & Buss, 2011) and mate value

(Buss & Shackelford, 1997; Sela et al., 2016). One psychological dimension that has been relatively neglected in the mate retention literature is *values*. A value is a unique psychological construct that guides behaviors and cognitively represents needs (Gouveia, 2013; Gouveia, Milfont, & Guerra, 2014).

Although values are correlated with other psychological constructs (e.g., personality dimensions, interests, and attitudes; Olver & Mooradian, 2003), values differ from these constructs in important ways. For example, personality dimensions are clusters of relatively stable attributes, whereas values vary more throughout the lifespan (Gouveia, Vione, Milfont, & Fischer, 2015). Values also differ from interests in that interests focus on specific objects or situations, whereas values represent needs that transcend specific objects or situations (Gouveia et al., 2014). Values are also not attitudes, because attitudes represent dispositions toward certain objects (e.g., art, people, money) or activities (e.g., occupations), whereas values are cognitive representations of needs (e.g., freedom, knowledge, prestige; Gouveia, 2013).

Values can be understood as solutions to adaptive problems of survival and reproduction (Gouveia, et al., 2014). For example, endorsement of Interactive values such as Affection and Belongingness reflects greater interest in establishing social networks that may lead to an increase in social status and coalitional allies (Gouveia, 2013), which may also increase access to mates (Buss, 2015). Attractive men who endorse values such as Pleasure and Sexuality are less desirable as a long-term partner (Lopes, Santos, Shackelford, Tratner, & Gouveia, 2017), because these values may signal greater interest in risk-taking activities (Gouveia, 2013), and men engaging in risk-taking activities may be less attractive as long-term mates because they are perceived to have a greater likelihood of infidelity, injury, and death (Buss, 2015).

A class of values that may be especially strongly linked with mate retention behaviors is Existence values (e.g., Personal stability, Survival, and Health; Gouveia, 2013). Individuals who endorse Existence values are driven by the need to assure the basic conditions for survival (Gouveia, 2013). Existence values correspond to a greater interest in living in environments that provide fewer survival and reproductive challenges, and individuals who endorse these values tend to make decisions that lead to more stable and safer lives (e.g., plentiful and reliable food and shelter; Gouveia, 2013). Cost-benefit trade-offs associated with the endorsement of Existence values include, for example, an increase in stability and safety, but at the cost of not reaping potential benefits of risky activities (e.g., attracting short-term mates; Buss, 2015). Therefore, we expect strategic individual differences in the endorsement of Existence values. For example, individuals raised in wealthy (vs. poor) environments endorse Existence values to a lesser extent (Gouveia, 2013), and individuals are more likely to endorse Existence values when raising children (Gouveia et al., 2015).

Because individuals who endorse (vs. do not endorse) Existence values are likely to make decisions that lead to greater life-stability (Gouveia, et al., 2014), we expected that such individuals will deploy more mate retention behaviors that increase the stability of romantic relationships (i.e., Benefit-Provisioning), and less mate retention behaviors that are risky and may compromise relationships (i.e., Cost-Inflicting). Because individuals tend to employ both Benefit-Provisioning and Cost-Inflicting behaviors, we sought to investigate the unique variance that endorsement of Existence values explains in each mate retention domain by statistically controlling for each domain in turn. We hypothesized that the more individuals endorse Existence values, the less frequently they would perform Cost-Inflicting behaviors (controlling

for Benefit-Provisioning behaviors; Hypothesis 1), and the more frequently they would perform Benefit-Provisioning behaviors (controlling for Cost-Inflicting behaviors; Hypothesis 2).

Sex differences in the magnitude of the relationship between endorsement of some values and several aspects of long-term mating include men's (more than women's) lesser desirability as a long-term romantic partner decreases when they are perceived as endorsing Excitement values (Lopes, et al., 2017). Long-term mate value is associated with differential performance of mate retention behaviors (e.g., Sela et al., 2016). Here, we explored sex differences in the magnitude of the relationship between endorsement of Existence values and performance frequency of mate retention behaviors.

2. Method

2.1 Participants

Participants ($n=164$, 51.8% female; 73.8% Caucasian) were undergraduates aged 18 to 33 years ($M=20.1$; $SD=2.8$), each in a heterosexual, romantic relationship for at least three months.

2.2 Procedure

Prospective participants from the Psychology Department Subject Pool at a large Midwestern university viewed an advertisement for the study on the university's experiment management system. Interested and eligible participants were provided a link to the online study. Consenting participants completed an online survey, and received partial course credit upon completion.

2.3 Materials

Participants completed the Mate Retention Inventory–Short Form (MRI-SF; Buss, Shackelford, & McKibbin, 2008), a 38-item measure assessing performance frequencies of mate retention behaviors. Participants were instructed to report how often they performed each mate

retention behavior over the past year using a 4-point scale (0=*never*, 1=*rarely*, 2=*sometimes*, 3=*often*). Following Miner et al. (2009), we computed composite scores for domains of Cost-Inflicting ($\alpha = .91$) and Benefit-Provisioning ($\alpha = .81$) mate retention behaviors.

Participants also completed the Basic Value Survey (BVS; Gouveia, 2013; Gouveia et al., 2014), a measure assessing endorsement of 18 values, organized in six value subscales (e.g., Existence values; see Gouveia et al., 2014). Participants were instructed to rate each item as a guiding principle in their life on a 7-point scale (1=*completely unimportant*, 7=*of the utmost importance*). Finally, participants provided demographic information such as age and sex. Following Gouveia et al. (2014), we computed composite scores for *endorsement of Existence values* ($\alpha=.71$) by averaging the responses to 3 items on the BVS: Survival (“To have water, food and shelter every day in your life; to live in a place with enough food”), Personal Stability (“To have the certainty that tomorrow you will have all that you have today; to have an organized and planned life”), and Health (“To look after your health at all times, not just when sick; not to be sick”).

3. Results

To test Hypothesis 1, we conducted a partial correlation between endorsement of Existence values and Cost-Inflicting behaviors, controlling for Benefit-Provisioning behaviors. Supporting Hypothesis 1, endorsement of Existence values ($M=6.05$; $SD=0.93$) was negatively associated [$r(161)=-.28$; $p<.001$] with Cost-Inflicting behaviors ($M=1.65$; $SD=0.51$), controlling for variance attributable to Benefit-Provisioning behaviors ($M=2.67$; $SD=0.47$). That is, individuals who more strongly endorsed Existence values performed less frequent Cost-Inflicting behaviors, controlling for performance frequency of Benefit-Provisioning behaviors.

To test Hypothesis 2, we conducted a partial correlation between endorsement of Existence values and performance of Benefit-Provisioning behaviors, controlling for variance attributable to Cost-Inflicting behaviors. Supporting Hypothesis 2, endorsement of Existence values was positively correlated [$r(161) = .15; p < .05$] with Benefit-Provisioning behaviors, controlling for variance attributable to performance of Cost-Inflicting behaviors. That is, individuals who more strongly endorsed Existence values performed more frequent Benefit-Provisioning behaviors, controlling for variance attributable to performance of Cost-Inflicting behaviors.

For reportorial completeness, we conducted Fisher's r -to- z transformations to investigate differences in the magnitude of these relationships. The relationship between endorsement of Existence values and Cost-Inflicting mate retention behaviors (controlling for Benefit-Provisioning mate retention behaviors) was significantly larger ($z = -4.00; p < .001$) than the relationship between endorsement of Existence values and Benefit-Provisioning behaviors (controlling for variance attributable to Cost-Inflicting behaviors). We also conducted Fisher's r -to- z transformations to test potential sex differences in the magnitude of the relationship between endorsement of Existence values and mate retention behaviors. Male and female participants did not differ in the magnitude of the relationship between endorsement of Existence values and Cost-Inflicting behaviors (controlling for variance attributable to Benefit-Provisioning, $z = -.25; p = .803$), or of Existence values and Benefit-Provisioning (controlling for variance attributable to Cost-Inflicting behaviors, $z = .87; p = .384$)¹.

¹ We performed a MANOVA to investigate sex differences in use of mate retention tactics. The results indicated that men and women differentially use mate retention tactics [$Wilks' \Lambda = .73, F(19, 144) = 2.82, p \leq .001$]. In line with previous research, tests of between-subjects effects indicated that, for example, men more than women used Resource Display (e.g., Buss, et al., 2008) and Submission and Debasement (e.g., Buss & Shackelford, 1997) (analyses available upon request).

4. Discussion

In the current study, we investigated the association between endorsement of Existence values and performance frequencies of mate retention behaviors. The results supported our hypotheses that the more strongly individuals endorse Existence values, the less frequently they perform Cost-Inflicting behaviors (controlling for Benefit-Provisioning behaviors; Hypothesis 1), and the more frequently they perform Benefit-Provisioning behaviors (controlling for Cost-Inflicting behaviors; Hypothesis 2).

Our results add to a growing body of evidence documenting that mate retention behaviors are associated with individual differences (see Sela, 2016). For example, individuals endorsing particular values are predicted to display particular personality traits (e.g., Existence values such as Safety, Harmony, and Stability of Society positively correlate with Agreeableness; Olver & Mooradian, 2003), and studies have found that agreeable individuals are likely to be driven by preservation and enhancement of the welfare of others (aspects represented by endorsement of Existence values; Boustani, 2006). Accordingly, individuals higher (relative to lower) on Agreeableness perform more frequent Benefit-Provisioning mate retention behaviors (e.g., de Miguel & Buss, 2011). Moreover, because performance of mate retention behaviors is associated with other relationship outcomes, future research might profitably investigate the associations of Existence values endorsement with other aspects of romantic relationships, such as relationship satisfaction.

The magnitude of the relationship between Existence values endorsement and Benefit-Provisioning behaviors was smaller than the magnitude of the relationship between Existence values endorsement and Cost-Inflicting behaviors. Perhaps not all individuals can afford to perform Benefit-Provisioning behaviors. For example, the performance frequency of mate

retention tactics such as Resource Display (e.g., “Took my partner to a nice restaurant”) and Possessive Ornamentation (e.g., “Gave my partner jewelry to signify that she was taken”) depends, in part, on whether the individual has sufficient resources (time, money, etc.) to afford such investment. Therefore, endorsement of Existence values may be insufficient for some people to perform more frequent Benefit-Provisioning mate retention behaviors. Future research could assess people’s mate retention *preferences* (i.e., their motivation to perform Benefit-Provisioning vs. Cost-Inflicting behaviors) as a function of their endorsement of Existence values.

This study offers several contributions to the mate retention literature. First, it integrates a theory of values that has demonstrated applicability in over 50 countries (Gouveia, et al., 2014) with the broader meta-theory of evolutionary psychology. We documented that endorsement of values—here, Existence values—is associated positively with performance of mate retention behaviors, and that the links between endorsement of Existence values and performance frequency of mate retention behaviors are not sex-differentiated. In the future, researchers may fruitfully examine value theories with evolutionarily-informed hypotheses of mate retention, such as whether, which, and how endorsement of values interact to predict mate retention behaviors. The current results may have applied utility. For example, understanding an individual’s preferences to perform certain mate retention behaviors as a function of the values he or she endorses may inform marital counseling and therapy.

This study has several limitations. For instance, we did not assess relationship length, and previous studies have found that romantic partners may perform mate retention behaviors differently depending on their relationship length (e.g., Kaighobadi, Shackelford, & Buss, 2010). Second, we observed a relatively restricted range in the endorsement of Existence values (i.e., M

= 6.05; $SD = .93$ in a 7-point Likert scale; see Materials), probably because selection pressures may have favored high levels of endorsement of Existence values (as it represents survival needs). Future research may investigate particular variations on the endorsement of Existence values, such as changes throughout the lifespan (e.g., Gouveia et al., 2015), on the performance of mate retention behaviors. Future research could also investigate whether endorsement of particular values is associated with performance of coalitional mate retention (Pham, Barbaro, & Shackelford, 2015) and online mate retention behaviors (Brem, Spiller, & Vandehey, 2015), which are additional strategies by which individuals attempt to keep a long-term partner. In conclusion, the current study provides evidence of differential use of mate retention behaviors as a function of individual's endorsement of Existence values.

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doi: 10.1007/978-3-319-16999-6_139-1

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