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Life history strategy as a longitudinal predictor of relationship satisfaction and dissolution

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ABSTRACT

The present study tested whether a couple's shared life history strategy predicts relationship satisfaction longitudinally and relationship dissolution. Through an integration of structural equation modeling and multilevel modeling, we found that a couple's shared life history strategy: (1) directly predicted their average relationship satisfaction, (2) indirectly predicted the linear change in their relationship satisfaction, (3) indirectly predicted the variability about their average relationship satisfaction, and (4) directly, yet weakly, predicted their likelihood of experiencing relationship dissolution over a one-year period. Couples in a relationship with a slower average life history strategy were more likely to: (1) report higher average levels of relationship satisfaction, (2) have a positive trajectory of relationship satisfaction, (3) have less variability in relationship satisfaction, and (4) were less likely to experience relationship dissolution. This suggests that the influence of life history strategy decreases over the course of the relationship.

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1. Introduction

Life history strategy has been documented as a strong predictor of relationship satisfaction, and has been compared against alternative predictors of relationship satisfaction, such as the couple's communication pattern, geographical distance between the romantic partners, and the extent to which the couple assortatively mated on life history strategy, and the couple's average life history strategy has consistently been shown as the primary predictor of relationship satisfaction (Olderbak & Figueredo, in preparation). The following study was designed to test the extent to which a couple's average life history strategy predicts relationship satisfaction longitudinally, specifically the average relationship satisfaction over a one-year period, the extent to which satisfaction either increased or decreased over time, variability in relationship satisfaction during that one-year period, and the couple's likelihood of experiencing relationship dissolution.

2. Life history strategy

Life history strategy (LHS) is an important individual difference variable, based on the theory of natural selection, that describes how organisms allocate their resources, such as energy and time, in order to most effectively ensure their genes survive in future generations. Resources are divided between two areas: somatic and reproductive effort. *Somatic effort* includes any resources the organism devotes towards taking care of itself. *Reproductive effort* includes any resources an organism devotes towards reproducing its own genes. Reproductive effort is divided between two areas: mating effort and parental/nepotistic effort. *Mating effort* includes any resources devoted towards attaining and/or retaining sexual partners with the final purpose of producing offspring. *Parental/nepotistic effort* includes any resources devoted towards offspring and genetic relatives (Figueredo et al., 2006).

There is evidence that there are not only between-species differences in LHS, but there are within-species differences as well (Ellis, Figueredo, Brumbach, & Schlomer, 2009). In particular, much research has been explored in individual differences in LHS within humans. It is theorized that humans, while in general demonstrating a slower LHS, demonstrate individual differences in LHS and range on a continuum from fast LHS to slow LHS. Faster LHS humans evolved in a harsh and unpredictable environment and are less likely to devote resources towards somatic and parental/nepotistic effort, and are more likely to devote resources towards mating effort. They are hypothesized to display psychosocial characteristics that would assist with a faster LHS such as "impulsivity, short-term thinking, promiscuity, low female parental investment, little or no male parental investment, little social support, disregard for social rules, and extensive risk taking". Slower LHS humans, on the other hand, evolved in a relatively mild and predictable environment and are more likely to devote resources

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towards somatic and parental/nepotistic effort, and likely to devote resources towards mating effort. They are hypothesized to display "long-term thinking, monogamy, extensive parental investment, substantial social support structures, adherence to social rules (e.g. cooperation, altruism), and careful consideration of risk" (Figueredo et al., 2006, p. 246).

3. Life history strategy and relationship satisfaction

LHS, when measured at the level of a romantic couple by averaging participant-level LHS scores between both romantic partners, has been documented as a strong predictor of relationship satisfaction at a single time point predicting about 75% (Olderbak & Figueredo, in preparation), or 46% of the variance in relationship satisfaction (Olderbak & Figueredo, 2009).

LHS was first linked to romantic relationship satisfaction through attachment behavior and communication (Olderbak & Figueredo, 2009). Attachment theory predicts that as a result of one's child rearing, an individual will develop a secure or an insecure attachment style such that individuals raised by parents who provide stable care will be more likely to develop a secure attachment style. Life history theory predicts these individuals are also more likely to display a slower LHS. Individuals raised by parents who provide unstable care, on the other hand, will develop an insecure attachment style, such as an anxious or avoidant attachment style, and according to life history theory, they are also more likely to display a faster LHS (Belsky, 1997). Though not as strongly linked empirically, there is a suggestion that individuals with a secure attachment style are also more likely to display more positive forms of communication (Olderbak & Figueredo, 2009). Individuals without detrimental styles of communication are more likely to remain married (Gottman, 1994). Olderbak and Figueredo (2009) tested these relationships in a path model and found that while a couple's shared LHS predicts their shared attachment style which predicts their communication which finally predicts relationship satisfaction, a direct path from LHS directly to relationship satisfaction provided a stronger path coefficient and more predicted variance in relationship satisfaction. This suggests that LHS is a stronger predictor of relationship satisfaction.

LHS was again tested as a predictor of relationship satisfaction with a more complex measure of LHS. In this model, LHS was indicated by six measures: personality, mate value, mating effort, self monitoring, intentions towards infidelity, and an additional short-form measure of LHS. In a structural equation model that partialed out method variance, LHS was tested against the geographical distance between the romantic partners as both predictors of relationship satisfaction, and LHS again predicted a substantial portion, 77%, of the overall variance in relationship satisfaction (Olderbak & Figueredo, in preparation).

Both of the previously discussed studies measured LHS at the level of the romantic couple, which combined individual scores of both romantic partners. This confounded a couple's average level of LHS with their level of assortative mating on LHS. Again using six variables to measure LHS, a third analysis compared a couple's average level on LHS with the extent to which they were disassortatively mated on each of the six variables, resulting in a final culminating disassortative mating score of LHS. Olderbak and Figueredo (in preparation) found a statistically significant difference between a couple's shared LHS and the extent to which they were disassortatively mated on convergent or divergent indicators of LHS such that couples with higher levels on convergent interests were more likely to assortatively mate on convergent interests and couples with higher levels on divergent interests were more likely to disassortatively mate on divergent interests. However, because both a couple's shared level on convergent and divergent interests were so highly related with their assortative or disassortative mating on convergent or divergent interests, this suggests that it is important to continue including both romantic partners' scores when testing LHS as a predictor of relationship satisfaction, instead of the LHS of only one partner.

4. Life history strategy and longitudinal relationship outcomes

All of the previous studies linking LHS with relationship satisfaction were cross-sectional and showed the static effect of LHS on relationship satisfaction at only one point in time. Since LHS is a trait that persists throughout one's lifetime, and makes predictions for long-term life choices and outcomes, we proposed to test the influence of LHS on relationship satisfaction and dissolution longitudinally. Since slow LHS individuals are long-term planners, are more prone towards long-term relationships, and have relatively few sexual partners during their lifetime, we would expect it to be adaptively beneficial if they also reported on average a higher level of relationship satisfaction, a slightly positive trajectory of relationship satisfaction, and less variability in relationship satisfaction over the duration of their romantic relationships. This would assist them with maintaining their long-term relationship, and providing a stable environment in which to raise their offspring. Because of this, we would also expect them to be less likely to experience relationship dissolution.

Fast LHS individuals, on the other hand, plan for the short-term, have short-term relationships, and are more inclined to have multiple mates in their lifetime. Because of this, we would expect it to be adaptively beneficial if they reported on average lower levels of relationship satisfaction, a slightly negative trajectory of relationship satisfaction, and high variability in relationship satisfaction over the duration of their relationship, which should lead them to break-up, and re-pair with other mates. As such, we would also expect them to be more likely to experience relationship dissolution.

5. Hypotheses

Based on the above discussion, the following are our hypotheses:

(1) Couples with a slower average LHS, compared couples with a faster average LHS, will have higher average relationship satisfaction over time.
(2) Couples with a slower average LHS, compared couples with a faster average LHS, will have a positive trajectory of relationship satisfaction over time.
(3) Couples with a slower average LHS, compared couples with a faster average LHS, will have less variability in their reported relationship satisfaction over time.
(4) Couples with a slower average LHS, compared couples with a faster average LHS, will be less likely to report relationship dissolution.

6. Methods

6.1. Sample

The sample represented a combination of two samples, recruited with slightly different inclusion criteria (see procedure below), resulting in a combined sample of 403 participants. They were primarily female (79%), White non-Hispanic (77%), with their romantic partner White non-Hispanic (78%). The respondents' average age was 18.8 years (SD = 1.4), with their partner at 19.8 years (SD = 2.4), and the length of romantic involvement ranged from less than one month to almost 10 years (M = 402.5 days, SD = 461.0 days).

6.2. Measures

Previous analyses utilized six questionnaires to measure LHS, instead of solely relying on the short-form Mini-K measure, in order to increase the stability at which LHS is measured (see Olderbak & Figueredo, in preparation). These six questionnaires were divided as indicators between two unique components of LHS, convergent and divergent interests. In this analysis, one of the six questionnaires was missing for some of the participants, specifically the Intentions Towards Infidelity measure, which was used as an indicator of divergent interests. In both previous analyses, and in this paper, LHS is identified as a latent construct, and as a latent construct, LHS can be identified through various manifest indicators, and still represent the same latent construct. Because LHS was measured as a latent construct, and because LHS can be identified through several manifest indicators, we decided to limit our indicators of LHS in this paper to only three questionnaires, specifically the three questionnaires used previously as indicators of convergent interests.

6.3. Life history strategy short-form (Mini-K)

This questionnaire is a 20-item short-form measure of slow LHS (Figueredo et al., 2006). The measure includes items which briefly measure many components of LHS including: insight, planning, and control; mother/father relationship quality; family/friends contact and support; anxious and avoidant attachment styles; altruism towards own children, kin, friends, community; and religiosity. Internal reliability, as measured by Cronbach's alpha, was acceptable: Mini-K-Self: $\alpha = 0.66$; Mini-K-Partner: $\alpha = 0.79$.

6.4. Mate Value Inventory (MVI)

This measure is a 17-item measure of personal perception of the personal qualities that are desirable in a romantic or sexual partner such as "Ambitious", "Intelligent", and "Independent" (Kirsner, Figueredo, & Jacobs, 2003). Internal reliability, as measured by Cronbach's alpha, was acceptable: MVI-Self: $\alpha = 0.80$; MVI-Partner: $\alpha = 0.80$.

6.5. NEO Five Factor Inventory (NEO-FFI)

The NEO Five Factor Inventory (Costa & McCrae, 1992) consists of 60 questions that measure the "Big Five" personality factors. A General Factor of Personality (GFP) was constructed from four of the five personality factors by computing an unweighted mean of the responses on each personality factor, specifically conscientiousness, agreeableness, extraversion, and neuroticism, with the scores on neuroticism reversed to indicate emotional stability. Cronbach's alphas for each personality factor were acceptable: 0.82 for Conscientiousness-Self, 0.84 for Conscientiousness-Partner, 0.75 for Extraversion-Self, 0.55 for Extraversion-Partner, 0.74 for Agreeableness-Self, 0.79 for Agreeableness-Partner, 0.86 for Neuroticism-Self, and 0.86 for Neuroticism-Partner. All factors correlated strongly with the GFP with correlations ranging between 0.58 and 0.74 for self, and .60 to .80 for partner.

6.6. Relationship satisfaction (RS)

This questionnaire was composed of three questions that asked the respondent to rate their current level of satisfaction towards their romantic partner, satisfaction towards their romantic relationship, and commitment towards their romantic partner. Previous analyses have found high convergence between the three items (Olderbak & Figueredo, in preparation) so for brevity, we chose to average responses to all three items to indicate relationship satisfaction. Internal reliability, as measured by Cronbach's alpha, was high for each observation: RS Time 1: $\alpha = 0.77$; RS Time 2: $\alpha = 0.93$; RS Follow-Up 1: $\alpha = 0.83$; RS Follow-Up 2: $\alpha = 0.82$; RS Follow-Up 3: $\alpha = 0.89$; RS Follow-Up 4: $\alpha = 0.90$.

6.7. Procedure

These data represent the combination of two subsamples from two similar studies. The first subsample included undergraduate students recruited from the University of Arizona's introductory psychology participant pool who were provided with class credit for participating. Only one member of the relationship was recruited so participants were asked to complete the aforementioned variables regarding themselves and their romantic partners. It was requested students be at least 18 years of age, currently involved in a heterosexual romantic relationship, and had been dating for at least three months. Some participants did not meet this last criterion, however in order to maximize our final sample size, they were still included in the analyses. As a result, the first subsample was skewed towards participants involved in more established romantic relationships (relationship length: $M = 545.7$ days, $SD = 476.5$). Participants were then contacted every three months until they broke up, or up to one-year from the initial data collection.

For the second subsample, the criteria were changed to recruit individuals who had recently started dating. The purpose was to include individuals who were in developing relationships and for those who maintained their relationship, to follow the course of their relationship from its initial stages. Like with the first subsample, some participants did not meet our inclusion criteria, however in order to maximize our final sample size, they were still included in the analyses. As a result, the second subsample was skewed towards participants in developing romantic relationships (relationship length: $M = 52.4$ days, $SD = 67.9$). We separated the initial data collection into two parts administered about one month apart. During the first part they were asked to complete the questionnaires in regards to themselves and for the second part, when they had gotten to know their romantic partner better, they were asked to complete the questionnaires in regards to their partner. The relationship satisfaction questionnaire was administered at both parts, and at the follow-up contacts three, six, nine, and 12 months from the initial data collection or until the couple broke-up.

By combining these two subsamples, those in established relationships and those in developing relationships, we were able to increase the overall variance of the sample, which assisted with the estimation of model parameters.

7. Results

7.1. Data analytic strategy

We used structural equations modeling (SEM) to replicate previous measurement models of LHS. The first three hypotheses were tested using PROC CALIS in SAS. SEM allows for the simultaneous prediction of multiple dependent variables and can accommodate scales with low internal reliabilities. SEM, however, does not work well with small sample sizes, which can sometimes result in falsely nonsignificant path coefficients (equivalent to Type II errors), and cannot accommodate missing data. Furthermore, over the course of the follow-ups contacts, the sample size was drastically reduced because of break-ups and attrition.

To prevent the analyses from being biased towards participants who did not break-up over the course of the study, and participated in every wave of data collection, we decided to estimate the longitudinal time course of relationship satisfaction outside

of SEM. Instead, we utilized multilevel modeling (MLM) to estimate average relationship satisfaction, change in relationship satisfaction, and variability about the average relationship satisfaction, while the participant was still involved in their romantic relationship, over the duration of the one-year follow-up contacts. Unlike SEM, MLM works well with missing data by using that data which is available to estimate parameters.

All MLM analyses were conducted using PROC MIXED in SAS (see Koss & Figueredo, 2004 for a similar example). Relationship satisfaction was predicted by the number of days (time) the participant had been involved in the romantic relationship since the first data collection. Because follow-up contacts took about one to two weeks every three months to complete, we treated time as random variable and allowed it to vary for each participant. Time was then used as a predictor of relationship satisfaction in a MLM with the participant's self-reported relationship satisfaction for each time point nested within that participant. Raw graphical displays of participant-level relationship satisfaction over time indicated a linear slope, so to allow for estimates of error, we removed any participant who had less than three observations of relationship satisfaction, and we modeled a linear slope. This reduced our sample from 403 to 125 participants. However, we did not observe any significant differences in demographic characteristics or our predictor variables between the original full sample and the new subsample, specifically Mini-K mean (full sample: $M = 1.28$, SD = 0.57; subsample- $M = 1.38$, SD = 0.53), MVI mean (full sample- $M = 2.02$, SD = 0.52; subsample-$M = 2.09$, SD = 0.48), or GFP mean (full sample- $M = 0.58$, SD = 0.37, subsample-$M = 0.66$, SD = 0.36).

To estimate average relationship satisfaction, we first centered time. To center time, we added the length of romantic involvement reported at each follow-up contact, divided them by the total number of follow-up contacts for that couple, and then subtracted that number from the length of romantic involvement reported at each follow-up contact. Then, the time-centered variable was used to predict relationship satisfaction. This method allowed the intercept parameter to represent the centercept, or the participant's estimated average relationship satisfaction over the course of their linear trajectory (centercept). To estimate the trajectory of the participant's relationship satisfaction, we used the linear slope estimate that was estimated in the MLM (slope). In the MLM, the intercept was statistically significant, however slope was not. To estimate the participant's variability about their centercept, we computed the root mean squared residual (RMS residual), which is the square root of the mean of the squared residuals that are estimated for each observation of relationship satisfaction. These estimates were obtained for each participant, and used as individual variables to test each hypothesis. Relationship dissolution was calculated in MPlus, which allows for the prediction of categorical variables in a SEM.

7.2. Inclusive model-cascade

We tested each hypothesis simultaneously in a single SEM using a cascade model. First, to replicate previous analyses (Olderbak & Figueredo, in preparation), self and partner scores were averaged together to create couple-level variables: Mini-K Mean, MVI Mean, and GFP Mean. As with previous analyses, participants were moderately assortatively mated on each questionnaire, and both self and partner variables strongly correlated with the mean for that variable (see Table 1).

Our inclusive model included a measurement model of LHS Mean as a latent variable indicated by Mini-K mean, MVI mean, and GFP mean (see Table 2 for a correlation matrix of all variables included in the SEMs). LHS Mean then predicted all three relationship satisfaction criterion variables: centercept, slope, and RMS residual. Because each of the criterion variables are based on the same statistical tool and data, and because we think theoretically they should be related, we freed additional paths from the centercept to the slope and to RMS residual, and from the slope to RMS residual. This allowed LHS Mean to predict each relationship satisfaction criterion variable, and also for each of the criterion variables to predict each other in a cascade form.

Overall, model fit demonstrated close fit ($\chi^2_{(6,n=125)} = 7.00$, $p = 0.32$; RMSEA = $0.037_{(0.000–0.127)}$; CFI = 0.998; NFI = 0.987) and predicted 6% of the variance in centercept, 93% of the variance in slope, and 44% of the variance in RMS residual. All paths were statistically significant except for the path from LHS Mean to RMS residual. Because this path was nonsignificant, it was removed and we ran a new restricted model called restricted model 1.

7.3. Restricted model 1

Restricted model 1 also demonstrated close fit ($\chi^2_{(7,n=125)} = 9.06$, $p = 0.25$; RMSEA = $0.049_{(0.000–0.127)}$; CFI = 0.996; NFI = 0.984) and predicted 6% of the variance in centercept, 93% of the variance in slope, and 43% of the variance in RMS residual. In this model, the path from LHS Mean to slope was also nonsignificant. As a result, we removed that path as well which resulted in our final model.

7.4. Final model

All paths in the final model were statistically significant. The final model demonstrated acceptable to close fit ($\chi^2_{(8,n=125)} = 11.45$, $p = 0.18$; RMSEA = $0.0590_{(0.000–0.129)}$; CFI = 0.994; NFI = 0.980) and predicted 6% of the variance in centercept, 93% of the variance in slope, and 42% of the variance in RMS residual (see Fig. 1).

In the final model LHS Mean moderately predicted the centercept, partially predicted slope, and did not directly predict RMS residual. Instead, the centercept was the primary predictor of slope and RMS residual. This model indicates that an individual's centercept, essentially their average relationship satisfaction over a one-year period, was the primary predictor of their slope and variability in their relationship satisfaction. LHS Mean was a moderate predictor of the centercept ($\beta = 0.25$, $p < 0.01$) so while LHS Mean did not directly influence the slope or RMS residual, it did influence the centercept, and thus indirectly influenced the remaining relationship satisfaction variables. LHS Mean indirectly and positively predicted the slope through the centercept (LHS Mean to centercept:

Table 1
Bivariate correlations, assortative mating coefficients.

	Mini-K-partner	MVI-self	MVI-partner	GFP-self	GFP-partner	Mini-K mean	MVI mean	GFP mean
Mini-K-self	**0.40**	0.49	0.29	0.42	0.24	0.78		
Mini-K-partner		0.43	0.58	0.36	0.51	0.88		
MVI-self			**0.60**	0.61	0.42		0.90	
MVI-partner				0.41	0.67		0.89	
GFP-self					**0.44**			0.83
GFP-partner								0.86

Note. All correlations were statistically significant at the 0.05 level and correlations in boldface indicate assortative mating coefficients for that variable.

Table 2
Bivariate correlations between all variables included in the structural equation models.

	MVI mean	GFP mean	Centercept	Slope	RMS residual
Mini-K mean	0.61*	0.55*	0.09	0.05	0.05
MVI mean		0.70*	0.25*	0.17	−0.09
GFP mean			0.19*	0.13	−0.12
Centercept				0.96*	−0.65*
Slope					−0.59*

* $p < 0.05$.

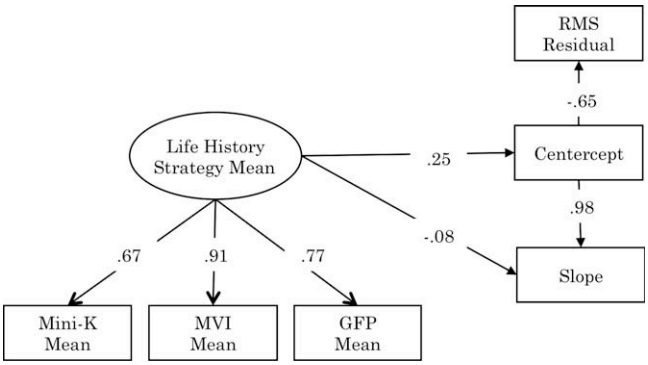

Fig. 1. Final model.

$\beta = 0.25$, $p < 0.01$; centercept to slope: $\beta = 0.98$, $p < 0.01$; $0.25 \times 0.98 = 0.25$), and directly and negatively predicted the slope ($\beta = -0.08$, $p < 0.01$). Combined, these two sets of paths indicate that LHS Mean has an overall moderate and positive influence on slope ($0.25 + (-0.08) = 0.17$). LHS Mean had a negative and indirect influence on RMS residual moderated by the centercept (LHS Mean to centercept: $\beta = 0.25$, $p < 0.01$; centercept to RMS residual: $\beta = 0.65$ $p < 0.01$; $0.25 \times -0.65 = 0.16$). This model shows support for hypothesis 1, and partial support for hypotheses 2 and 3.

7.5. Relationship dissolution

Next, we estimated the influence of LHS Mean on relationship dissolution. A minority of our sample, 21%, experienced relationship dissolution. Model fit demonstrated exact fit ($\chi^2_{(2,n=125)} = 1.00$, $p = 0.61$; RMSEA = 0.000; CFI = 1.000) however LHS Mean had little influence on relationship dissolution, with the standardized path coefficient at 0.06 and less than 1% of the variance in relationship dissolution predicted. The threshold level was estimated at 0.825, which suggests that couples with an average slower LHS were less likely to have experienced relationship dissolution during the course of the one-year follow-up contacts. This supports hypothesis 4, although weakly.

8. Discussion

Based on these results our first hypothesis, that a couple's shared LHS predicts a romantic partner's average relationship satisfaction over time, was supported. Our second and third hypothesis, that a couple's shared LHS will also predict a romantic partner's self-reported relationship satisfaction trajectory over time, or variability about their average relationship satisfaction, was not supported as a *direct* effect. Instead, we found an *indirect* effect through the centercept, indicating that the relationship between these two variables is largely mediated by the average relationship satisfaction. This suggests that a couple's shared LHS is a strong predictor of a romantic partner's average relationship satisfaction such that a partner in a relationship with an average slower LHS is also more likely to report an average higher relationship satisfaction over time, and because they report an average high relationship satisfaction, they are also more likely to report a slightly positive trajectory and less variability in relationship satisfaction over time. We also found some weak empirical support for hypothesis 4, which predicted couples with an average slower LHS would be less likely to experience relationship dissolution.

Previous papers have identified a strong association between LHS and assortative mating on LHS (Olderbak & Figueredo, in preparation) such that couples with an average slower LHS are also more likely to be assortatively mated on LHS, and couples with an average faster LHS are more likely to be disassortatively mated on LHS. Because of the strong association between a couple's average LHS and assortative mating on LHS, the two variables were confounded in this paper. While the argument could be raised that we do not know if it is a couple's shared LHS, or their assortative mating on LHS, that is operating as the primary causal agent in predicting relationship outcomes, Olderbak and Figueredo (in preparation) found that because of this strong association, it is nearly impossible to separate the two variables in a study such as this, because in nature, the two naturally co-occur together. To establish causal priority theoretically, when examining the nature of both variables, LHS has been identified as a highly heritable variable ($h^2 = 0.65$ in humans; Figueredo, Vásquez, Brumbach, & Schneider, 2004), strongly related to an individual's genetics, and less influenced by environmental variables. Because of this, it is less likely that the extent to which an individual is assortatively mated with their romantic partner causes both individuals to report a slower LHS, and more likely those individuals with a slower LHS are more likely to assortatively mate.

In combination with previous analyses these results suggest that LHS is a strong predictor of relationship satisfaction at initial data collection, but only a moderate predictor of relationship satisfaction over time, and a relatively weak predictor of relationship dissolution, at least during the maximum period of time (1 year) sampled. In other words, the influence of LHS appears to decrease over time. These results suggest that perhaps the traits of the romantic partners, specifically their LHS, are important in terms of relationship satisfaction, however, as the relationship progresses, other variables become important. Gottman (1994) has found a couple's pattern of communication is a substantial predictor of their relationship outcomes, which perhaps is one of the variables that are more important later in the relationship. These results suggest that future research examining the relationship between LHS and relationship outcomes should be directed towards couples in the early stages of their relationship, such as mate choice.

This study is limited in that we only received data from one partner in the relationship, and did not survey both partners. Future research should include both partners and measures of relationship satisfaction should come from both romantic partners. Future research should also include married couples, and couples older in age. That would allow us to test for possible generational effects or an interaction of LHS with age on relationship outcomes.

Overall, this paper extends previous analyses linking LHS with relationship outcomes. Previous research has found a strong relationship between LHS and relationship satisfaction at initial data collection. This research suggests that LHS maintains its influence on relationship satisfaction over time, specifically average relationship satisfaction, the trajectory of relationship satisfaction, and variability in relationship satisfaction over time, however this influence is less than that reported at the initial data collection. Future research should examine the relationship between LHS and relationship outcomes during the initial stages of a romantic relationship such as during mate choice.

References

Belsky, J. (1997). Attachment, mating, and parenting: An evolutionary interpretation. *Human Nature, 8*(4), 361–381.

Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO personality inventory (NEO-PI-R) and NEO five-factor inventory (NEOFFI) professional manual*. Odessa, FL: Psychological Assessment Resources, Inc..

Ellis, B. J., Figueredo, A. J., Brumbach, B. H., & Schlomer, G. (2009). Fundamental dimensions of environmental risk: The impact of harsh versus unpredictable environments on the evolution and development of life history strategies. *Human Nature, 20*, 204–268. doi:10.1007/s12110-009-9063-7.

Figueredo, A. J., Vásquez, G., Brumbach, B. H., & Schneider, S. M. R. (2004). The heritability of life history strategy: The k-factor, covitality, and personality. *Social Biology, 51*, 121–143.

Figueredo, A. J., Vásquez, G., Brumbach, B. H., Schneider, S., Sefcek, J. A., Tal, I. R., et al. (2006). Consilience and life history theory: From genes to brain to reproductive strategy. *Developmental Review, 26*, 243–275. doi:10.1016/j.dr.2006.02.002.

Gottman, J. M. (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Kirsner, B. R., Figueredo, A. J., & Jacobs, W. J. (2003). Self, friends, and lovers: Structural relationships among Beck depression inventory scores and perceived mate values. *Journal of Affective Disorders, 75*, 131–148. doi:10.1016/S0165-0327(02)00048-4.

Koss, M. P., & Figueredo, A. J. (2004). Change in cognitive mediators of rape's impact on psychosocial health across 2 years of recovery. *Journal of Consulting and Clinical Psychology, 72*(6), 1063–1072. doi:10.1037/0022-006X.72.6.1063.

Olderbak, S.G., & Figueredo, A.J. (in preparation). Shared life history strategy versus assortative mating as predictors of romantic relationship satisfaction. Assortative mating and life history strategy as predictors of relationship quality. Tucson, Arizona: Department of Psychology, University of Arizona.

Olderbak, S., & Figueredo, A. J. (2009). Predicting romantic relationship satisfaction from life history strategy. *Personality and Individual Differences, 46*, 604–610. doi:10.1016/j.paid.2008.12.019.