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Research article

The reciprocal cycle of self-concealment and trust in romantic relationships

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Abstract

We propose that perceived partner concealment, self-concealment from one's partner (i.e., keeping secrets from one's partner), and trust in one's partner form a reciprocal cycle in romantic relationships. In Study 1, participants in a romantic relationship (N = 94) completed a two-time point survey within a span of 8 to 10 weeks. Results revealed that perceived partner concealment was associated with a loss of trust in partner, and low trust in partner was associated with an increase in self-concealment from one's partner. Furthermore, the association between perceived partner concealment and self-concealment from one's partner was mediated by trust. In Study 2, couples (N = 50) completed daily records for 14 consecutive days. Multilevel analyses indicated that on the days the individuals reported more self-concealment, their partners reported lower trust in them. Moreover, on the days the partners reported lower trust, the partners also reported higher self-concealment. These findings suggest that self-concealment in romantic relationships can create a reciprocal cycle that involves loss of trust and more self-concealment between partners, which would slowly deteriorate the relationship well-being. Copyright © 2012 John Wiley & Sons, Ltd.

Self-concealment is defined as the tendency to keep negative or distressing information secret from others (Larson & Chastain, 1990). Research has shown consistently that self-concealment is detrimental to psychological and physical well-being, independent of self-disclosure (Larson & Chastain, 1990; Major & Gramzow, 1999; Uysal, Lin, & Knee, 2010). Recently, researchers have also started to investigate self-concealment in the context of romantic relationships. These studies suggest that individuals who perceive their spouses as self-concealing have lower marital well-being over time (Finkenauer, Kerkhof, Righetti, & Branje, 2009), and self-concealment from one's partner contributes negatively to relationship satisfaction and commitment, independent of self-disclosure (Uysal, Lin, Knee, & Bush, 2012). Moreover, similar constructs such as topic avoidance and authenticity have been found to be associated with relationship functioning and quality (Brunell et al., 2010; Caughlin & Golish, 2002; Dailey & Palomares, 2004; Lopez & Rice, 2006).

Secrecy or self-concealment is an interpersonal process by definition, as it involves keeping secrets from a target audience. Such interpersonal processes play a key role in the context of romantic relationships, as they have both intrapersonal and interpersonal consequences. For example, self-disclosure is an important aspect of romantic relationships (Reis & Shaver, 1988), as not only does it have positive outcomes for the discloser but also leads to more self-disclosure by one's romantic partner (Dindia, 2002). Unfortunately, self-concealment in romantic relationships has not received much attention from researchers. It is important to note that self-concealment is not simply a lack of self-disclosure, as it involves active suppression of information in order to avoid revealing it (e.g., Larson & Chastain, 1990; Uysal et al., 2010). For instance, Tom might not disclose to his wife Linda that he got into a small accident, considering it unimportant or irrelevant. This would be a lack of self-disclosure, as Tom was not trying to hide this information. On the other hand, Tom might actively try to hide the accident from Linda, thinking that it will upset her or lead to a conflict, which would be an act of self-concealment. In the present research, we investigated whether self-concealment and trust form a reciprocal cycle in romantic relationships.

The Reciprocal Cycle of Self-concealment and Trust

An important element of relationship functioning is trust in one's partner, as suggested in theories such as attachment theory (Bowlby, 1980) or the theory of psychosocial development (Erikson, 1950). Although trust plays a central role in relationships, it has received limited attention until recently (Simpson, 2007). More recently, researchers conceptualized trust as a dyadic process reflected by one's partner's responsiveness (Murray & Holmes, 2009; Murray et al., 2011). Accordingly, trust reflects beliefs about one's partner's caring, commitment, and devotion to one's needs. This line of work also suggests that trust is associated with approach and avoidance motives in romantic relationships. Losing trust in one's

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partner can trigger self-protective motives, which can result in distancing oneself from the partner (Murray, Derrick, Leder, & Holmes, 2008; Murray, Holmes, & Collins, 2006). Similarly, loss of trust can negatively bias one's inferences about partner's behaviors (Campbell, Simpson, Boldry, & Rubin, 2010; Murray, Bellavia, Rose, & Griffin, 2003). These findings provide strong empirical evidence for trust's central role in relationship functioning.

Nevertheless, research investigating the role of self-concealment and trust in close relationships is scarce. One recent study showed that perceived partner concealment predicted lower trust in one's partner after 9 months (Finkenauer et al., 2009). Although this research examined trust as a consequence of perceived partner concealment, losing trust in one's partner would also have consequences for one's own concealment in the relationship. Specifically, loss of trust may result in being less open, and more concealing, toward one's partner. Indeed, priming doubts about partner's trustworthiness automatically triggers distancing or avoidance motives (Cavallo, Fitzsimons, & Holmes, 2010; Murray et al., 2008; Murray et al., 2011).

Our model starts with the idea that perceived partner concealment is associated negatively with trust in one's partner (Finkenauer et al., 2009). When Linda perceives that Tom is keeping secrets, Linda is likely to lose trust in Tom. Furthermore, we suggest that when people lose trust in their partners, they will be more likely to self-conceal from their partners. That is, when Linda loses trust in Tom, she would be more likely to self-conceal from Tom. Next, when Linda conceals more, the same process would start for Tom. Tom would perceive Linda's concealment, lose trust in Linda, and conceal even more from Linda. This would form a reciprocal cycle of concealment and distrust within the relationship (Figure 1).

We tested parts of this model in two studies. In Study 1, we tested the associations between perceived partner concealment, trust in one's partner, and self-concealment from one's partner by collecting two-time point data from individuals who were involved in a romantic relationship. In Study 2, we tested whether the actor's actual self-concealment was associated negatively with the partner's actual trust in the actor. As this hypothesis involved an interpersonal effect, we collected dyadic data using a diary study.

STUDY 1

Study 1 focused on the intrapersonal processes of the model presented in Figure 1. We examined whether perceived partner concealment reduces trust in one's partner and whether low trust in one's partner increases self-concealment from one's partner.

Hypothesis 1: Perceived partner concealment at Time 1 would be associated negatively with trust in one's partner at Time 2, controlling for trust at Time 1.

Hypothesis 2: Trust in one's partner at Time 1 would be associated negatively with self-concealment from one's partner at Time 2, controlling for self-concealment from one's partner at Time 1.

Hypothesis 3 (mediation): Perceived partner concealment at Time 1 would be associated positively with self-concealment from one's partner at Time 2, controlling for self-concealment from one's partner at Time 1. This effect would be mediated by trust in one's partner at Time 2.

Method

Participants and Procedure

Time 1 data were collected from 172 participants (146 female) who were in a heterosexual relationship. Participants were recruited from the participant pool at a large urban university and the Society of Personality and Social Psychology listserv, and they completed an online questionnaire that included measures of perceived partner concealment, trust in partner, and concealment from one's partner. After 8 to 10 weeks, the participants were invited to participate in the follow-up survey. Ninety-four participants completed the survey at Time 2. There were no significant mean differences between those who completed the follow-up survey and those who did not, in terms of self-concealment from one's partner, perceived partner concealment, and trust in partner, as well as for gender and relationship length. However, participants who dropped out were slightly younger ($M = 22.5$, $SD = 5.1$) than those who completed the follow-up survey ($M = 24.8$, $SD = 8.2$; $t(168) = 2.2$, $p = .03$).

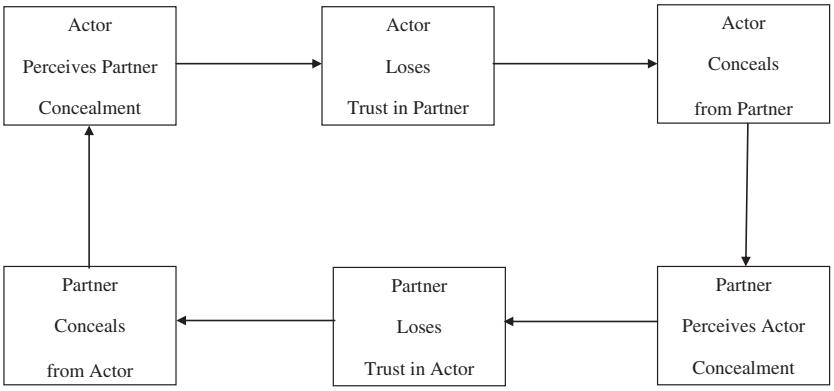

Figure 1. The reciprocal cycle of self-concealment and trust in romantic relationships

In sum, 94 participants (seven males) were included in the analyses. Participants' ages ranged from 18 to 73 years ($M = 24.83$ years, $SD = 8.20$ years). The sample was ethnically diverse with participants identifying as Caucasian (50%), Hispanic (19%), Asian (17%), African (7%), and "Other" (7%). Average relationship length was 4.33 years ($SD = 6.67$ years) with a minimum of 2 months and a maximum of 42 years. Regarding relationship status, 27% were married, 4% were engaged, 20% were cohabiting, 46% were exclusively dating, and 3% were actively dating other people.

Measures

Self-concealment from One's Partner. Self-concealment from one's partner was measured by adapting the Self-Concealment Scale (Larson & Chastain, 1990) items to refer to a romantic partner (Finkenauer et al., 2009; Uysal et al., 2012). Participants rated 10 items such as, "There are lots of things about me that I keep from my romantic partner" and "I'm often afraid I'll reveal something to my romantic partner that I don't want to" on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale. Internal reliability (Cronbach's alpha) was .89.

Perceived Partner Concealment. Perceived partner concealment was measured by five items that were adapted from the Self-Concealment Scale. Participants rated items such as, "There are lots of things about my partner that he/she keeps from me," "My partner has an important secret that he/she hasn't shared with me," and "When something bad happens to my partner, he/she tends to keep it from me" on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale. Internal reliability was .87.

Trust in One's Partner. Trust in one's partner was measured by 18 items from the Trust Scale (Rempel, Holmes, & Zanna, 1985). The scale has three subscales: predictability ("My partner is not very predictable. I can't always be certain how my partner is going to act from one day to another"), dependability ("Based on past experience, I cannot with complete confidence rely on my partner to keep promises made to me"), and faith ("I feel completely secure in facing unknown new situations because I know my partner will never let me down"). Participants rated the items on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale. We did not have any specific hypotheses regarding the subscales; hence, an overall trust score was calculated by averaging the items (Cronbach's alpha = .91).

Results and Discussion

Means, standard deviations, and correlations are presented in Table 1. We hypothesized that perceived partner concealment would be associated with a reduction in trust in one's partner (H1). To test the hypothesis, we conducted cross-lagged regression analyses. That is, perceived partner concealment and trust in one's partner at Time 1 were entered as predictors of trust in one's partner at Time 2. Furthermore, we also tested the reverse hypothesis (i.e., whether trust in one's partner predicts change in perceived partner concealment) by entering perceived partner concealment at Time 2 as the criterion.

The findings showed that perceived partner concealment at Time 1 was associated with lower trust at Time 2 ($\beta = -.18$, $p = .02$), controlling for trust at Time 1 ($\beta = .72$, $p < .001$). In other words, individuals who perceived that their partners were keeping secrets from them at Time 1 experienced a reduction in their level of trust after 2 months. Although trust at Time 1 explained a large amount of variance of trust at Time 2 ($R^2 = .67$, $p < .001$), perceived partner concealment still explained additional variance ($R^2_{\text{change}} = .02$, $p = .02$). When we tested the reverse hypothesis, the findings suggested that trust at Time 1 was not significantly associated with perceived partner concealment at Time 2 ($\beta = -.07$, $p = .34$), controlling for perceived partner concealment at Time 1 ($\beta = .79$, $p < .001$). In brief, perceived partner concealment was significantly associated with reduced trust in partner after 2 months, whereas trust was not associated significantly with a change in perceived partner concealment. These findings supported Hypothesis 1.

We conducted similar analyses to test the hypothesis that trust in one's partner would be associated negatively with self-concealment from one's partner (H2). The regression analyses suggested that trust in one's partner at Time 1 was associated negatively with self-concealment from one's partner at Time 2 ($\beta = -.23$, $p < .001$), controlling for self-concealment from one's partner at Time 1 ($\beta = .76$, $p < .001$). Hierarchical regression analyses showed that self-concealment from one's partner at Time 1 explained a large amount of the variance in self-concealment from one's partner at Time 2 ($R^2 = .68$, $p < .001$); however, trust still explained additional variance ($R^2_{\text{change}} = .05$, $p < .001$). On the other hand, self-concealment from one's partner at Time 1 was not significantly associated with trust in one's partner at Time 2 ($\beta = -.04$, $p = .50$), controlling for trust in one's partner at Time 1 ($\beta = .81$, $p < .001$). Therefore, the reverse-direction hypothesis was not supported. In sum, Hypothesis 2 was

Table 1. Means, standard deviations, and correlations for Study 1

	1	2	3	4	5	6
1. Self-concealment from partner (T1)	–					
2. Trust in partner (T1)	−.28	–				
3. Perceived partner concealment (T1)	.42	−.56	–			
4. Self-concealment from partner (T2)	.82	−.45	.51	–		
5. Trust in partner (T2)	−.28	.82	−.59	−.52	–	
6. Perceived partner concealment (T2)	.46	−.52	.82	.61	−.62	–
Mean	2.03	5.45	2.00	2.08	5.40	2.01
SD	.82	.94	.92	.84	1.02	.94

Note: All correlations are significant at $p < .001$ except $r = -.28$ is significant at $p < .01$.

supported in that individuals who did not trust in their partners at Time 1 reported an increase in their self-concealment from their partners after 2 months.[1]

Finally, we tested the mediation model (H3). The regression analyses suggested that perceived partner concealment at Time 1 was associated positively with self-concealment from one's partner at Time 2 ($\beta = .20$, $p = .002$), controlling for self-concealment from one's partner at Time 1 ($\beta = .74$, $p < .001$). When trust at Time 2 was inserted into this model, the effect of perceived partner concealment was no longer significant ($\beta = .05$, $p = .43$), and trust significantly predicted self-concealment from one's partner at Time 2 ($\beta = -.27$, $p < .001$), controlling for self-concealment from one's partner at Time 1 ($\beta = .73$, $p < .001$, Sobel $Z = 3.37$, $p < .001$). These findings supported Hypothesis 3.

The findings of Study 1 provided support for the intrapersonal aspect of our model. When individuals perceived their partners were concealing, they lost some trust in their partners. Furthermore, individuals who reported lower trust in their partners reported an increase in their own self-concealment from their partners. Finally, perceiving one's partner as self-concealing was associated with an increase in one's own concealment, and findings supported this effect being mediated by a loss of trust in one's partner. These findings were strengthened by the fact that the opposite causal direction hypotheses were not supported.

Nevertheless, Study 1 also had shortcomings. First, we did not test any interpersonal effects. That is, we still do not know whether the actor's actual concealment affects the partner's level of trust. Second, participants consisted predominantly of women; thus, the findings might not generalize to men. To address these issues, we collected dyadic diary data across 14 days. We examined whether one's own (i.e., self-reported) daily concealment was associated negatively with one's partner's actual (i.e., self-reported by the partner) daily trust in the actor.

STUDY 2

In Study 2, we focused on the interpersonal aspect of our model. We tested the direct association between actor's concealment and partner's trust.[2]

Hypothesis 4: Actor's daily self-concealment would be associated negatively with partner's daily trust in the actor.

Method

Participants

Both partners of 71 heterosexual couples who were not cohabiting and who had been dating for at least 1 month participated in this study. Participants were recruited through undergraduate courses at a large urban university, as well as through flyers posted throughout the university campus. In order to acquire the most authentic records, it was critical that participants completed records individually. Ensuring individual record privacy was expected to be substantially more difficult with married couples and couples who were cohabiting; thus, such couples were not recruited. Of the 71 couples who signed up for the study, 21 were removed from analyses because some dropped out before the end of the study ($N = 10$ couples completed fewer than 7 days of daily records), did not follow instructions ($N = 9$ couples), or broke up during the study ($N = 2$ couples). Included couples ($N = 50$) did not differ from non-included couples ($N = 21$) in relationship length or relationship status. Participants were relatively young ($M = 21.93$ years, $SD = 6.30$ years) and ethnically diverse, with participants identifying as Hispanic/Latino (32%), Asian (30%), Caucasian (19%), African-American (10%), and "Other" (9%). Average relationship length was 1.66 years ($SD = 1.56$ years), and most couples (90%) reported that they were exclusively dating. In exchange for participation, students received course credit, and non-students received entries into monetary lottery drawings. Because of the slow pace of data collection, after the first 6 weeks of data collection, all couples ($N = 41$; 82%) were offered $25 for participating in the study.

Procedure

Both members of each couple completed an initial written questionnaire assessing basic individual and relational demographic information and baseline (i.e., person-level) self-concealment from one's partner. Upon completion of this questionnaire, participants attended a one-hour orientation session, in which they received detailed instructions and examples for completing the daily online record. Participants completed an online log each night that included the measures relevant to this study, along with other measures about relationships, immediately before bed for 14 consecutive days, beginning on the evening after the orientation. If participants had not completed a day's record by 12 PM the following day, they were unable to submit a record that day. Participants who failed to complete a record were contacted in order to remind them of the study, address any concerns, and facilitate completion of daily records. Couples' time-stamped data were inspected prior to all analyses to make certain that records were completed on the proper day and to ensure that the days matched for both members of a couple. The mean number of records was 13.12 ($SD = 1.02$) for men and 13.32 ($SD = 1.08$) for women. Two women completed records an extra day. These extra data were included in the analyses.

Measures

Self-concealment from One's Partner. Baseline self-concealment from one's partner was measured with the same scale used in Study 1.

Daily Self-concealment from One's Partner. Daily self-concealment from one's partner was measured with five items (i.e., "I felt that I had to hide information about myself from

[1]We also tested H1 and H2 controlling for gender and relationship length. These variables did not have a significant effect, and the findings remained the same.

[2]Study 2 was part of a larger study about lies and deception in romantic relationships. We did not measure perceived partner concealment in order to maintain the brevity of the daily records and reduce participant burden. Also, both samples were the same as in Uysal et al., 2012.

my partner," "I was afraid I would reveal something to my partner that I didn't want to reveal," "I was often hiding a part of who I am from my partner," "I was pretending to be someone I'm not while with my partner," and "I felt that my partner didn't know what I'm really like") that participants were instructed to rate from 1 (*strongly disagree*) to 7 (*strongly agree*) by "considering today only." Daily alpha values ranged from .89 to .95, and the mean alpha across the 14-day period was .92.

Daily Trust in One's Partner. Daily trust in one's partner was measured with three items from the Trust Scale (Rempel et al., 1985): "My partner behaves in a consistent manner," "My partner is a thoroughly dependable person, especially when it comes to things that are important," and "I feel completely secure in facing unknown new situations because I know my partner will never let me down," which participants were instructed to rate from 1 (*strongly disagree*) to 5 (*strongly agree*) by considering how they feel "right now." These items were selected by the authors on the basis of their face validity. Daily alpha values ranged from .72 to .98, and the mean alpha across the 14-day period was .82.

Data Analytic Strategy

A complex pattern of interdependent data emerged, as two individuals were nested within 50 couples that were then crossed with 14 days. The structure of the dyadic data consisted of distinguishable dyads; hence, we employed a two-intercept model with separate male and female intercepts (Bolger & Shrout, 2007). The two-intercept model approach allows male and female intercepts to be different and correlated. Moreover, the first-order autoregressive covariance structure type was specified to model the correlation between one's daily outcome (e.g., trust in one's partner) and the outcome that immediately preceded it (e.g., trust in one's partner from the day before). This structure allowed the errors to be autocorrelated to model the correlation from one day to the next (Kenny, Kashy, & Cook, 2006). Finally, we also controlled for baseline self-concealment and centered the daily self-concealment scores within the individual. By centering within the individual, daily self-concealment from one's partner scores reflected daily self-concealment compared with one's average level of self-concealment across 14 days. This allowed us to examine purely within-person associations (e.g., whether one's partner reported lower trust on the days one concealed more than one's average level of concealment). We used SAS software (Copyright, SAS Institute Inc. SAS and all other SAS Institute Inc. product or service names are registered trademarks or trademarks of SAS Institute Inc., Cary, NC, USA.) to conduct the analyses.

Results and Discussion

Initially, we examined the intraclass correlation (ICC) for trust and self-concealment with empty two-intercept models. For trust, the ICC was .57 for women and .58 for men, indicating that about 43% of the variance in trust was within-person for both genders. The covariance of the two intercepts was .11, $p = .08$. For self-concealment, the ICC was .49 for women and .50 for men, and the covariance of the two intercepts was .45, $p < .01$.

Table 2. Fixed effects, variance, and covariance estimates for actor concealment predicting partner's trust (Study 2)

	Partner's trust
Fixed effects	
Daily concealment	−.04**
Baseline concealment	−.20**
Intercept (F)	3.81***
Intercept (M)	3.98***
Variances	
Intercept (F)	.38***
Intercept (M)	.29***
Slope	.002
Residual (F)	.30***
Residual (M)	.24***
AR(1)	.32***
Covariances	
Intercept	.03
Residual	.03**

Note: (F) and (M) represent female and male values for the two intercepts. $^{**}p < .01$, $^{***}p < .001$.

Next, we conducted a multilevel regression analysis that included two intercepts (women and men) with random variance, a random slope (actor's daily self-concealment), and a fixed effect (person-level self-concealment) as predictors of partner's daily trust. According to our hypothesis (H4), we expected a significant effect of self-concealment at the day level.

Results (Table 2) showed that actor's daily concealment was associated negatively with one's partner's daily trust ($B = -.04$, $p = .03$), independent of actor's person-level concealment ($B = -.20$, $p < .01$). As expected, on the days the actors reported self-concealment higher than their average level of self-concealment, their partners reported lower trust. The significant effect of person-level concealment also indicated that individuals who were higher on baseline self-concealment in their relationships had partners who trusted them less across the 14 days. These findings supported Hypothesis 4.

We also tested whether actor's daily trust was associated negatively with actor's daily self-concealment from the partner (H2), in order to replicate the findings of Hypothesis 2. Multilevel regression analyses using the two-intercept model showed that actor's daily trust was associated negatively with actor's daily self-concealment ($B = -.41$, $p < .001$), independent of actor's baseline trust ($B = -.11$, $p = .25$). On the days the individuals reported lower trust in their partners, they also reported higher self-concealment from their partners, independent of their general level of trust in their partners. These findings replicated Hypothesis 2 using a multilevel design and demonstrated the within-person relationship between trust in one's partner and self-concealment from one's partner.[3]

Although these findings were supportive of our hypotheses, we conducted additional analyses to explore the interpersonal effects further, as well as to examine whether there were gender differences. First, we tested Hypothesis 4 and its opposite-direction hypothesis using lagged models

[3]The findings of Study 2 remained the same when we controlled for relationship length, as relationship length did not have a significant effect on the outcomes.

(i.e., using previous day's score as the predictor). However, the results were inconclusive, as lagged predictors were not significant in either direction.

Finally, we conducted a multilevel Actor Partner Interdependence Model, using the two-intercept model, to test Hypothesis 4 in a more rigorous way. This model included both the partner's and actor's daily self-concealment scores, and the actor's baseline self-concealment, as predictors of the partner's daily trust. In other words, we examined the association between actor's daily self-concealment and partner's daily trust, independent of partner's daily self-concealment and actor's person-level self-concealment. Moreover, for each predictor, we obtained separate estimates for women and men by using a dummy-coded variable. This also allowed us to examine gender differences. In sum, the model had two random intercepts and two random slopes (actor–partner daily self-concealment) and separate gender-based estimates for partner self-concealment, actor self-concealment, and actor's baseline self-concealment.[4] Results showed that for both genders, actor's daily self-concealment was associated negatively with partner's daily trust ($B_{\text{female}} = -.05$, $p = .04$, $B_{\text{male}} = -.04$, $p = .04$), independent of partner's daily self-concealment ($B_{\text{female}} = -.08$, $p < .01$, $B_{\text{male}} = -.16$, $p < .001$), and actor's person-level self-concealment ($B_{\text{female}} = -.19$, $p = .09$, $B_{\text{male}} = -.13$, $p = .17$). Results showed that for both genders, actor's daily self-concealment was associated negatively with partner's daily trust ($B_{\text{female}} = -.05$, $p = .04$, $B_{\text{male}} = -.04$, $p = .04$), independent of partner's daily self-concealment ($B_{\text{female}} = -.08$, $p < .01$, $B_{\text{male}} = -.16$, $p < .001$), and actor's person-level self-concealment ($B_{\text{female}} = -.19$, $p = .09$, $B_{\text{male}} = -.13$, $p = .17$).

GENERAL DISCUSSION

To summarize, we conducted two studies to examine whether self-concealment and trust form a reciprocal cycle in romantic relationships. In Study 1, we found that perceived partner concealment predicted lower trust in one's partner after 2 months, and lower trust in one's partner predicted higher self-concealment from one's partner after 2 months. In Study 2, we found that on the days the individuals reported higher levels of self-concealment from their partners, their partners reported lower trust.

These findings contribute to the literature in several ways. First, to our knowledge, this is the first set of studies to demonstrate reciprocity of self-concealment. Although it is well established that self-disclosure in relationships is reciprocal (Cozby, 1972; Miller & Kenny, 1986; Rubin & Shenker, 1978), no research has investigated whether self-concealment is similarly reciprocal in romantic relationships. The findings of the current research provide empirical support for the reciprocity of self-concealment in romantic relationships and contribute to the scarce literature on self-concealment in romantic relationships.

Second, these studies also propose and test a process model for the reciprocity of self-concealment in romantic relationships, which involves perceived partner concealment and trust in one's partner. The findings of Study 1 not only replicated the previous findings regarding the association between perceived partner concealment and trust (Finkenauer et al., 2009), but they also extended this idea by suggesting that perceived partner concealment would eventually lead to one's own concealment. This has important implications for relationships, as trust plays a key role in relationship functioning, and both perceived partner concealment and self-concealment from one's partner have been shown to be detrimental to one's own relationship quality (Finkenauer et al., 2009; Uysal et al., 2012). If the self-concealment cycle is not broken, this may lead to the deterioration of the relationship, as partners grow more distant from and less trusting of each other, and they may become dissatisfied with their relationship. The consequences of self-concealment cycle in terms of relationship quality could be a fruitful venue of research in future studies.

A final contribution of this research is that we assessed within-person variations using a diary method in Study 2 and showed that the association between self-concealment from one's partner and partner's trust is independent of individual differences in self-concealment. In that sense, Study 2 takes a process-oriented approach rather than a trait approach. Therefore, the findings do not apply just to individuals who are self-concealers in their romantic relationships; instead, they suggest that whenever people engage in self-concealment in their romantic relationships, they might lose their partner's trust.

It should be noted that we did not test all the associations proposed in the model (Figure 1). The model suggests that actor's self-concealment would be perceived by the partner, which in turn, would reduce the partner's trust in the actor. In Study 2, we only tested the direct association between one's own concealment and one's partner's trust. Although Study 2 clearly demonstrated the interpersonal effect proposed in the model, it still did not test whether this association (i.e., the link between one's own concealment and partner's trust) is mediated by the partner's perceptions. This link could be important because under some conditions, individuals may perceive concealment even when their partners are not concealing or vice versa. For instance, anxiously attached individuals might be more suspicious and perceive their

[4]The equations for the actor–partner model are as follows:

$$\begin{aligned}\text{Trust}_{\text{M}} = {} & B_{0\text{F}} + B_{1\text{F}}(\text{actor daily self-concealment}) \\ & + B_{2\text{M}}(\text{partner daily self-concealment}) \\ & + B_{3\text{F}}(\text{baseline self-concealment}) + v_{0\text{F}} + u_{\text{F}}\end{aligned} \quad (1)$$

$$\begin{aligned}\text{Trust}_{\text{F}} = {} & B_{0\text{M}} + B_{1\text{M}}(\text{actor daily self-concealment}) \\ & + B_{2\text{F}}(\text{partner daily self-concealment}) \\ & + B_{3\text{M}}(\text{baseline self-concealment}) + v_{0\text{M}} + u_{\text{M}}\end{aligned} \quad (2)$$

Equation (1) illustrates the effects for women, and Equation (2) illustrates the effects for men. In each case, trust on a given day was predicted by the intercept (B_0: a conditional average-level term that varies across individuals and is thus a random effect), one's own self-concealment on that day (B_1: a fixed effect that is the average within-person slope across all individuals), one's partner's self-concealment on that day (β_2: a fixed effect that is the average within-person slope across all individuals), an error term (v_0) that reflects how much each person's average deviates from the overall average, and an error term (u) that reflects each person's daily deviation from his or her own mean on the criterion.

Study 2 analyses were conducted using sas software. We used the PROC MIXED routine in SAS with AR(1) covariance structure. Two dummy-coded gender variables were used to obtain separate estimates for the intercepts and the slopes. For further details about two-intercept models and dyadic data analyses over time, see Bolger & Shrout (2007) and Kenny et al., (2006).

partners as concealing when they actually are not, whereas avoidant individuals might be less attentive to their partner's concealment. Future studies can examine the mediating role of perceived partner concealment, as well as moderators of the association between one's own concealment and partner's perceived concealment.

Our model implies that self-concealment would slowly erode the relationship by forming a vicious cycle. This does not mean that the cycle is unbreakable. One straightforward way to prevent this progression is to be open and authentic in one's relationship, even when one's partner is concealing. As self-disclosure is reciprocal (Miller & Kenny, 1986), if the actor is open and honest, it may encourage the concealing partner to be more authentic and less concealing. Furthermore, research on authenticity in romantic relationships suggests that dispositional authenticity is associated with better relationship well-being (Brunell et al., 2010). Second, under some conditions, people may change how they perceive their partner's concealment in order to stop the cycle. For example, the empathic accuracy model (Ickes & Simpson, 1997; Simpson, Oriña, & Ickes, 2003) suggests that being accurate in inferring one's partner's feelings and thoughts promotes relationship well-being; however, this association is moderated by the potentially threatening nature of the inferred information. That is, when the information is relationship-threatening, being empathically accurate hurts the relationship. Furthermore, the model also suggests that sometimes people use a motivated inaccuracy mindset under relationship-threatening situations in order to protect the relationship. From this perspective, it can be suggested that motivated inaccuracy may result in a non-significant association between partner's actual concealment and actor's perceived partner concealment. In other words, when the actors are motivated to be empathically inaccurate, they would not perceive their partners as concealing. This could be another way to stop the reciprocal cycle of self-concealment in romantic relationships.

It is also necessary to note that relationship processes can be beneficial for the relationship in one context but detrimental in another context (McNulty & Fincham, 2012). For instance, negative problem-solving behaviors such as blaming or rejecting the partner for minor problems can have detrimental effects for relationship satisfaction, whereas the same behaviors can have positive effects on relationship satisfaction for more severe problems (McNulty & Russell, 2010). Similarly, sometimes concealment might be adaptive for the relationship. For instance, if one's partner is easily irritated, insecurely attached, or judgmental due to contextual or personality-related reasons, the relationship consequences of concealment might be less severe or even more positive than those from being open and honest. On the other hand, this comes at a cost for the concealer, as incongruent behaviors have been shown to be associated with lower well-being (Ryan & Deci, 2002).

A similar potential moderator is the severity or importance of things that are being concealed. For instance, hiding that one has feelings for another person could have different consequences compared with hiding that one has received a traffic ticket. Moreover, the severity of secrets could also play a moderating role in perceived partner concealment. Thinking that one's partner is hiding a minor secret, compared with a major secret, would probably have different effects on the partner's perceived trustworthiness. On the other hand, it could also be argued that the effect of severity of the secrets would be reflected in concealment scores, as some items of both (i.e., perceived and self) concealment scales assess the importance of what is being concealed (e.g., "My partner has an important secret that he/she hasn't shared with me" and "I have a secret that is so private that I would lie if my romantic partner asked me about it"). Nevertheless, specifically assessing the severity, or if possible the content, of both self-concealment and perceived partner concealment would further clarify these processes.

Finally, future studies can also examine the valence of the information that is being concealed. Although self-concealment is about hiding negative personal information, individuals can sometimes conceal positive information from their partners for a variety of reasons. For instance, Linda may hide that she got a promotion or a career-related award, thinking that Tom, who is also working in the same field, would feel threatened by this information. Although concealing positive information is probably not as common as concealing negative information, it remains to be seen whether the consequences are similar.

There were a few limitations to the current studies. First, both studies were correlational, and the proposed causal relationships were based on past research and our hypothesizing. Although we used longitudinal designs, the findings cannot demonstrate causation unless experimental studies are conducted. Moreover, lagged analyses in Study 2 were not conclusive; thus, one needs to be cautious about making causal inferences. Similarly, both studies spanned brief periods of time. Thus, it is not possible to draw conclusions about the long-term consequences of these processes, which can be addressed in future studies. Finally, the samples consisted mostly of young adults, and the average relationship length was about 3 years, restricting the external validity of the findings. Although controlling for relationship length did not change the results, self-concealment from one's partner might still have varying consequences at different stages of a relationship. Similarly, the sample of Study 2 was restricted to couples who were not cohabiting, and the findings may be different for married couples. Studies testing these associations using different methods, with more representative samples (such as couples in short versus long-term relationships and cohabiting versus non-cohabiting couples) would give us more insight about these processes.

In sum, this research suggests that self-concealment in romantic relationships can create a reciprocal cycle that involves loss of trust and more self-concealment between partners. This cycle can slowly deteriorate the relationship and result in severe long-term consequences for the relationship well-being.

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