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### Spousal Interrelations in Happiness in the Seattle Longitudinal Study: Considerable Similarities in Levels and Change Over Time

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Development does not take place in isolation and is often interrelated with close others such as marital partners. To examine interrelations in spousal happiness across midlife and old age, we used 35-year longitudinal data from both members of 178 married couples in the Seattle Longitudinal Study. Latent growth curve models revealed sizeable spousal similarities not only in levels of happiness but also in how happiness changed over time. These spousal interrelations were considerably larger in size than those found among random pairs of women and men from the same sample. Results are in line with life-span theories emphasizing an interactive minds perspective by showing that adult happiness waxes and wanes in close association with the respective spouse. Our findings also complement previous individual-level work on age-related changes in well-being by pointing to the importance of using the couple as the unit of analysis.

Keywords: couples, spousal dyads, well-being, successful aging, growth curve modeling

Happiness represents an affective component of well-being, a key element of successful aging (Andrews & McKennell, 1980; Baltes & Baltes, 1990; Campbell, Converse, & Rodgers, 1976; Lynch & George, 2002; Rowe & Kahn, 1997; Ryff & Singer, 1998). Despite the fact that, on average, happiness remains relatively stable across midlife and into older adulthood, there is also substantial variability in happiness trajectories (Diener, Lucas, & Scollon, 2006; Kunzmann, Little, & Smith, 2000; Mroczek & Kolarz, 1998). Importantly, past work examining individual differences in happiness points to the significant role of social relationships such as marriage (Antonucci, 2001; Diener, Tamir, & Scollon, 2006; Lucas, 2007). Most past research investigating the link between happiness and marriage considers the individual as the unit of analysis. However, researchers have recently started to call for an investigation of the spousal dynamics and mutual influences in adulthood that uses the couple as the unit of analysis and examines interrelations in spousal developmental trajectories on the basis of information from both partners (Bookwala & Schulz, 1996; Hoppmann & Gerstorf, 2009; Strawbridge, Wallhagen, & Shema, 2007). The present brief report therefore extends past research on happiness and marriage using 35-year longitudinal data from both members of 178 married couples from the Seattle Longitudinal Study (SLS) to examine interrelations in spousal happiness trajectories across midlife and into old age.

Why should we investigate happiness trajectories in married couples? Married couples are a very special social unit. Spouses are typically very close to each other, share many joint experiences, and live in the same environment (Lang, 2001; Meegan & Berg, 2002). Hence, couples are a unit of primary interest because spouses have a great potential to influence each other's developmental outcomes. Empirical research supports this notion by documenting spousal interrelations in various domains of functioning, including social activities, marital satisfaction, cognition, and health (Gerstorf, Hoppmann, Anstey, & Luszcz, 2009; Gruber-Baldini, Schaie, & Willis, 1995; Hoppmann, Gerstorf, & Luszcz, 2008; Johnson & Bradbury, 1999; Strawbridge et al., 2007). Hence, spousal interrelations seem to represent an important empirical phenomenon that may very well extend to spousal interrelations in happiness. To date, empirical studies that specifically target spousal interrelations in well-being are often limited to cross-sectional reports (e.g., Bookwala & Schulz, 1996; Peek, Stimpson, Townsend, & Markides, 2006; Tower & Kasl, 1995; Townsend, Miller, & Guo, 2001; Windsor, Ryan, & Smith, 2009; but see Tower & Kasl, 1996).

What are the conceptual mechanisms underlying interrelations in happiness trajectories among spouses? Socioemotional selectivity theory posits that spouses increasingly focus on a positive emotional climate and derive emotional meaning from their relationship (Carstensen, Graff, Levenson, & Gottman, 1996). According to this theory, we would expect that spousal happiness remains

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stable with age and that it becomes increasingly tied to the respective partner. On the other hand, spousal happiness may also be challenged under certain circumstances such as problems with joint children or health concerns of one partner (Fingerman, Pitzer, Lefkowitz, Birditt, & Mroczek, 2008; Gottman & Notarius, 2000; Lyons, Zarit, Sayer, & Whitlach, 2002). As a result, it may also be the case that spousal happiness goes down over time and that this decline in happiness is closely tied to the respective partner. For the purpose of the present study, we thus propose that several theoretical models converge in suggesting that spousal happiness trajectories wax and wane together over time.

To provide a meaningful interpretation of such spousal associations, we took into account a number of individual and spousal factors that could be expected to influence spousal relationships and happiness (age, education, number of children, and length of marriage). These variables were chosen to control for important individual- and relationship-specific correlates of happiness regarding life phase, resource status, relationship commitment, and history of joint experiences (Carstensen et al., 1996).

It is also important to acknowledge that relationship-specific processes and events may not be the only reason why spousal interrelations in happiness trajectories may occur. Specifically, interrelations in spousal happiness trajectories may also reflect factors that originate outside the marital relationship and that are associated with the broader sociocultural context (Baltes, Lindenberger, & Staudinger, 1998; Bronfenbrenner, 1979; Magnusson & Cairns, 1996; Schaie et al., 1992; 1993). In other words, spouses may be exposed to a certain set of experiences that they share with other individuals of the same birth cohort. These cohort-specific experiences may also result in spousal interrelations among happiness trajectories without being specific to a particular marriage. From this perspective, spousal happiness trajectories may be interrelated not because of factors that are unique to the couple but because both spouses belong to the same cohort. We therefore believe that it is imperative to not only ask whether spousal interrelations in happiness exist but to also examine whether in fact spousal interrelations in happiness trajectories go beyond what would be expected on the basis of the fact that both spouses are members of a particular cohort. The present study therefore examined interrelations in happiness trajectories among spouses and compared them with interrelations in happiness trajectories among random pairs of women and men from the same couple data set. We expected to find meaningful interrelations in happiness trajectories among spouses that go beyond what might be observed in random pairs of participants belonging to the same cohort.

#### Method

The SLS is an ongoing interdisciplinary longitudinal panel study that was begun more than 50 years ago. Detailed descriptions of variables and procedures are published in Schaie (2005). Information relevant to the present study is presented below.

#### **Participants and Procedure**

The SLS is a cohort-sequential study that has collected data on close to 6,000 participants between the ages of 22 and 101. Participants were recruited randomly from within gender and age/cohort groups from membership in a large health maintenance organization (HMO) in the Seattle, Washington, area. The sample was largely homogenous regarding race and ethnicity (90% Caucasian and English speaking) and had a high occupational level (mainly skilled craftsmen or professionals; Schaie, 2005). The sampling frame was a community-dwelling population representing a range of occupational, educational, and economic backgrounds (Schaie, 2005). At each measurement occasion, 35 men and 35 women per 7-year birth cohort intervals were invited to participate in the study. Data were collected every 7 years from 1956 onward. With each new wave tested, an additional 7-year age birth cohort was added to match the age range of the original samples, up to age 81 years (Schaie, 2005). All participants were able to complete the measurement battery.

Included in the current study were all married couples for which both partners participated in the SLS (N = 178 couples or 356 participants). Inclusion of both partners in the SLS happened by coincidence. Couples were identified through shared HMOinsurance numbers and verified them at each occasion by comparing responses to the question "spouse's year of birth" with the actual year of birth. Discrepancies of more than 2 years as well as changes in marital status were used to eliminate data for a given couple from that occasion. We used six waves of longitudinal data (7-year interval per wave) spanning a total of up to 35 years (1956–1991). Compared with the  $\sim$ 3,500 participants from the total SLS sample who had been married at their first measurement occasion, participants in the SLS couple subsample did not differ in happiness, education, and length of marriage at Time 1 (all ps >.10), but were younger, M = 48.16, SD = 14.52 versus M = 51.22, SD = 15.40; F(1, 3,942) = 12.66, p < .001, and had slightly more children, M = 2.52, SD = 1.57 versus M = 2.26, SD = 1.61; F(1, 1)(4419) = 8.8, p < .001. These analyses suggest that our findings could largely generalize to other married participants in the SLS. To also examine the longitudinal selectivity, we compared SLS couples who provided relatively more data points (four and more waves; 82 couples) with those with fewer data points (three and fewer waves; 96 couples). As one would expect, couples who were younger, M = 41.84, SD = 8.86 versus M = 53.60, SD = 16.22; F(1, 354) = 68.8, p < .001, and had more children, M = 2.85, SD = 1.57 versus M = 2.32, SD = 1.55; F(1, 354) = 10.3, p < 10.3.01, provided more data points, whereas no differences were found for happiness and education (both ps > .10).

#### Measures

*Happiness* was measured using responses to the item "Would you describe your life until the year X (current study wave) as being . . ." with answers provided on a 5-point Likert scale ranging from *very happy* (1) to *very unhappy* (5). The item was asked as part of a larger personal data form filled out by participants to survey background characteristics and has been administered in the same version since the inception of the SLS. Responses were reverse coded so that higher scores reflected reports of higher happiness. Similarly worded happiness items are regularly included in large-scale longitudinal panel studies and have been widely used in psychological research (e.g., Fujita & Diener, 2005; Gerstorf et al., 2008; Lucas, 2007).

**Covariates.** To control for potential confounds, some of our models included individual (age and education) and spousal factors (number of children and length of marriage) at baseline as

time-invariant covariates. Information about each covariate was obtained from the self-administered personal data form.

#### **Data Preparation**

As in most previous publications from the SLS, measures were standardized to a T metric (M = 50, SD = 10), with the Time 1 SLS couple sample of 356 participants providing the reference. This transformation maintained the psychometric properties of the scores and the longitudinal changes in means and variances. No data imputation procedure was applied. Wives contributed a total of 616 longitudinal observations over an average of 12.55 years (SD = 11.19); husbands contributed a total of 617 longitudinal observations over an average of 12.77 years (SD = 11.24).

Table 1 presents the age at assessment as well as means and standard deviations for the happiness measures along with the covariates, separately for wives and husbands. The age range, on average, was from the late 40s to the early 70s. Husbands were nominally about 1.5 years older than their wives and had more years of education, but differences were statistically significant only for education, F(1, 353) = 9.2, p < .01. On average, couples were married for more than 25 years (range 3–64 years at Time 1) and had more than two children (range 0–9). We also note that over time, the means for happiness remain relatively stable and sample size drops considerably over the 35-year period.

#### **Statistical Procedures**

To examine spousal interrelations in change in happiness, we used a two-variable latent growth curve model (LGM; McArdle, 1988). As a straightforward extension of a univariate LGM, a two-variable LGM estimates fixed effects (average levels and slopes) and random effects (interindividual differences in levels and slopes). Figure 1 provides a graphic representation of the model. It can be observed that the repeated measures of wives and husbands had three sources: (a) the latent intercepts with loadings of 1  $(x_0, y_0)$ , (b) the latent slopes with linear loadings  $(x_s, y_s)$ , and (c) the time-specific residuals,  $e_{y}(t)$ ,  $e_{y}(t)$ . Intercepts and slopes were estimated at the population level and were allowed to vary and covary. The time-specific residuals are assumed to have a mean of zero and exhibit occasion-specific variances.<sup>1</sup> Pairwise structuring of the data allowed us to treat the spousal couple as the unit of analysis. In total, the model estimated 26 free parameters. We estimated models on the basis of all data points available using the full information maximum likelihood estimation algorithm, which allowed us to accommodate incomplete data under the missing-at-random assumption (Little & Rubin, 1987). We used the Mplus program Version 4 (Muthén & Muthén, 1998-2006).

Three sets of models were tested. In a first step, we estimated separate growth processes for happiness of wives and husbands and determined whether interindividual differences in one growth process relate to interindividual differences in the other growth process. In a second step, we additionally included individual factors (age and education of both partners) and spousal factors (number of children and length of marriage at Time 1) into our models and examined if spousal interrelations in happiness exist over and above these covariates. The covariates were specified as having their own means, variances, and covariances as well as regression effects on intercepts and slopes of both partners. In a final step, we randomly paired women and men from the SLS couple sample, applied the two-variable LGM to the newly paired sample, and by using a multigroup set-up determined whether the size of the partner associations were comparable to those found

#### **Results**

between the original SLS couples.

#### Spousal Interrelations in Happiness Level and Change

We report findings from the two-variable LGM in Table 2. As seen in the left-hand panel, the model provided reasonably good fit to our data (e.g., root-mean-square error of approximation = .040). Fixed effects indicate that both spouses showed on average minimal and statistically nonsignificant decline in happiness. Also, statistically nested model comparisons revealed that wives and husbands did not differ reliably from one another in either average level  $(\Delta \chi^2/df = 0.5/1, p > .10)$  or slope  $(\Delta \chi^2/df = 0.1/1, p > .10)$ . More importantly, there were between-person differences in the rate of change among both wives and husbands, indicating that some individuals declined in happiness whereas others remained relatively stable or reported more happiness over time. Intercorrelations revealed that these between-person differences were considerably interrelated between spouses, both in terms of level (r =.54) and slope (r = .85). For the primary question under study, analyses thus revealed sizeable spousal similarities both in reports of happiness and in how happiness changed over time.

#### The Role of Individual and Spousal Factors

In a second set of models, we covaried for several baseline individual and spousal variables that may have contributed to the above pattern. More specifically, we included age and education of both partners as well as the number of children and length of marriage at Time 1 as time-invariant covariates. Results are reported in the righthand panel of Table 2. Findings revealed essentially the same pattern as above, with substantial intercorrelations between both intercepts and rates of change between partners. We note that the covariates (particularly age and education) contributed significant portions of overall explained variance to the model parameters: wives' level,  $R^2 = .089$ ; wives' change,  $R^2 = .116$ ; husbands' level,  $R^2 = .089$ ; and husbands' change,  $R^2 = .194$ . Of pivotal interest for the question under study, however, inclusion of individual and spousal covariates did not substantively alter the spousal relations reported.

<sup>&</sup>lt;sup>1</sup> In a preliminary step, we tested a series of models that utilized different structures for the residual variances. In one model, we assumed the residual variances to be invariant across time; in another model, the residuals were allowed to covary between the time series for wives and husbands (e.g., to control for additional sources of nonindependence). Both models provided a worse description of the structure in our data set,  $\Delta\chi^2 = 32.65$  per 10 *df*, p < .001; CFI = .884 and  $\Delta\chi^2 = 32.10$  per 9 *df*, p < .001; CFI = .883, respectively. Also, the substantive pattern of results was unchanged. As a consequence, our models reported in the text relaxed the error equality assumption over time.

Table 1

	Wives				Husbands				Couple		
Measure	п	Age	Mean	SD	n	Age	Mean	SD	п	Mean	SD
Happiness											
Ťĺ	178	47.41	50.21	10.38	178	48.96	49.79	9.63			
T2	127	51.69	49.91	10.12	119	53.68	48.98	9.26			
Т3	113	113 57.11	50.13	11.29	112	58.72	50.33	11.13			
T4	87	62.67	49.06	10.42	94	64.09	49.47	9.12			
Т5	65	68.05	49.78	8.63	69	69.14	49.03	10.25			
Т6	46	73.46	48.29	6.68	45	73.20	47.06	8.80			
Covariates at T1											
Education	178	47.41	13.59	2.33	177	48.81	14.44	2.93			
# Children									178	2.57	1.58
Length of marriage									175	25.81	14.18

Age at Assessment and Descriptive Statistics for Measures Entered into the Growth Curve Models

*Note.* T = Time. Happiness for wives and husbands was standardized to the T metric using the T1 SLS couple sample (N = 356) as the reference, *Mean* = 50, *SD* = 10. Baseline assessment or T1 in 1957, T2 in 1963, T3 in 1970, T4 in 1977, T5 in 1984, T6 in 1991.

#### Random Pairs of Women and Men From the SLS Couple Sample

In a final step, we examined if spousal interrelations go beyond what might be expected in random pairs of participants from the same birth cohorts. To do so, we randomly paired women and men from the same 356 SLS couple participants and reran the above two-variable LGM. We decided to use random pairs over matched pairs because matched pairing would have had to be based on a limited and not necessarily comprehensive number of variables. Random pairs thus offered a rigorous test of our hypothesis, particularly because we reran the analyses 10 and more times with new randomly selected pairs to make sure that our findings were not simply based on chance.

Findings indicated that the size of the intercorrelation between these random partners (intercept correlation = -.22, p > .10; slope correlation = -.16, p > .10) were considerably smaller for both levels and slopes than were those found among actual spouses in the SLS (intercept correlation = .54; slope correlation = .85). Statistically nested model comparisons made with a two-group approach (actual couples vs. random pairing) corroborated this pattern. More specifically, statistically reliable losses in model fit were found when intercept correlations were set to be invariant across groups ( $\Delta \chi^2/df = 24.5/1$ , p < .001) and when slope correlations were set to be invariant across groups ( $\Delta \chi^2/df = 5.3/1, p <$ .05). Also, when we randomly paired men and women separately among earlier born cohorts (born 1920 or before) and later born cohorts (born 1921 or after), the substantive pattern of results remained unchanged (loss in model fit for level invariance:  $\Delta \chi^2$ / df = 12.5/1, p < .001; loss in model fit for slope invariance:  $\Delta \chi^2/df = 5.1/1, p < .001$ ). To illustrate our finding, Figure 2 shows a scatterplot of predicted happiness change for both partners, separately for the actual SLS couples (left-hand panel) and a random pairing of male and female SLS participants (right-hand panel). Predicted change was highly similar between partners in actual couples, but not in the random pairing.<sup>2</sup>

#### Discussion

The major objective of the current study was to examine spousal interrelations among happiness trajectories using 35-year longitudinal data from married couples in the SLS. Findings provide evidence for significant spousal interrelations in levels and change in happiness over time that cannot be accounted for by several individual and spousal covariates. It is important to note that spousal similarities in happiness trajectories considerably exceed in size what was observed in random pairs of women and men from the same data set.

Our findings indicate that spouses not only report relatively similar happiness but also that happiness waxes and wanes in relation to the respective partner. These findings indicate that portions of the well-documented interindividual differences in happiness in adulthood are in fact related to spouses. It may thus be important to extend research on interindividual differences in happiness by moving beyond focusing on individuals toward an investigation of socially interdependent pathways. The current study also considered the influence of age, education, presence of children, and relationship duration as important factors that may contribute to spousal interrelations in well-being (Carstensen et al., 1996). Findings from this study confirm that this set of covariates accounts for considerable portions of between-person differences in happiness trajectories in the present sample. However, including these individual difference and relationship factors did not change the reported pattern of results. This speaks to the robustness of our findings. As such, we hope that our results concerning spousal interrelations in happiness levels and changes over time will complement existent knowledge on the role of spousal relationships for individual differences in well-being across adulthood and old age.

It is important to note that spousal interrelations in happiness levels and changes were considerably larger in size than those in randomly paired women and men from the same cohort. Implica-

<sup>&</sup>lt;sup>2</sup> We found substantively the same pattern of results when we restricted the sample to couples who remained intact over time and provided data to subsequent measurement occasions. For example, high intercorrelations of wives and husbands both in intercepts and rates of change were found for couples who provided data for  $\geq$  3 occasions ( $n_{\text{couples}} = 101$ ; intercept correlation = .56, p < .001; slope correlation = .74, p < .001). Also, virtually the same set of results was obtained when we used means of and differences between spouses in age and education as time-invariant predictors.



*Figure 1.* A two-variable linear latent growth curve model (McArdle, 1988) as applied to 35-year longitudinal happiness data from wives and husbands in the Seattle Longitudinal Study. Observed variables are presented by squares, latent variables by circles, regression weights by one-headed arrows, and (co-)variances by two-headed arrows. The triangle represents a constant indicating the means and intercepts. Unlabeled paths are set to 1.

tions of spousal interrelations in happiness trajectories thus seem to go beyond what might be attributed to broader cohort-specific sociocultural phenomena (Baltes et al., 1998; Bronfenbrenner, 1979; Magnusson & Cairns, 1996). Our findings support propositions by life-span scholars that individual development may be shaped not only by such macrolevel effects but also occurs in more microlevel contexts of meaningful relationships (Baltes & Carstensen, 1998; Baltes & Staudinger, 1996; Hoppmann & Gerstorf, 2009). Such a patterning may have important implications for research on individual differences in happiness and their association with indicators of successful aging. For example, research addressing the link between well-being, morbidity, and mortality may benefit from taking a social systems approach by going beyond an examination of individuals toward an inclusion of across-partner associations. Recent evidence supports this assumption by showing that well-being and health trajectories are interrelated among spouses (Lam, Lehman, Puterman, & DeLongis, 2009; Strawbridge et al., 2007).

#### Limitations

The present data set is unique in that it provides information on spousal happiness in multiple cohorts covering change across more than three decades. Admittedly, the rate of attrition in our sample was of considerable size, but its magnitude is very well comparable to other studies using couples in later adulthood and old age (Hoppmann et al., 2008). We note, however, that couple attrition may not have occurred at random and that spouses who participated over time likely represent a positive selection of all couples in terms of their happiness levels (e.g., individuals who eventually divorce start out at lower levels of well-being than those who do not; Lucas, 2007). This may have also contributed to the relatively high levels of happiness that were stable well into old age. The present sample was well educated, had a high occupational status (mainly skilled craftsmen and professionals), and was homogenous in ethnicity (90% Caucasian), all of which may limit the generalizibility of our findings. To estimate our models, we had to make very strong model assumptions. For example, when we applied the missing-at-random assumption, our model produced estimates of average within-person change in the overall sample whether or not an individual (or couple) stayed in the sample over time. Going this route allowed us to provide, from our perspective, compelling evidence for meaningful associations among spousal happiness trajectories over the course of multiple decades. Also, focusing on correlated changes does not tell us anything about the directionality or gender-specificity of effects. We additionally note that we had used single-item data on happiness, but our findings are in line with other studies using more comprehensive assessments in showing that well-being is relatively stable across adulthood (Charles, Reynolds, & Gatz, 2001; Mroczek & Kolarz, 1998). Finally, we acknowledge that the reported interrelations among

		Model 1: Zero	o-order model			Model 2: Covi	ariates included	
		Actor	effects			Actor	effects	
	Wi	ves	Hust	ands	Wi	ves	Husba	nds
Happiness	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Fixed effects Level µ <sub>0</sub> Slope µ <sub>s</sub>	50.28* -0.04	0.734 0.029	49.69* 0.04	0.681 0.030	$50.31^{*}$ -0.03	0.715 0.036	49.64* 0.05	0.664 0.037
Random effects Variance of level $\sigma_0^2$ Variance of slope $\sigma_s^2$ Correlation level $\sigma_{0,3}^2$ slope $\sigma_s^2$	62.68* 0.03ª	11.446 0.017	56.18* 0.03* -	9.013 0.014 39	57.54* 0.03	$10.850 \\ 0.016 \\ 70^*$	51.72* 0.03* 2	8.518 0.014
Residual variances T1 $\sigma_{T.1.e}^2$ T2 $\sigma_{T.2.e}^2$ T3 $\sigma_{T.3.e}^2$ T4 $\sigma_{T.4.e}^2$ T5 $\sigma_{T.5.e}^2$ T6 $\sigma_{T.5.e}^2$	49.22* 47.86* 74.27* 57.88* 25.09*	10.362 8.101 11.507 12.606 11.688 11.091	38.12* 31.41* 73.66* 33.64* 48.96* 26.72*	6.806 5.824 11.090 6.606 9.928	48.16* 48.39* 74.40* 56.46* 28.28*	10.121 8.102 11.466 12.673 11.159 10.480	35.82* 32.52* 74.08* 33.82* 49.76* 26.38*	6.629 5.927 11.113 6.624 10.486 9.837
Partner effects ( $r$ ) Husband level $\sigma_0^2$ —Wife level $\sigma_0^2$ Husband level $\sigma_{s}^2$ —Wife slope $\sigma_{s}^2$ Husband level $\sigma_0^2$ —Wife slope $\sigma_{s}^2$ Wife level $\sigma_0^2$ —Husband slope $\sigma_{s}^2$ Model Fit: $\chi^2$ ( $df$ ) CFI RMSEA		8	54* 85* 33 39 948 040				.51* .77* .31 .31 .015 .015	
<i>Note.</i> $T = Time$ ; CFI = comparative fit in time-invariant covariates. Noncorrelation est using the Time 1 SLS couple sample ( $N = {}^{*}P < .05$ or below.	dex; RMSEA = rooi mates are unstandard 356) as the reference	t-mean-square error lized. Significance t $hard mathbf{s}, Mean = 50, SD =$	of approximation. I ests assigned to the = 10. The rate of cl	Model $2 = ages$ and correlations $(r)$ refe nange is scaled in T	l education of both p r to the correspondin units per year.	artners, number of g covariances. Hap	children and length o piness standardized to	f marriage as the T metric

Table 2 Estimates of a Two-Variable Latent Growth Model for Happiness of Husbands and Wives in the Seattle Longitudinal Study

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*Figure 2.* Scatterplot of predicted happiness change for both partners, separately for the actual Seattle Longitudinal Study (SLS) couples (left-hand panel) and a random pairing of male and female SLS participants (right-hand panel). Predicted change is highly similar between partners in actual couples, but not in the random pairs.

spousal happiness trajectories may be linked to other systems such as functional health (Kunzmann et al., 2000).

#### Conclusion

The present study demonstrates that happiness trajectories are meaningfully associated among spouses. To our knowledge, this is the first study showing such associations across midlife and old age that used long-term longitudinal information that spans more than three decades. Our findings attest to the significance of extending investigations focusing on individual happiness trajectories toward an inclusion of close others such as spouses. Future research is needed to substantiate our findings and move beyond documenting dyadic associations in individual-level measures toward investigating specific underlying mechanisms. For example, it may be important to ask how spouses actively shape each other's developmental trajectories through the setting and pursuit of goals. In addition, it would be intriguing to investigate how the degree to which couples differ in the similarity of spousal happiness trajectories might be related to successful aging. In particular, it would be important to determine if similarities reveal positive effects on aging outcomes (e.g., one spouse's happiness lifting up the other spouse's spirits) or detrimental effects (e.g., one spouse dragging down the other). Finally, it would be key to know if the reported spousal interrelations are limited to long-term married couples that stayed together during good and also not-so-good times and how such findings may generalize to the aging baby boomers who enter old age with much more diverse relationship histories than did prior cohorts of older adults. Our findings provide further impetus to examine how and why a key ingredient of successful aging, level of and age-related change in happiness, is intrinsically linked between spouses.

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