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# Self-Silencing in Romantic Relationships: Is it Related to Worse Relationship Conflict Outcomes?

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A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy

in

Psychology

in the

**Graduate Division** 

of the

University of California, Berkeley

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#### Abstract

Self-Silencing in Romantic Relationships:

Is it Related to Worse Relationship Conflict Outcomes?

by

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Self-silencing (i.e., withholding one's true thoughts and feelings) is a behavior that romantic partners engage in to minimize conflict in their relationships, yet previous research has not directly examined its prevalence nor its effectiveness. Across four studies using multiple methods (total N = 1,601), we found evidence that self-silencing is a common relationship behavior, and one that may be associated with more and worse conflict. Specifically, we established that contrary to widespread lay beliefs in self-silencing's adaptiveness, it is associated with more frequent and more negatively-valenced conflict as well as lower conflict resolution. Furthermore, our findings suggest that lower subjective feelings of relational authenticity may help explain the counterintuitive association between self-silencing and worse conflict outcomes, but also that self-silencing and conflict may be bidirectionally linked. In our final, pre-registered study, we used a longitudinal dyadic approach to investigate couples during the COVID-19 pandemic and found that both actor's and partner's self-silencing were positively associated with conflict in the moment and that partner's self-silencing predicted greater conflict over time. Throughout our studies, we examined the effects of self-silencing alongside related constructs and processes (e.g., self-disclosure, emotional suppression) and found that selfsilencing is uniquely associated with conflict. Taken together, these results suggest that when individuals withhold their thoughts and feelings from a romantic partner to avoid arguing in the moment, or when their partners do so, this may be associated with lower relational authenticity and worse conflict outcomes.

Keywords: self-silencing, conflict, authenticity, close relationships, romantic relationships

# **Self-Silencing in Romantic Relationships:**

# Is it Related to Worse Relationship Conflict Outcomes?

For many people, romantic relationships are a central aspect of life. People's everyday lives are deeply intertwined with those of their romantic partners. Part of this involves sharing thoughts and feelings with a partner, which has been shown to have numerous benefits for the cultivation and maintenance of close relationships, including enhanced intimacy (Laurenceau et al., 1998) and stronger commitment (Sprecher & Hendrick, 2004). Yet studies also demonstrate the challenges that can be involved with sharing our inner thoughts and feelings with others, including arousing fears of rejection (Garrison et al., 2014) or anticipating negative emotional reactions from others (Schrimshaw et al., 2018). Within our close relationships we decide how much of our true selves to share and how much to withhold, with each decision having its own intrapersonal and interpersonal consequences.

Sometimes, we may decide to withhold or *self-silence*, which entails inhibiting the expression of one's true thoughts, feelings, and actions, and is one behavior romantic partners may engage in to avoid conflict (Jack, 1991). To date, the small body of research on selfsilencing has mainly treated the construct in dispositional terms and has focused on how individuals who tend to self-silence more tend to have poorer mental health and lower relationship satisfaction (e.g., Whiffen et al., 2007). Surprisingly, little work has delved into understanding how self-silencing relates to relationship conflict—the very outcome people theoretically seek to avoid via self-silencing. To address this gap in the literature, we used multiple methods across four studies—two of which were pre-registered—to investigate six main aims. First, we aimed to examine how frequently the average person engages in self-silencing, as well as people's lay beliefs about self-silencing's adaptiveness. Second, we sought to test the central hypothesis that, contrary to why people often engage in self-silencing in the first place namely, to minimize conflict—self-silencing may actually be related to worse relationship conflict. Third, we thought it was critical to test for bidirectional links between self-silencing and conflict, recognizing that conflict may breed further self-silencing. Fourth, we examined whether self-silencing is also linked to lower subjective feelings of relational authenticity, and if this might help explain the proposed counterintuitive association between self-silencing and worse conflict. Fifth, we incorporated a dyadic approach to examine the link between self-silencing and conflict, which allowed us to explore the possibility that a partner's self-silencing may also influence one's own experience of relationship conflict. Finally, we examined the effects of selfsilencing alongside related constructs and processes (e.g., self-disclosure and emotional suppression) to ascertain the unique association between self-silencing and conflict.

# Lay Beliefs about Self-Silencing: Do They Align with Existing Theory and Research?

The self-silencing construct emerged from a broader "Silencing the Self" theory, which argues that some women may develop toxic cognitive schemas that encourage them to silence their true feelings, thoughts, and behaviors, ultimately leading to depression (Jack, 1991). These schemas are learned through experiences of social and gender inequality wherein some women are taught that they must inhibit their true self-expression in order to create and maintain lasting intimate relationships. Even though self-silencing theory originated from work on female depression, numerous studies have found that males also engage in self-silencing, sometimes at

even higher levels than women (Duarte & Thompson, 1999; Ussher & Perz, 2010; Whiffen et al., 2007). Indeed, research has shown that individual differences in self-silencing are associated with negative outcomes for both sexes. For example, one study found that self-silencing positively predicts loneliness and self-criticism for both females and males (Besser et al., 2003).

The implication from self-silencing theory and research is that people, particularly clinically depressed women, engage in self-silencing as a means of avoiding conflict and protecting their relationships. But does the average person engage in self-silencing with the same beliefs and intentions? Studies have shown that people's lay beliefs about conflict in romantic relationships (e.g., the belief that conflict is an opportunity to grow vs. a sign that the relationship is failing) can predict relationship functioning (Knee et al., 2004; see Knee & Canevello, 2006, for a review). To the best of our knowledge, no research to date has examined lay beliefs about how self-silencing is related to conflict, nor even how prevalent self-silencing behavior is in the first place. If found to be a frequent relationship experience, self-silencing research would merit further empirical attention, and understanding how frequently the public engages in self-silencing behavior could inform romantic relationship conflict research more broadly. Thus, before examining the association between self-silencing and conflict, in Study 1 we first examined how often people engage in self-silencing behavior as well as their lay beliefs about how such behavior may influence conflict.

# **Self-Silencing and Conflict: Bidirectionally Linked?**

Jack (1991) theorized that individuals use self-silencing behavior as a relationship-maintenance strategy, believing that by withholding contentious thoughts and feelings they can avoid conflict and lower the likelihood of relationship dissolution. If this is the case, then why would we propose that self-silencing is positively associated with more and worse conflict? Previous research has examined how self-silencing is related to relationship outcomes, documenting associations with negative consequences such as poorer relationship satisfaction (Uebelacker et al., 2003) and greater hostility among the highly rejection sensitive (Romero-Canyas et al., 2013; Ayduk et al., 2003). Such findings would seem to suggest that self-silencing might also be related to worse conflict. However, direct examinations of the association between self-silencing and conflict are few. Indeed, investigations of self-silencing outside of a depression framework, with a focus on non-clinical samples, are sparse.

By and large, in the limited body of empirical work that has examined self-silencing and conflict, self-silencing has been treated as an individual difference, trait-level variable and the focus has been on conflict style. Moreover, while previous research has investigated how constructs similar to self-silencing (e.g., stonewalling, emotional suppression) are associated with conflict, a topic we address below, we are aware of only four peer-reviewed research articles that have directly examined self-silencing and conflict. The first used an adolescent sample and found that those high in trait-level self-silencing reported poorer global communication within their romantic relationships, and partners of high trait self-silencers reported experiencing greater discomfort and frustration during laboratory conflict conversations (Harper & Welsh, 2007). The next two used the Conflict Tactics Scale (Straus, 1979) and assessed whether higher trait-level self-silencing was associated with greater verbal and physical aggression during romantic conflict, one finding no association within adolescent couples

(Norona et al., 2016), and the other finding a positive association among depressed adult couples (Whiffen et al., 2007). Finally, one longitudinal study that surveyed adolescents through emerging adulthood found that individuals who showed decreases in trait-level self-silencing over time were more likely to report increases in intrapersonal growth after experiencing intense romantic conflict or a breakup (Shulman et al., 2018). Overall, this small set of studies provides initial hints about how self-silencing tendencies can negatively influence conflict when it unfolds, but they do not address whether self-silencing is an effective strategy for preventing conflict in the first place. Moreover, the only dyadic studies investigating self-silencing were cross-sectional, and the single longitudinal study in this small literature focused on how self-silencing individuals felt after a conflict as opposed to how self-silencing may be related to conflict over time.

The present studies build on these initial strands of evidence by directly examining the link between self-silencing and various indices of conflict (including frequency of conflict, negativity of conflict interactions, and conflict resolution), as a test of our hypothesis that self-silencing may be related to worse conflict (Studies 2-4). In addition, aside from a single dissertation study (Clark, 2015), daily diary methodology has not yet been utilized in research on self-silencing; thus, we are among the first to examine self-silencing and conflict simultaneously over time (Study 3). This methodology enabled us to investigate if self-silencing behavior fluctuates over time and to assess the association between self-silencing and conflict at both within- and between-person levels. Moreover, in Studies 3 and 4, which were pre-registered, we used longitudinal methods which allowed us to test for bidirectionality. We hypothesized a positive bidirectional association, reflecting the notion that conflict may not only result from self-silencing, but also prompt individuals to further self-silence. Finally, by examining self-silencing and conflict in a longitudinal dyadic design in Study 4, we were able to look at these processes over time within both partners.

# Is Lower Relational Authenticity Associated with Greater Self-Silencing and Conflict?

In addition to the initial empirical evidence we described above, there are theoretical reasons to expect a positive association between self-silencing and conflict. In particular, relational authenticity refers to a person's subjective feelings of authenticity—the sense that you can be your "true self"—in a given relationship (Goldman & Kernis, 2002; Lopez & Rice, 2006). By definition, self-silencing entails withholding one's thoughts and feelings from a partner, whereas subjective feelings of relational authenticity hinge in part on expressing them. Indeed, various strands of evidence support the notion that self-silencing may harm relational authenticity. For example, research has shown that suppressing one's emotions—which could occur when one self-silences—reduces subjective reports of authenticity (English & John, 2013; Impett et al., 2012). Other work suggests that when people subordinate their own needs to resolve conflict—again, a behavior that may occur when one self-silences—they report lower authenticity (Neff & Harter, 2002). With such findings as a backdrop, our fourth aim was to examine whether self-silencing may lower relational authenticity and, in turn, whether such reduced feelings of authenticity are associated with greater conflict. In other words, we sought to test if lowered relational authenticity might help explain the counterintuitive possibility that selfsilencing may worsen, rather than help people avoid, conflict. Accordingly, we examined the

association between self-silencing and relational authenticity, as well as the link between relational authenticity and conflict.

Importantly, we note that engaging in relationship behaviors that do not reflect one's immediate thoughts, feelings, needs, and desires does not automatically decrease relational authenticity, particularly when motivated by higher-order goals. For example, research has shown that subordinating personal needs felt authentic when individuals reported doing so out of concern for their partner, but felt inauthentic when they reported being motivated to avoid future conflict (Neff & Harter, 2002). In an analogous vein, Impett and colleagues (Impett et al., 2013; Le & Impett, 2013) have shown that when people sacrifice for their relationship partners, whether this has positive or negative consequences for the relationship depends in part on the goals driving the sacrifice. Sacrifices motivated by approach goals (e.g., to create intimacy; to please one's partner) bolster authenticity, whereas those driven by avoidance goals (e.g., to not disappoint one's partner; to avoid conflict) decrease authenticity. Given that self-silencing is defined by conflict avoidance goals, we reasoned that, on average, it is likely to reduce subjective feelings of authenticity.

Are decreases in relational authenticity associated, in turn, with worse conflict outcomes? Though research on this question is limited, the small body of work that does exist supports the notion that lower authenticity has negative consequences for conflict. For example, in a daily diary study, individuals low (vs. high) in trait authenticity reported lower well-being on days they experienced interpersonal conflict and this effect persisted the following day (Wickham et al., 2016). More pointedly, this study also found that a component of trait authenticity (i.e., unbiased processing) was negatively correlated with the number of interpersonal conflicts reported across the study, suggesting that those higher in trait authenticity experience fewer instances of conflict in daily life. Thus, this research suggests that lower relational authenticity is likely to be associated with more damaging and more frequent conflict. Other work has examined the link between trait authenticity and conflict resolution strategies (Tou et al., 2015), finding that higher authenticity is related to more adaptive conflict resolution strategies, which would imply fewer subsequent instances of conflict. Overall, the current set of studies extends this work by examining both the link between self-silencing and relational authenticity, as well as that between lower relational authenticity and more and worse conflict.

# Considering the Dyadic Nature of Self-Silencing and Conflict

Relationships are dyadic experiences, making it critical to examine the ways in which one's own and one's partner's behaviors may uniquely affect each person's outcomes (Kenny, 2018; Kiecolt-Glaser & Newton, 2001; Troxel, 2010). Applied to the present studies, we examined whether an individual's conflict experiences would be affected by their partner's self-silencing. After all, contexts in which individuals self-silence are mostly (if not entirely) during interactions with their relationship partners.

As noted, to date only one study on self-silencing and conflict has included assessments from both partners in a romantic couple, with a focus on investigating the dyadic effects of self-silencing on relationship satisfaction (Harper & Welsh, 2007). These researchers found that those higher in trait-level self-silencing had partners who were coded as expressing greater frustration

and discomfort during a laboratory conflict conversation. Another study that interviewed only one member of the couple found that self-silencing behavior was often prompted by the emotions and behaviors of one's relationship partner, such as when one's partner is perceived to be in a negative mood (Ussher & Perz, 2010). These studies highlight the dyadic elements of self-silencing in romantic relationships. As such, they extend self-silencing theorizing, which has focused solely on the intrapersonal experiences and outcomes of the self-silencing individual. In the final study in the present research, we took a dyadic approach with the aim of shedding light on whether one romantic partner's self-silencing behavior influences not only their own experience of relationship conflict, but also their partner's.

# **Related Relationship Constructs and Behaviors**

A great deal of work, using focus groups and interviews, suggests that self-silencing is common within clinical samples and highlights the emotional and relational aspects of engaging in this behavior (Jack, 2001; London et al., 2012; Ussher & Perz, 2010). However, this work has been largely silent on how self-silencing is related to other relationship constructs and behaviors, both in people's minds and in practice. Do people distinguish between self-silencing and other relationship constructs and behaviors? Is self-silencing associated with outcomes such as conflict and relational authenticity beyond other related constructs? Among various possibly related relationship constructs and behaviors, we focused on two that seemed particularly relevant — self-disclosure and emotional suppression.

Research on self-disclosure, which is the act of revealing personal information to others (Archer & Burleson, 1980), focuses on the cultivation of intimacy and closeness between partners. Individuals who avoid self-disclosure feel less connected to their partners and are often perceived by partners as disinterested, uncaring, and distant (Laurenceau, Barrett, & Pietromonaco, 1998; Reis & Shaver, 1988). Arguably, self-silencing and avoiding self-disclosure are distinct constructs because while both involve limiting the amount of personal and emotional information that is shared with a partner, the theorized motivations for them differ. Whereas self-silencing is motivated by a desire to avoid conflict and relationship dissolution (Jack, 1991), avoiding self-disclosure stems from a desire to avoid intimacy and can even be used as a way to maintain higher social power (Sprecher & Hendrick, 2004; Murstein & Adler, 1995). Although some research has shown that relational authenticity is distinct from self-disclosure and that both have unique positive associations with relationship satisfaction (Rasco & Warner, 2017), self-silencing and self-disclosure have not yet been simultaneously examined as predictors of relationship outcomes.

Emotional suppression involves inhibiting expressive displays of emotion and has been largely cited as harmful for relationship development and maintenance (Velotti et al., 2016). Some research has shown that relational authenticity mediates the link between emotional suppression and relationship conflict and satisfaction (Impett et al., 2012), providing indirect support for our aforementioned proposition that lower authenticity is associated with more and worse conflict. Yet, theoretically, suppression and self-silencing are separable even though they may co-occur when one is trying to avoid conflict. To illustrate, imagine a time when someone verbally told you they were "fine", but their facial expression and behaviors indicated otherwise. In this situation, the person's negative emotional state is clearly displayed while they self-

silence. More generally, emotional suppression is theoretically narrower than self-silencing. Whereas suppression is specific to emotional expression, self-silencing encompasses feelings as well as thoughts and actions. Furthermore, there are multiple contexts and motivations for emotional suppression that fall outside the scope of close relationships and wanting to avoid conflict, such as the motivation to maintain one's position in a hierarchy in a professional setting (Pilch et al., 2018).

Overall, although self-silencing, self-disclosure, and emotional suppression are related, no published research has formally examined similarities and/or differences in their impact on relational authenticity and conflict, the primary outcomes of interest in the present studies. If these constructs are related but separable from self-silencing, it is important to determine whether self-silencing is uniquely associated with conflict and relational authenticity beyond any associations with self-disclosure and emotional suppression, which have received more attention in the literature. Thus, in our later studies, we test for the unique predictive effects of self-silencing. Additionally, we assessed lay beliefs about all three constructs, evaluating whether people see self-silencing as simply the absence of self-disclosure or if they see them as distinct behaviors, as well as whether people view self-silencing and emotional suppression as separable or as one in the same.

#### The Present Research: Overview and Predictions

Extant theorizing on self-silencing suggests that people engage in self-silencing because they believe it helps minimize relationship conflict. However, comprehensive examinations of the association between self-silencing and various indices of relationship conflict are lacking. To begin to fill this gap, we sought to address six main aims and questions related to the link between self-silencing and conflict and did so across four studies using multiple methods. As a first step, in Study 1 we (a) examined the prevalence of self-silencing behavior and the goals people hope to achieve by engaging in it; (b) assessed lay beliefs concerning the adaptiveness and authenticity of such behavior; and (c) compared the frequency of self-silencing behavior to that of other relationship constructs and behaviors (e.g., self-disclosure and emotional suppression).

In Study 2, we extended prior work on trait-level self-silencing by examining its cross-sectional associations with relational authenticity and conflict (including conflict frequency, the negativity of conflict interactions, and conflict resolution) in ongoing romantic relationships. Then, in Studies 3 and 4, with pre-registered data-analysis plans, we examined the bidirectionality of the association between self-silencing and conflict. Specifically, in Study 3 we examined the links between daily self-silencing and both daily relational authenticity and conflict, and did so both within and between people over the course of a 14-day diary study. For this study, we first tested greater self-silencing as a predictor of both greater conflict and lower relational authenticity. Then, using statistical mediation techniques, we examined if the proposed lower subjective feelings of relational authenticity brought about by greater daily self-silencing helped explain the self-silencing-to-conflict association. By placing lower daily relational authenticity in a statistical mediating role, we were able to test the direct association between self-silencing and relational authenticity, while simultaneously testing if lower relational authenticity is directly linked to greater conflict. In Study 4, we took a dyadic longitudinal

approach, obtaining responses from both partners in romantic couples over time. This study was run while couples were sheltering-in-place together during the COVID-19 pandemic. We reasoned that the forced close quarters during this time would provide a rich context in which to examine the link between self-silencing and conflict. This study allowed us to examine actor and partner effects of self-silencing on conflict both cross-sectionally and longitudinally.

Lastly, in an effort to distinguish self-silencing from related relationship constructs and behaviors, in Study 3 we examined the effects of self-silencing alongside those of self-disclosure, and in Study 4 we did so alongside those of emotional suppression.

#### Study 1

Study 1 addressed our first aim by examining how frequently people self-silence, lay beliefs about the adaptiveness of engaging in such behavior, and the goals people seek to achieve when they choose to self-silence in their close relationships. In line with existing research, we expected to see variation in the tendency to self-silence but that, on average, it would not be a rare relationship behavior. Consistent with extant theorizing, we also anticipated that people generally see self-silencing as an adaptive way to minimize conflict and as a behavior that can benefit their relationships.

Study 1 also had several secondary goals. First, as an initial assessment of how selfsilencing may be linked to lower relational authenticity, we examined the perceived authenticity of engaging in self-silencing behavior. We expected that, on average, people view self-silencing as a relatively inauthentic behavior. Moreover, considering our theorizing that the association between self-silencing and conflict is likely bidirectional, we thought it was critical to also examine lay beliefs in the other direction—that is, whether people believe that during conflict self-silencing is a way to avoid making things worse. We also took an initial look at the degree to which self-silencing is related to, but distinct from, emotional suppression and self-disclosure. In this first study, we were also able to include measures of self-concealment, which refers to actively hiding negative or distressing personal information from others (Larson & Chastain, 1990), and stonewalling, which is intentionally shutting down an argument by refusing to communicate with the other person (Gottman, 1994), as other potentially related constructs that bear some resemblance to self-silencing and have been discussed in the relationships literature. Both self-concealment and stonewalling have been linked to negative outcomes such as lower commitment and relationship satisfaction (Uysal et al., 2012) and divorce (Gottman & Levenson, 2000). Lastly, given that the self-silencing literature on sex/gender differences has been mixed and nuanced (Remen et al., 2002; Ussher & Perz, 2010), we explored potential sex differences but did not have any strong, a priori predictions.

#### Method

**Participants and Procedure.** Participants were community adults (N=388) from the U.S. who were recruited using Amazon's Mechanical Turk (MTurk) to take a survey about how they believe people behave in their close relationships. All participants were required to be located in the United States, be fluent in English, and be between the ages of 18 and 65. A total of 525 MTurk HITS were posted and data were excluded from 137 participants due to inattentiveness (i.e. failing 5+ out of 6 attention checks) or because they completed the survey despite not

meeting the aforementioned inclusion criteria. Participants were 53% female, 46% male, and 1% non-binary, on average they were 37.67 (SD=11.3) years old, and were 77% White, 8% Black, 7% Asian, 6% Latinx, and 2% identified as Other. MTurk filters recommended for improving data quality were followed such that individuals could only participate if they had successfully completed at least 95% of at least 1000 previous MTurk HITS (Peer et al., 2014). We decided that the sample size for this study should be at least 250 based on a power analysis (>.80) for the median effect size (r=.21) in social-personality psychology (Richard et al., 2003), but deliberately oversampled in order to increase statistical power.

In the survey, participants were first presented with paraphrased definitions of different relationship concepts (see Measures below) and were asked to rate how frequently they engaged in each behavior. Participants then responded to items tapping their lay beliefs concerning the adaptiveness, authenticity, and goals associated with self-silencing.

#### Measures

**Frequency ratings.** Definitions for self-silencing, self-disclosure, emotional suppression, self-concealment, and stonewalling were provided to participants who were then asked to rate how frequently they engaged in each on a 7-point scale ranging from *not at all* (1) to *all the time* (7). Definitions presented to participants were as follows:

*Self-Silencing* (Jack, 1991) is "inhibiting one's self-expression and action to avoid conflict with another person and the possible loss of one's relationship with that person".

Self-Disclosure (Archer & Burleson, 1980) is "the act of revealing personal information to others".

Emotional Suppression (Gross & Levenson, 1993) the conscious inhibition of one's own emotional expressive behavior". It aims to "mask or change the expression of the already formed emotion".

*Self-Concealment* (Larson & Chastain, 1990) is "the active concealment of personal information (thoughts, feelings, actions, or events) that is highly intimate and negative in valence".

Stonewalling (Gottman, 1994) is "removing oneself from an interaction in a manner that conveys disapproval, icy distance, and smugness".

Adaptiveness of self-silencing. Participants responded to three items assessing the extent to which they believe in the adaptiveness of self-silencing. Specifically, they were asked to indicate their level of agreement with the following statements: (1) "Sometimes it is just best to self-silence with someone I am close to"; (2) "Instead of fighting over every disagreement, I think it is wise to sometimes self-silence"; and (3) "No matter how big or small a disagreement is, there is never a good reason to self-silence" (reverse-scored). Participants were asked to rate their agreement with each item on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). Items were averaged together to create a single score ( $\alpha$ =.80), with higher numbers corresponding to the lay belief that self-silencing is an adaptive relationship behavior.

Goals of self-silencing. Three items were used to assess the goals participants are trying to achieve when they engage in self-silencing. Individuals can try to "avoid conflict" via self-

silencing in multiple ways—for example, self-silencing can be used with the goal of trying to prevent a conflict from ever occurring, to deescalate the intensity of a current argument, or to immediately end an argument. As such, we presented participants with three different items, each starting with the stem, "Generally speaking, if you were to engage in self-silencing (i.e., keep your true thoughts and feelings to yourself) to avoid conflict with someone you are close to, it would be mostly to...": (1) "Prevent an argument from starting in the first place"; (2) "Decrease the intensity of an ongoing argument in order to continue talking more calmly"; and (3) "Immediately end an argument, even if that means the issue is left unresolved". Participants were asked to indicate their level of agreement with each of the above items on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7).

Authenticity of self-silencing. Participants were shown four items to assess the extent to which they believed self-silencing constituted authentic or inauthentic behavior. Specifically, they rated their agreement with: (1) "If I self-silence with those close to me to avoid an argument, then I'm not being true to myself"; (2) "To be an authentic person, I can't self-silence during an argument"; (3) "Being authentic in my close relationships means saying exactly how I feel, even if it hurts the other person"; and (4) "I can censor what I say to those close to me during an argument and still feel like I'm being true to myself" (reverse-scored). Participants rated their level of agreement with each item on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). Items were averaged together to create a single score ( $\alpha$ =.78), with higher numbers corresponding to the lay belief that self-silencing is an inauthentic behavior.

#### Results

#### **Frequency Ratings**

Descriptive statistics and zero-order correlations for frequency ratings and self-silencing lay beliefs are presented in Table 1. As anticipated, people reported using self-silencing in their relationships with moderate frequency (*M*=3.79 out of 7), although there clearly are individual differences (*SD*=1.36), as can be seen in Figure 1's violin plots of all frequency rating distributions. Also, as anticipated, engaging in self-silencing was negatively correlated with the use of self-disclosure while it was positively correlated with the use of suppression, self-concealment, and stonewalling. These correlations ranged from -.18 to .64, suggesting that self-silencing overlaps in varying degrees with other relationship constructs and behaviors in terms of frequency of use. However, even for the most highly overlapping construct (emotional suppression), the two variables only shared 40% of their variance, suggesting that self-silencing is a distinct construct and is not always used in conjunction with emotional suppression.

**Table 1.** *Correlatic* 

		Frequency Ratings Self-Silencing Lay Beliefs	F	Frequency Ratings	ıgs		Self-Silencing Lay Beliefs	g Lay Beliefs	Si	Self-Silencing Goals	is .
	Mean (SD)	Self- Silencing	Self- Disclosure	Self- Conceal- ment	Emotional Suppression	Stone- walling	Belief in SS's Adaptive- ness	Belief in SS's Authentic-	Prevent conflict from beginning	Deescalate conflict intensity	End conflict regardless of resolution
Frequency Ratings											
Self-Silencing	3.79 (1.36)	ł									
Self- Disclosure	4.71 (1.32)	18***	ł								
Self- Concealment	3.55 (1.35)	.63***	26***	I							
Emotional Suppression	3.53 (1.35)	.64***	28***	.64***	I						
Stonewalling	2.71 (1.36)	.41***	13*	.42***	.43***	ŀ					
Self-Silencing Lay Beliefs											
Belief in SS's Adaptiveness	4.97 (1.17)	.34***	02	.26***	.22***	.00	ł				
Belief in SS's Authenticity	4.00 (1.21)	19***	.01	15**	06	.03	48***	ŀ			
Self-Silencing Goals											
Prevent conflict from beginning	5.68 (1.24)	.04	.13**	.06	.09	10	.37***	13*	ı		
Deescalate conflict	5.50 (1.26)	.02	.15**	06	.06	11*	.18***	.00	.40***	i	
End conflict regardless of resolution	4.56 (1.61)	.16**	09	.16**	.14**	.10	.17***	.00	.35***	.29***	

Sex Differences

and remaies	between males	T-tests
		1
p = 0.24	=-1.18,	t(371.38)
p=0.42	=81,	t(378.75)
p=0.21	=-1.25,	t(380.17)
p=0.79	=27,	t(370.47)
p=0.63	=48,	t(377.44)
p=0.18	=-1.36,	t(375.37)
p=0.08	= 1.78,	t(372.68)

t(372.47)= -.83, p=0.41

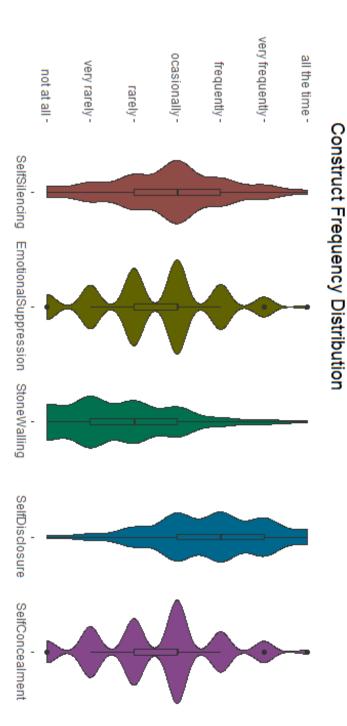
t(370.39)= -1.43, p=0.15

t(371.45)= -1.42, p=0.16

*p*<.05\*, *p*<.01\*\*, *p*<.001\*\*\*

Figure 1.

Relationship Construct Frequency Distribution in Study 1



Given self-silencing was first conceived of as a common behavior for women, in this and all subsequent studies, we looked for potential sex differences. However, as noted, evidence for sex/gender differences in self-silencing has been mixed and nuanced, and thus we did not have strong, a priori predictions. In the current study, we found that men and women did not differ on their frequency of self-silencing use, nor on their frequency of use for any of the other constructs measured.

# **Lay Beliefs**

In terms of lay beliefs about self-silencing, we found that participants indicated moderate to strong beliefs in self-silencing's adaptiveness (M=4.97; SD=1.7). Essentially, people tend to believe that self-silencing is a behavior that can potentially benefit their close relationships. As would be expected, the more people believe self-silencing is an adaptive relationship behavior, the more frequently they engaged in it, r=.34, p<.001.

Next, we examined responses to the three items assessing the goals people may hold when engaging in self-silencing and found that people have varying goals in mind. Specifically, participants showed fairly high endorsement of using self-silencing to "prevent arguments from starting" (M=5.68; SD=1.24) and as a way to "decrease the intensity of an ongoing argument" (M=5.50; SD=1.26). They endorsed using self-silencing to "immediately end an argument, even if that means the issue is left unresolved" to lower but still moderate degree (M=4.56; SD=1.61).

Interestingly, we found that greater frequency of self-silencing was modestly positively correlated with using self-silencing to end arguments even at the cost of conflict resolution, r=.16, p<.01, whereas it was unrelated to argument prevention (r=.04, p=.38) and argument deescalation, r=.02, p=.75. Overall, these findings suggest that people have varying goals in mind when they use self-silencing to minimize conflict. Interestingly, though regrettably, it may be that those who use self-silencing the most frequently often do so with a maladaptive goal in mind — to end arguments at the expense of conflict resolution.

Finally, on the index of people's beliefs about whether self-silencing is an inauthentic behavior, the average fell at the midpoint (M=4.0, SD=1.21). To explore this further, we examined the distribution of scores and found that they were normally distributed, as opposed to bimodally distributed, which suggests that people's views are mixed when it comes to the perceived authenticity of self-silencing behavior. Interestingly, frequency of self-silencing was negatively correlated with perceptions of self-silencing's authenticity (r=-.19, p<.001), suggesting that those who engage in the behavior the most frequently are less inclined to view self-silencing as inauthentic.

#### **Discussion**

In sum, Study 1's findings largely fit expectations. The results demonstrate that self-silencing is a common behavior within close relationships. Additionally, self-silencing appears to be used with similar frequency among women and men and there is a moderate to strong lay belief that self-silencing is a generally adaptive relationship behavior. We also found that people hold various goals when engaging in self-silencing to avoid conflict, including to prevent conflict, de-escalate conflict intensity, and to end conflict at all costs. It should be noted that each

of the self-silencing goal items were endorsed above the midpoint, but only self-silencing to end conflict at all costs was positively correlated with self-silencing frequency. Why is it that those who self-silence with the goal of ending conflict regardless of conflict resolution are also the same individuals who tend to self-silence the most? Consider our hypothesis that self-silencing and conflict may be bidirectional. It may be that those who are in highly conflictual relationships are also the individuals who are most likely to use self-silencing as a means of ending conflict at the expense of conflict resolution. Rather than working towards conflict resolution, self-silencing may set couples up for more conflict in the future and thus perpetuate a vicious cycle. Though clearly only an initial finding, it does suggest the importance of examining the bidirectionality of the association between self-silencing and conflict.

Study 1 also revealed that lay beliefs about self-silencing's authenticity were mixed, supporting the notion mentioned in the Introduction that engaging in self-silencing may not always constitute inauthentic behavior. Of course, we cannot know for sure what the thought processes were behind participants' ratings. Mixed scores could suggest that participants believe self-silencing can be an authentic form of self-expression in some situations, but inauthentic in others. Alternatively, mixed scores could suggest that participants believe that engaging in self-silencing is neither entirely inauthentic nor entirely authentic behavior. Regardless of interpretation, lay beliefs about the authenticity of self-silencing were negatively correlated with self-silencing frequency, suggesting that those who more strongly believe self-silencing may constitute inauthentic behavior engage in it less frequently.

Finally, the findings suggest that self-silencing is a distinct relationship behavior, but that it is related to various other relationship constructs and behaviors in expected ways. Specifically, the frequency with which participants reported engaging in self-silencing was positively associated with their frequency of engaging in emotional suppression, stonewalling, and self-concealment and negatively associated with self-disclosure frequency.

Overall, Study 1's results underscore the importance of self-silencing research in general, insofar as people reported engaging in self-silencing with moderate frequency on average, and very few people reporting that they never engage in self-silencing. They also suggest the worthiness of examining the link between self-silencing and conflict, as people tend to believe self-silencing is an adaptive relationship behavior, yet this belief might not always hold true in practice.

#### Study 2

The purpose of Study 2 was twofold: (1) to provide a first test of our hypothesis that, contrary to lay beliefs, self-silencing is associated with worse conflict outcomes, including higher frequency and more negatively-valenced conflict; and (2) to evaluate whether reduced relational authenticity might be associated with both greater self-silencing and more conflict. We used a cross-sectional design in which we assessed trait-level self-silencing and relational authenticity as well as global levels of relationship conflict. In addition, as a more concrete means of ascertaining the nature of the association between self-silencing and conflict, we asked participants to recall a specific instance in which they engaged in self-silencing. We reasoned this would be possible for most participants and should reflect participants' typical self-silencing

experiences with their current partner, given that in Study 1 we found that most people reported having self-silenced at some point in their relationships. Participants then completed a series of ratings about their recalled episode, and independent coders rated these episodes along various dimensions (e.g., valence of the episode and importance of the conflict topic). Lastly, as in Study 1, we asked participants about self-silencing goals as they pertain to their current romantic relationship, using similar items for conflict prevention, de-escalation, and to end conflict regardless of resolution.

#### Method

**Participants and Procedure.** Data were collected across two different occasions, approximately 5 months apart. Procedures were identical across both samples, and here we present the findings for the two samples combined<sup>1</sup>. Participants were community adults (N=536) who were currently in romantic relationships and were recruited to participate via MTurk. The same MTurk filters and inclusion/exclusion criteria that were used in Study 1 were applied. Participants completed measures of self-silencing, relationship conflict, and relational authenticity. Then, participants were asked to recall and write about a specific time in their current relationship when they used self-silencing and answered questions regarding the recalled experience. In total, 700 MTurk HITS were posted and data were excluded from 164 participants due to inattentiveness or for not meeting the inclusion criteria. Participants were 53% male and 47% female and were 79% White, 7% Black, 7% Asian, 6% Latinx, and 1% Other. On average, they were 35.24(SD= 9.71) years old and had been in their current relationship for 7.61(SD= 8.29 years, Range = 1 month – 16 years). Most participants identified as heterosexual (91%), and 5% were bisexual, 3% homosexual, and 1% Other.

#### Measures

**Self-silencing.** Self-silencing was assessed using the Self-Silencing subscale from the Silencing the Self Scale (Jack & Dill, 1992)<sup>2</sup>. The subscale includes nine items that asks individuals how much they inhibit self-expression to avoid conflict and the possible loss of their current relationship. Participants rated their level of agreement with each item using a 5-point scale ranging from *strongly disagree* (1) to *strongly agree* (5) and responses were summed to create a single score ( $\alpha$ =.87), where higher scores indicate higher levels of self-silencing (M=23.4; SD=7.68). Sample item: "I don't speak my feelings to my partner when I know they will cause disagreement".

**Conflict.** Global levels of relationship conflict were assessed using six items designed to measure the amount of conflict an individual perceives experiencing in their relationship

<sup>&</sup>lt;sup>1</sup> Analyses were first run separately for each sample and results were consistent. Here we present the results from the combined samples for efficiency. Samples were not significantly different from one another as indicated by independent samples t-tests when examining age, sex, relationship length, sexual orientation, self-silencing, relational authenticity, or relationship satisfaction. However, a small difference was observed for mean levels of conflict. The means(sds) for conflict scale scores were 2.56(1.21) and 2.79(1.22) for samples one and two respectively, t(513.54) = -2.15, p = 0.032.

<sup>&</sup>lt;sup>2</sup> Only the Self-Silencing subscale was used from the broader Silencing the Self Scale which contains four subscales in total. Each subscale taps into a different aspect of self-silencing, but the subscale used in this study is the only subscale specific to conflict avoidance.

(Gordon & Chen, 2016). Participants rated their level of agreement with each item using a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). Sample items include: "My partner and I have a lot of disagreements" and "I am often irritated by my partner." Responses were averaged ( $\alpha$ =.86), with higher scores indicated greater relationship conflict (M=2.67; SD=1.22).

Relational authenticity. Global levels of relational authenticity were assessed using five face-valid items to assess how authentic individuals feel when interacting with their current relationship partner. Participants rated their level of agreement with each item using a 7-point scale ranging from *completely disagree* (1) to *completely agree* (7). Sample items include: "I change myself to get along with my partner (reverse coded)" and "I can be myself with my partner." Responses were averaged ( $\alpha$ =.88), with higher scores corresponding to higher relational authenticity (M=5.71; SD=1.24).

**Self-silencing recall task.** Participants were asked to recall and write a few sentences about a specific time in their relationship when they engaged in self-silencing and then to complete several questions about this event. Specifically, they were presented with the following prompt and then asked to rate the degree to which the recalled conflict topic is now resolved. To make these ratings, one sample used a 5-point scale from *strongly disagree* (1) to *strongly agree* (5) while the other used a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). Ratings from the two samples were z-scored before combining the two samples.

It is normal for couples to experience conflict within their relationship from time to time. Arguments are likely to happen multiple times over the course of a relationship, but the strategies people use when faced with relationship conflict often vary from situation to situation. One strategy is to withhold opinions and thoughts from a partner and to try not to express argumentative feelings and emotions. In doing so, perhaps a particular argument can be completely avoided or quickly ended. Think back to a time in your relationship when you have kept your thoughts, opinions and/or feelings to yourself in the context of an argument. Please write a few sentences below explaining the situation and WHY you chose to keep your thoughts, opinions and/or feelings to yourself.

Responses were read by trained research assistants and assigned codes to filter out unusable responses. Across both samples, 98 responses (18%) were excluded: 72 because the participant wrote about self-silencing in their relationship generally as opposed to writing about a specific event, 13 because the participant indicated they never self-silence in their relationship, and 13 because the event the participant recalled was not with their current romantic partner. It is worth noting that although 18% of our sample did not recall a specific self-silencing event with their current partner, 98% were able to recall a self-silencing experience of some kind, supporting our notion that self-silencing is a common relationship behavior.

The remaining recall responses (n=438) were independently coded by four research assistants. The valence (i.e., how positive vs. negative) of the conflict episode and importance of the conflict topic were each coded using a 4-point rating scale, with higher scores indicating more positively-valenced recalls and greater importance of the conflict topic (see

[https://osf.io/sd9xn/] for the full coding scheme). Interrater reliabilities between coders were high, ranging from .83 to .99 across samples.

Goals of self-silencing. After participants completed their recalls, they were presented with the stem, "In general, when you keep things to yourself to avoid conflict with your partner it is mostly to..." (1) "Prevent an argument from starting"; (2) "Decrease the intensity of an ongoing argument"; and (3) "Immediately end an argument, and move on to a new topic". To make these ratings, one sample used a 5-point scale from *strongly disagree* (1) to *strongly agree* (5) while the other used a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). Ratings from the two samples were z-scored before combining them.

#### **Results**

# **Trait-Level Analyses**

We did not find sex differences in self-silencing scores, suggesting once again that self-silencing is a common relationship phenomenon among both males and females. Bivariate correlations are presented below the diagonal of Table 2. As predicted, trait-level self-silencing was positively correlated with global levels of conflict (r=.33, p<.001), and negatively correlated with relational authenticity (r=-.53, p<.001). We also found that relational authenticity was negatively correlated with conflict (r=-.60, p<.001).

# **Recalled Self-Silencing Event Analyses**

We reasoned that participants were likely to recall episodes that reflected their typical self-silencing behavior, and therefore were interested in how trait-level self-silencing may be associated with participants' rating of conflict resolution and coders' ratings of conflict valence for the recalled self-silencing episode. Coders' ratings of the importance of the conflict topic were significantly correlated with both participants' ratings of conflict resolution (r=-.16, p<.01) and coders' ratings of conflict valence (r=-.24, p<.001). Thus, in the upper diagonal of Table 2, we present partial correlations for the association between trait-level self-silencing and conflict resolution, as well as for trait-level self-silencing and conflict valence, with ratings of conflict importance partialed out.

Among those who provided a specific recalled episode, we found that trait-level self-silencing remained negatively correlated with conflict resolution, even when the rated importance of the conflict topic was partialed out. A similar pattern emerged for conflict valence, suggesting that those higher in trait-level self-silencing tended to have recalled episodes that were coded as higher in negative valence.

	Self- Silencing	Global F Conflict A	Relational Authenticity	Participant rating of	ant Coder rating Cod of of conflict of	Coder rating of conflict	Prevent conflict from beginning		self-silencing Goals  t Deescalate conflict
Trait Level Constructs				resolution		mponance			
Self-Silencing	ł			12*	19***				
Global Conflict	.33***	;							
Relational Authenticity	53***	60***	ŀ	.20***	.18***				
Self-Silencing Recall Task									
Participant rating of conflict	12*	30***	.21***	I					
resolution Coder rating of conflict valence	18**	21***	.19**	.23***	I				
Coder rating of conflict topic importance Self-Silencing Goals	.01	.09	05	16**	24***	ŀ			
Prevent conflict from	.25***	.03	05	01	13**	07		1	!
beginning	.18***	.08	05	.05	11*	.01	.4	7**	
conflict									.47***

Sex Differences

		and remaies	between males	T-tests
		p = 0.05	= -1.99,	t(496.93)
		p=0.68	= .41,	t(495.39)
		p=0.78	= .28,	t(505.52)
higher	males	p < .001	=-3.40,	t(430.87)
		p=0.25	=-1.16,	t(435.54)
higher	females	p < .001	= 3.72,	t(431.61)
		p=0.47	=73,	t(508.97)
		p=0.87	=17,	t(515.43)
		p = 0.41	=82,	t(518.50)

*p*<.05\*, *p*<.01\*\*, *p*<.001\*

of this table compare mean level differences between males and females. self-silencing and coders' ratings of conflict valence, c) trait level relational authenticity and participants' ratings of conflict resolution, and d) trait level relational authenticity and coders' ratings of conflict valence. Gender differences presented at the bottom partialled out from the correlations between a) trait level self-silencing and participants' ratings of conflict resolution, b) trait level because this rating was significantly correlated with both conflict resolution and conflict valence, conflict topic importance was presented in the upper diagonal. The self-silencing event that participants recalled were coded for conflict topic importance, and *Note.* This table presents bivariate correlations within the below diagonal for all variables assessed in Study 2. Partial correlations are Next, we examined partial correlations reflecting how trait-level relational authenticity may be associated with conflict resolution and valence with ratings of conflict topic importance partialed out. Trait-level relational authenticity remained positively correlated with both conflict resolution and valence after ratings of conflict topic importance were partialed out. These results suggest that those higher in trait-level relational authenticity reported greater conflict resolution of their recalled episode and tended to recall episodes that were rated as more positively-valenced by coders. Results for these partial correlations can be found above the diagonal of Table 2. Overall, these findings suggest that higher trait-level self-silencing and lower relational authenticity are both associated with worse conflict outcomes, namely, lower conflict resolution and more negatively-valenced conflict.

# **Self-Silencing Goals**

Lastly, we followed up on our findings from Study 1 by examining how trait-level self-silencing, relational authenticity, and global conflict may be associated with individuals' self-silencing goals in their current romantic relationships. In line with Study 1's findings, all three self-silencing goals – prevention (r=.25, p<.001), de-escalation (r=.18, p<001), and ending conflict (r=.21, p<.001) – were positively correlated with trait-level self-silencing. Self-silencing to end conflict was associated with higher levels of global conflict (r=.10, p<.05) and lower relational authenticity (r=-.09, p<.05), while prevention and de-escalation were not significantly associated with either (rs ranged from -.05 - .08, all ps >.10). However, both self-silencing to prevent conflict (r=.-13, p<.01) and to de-escalate conflict intensity (r=-.1, p<05) were negatively correlated with the conflict valence, suggesting that self-silencing with these goals in mind may be associated with more negatively-valenced conflict experiences.

#### **Discussion**

In sum, contrary to the lay beliefs assessed in Study 1—indicating that people tend to believe self-silencing mitigates conflict in their relationships—Study 2 shows that higher self-silencing is related to worse conflict outcomes (i.e., more frequent experiences of conflict and less conflict resolution, as well as more negativity in the context of concrete episodes of self-silencing). Consistent with Study 1's findings on self-silencing and relational authenticity, we found that people higher in trait self-silencing report lower relational authenticity, and lower relational authenticity was also associated with worse conflict outcomes. Self-silencing to end conflict was the only self-silencing goal associated with higher global levels of conflict, further suggesting the merit of testing the bidirectionality of the association between self-silencing and conflict.

Together, Studies 1 and 2 provide cross-sectional support for our hypothesis that self-silencing is linked to worse conflict and is consistent with our bidirectionality hypothesis. To provide a stronger test of these hypotheses, in Study 3 we used a daily diary design that enabled us to directly examine bidirectionality and to test if reduced relational authenticity might help explain why self-silencing predicts more and worse conflict. Additionally, in Study 3 we began testing the association between self-silencing and conflict alongside related constructs, in particular self-disclosure.

# Study 3

To date, previous studies have focused on between-person effects of self-silencing. In addition, except for one dissertation (Clark, 2015), we have not found any studies that use daily diary methodology to investigate self-silencing. In Study 2, in line with prior work, we found between-person differences such that individuals higher in trait self-silencing reported experiencing higher global levels of conflict and recalled specific self-silencing experiences that were coded as more negatively valenced. However, our findings from both Studies 1 and 2 suggest that most people use self-silencing at least occasionally in their relationships. Thus, Study 3 extends our initial findings, and the self-silencing literature more generally, by directly measuring within-person variation to (a) test the possibility that self-silencing behavior fluctuates from day to day; and (b) examine whether these daily fluctuations may be related to conflict and relational authenticity. To examine whether self-silencing is related to conflict and relational authenticity in daily life, we pre-registered a data analysis plan and used a pre-existing dataset from a 14-day diary study<sup>1</sup>. As in Studies 1 and 2, our primary predictions were that selfsilencing would be positively associated with conflict and negatively associated with relational authenticity. Specifically, we hypothesized that on days when individuals self-silenced more than their typical amount, they would report more conflict and lower relational authenticity.

Another strength of using daily diary methodology is that it allows us to test for bidirectionality in the relationship between self-silencing and conflict. Given that both of our prior studies suggest people try to use self-silencing as a means of preventing conflict from arising and as a way to end or de-escalate an existing conflict, we reasoned that self-silencing and conflict may be bidirectionally associated. Testing this required assessing both variables over time and using a series of lagged analyses. In our first series of lagged analyses, we sought to test if any observed daily variation effects held while controlling for the previous day's outcome. This lagged analysis approach tests if today's variables predict change in today's outcome variable relative to yesterday. Our second series of lagged analyses sought to predict tomorrow's outcome from today's variables. Additionally, we examined whether lower relational authenticity would help explain the self-silencing-to-conflict association. In both series of lagged analyses, we tested the reverse direction, anticipating evidence of bidirectional links, such that greater conflict would predict greater self-silencing in the future.

Study 3 had one additional aim. As a means of further clarifying the association between self-silencing and conflict, we examined this association alongside one of the constructs assessed in Study 1—namely, self-disclosure. In effect, we sought to test whether self-silencing is simply the absence of self-disclosure or if the two are independent constructs and predictors of conflict and relational authenticity. Prior research has found relational authenticity to be positively correlated with self-disclosure, which was then associated with greater commitment, relationship satisfaction, and personal well-being one month later (Brunell et al., 2010). Thus, we anticipated that daily self-disclosure would be positively associated with daily relational authenticity. However, since no prior work has been conducted simultaneously evaluating self-silencing and self-disclosure, we did not have clear predictions regarding how each may be uniquely related to conflict and relational authenticity.

<sup>&</sup>lt;sup>1</sup> Data from this pre-existing dataset has never been published. Further, the self-silencing data within this dataset had never been previously analyzed.

#### Method

**Participants and Procedure.** Participants were undergraduates (N=111) who were currently in a romantic relationship and were recruited to participate in a 14-day diary study in exchange for course credit. Nightly diaries were electronically sent each evening at 6:00 pm and participants were instructed to complete the diary before going to sleep each night. Diaries asked about their experiences with their romantic partner each day including their self-silencing behavior, relational authenticity, self-disclosure, and levels of conflict. Data were filtered based on a priori exclusion criteria. Specifically, diary entries that were not completed between 6:00 pm the day that the diary was sent and 8:00 am the following morning were excluded. Additionally, to further ensure the quality of the data, diary entries that were completed very close to together in time (even if within the appropriate timeframe) were excluded because this indicated that entries for different days were completed on the same day. After applying filters, 1,046 observations remained within a sample of 109 participants. On average, participants provided 9.51(SD=5.18) days of useable data across the 14-day period. Participants were on average 20.36(SD=2.63) years old, 81% female and 19% male. The sample was predominately Asian (49%), 20% White, 19% Hispanic, 2% Black, and 10% identified as Other. Most of the participants identified as heterosexual (93%), with 2% identifying as homosexual and 5% identifying as bisexual, and had been in their current romantic relationship for an average of two years (SD=23.75 months, Range = 1 month - 10 years).

#### Measures

The daily diary measurements were kept brief to maintain participant motivation and maximize responses (Reis & Gable, 2000).

**Daily self-silencing.** Participants answered a single item each night to assess daily self-silencing—"How much did you keep your opinions to yourself to avoid conflict or disagreement with your partner today?" Responses were measured on a 5-point scale from *Not at all* (1) to *Completely* (5).

**Daily conflict.** Conflict was assessed each night using the average of two items: (1) "Did you and your partner experience conflict in your relationship today?", measured on a 5-point scale from *We did not experience any conflict today* (1) to *We experienced a lot of conflict today*(5); and (2) "How much did you and your partner experience differences of opinion today?", both measured on a 5-point scale from *Not at all* (1) to *Very much* (5). Participants' mean responses for these two items were highly correlated (r=.75, p<.001).

**Daily relational authenticity.** Relational authenticity was assessed using a single item—"How much did you feel like you could be your true self in your relationship today?"—measured on a 5-point scale from *Not at all* (1) to *Completely* (5).

**Daily self-disclosure.** Self-disclosure was assessed using a single item—"How much did you disclose personal information about yourself to your partner today?"—measured on a 5-point scale from *Did not disclose at all* (1) to *Disclosed completely* (5).

# **Data Analysis Plan**

Analyses were done according to a pre-registered data analysis plan [https://osf.io/7hdkc]². Given daily reports were nested within participants, multilevel modeling was used to account for the non-independence of these data. We used a two-level model, in which days were nested within individuals. The nlme package in R was used to model the autocorrelations inherent in the error structure of the daily diary data. To unconfound within-person and between-person effects, predictors were person-centered. In our daily variation models, person-centered predictors were simultaneously included in the models alongside each person's average value for that variable. This technique allowed us to test whether between-person differences in self-silencing as well as day-to-day fluctuations around a participant's own mean level of self-silencing predict conflict. Full random effects models were tested first. If full random models failed to converge, random effects that were unable to be computed due to lack of variance were removed. The final syntax for all analyses can be found on the project's OSF page.

Next, two series of lagged analyses were conducted to test for bidirectionality and to determine if daily variation effects remained over time. First, we reran our daily variation models, but this time controlling for prior levels of the outcome variable and removing the mean. For example, we constructed a model that predicted today's conflict from today's self-silencing while controlling for yesterday's conflict, effectively testing whether self-silencing today predicts changes in conflict relative to yesterday. In our second series of lagged analyses, we predicted tomorrow's outcomes from today's variables. In these models, a participant's outcome variable today—for example, conflict today—was included in the model as a control variable along with the predictors of interest, today's self-silencing in this case, predicting the outcome tomorrow. In each of these series of lagged analyses, self-silencing and conflict were both examined as the outcome variable to test for bidirectionality.

Finally, we conducted a 1-1-1 mediation assessing within-person mediation with daily relational authenticity placed in the mediating role between daily self-silencing and daily conflict. This multilevel mediational analysis allowed us to test if reduced relational authenticity brought about by greater daily self-silencing can help explain the self-silencing-to-conflict link. Furthermore, by placing daily relational authenticity in a mediating role, we were able to examine the direct association between self-silencing and relational authenticity, while simultaneously testing if relational authenticity is directly linked to daily conflict. Due to the potential nonnormality of the underlying distributions for the indirect effects, 95% confidence intervals were calculated using simulated repeated sampling to assess the significance of the indirect effects. We used the freely available online calculator developed by Preacher and Selig (2010) for R Studio. This method, known as the Monte Carlo approach, was first used by

<sup>&</sup>lt;sup>2</sup> Sensitivity analyses excluding diary entries that had very little variability were also pre-registered. For example, participants provided nightly ratings of 25 different emotions on a 5-point scale from (1) *Not at all* to (5) *A lot*. Entries in which participants rated experiencing all emotions equally were excluded (i.e., have 0 variance on all emotions). Additionally, we excluded data at the participant level if a participant failed to comply with the diary instructions for over 50% of the assessments (e.g., often completed multiple diaries on the same day and/or often completed diaries outside the above time range). The results of these analyses conducted with these additional exclusions are consistent with the analyses reported in the main section of this paper.

MacKinnon, Lockwood, and Williams (2004) and was then adapted by Bauer et al. (2006) for multilevel mediation.

#### Results

# **Descriptive Statistics**

Table 3 provides descriptive statistics and both within- and between-person correlations of our study variables. Variances in primary study variables were examined by inspecting the intra-class coefficient (ICC) based on an unconditional random coefficient model (Bolger & Laurenceau, 2013). Daily self-silencing yielded an ICC of .30 indicating that approximately 30% of the variance in self-silencing was contained within-persons. This suggests that self-silencing can be conceptualized as both a trait and state construct when evaluating mean and daily levels respectively. ICCs of other study variables are presented in Table 3.

Seventy-nine percent of participants reported self-silencing to some degree during the diary period and 86% reported experiencing at least some conflict. We tested for sex differences in mean levels of self-silencing use across the 14-day period and, consistent with Studies 1 and 2, we found that males and females did not differ in their use of self-silencing, t(30.91)=0.45, p=0.65; however, it should be noted that only 19% of the sample identified as male.

Within- and Between-Person Correlations among Daily Measures and Intra-Class Coefficients in Study 3 Table 3.

	Daily Self- Silencing	Daily Conflict	Daily Relational Authenticity	Daily Self- Disclosure	Between-Person Mean (SD)	Gender Differences
Daily Self- Silencing	.30	.32	19	20	1.72 (.75)	t(30.91)=0.45, p=0.65
Daily Conflict	.31	.26	15	12	1.64 (.61)	t(20.74) = -0.57, p=0.58
Daily Relational Authenticity	28	.01	.31	.43	4.08 (.78)	t(24.74) = -1.59, p=0.12
Daily Self- Disclosure	18	.01	.28	.52	3.22 (1.0)	t(24.50) = -2.37, $p=0.03$ females higher

and intra-class coefficients are bolded and presented along the diagonal. To obtain between-person correlations we aggregated Note. Within-person correlations are presented in the upper diagonal, between-person correlations are presented in the lower diagonal, participants' daily measures and used these means to conduct bivariate correlations. The gender differences presented at the bottom of this table also use participants' aggregated data and compare mean level differences between males and females.

#### **Daily Variation Results**

Table 4 provides the statistics for all daily variation multilevel models.

**Self-Silencing and Conflict.** Our first hypothesis concerned how self-silencing may be associated with daily relationship conflict. Consistent with our predictions, we found that on days when people self-silenced more than they typically did across the 14-day period, they also reported experiencing higher levels of conflict, suggesting that self-silencing and conflict are positively associated in daily life. Additionally, we also observed between-person effects such that individuals who tended to self-silence more on average reported experiencing more conflict in daily life relative to those who tended to self-silence less.<sup>3</sup>

Self-Silencing and Relational Authenticity. Our second hypothesis concerned the association between self-silencing and daily feelings of relational authenticity. Consistent with our predictions, we found that on days when people self-silenced more than they typically did across the 14-day period, they reported experiencing lower levels of relational authenticity. Between-person effects were not observed, suggesting that there is no strong evidence that individuals who tend to self-silence more necessarily feel less authentic in their relationships on a daily basis compared to those who tend to self-silence less.

**Self-Silencing and Self-Disclosure.** In an exploratory analysis, self-silencing and self-disclosure were modeled as simultaneous predictors of daily conflict to explore if these variables had unique associations with daily conflict. When entered as simultaneous predictors, only self-silencing predicted daily conflict. Both the within-person and between-person effects for self-silencing on conflict remained significant while controlling for self-disclosure. In contrast, self-disclosure appeared to have neither within-person nor between-person effects on daily conflict when controlling for self-silencing. These results clearly suggest that self-silencing is not merely the absence of self-disclosure.

Next, we explored whether self-silencing and self-disclosure had unique associations with relational authenticity. Results indicated that, when entered as simultaneous predictors, each had within-person effects on relational authenticity. Similar to our other daily variation models, self-silencing was negatively associated with relational authenticity at the within-person level but was unrelated at the between-person level. Self-disclosure was positively associated with relational authenticity both at the within- and between-person levels. These results suggest that on days when individuals self-disclose to their partners more than their typical amount, they report higher relational authenticity, and that those with a higher mean level of self-disclosure experience greater relational authenticity in their daily lives. But most pertinent to the present purposes, the fact that self-silencing and self-disclosure had unique associations with relational authenticity further supports the independence of the two constructs.

<sup>&</sup>lt;sup>3</sup> The interaction between mean and daily level self-silencing was also tested and yielded a marginal result, b=-.13, d = -.13, t(918)=-2.00, p=.045. Thus, we refrain from interpreting this association.

Table 4.

Daily Variation Multilevel Models in Study 3

,		•								
			Mode	Model Estimates	<b>5</b> 2				l }	!
							95% CI	CI	Effect Size	t Size
		Estimate	SE	DF	t	Sig	Lower	Upper	d	partial r
Confirmatory Daily Variation	Daily Variation									
IVc					1 <i>d</i>	DV: Daily Conflict	Conflict			
	Mean Self-Silencing	0.33	0.07	105	4.74	0000	0.19	0.47	0.93	.42
1		1		) !	) :	) !	) !			2
Da	Daily Self-Silencing	0.27	0.04	919	6.25	.000	0.19	0.36	0.41	.20
				D	V: Daily	Relation	al Auther	ıticity		
Me	Mean Self-Silencing	-0.16	0.10	105	-1.52	0.13	-0.36	0.05	0.30	.15
Da	Daily Self-Silencing	-0.22	0.05	920	4.13	.000	-0.32	0 -4.13 .000 -0.32 -0.11	0.27	.13
Exploratory Daily Variation Models	ily Variation									
IVs					1 <i>d</i>	DV: Daily Conflict	Conflict			
Me	Mean Self-Silencing	0.34	0.07	104	4.75	.000	0.20	0.48	0.93	.42
Da	Daily Self-Silencing	0.29	0.04	913	7.01	.000	0.21	13 7.01 .000 0.21 0.38	0.46	.23
Mea	Mean Self-Disclosure	0.01	0.05	104	.21	0.83	-0.09	0.11	0.04	.02
Dail	Daily Self-Disclosure	0.08	0.04	913	1.88	0.06	-0.00	0.17	0.12	.06
				D	V: Daily	Relation	al Auther	ıticity		
Me	Mean Self-Silencing	-0.03	.10	104	-0.33	0.74	-0.22	0.16	0.06	.03
Da	Daily Self-Silencing	-0.18	0.05	914	-3.61	.000	-0.27	-0.08	0.24	.12
Mea	Mean Self-Disclosure	0.34	0.07	104	4.82	.000	0.20	0.47	0.95	.43
Dail	Daily Self-Disclosure	0.19	0.05	914	3.92	.000	0.10	0.29	0.26	.13

each participant's own average. *Note.* The between-person effect is represented by mean levels which were obtained by aggregating participants' daily scores across the 14-day diary period. The within-person effect is represented by daily levels which were person-centered to reflect deviations from

#### Over Time and Bidirectional Analyses

Next, we tested the series of lagged models to examine if self-silencing and conflict are linked over time and to understand if these effects are bidirectional in nature. First, following prior research testing daily variation effects over time (e.g., Algoe et al., 2010; Arpin et al., 2018), in our first series of lagged analyses we predicted conflict from self-silencing that day, controlling for conflict the prior day. In our second series of lagged analyses we predicted today's conflict from self-silencing the *prior* day while controlling for conflict the prior day (Bolger et al., 2003; Bolger & Laurenceau, 2013). Each approach has its strengths and weaknesses and employing both allowed us to examine different ways in which self-silencing and conflict may be linked over time. The strength of the first approach is that it enabled us to examine whether self-silencing predicts changes in conflict from one day to the next and rules out the possibility that greater levels of conflict one day are contributing to greater conflict and self-silencing the next day. The trade-off in using this approach is that because conflict and selfsilencing are assessed on the same day, it affords less precision when it comes to accessing the temporal dynamics of these processes, leaving us unableto speak to how rapidly or slowly these processes may be unfolding over time. Precision is the strength of the latter approach because it uses self-silencing one day to predict conflict the next day, removing any confound of measuring self-silencing and conflict on the same day. However, this level of precision may also be viewed as a weakness because it explicitly tests whether the self-silencing-to-conflict link occurs over the course of a very specific time-frame –namely, it assumes that this process unfolds overnight, which may or may not be accurate. Table 5 provides the statistics for all over time and bidirectional multilevel models.

**Table 5.**Over Time and Bidirectional Multilevel Models in Study 3

		Mode	Model Estimates	S		95% CI	CI	Effect Size	Size
	Estimate	SE	DF	t	Sig	Lower	Upper	<i>d</i>	partial r
Self-Silencing Predicting									
Conflict Over Time									
Lagged Analysis Series 1				DV: L	DV: Daily Conflict	lict			
Daily Self-Silencing	0.25	0.05	667	4.64	.000	0.14	0.35	0.36	.18
Lagged Conflict	0.08	0.05	667	1.50	0.13	-0.02	0.16	0.12	.06
Lagged Analysis Series 2				DV: L	DV: Daily Conflict	lict			
Lagged Self-Silencing	0.22	0.05	666	0.49	0.62	-0.07	0.11	0.04	.02
Lagged Conflict	0.13	0.05	666	2.51	0.01	0.03	0.24	0.19	.09
Conflict Predicting Self- Silencing Over Time									
Lagged Analysis Series 1				DV: Dail	DV: Daily Self-Silencing	ncing			
Daily Conflict	0.30	0.06	669	5.32	.000	0.19	0.41	0.41	.20
Lagged Self-Silencing	0.13	0.04	669	3.34	.000	0.05	0.21	0.26	.13
Lagged Analysis Series 2				DV: Dail	DV: Daily Self-Silencing	ncing			
Lagged Conflict	-0.00	0.05	669	-0.04	0.97	-0.10	0.10	-0.00	00
Lagged Self-Silencing	0.19	0.04	669	4.41	.000	0.11	0.28	0.34	.17

outcome variable today was included in the model as a control variable along with the person-centered predictor of interest. Selfvariable. In the second series of lagged analyses, we predicted tomorrow's outcome from today's variables such that a participant's silencing and conflict were both examined as the outcome variable to test for bidirectionality. person-centered predictor and yesterday's outcome variable were included in the model simultaneously to predict today's outcome Note. We utilized two different approaches to conduct a series of lagged analyses. In the first series of lagged analyses, today's Self-Silencing Predicting Conflict Over Time. As part of our first series of lagged analyses we tested if daily variation effects remained over time when controlling for the prior day's level of conflict. Results indicated that the within-person effects of self-silencing on conflict that same day remained while controlling for the prior day's conflict. We can interpret these within-person results as the unit change in today's level of conflict that is not explained by yesterday's conflict levels. This indicates that greater self-silencing today is associated with an increase in conflict today relative to the previous day. These results also tell us that the association between today's self-silencing and conflict cannot be explained by greater levels of conflict the previous day.

Next, we examined if today's self-silencing predicted greater conflict the following day (tomorrow), while controlling for today's conflict. Results yielded only a positive autoregressive effect for conflict; today's self-silencing did not predict an increase in conflict from today to tomorrow.

Conflict Predicting Self-Silencing Over Time. To test for bidirectionality we turned to conducting lagged analyses in the conflict-to-self-silencing direction. Analogous to the other direction, in our first series of lagged analyses we examined if daily variation effects of conflict on self-silencing emerged over time by controlling for the prior day's level of self-silencing. Results indicated positive within-person effects of conflict while controlling for the prior day's self-silencing. These results support our bidirectional hypotheses such that increases in daily levels of conflict were positively associated with increases in today's self-silencing relative to the previous day, above and beyond the positive effect of the prior day's self-silencing.

Lastly, we also examined if greater conflict today predicted more self-silencing the following day (tomorrow), while controlling for today's self-silencing. Similar to the other direction, results yielded only a positive autoregressive effect for self-silencing and no association for conflict.

Multilevel Mediation Analysis. Given our finding that greater self-silencing can predict change in conflict from the prior day, we sought to provide further explanation for this effect. To do so, we utilized 1-1-1 mediation techniques for multilevel modeling (Bolger & Laurenceau, 2013) to test if daily relational authenticity functioned as a mediator for the within-person effects of self-silencing on conflict and to test for a direct effect between lower relational authenticity and greater conflict. Results are summarized in Figure 2, in which the previous day's conflict and time<sup>4</sup> were entered as covariates in the model. A major strength of 1-1-1 mediation analysis is that it allows us to describe the mediation effect for the average person (i.e., fixed effects), as well as obtain estimates for how much variation exists around that average (i.e., random effects) by assessing separate mediational processes for each individual in the sample.

As shown in Figure 2, we found evidence to suggest that daily self-silencing may have a positive indirect effect on daily conflict through lowered daily relational authenticity, even after controlling for the prior day's conflict. Consistent with our previous analyses, we saw negative

<sup>&</sup>lt;sup>4</sup> It is possible that the effects we observed are changing in similar ways over time, thus we have accounted for time by controlling for the day of the diary.

fixed effects for both self-silencing on relational authenticity (i.e., the 'a' path) and relational authenticity on conflict (i.e., the 'b' path), where the average slopes are b = -.25, SE = .06 and b = -.18, SE = .05, respectively. In 1-1-1 mediation, the average indirect effect is comprised of the ab path product and the covariance between individuals' a and b paths ( $\sigma_{aj,bj}$ ) which yielded an average indirect effect of .06, 95% CI[.0047,.1165]. This suggests that 24%<sup>5</sup> of the overall average association between daily self-silencing and increases in conflict is explained by decreases in relational authenticity.

We also see evidence for a positive direct effect of self-silencing on conflict (b = .19, SE=.05). This suggests that for the average individual, even after adjusting for relational authenticity and time, an increase in daily self-silencing predicts an increase in conflict relative to the previous day.

Next, we turn to the random effects that describe how much variation exists around each path. The random effect associated with the 'a' path,  $SD(a_i) = .14$ , suggests that there is moderate variation in the path from self-silencing to relational authenticity. In other words, while increases in daily self-silencing tend to be associated with decreases in daily relational authenticity for the average person, this pattern may not hold true for everyone in the sample, supporting the notion that self-silencing does not automatically lower relational authenticity. In contrast, the random effect associated with the 'b' path,  $SD(b_i) = .05$ , suggests that there is very little variation in the negative association between relational authenticity and conflict, and that this pattern of results holds true for most people in the sample. Examining the covariance between individuals' a and b paths indicates that 26% of the mediated effect is accounted for by the covariance between the a and b paths,  $\sigma_{ai,bi} = .01$ . This suggests that the individuals who experience stronger decreases in relational authenticity when they self-silence are the same individuals for whom lowered relational authenticity produces the strongest association with increased daily conflict. Lastly, we see that the random effect associated with the c' path,  $SD(c'_i) = .05$ , suggests that there is very little variation in the direct effect from self-silencing to conflict. In other words, for most people in the sample, an increase in daily self-silencing predicts an increase in conflict relative to the previous day.

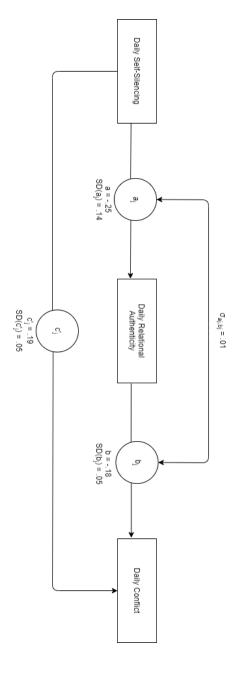
Taken together, Study 3 provided some evidence to suggest the positive effect of self-silencing on daily conflict over time may be explained in part by lowered relational authenticity. Importantly, while there is decent variation in how much self-silencing may decrease an individual's feelings of relational authenticity, it seems that lowered authenticity predicts increased conflict for most people. Lastly, we found that even after adjusting for relational authenticity, increases in self-silencing directly predicted increased conflict relative to the previous day.

<sup>&</sup>lt;sup>5</sup> This value can be found by dividing the indirect effect by the total effect. The total effect is  $c' + (a*b) + \sigma a_i b_i$ 

<sup>&</sup>lt;sup>6</sup> This value can be found by dividing the covariance of the a and b paths by the indirect effect.

Figure 2.

for the Previous Day's Conflict. 111 Multilevel Mediation for the Effect of Daily Self-Silencing on Daily Conflict via Daily Relational Authenticity while controlling



silencing on conflict was, b = .19, SE = .05, suggesting that for the average individual, even after adjusting for daily relational daily self-silencing and increases in conflict is explained by decreases in relational authenticity. The positive direct effect of selfaverage indirect effect of .06, 95% CI[.0047,.1165], suggesting that approximately 24% of the overall average association between effect for the 'b' path (i.e., daily relational authenticity to daily conflict) was b = -.18, SE = .05. In 1-1-1 mediation, the average mediator variable, daily conflict as the dependent variable, and with the previous day's conflict and dairy day included as control *Note.* This mediation was conducted with daily self-silencing as the primary independent variable, daily relational authenticity as the authenticity and time, an increase in daily self-silencing predicts an increase in conflict relative to the previous day indirect effect is comprised of the ab path product and the covariance between individuals' a and b paths (oaj,bj) which yielded an variables. The fixed effect for the 'a' path (i.e., daily self-silencing to daily relational authenticity) was b = -.25, SE = .06 and the fixed

# **Discussion**

Using intensive longitudinal methodology, Study 3 yielded further support for our preregistered primary hypothesis that greater self-silencing is related to more conflict. Replicating our Study 2 results, we found between-person differences such that individuals with higher mean levels of self-silencing reported experiencing greater relationship conflict in their daily lives. Study 3's results also revealed that approximately 30% of the variance of self-silencing was at the within-person level, indicating that an individual's self-silencing behavior fluctuates from day to day. Indeed, on days when individuals self-silenced more than their typical amount, they experienced greater conflict and lower relational authenticity. Although within-person effects of self-silencing on relational authenticity were found at the daily level, it is important to note that between-person effects were not observed. That is, higher mean levels of self-silencing were not associated with lower daily relational authenticity, which is in line with our Study 1 findings suggesting that not everyone believes self-silencing is an inauthentic behavior. Moreover, the absence of a between-person effect of self-silencing on daily relational authenticity is consistent with previous research in related areas—namely, studies on sacrifice and accommodation behaviors (Impett et al., 2013; Van Lange et al., 1997)—suggesting that subjective feelings of authenticity might hinge more on the motivation underlying relationship behavior rather than simply the behavior itself. When it came to how relational authenticity and conflict may be linked, we used 1-1-1 statistical mediation techniques and found that lower daily relational authenticity was associated with greater daily conflict. Specifically, the results yielded evidence consistent with the possibility that the effect of self-silencing on conflict may in part be due to decreases in daily relational authenticity. In conjunction with the findings from Study 2, we posit that lower relational authenticity renders conflict resolution less likely, thus perhaps prolonging and intensifying arguments. These results provide some insight as to why self-silencing may be positively associated with conflict, while also adding to the small body of empirical work that links lower authenticity to greater relationship conflict.

Turning to our two series of lagged analyses, in the first we observed some evidence to suggest that self-silencing may influence conflict over time. Specifically, when we tested if daily variation effects remained while controlling for the previous day's outcome, we found that self-silencing more than one's typical amount predicted increases in daily conflict relative to the previous day, providing some evidence to suggest that these effects remain over time. Then, when we used this same approach to test the self-silencing-to-conflict link in the other direction, we found evidence in support of bidirectionality such that experiences of conflict were associated with increases in self-silencing while controlling for the previous day's self-silencing.

In our second series of lagged analyses, however, we did not observe significant results in either direction. That is, we did not find evidence to suggest that one's own self-silencing today directly increases one's personal experience of conflict tomorrow, nor that experiencing conflict today predicts an increase in self-silencing tomorrow. Why is it that our first series of lagged analyses produced positive, significant results in both directions while our second series of lagged analyses did not? Perhaps this discrepancy reflects the nature of how these processes unfold over time. As mentioned above, by nature of having the predictor and outcome variables on consecutive days, the second lagged approach specifically tests if the self-silencing-to-conflict link unfolds over the course of 24 hours. The null results produced by this approach suggests that

the exact time course in which the self-silencing-to-conflict link unfolds remains unknown. Taken together, the results from our lagged analyses suggest that self-silencing and conflict may be positively linked over time, but that more research is needed to determine exact time course of these processes.

Lastly, while self-silencing and self-disclosure are related, we found that they are independent constructs. Only self-silencing had an effect on conflict, whereas both self-silencing and self-disclosure had unique effects on daily relational authenticity. In sum, Study 3 provides support for our hypotheses by demonstrating that within-person fluctuations in self-silencing predict increased conflict while also providing some evidence for bidirectionality and how these processes may be linked over time. To extend these findings, in Study 4 we focused on the self-silencing-to-conflict link over the course of a 3-week timeframe and used a dyadic sample. Additionally, in Study 4 we tested the association between self-silencing and conflict alongside the related construct of emotional suppression.

## Study 4

In Study 4, we pre-registered analyses using a longitudinal dyadic study in which we obtained responses from both members within a romantic couple at two different timepoints three weeks apart. We focused on the link between self-silencing and conflict within a novel setting—namely, during the beginning of the COVID-19 pandemic when many couples were sheltering-in-place.

The COVID-19 pandemic and resulting shelter-in-place orders are ripe for the study of relationship dynamics given that stressors and the sheer number of interactions are likely to be more frequent than under normal circumstances, both of which may create more "opportunities" for conflict to arise. Examining self-silencing and conflict from a dyadic perspective is critical given the inherently interpersonal nature of both of these constructs. Utilizing the Actor-Partner Interdependence Modeling (APIM) in a longitudinal design, we were able to examine within-person effects (actor effects) and cross-partner influences (partner effects). In other words, we were able to test if an individual's experience of conflict is predicted by their own levels of self-silencing as well as by their partner's levels of self-silencing, both cross-sectionally and over time. As in Study 3, we also tested the bidirectional relationship between self-silencing and conflict—investigating whether experiencing high amounts of conflict prompts individuals to self-silence more in the future.

Study 4 used a longer time frame than Study 3 to assess links between self-silencing and conflict, thus allowing us to examine time in a different, but complementary, way. Collectively, the results from Study 3's two series of lagged analyses suggest that self-silencing and conflict may be positively associated over time, but that a 24-period may not be the average time frame by which this link emerges. Could it be that the self-silencing-to-conflict link is more cumulative in nature? That is, perhaps the accumulation of multiple instances of self-silencing breeds future conflict more so than engaging in a single instance of self-silencing? In this vein, in Study 4 we tested if greater self-silencing (at Time 1) positively predicted increases in conflict 3 weeks later (at Time 2) – and did so for both actor and partner self-silencing. Relational authenticity was not

assessed in this study, so we were unable to further examine it, leaving our focus on the direct effect between self-silencing and conflict.

Lastly, continuing to tease the effect of self-silencing on conflict apart from the effects of other related constructs and behaviors, we investigated emotional suppression as a relevant covariate. In Study 1, we found that self-silencing and emotional suppression were positively correlated, and previous research has found that suppression predicts relationship conflict (Impett et al., 2012). Thus, it is important to examine how self-silencing and suppression may be associated with conflict concurrently. We specifically focused on negative emotion suppression since emotions such as anger, sadness, and frustration are particularly relevant within the context of conflict.

#### Method

Participants and Procedure. These data come from a larger pre-registered study that tracked cohabiting couples during the pandemic [https://osf.io/g9uby/]. We pre-registered a separate data analysis plan [https://osf.io/8zgm2/] specifically for this study. The data were collected via two different sources: (1) participants in Sample 1 were recruited via a link to the Time 1 (T1) survey posted on Social Media sites such as Facebook via private accounts and advertising; and (2) participants in Sample 2 were recruited via Prolific, an online participant pool, for the same T1 survey as well as a Time 2 (T2) survey collected 3 weeks later. To be eligible for the Social Media version participants needed to be 18 or older, currently cohabiting with a romantic partner, and living in either the United States or Canada. Eligibility for the Prolific version was limited to those living in the US and currently sheltering-in-place with their partner. Participants recruited via Social Media only completed T1, and all participants across the different sources completed the same items. When the samples were analyzed separately, they yielded similar results. Therefore, the data presented in the main text has been collapsed across samples, but separate sample analyses can be found in the supplemental materials.

In total, Time 1 consisted of 283 couples, while Time 2 consisted of 133 couples<sup>7</sup>. Based on a priori power analyses<sup>8</sup>, we aimed to collect 150 complete dyads which would provide us with adequate power ( $\geq$  80%) for cross-sectional dyadic analyses for effect sizes  $> \beta = .15$ . Participants in the combined sample were on average 35.48(SD=10.20) years old, 48.8% woman/female, 47.6% man/male, and 3.6% identified as another gender identity. The sample was predominantly White (80.7%), 10.6% Hispanic, 6.4% Asian, 4.6 % Black, 1.9% American Indian or Alaskan Native, 1.2% Middle Eastern, .2% Native Hawaiian or Pacific Islander, and 1.4% identified as Other. Most of the participants were in heterosexual relationships (90.1%) and

<sup>&</sup>lt;sup>7</sup> Time 1: Sample 1 consisted of 132 couples while Sample 2 consisted of 151 couples. Only Sample 2 included a Time 2 which consisted of 133 couples . Sample 1 was a convenience sample in which we aimed to collect as many participants as we could using a combination of free and minimal paid advertising on Facebook, while Sample 2 was collected via Prolific. For Sample 1, data collection ran for an entire year, but here we report only the results collected between April 20th and May 28th, 2020, to mirror the timeframe of Sample 2. The baseline assessment for Sample 2 ran for two weeks between April 19<sup>th</sup>, 2020 and May 4<sup>th</sup>, 2020.

<sup>&</sup>lt;sup>8</sup> Ackerman and Kenny's shiny app was used to compute dyadic power analyses (<a href="https://robert-a-ackerman.shinyapps.io/apimpower/">https://robert-a-ackerman.shinyapps.io/apimpower/</a>). An initial wave of data collection was run to determine the percentage of participants who generated dyadic data (i.e., got their partner to participate as well). About 1/3 of participants recruited their partners as well, thus we aimed to collect 450 primary participants and 150 partners.

had been in their current romantic relationship for an average of nine and a half years (SD=8.19 years, Range = 4 months – 47 years).

## Measures

**Self-Silencing.** Self-silencing was measured with the item "In the past week, how much have you kept your thoughts and opinions to yourself to avoid conflict or disagreement with your partner?". Responses were made using a 5-point scale ranging from (1) *Not at all* to (5) *Extremely.* Items were identical across time points.

**Conflict.** Conflict was measured with the item "In the past week, how much have you and your partner been fighting/arguing?" using a 5-point scale ranging from (1) *Not at all* to (5) *Extremely.* Items were identical across time points.

**Emotional Suppression.** Suppression of negative emotion was measured by providing participants with the stem "How do you deal with negative emotions?" and then asking them to rate "I keep my emotions to myself" on a 5-point scale ranging from (1) *Strongly disagree* to (5) *Strongly agree*. This item measured general tendencies as opposed to behavior over the past week and was only assessed at Time 1.

# **Data Analysis Plan**

Analyses were done according to the pre-registered data analysis plan [https://osf.io/8zgm2/]. Due to the dyadic nature of these data, analyses were conducted using multi-level modeling to account for the interdependence of dyads. Models were primarily run using the nlme package in R. We constructed models for indistinguishable dyads for three reasons: (1) these datasets contained same-sex couples, (2) sex differences were tested and not found in our previous studies, leaving us with no empirical basis to suggest that dyad members should be distinguishable on the basis of sex; and (3) these datasets included individuals who identified as non-binary and thus a binary model of sex was not sufficient for these data. However, we planned to test for sex differences on our key variables. Random intercepts were used across all models and actor and partner independent variables were grand-mean centered and included simultaneously in all models.

Due to the novelty and uncertainty surrounding how the COVID-19 pandemic and sheltering-in-place could affect the data we ran a number of sensitivity analyses. We chose to first test whether a predetermined list of COVID-19 variables (e.g., virus contraction, severity of symptoms, stress induced by pandemic conditions, etc.) correlated with self-silencing and/or conflict variables. If a COVID-19-specific variable was correlated at .20 or above with any of our key variables, we pre-registered to rerun the main analyses controlling for these additional variables. In these data, only severity of COVID-19 symptoms was associated with self-silencing and conflict (*rs* ranged from .13 - .38). However, only 9% of people in this dataset reported contracting the virus. For the final syntax of all analyses and a full list of all the COVID-19-specific variables we examined, see the project's OSF page.

#### Results

## **Descriptive Statistics**

Mean levels of self-silencing and conflict were similar across time points: T1 self-silencing, M=2.00(.96); T2 M=2.03(1.01), and T1 conflict, M=1.73(.76); T2 M=1.67(.78). Emotional suppression was only measured at T1 M=2.79(1.31). Additionally, in the subset of our sample with a longitudinal component, the within-person self-silencing correlation was r=.56, p<.001, suggesting that across three weeks there is evidence of moderate intrapersonal stability in self-silencing behavior. Across time points, 65% of participants indicated engaging in some degree of self-silencing and 57% of participants reported experiencing some conflict with their partner. Eighty-nine percent of participants reported suppressing their negative emotions from their partner.

Lastly, using the mean levels listed above, we tested for sex differences in self-silencing, conflict, and emotional suppression among participants who identified as man/male or woman/female. Sex differences did not arise at T1 for self-silencing, t(475.78)=1.96, p=0.05, or conflict, t(491.98)=1.15, p=0.25. At T2, we once again observed no sex differences for self-silencing, t(250.32)=.69, p=0.49, or conflict, t(247.21)=0.00, p=0.99. However, a sex difference was observed for emotional suppression, t(492.31)=7.33, p<0.001, such that males M=3.39(1.19) reported engaging in significantly higher levels of negative emotion suppression compared to females, M=2.58(1.28).

## **Actor-Partner Effects at Time 1**

The results presented in the main text only include individuals who did not report contracting COVID-19, and Table 7 provides the statistical results of these analyses. However, unless stated otherwise the same pattern of results held when including the full sample and controlling for the reported severity of COVID-19 symptoms. See this study's OSF page for these supplemental analyses.

**Self-Silencing and Conflict.** As shown in Table 7, and consistent with our predictions, we found that actors' and partners' self-silencing each had a unique positive effect on actors' reports of conflict. These findings suggest that people reported greater conflict over the past week if they self-silenced more. Above and beyond the effect of their own self-silencing, they also reported greater conflict if their partner self-silenced more.

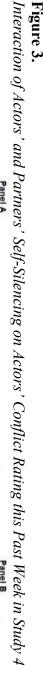
Next, we tested the interaction between actors' and partners' self-silencing on actors' conflict<sup>9</sup>. A significant interaction was observed, and the simple slopes were tested using the reghelper package in R Studio. The results of this interaction are depicted in Panel A of Figure 3. On the x-axis, we show actor's grand-mean centered level of self-silencing such that 0 represents the mean while negative numbers represent standard deviations below the mean and positive numbers represent standard deviations above the mean.

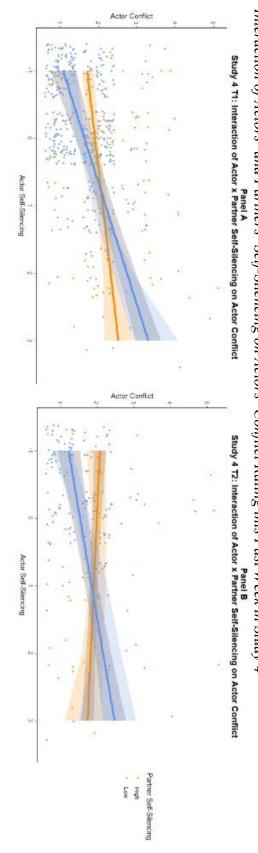
<sup>&</sup>lt;sup>9</sup> In Sample 1 the interaction term did not reach significance, interaction term: b = -.10(.07) t(115) = -1.46, p=.15. However, in Sample 2, a significant interaction effect was observed between actor's and partner's self-silencing on actor's reports of weekly conflict, interaction term: b = -.12(.04) t(138) = -2.70, p<.05. The significant interaction was observed again when the samples were combined, and those results are presented in Table 7 and depicted in Figure 3.

Table 7. Cross-sectional Multilevel APIM for Indistinguishable Dyads predicting Actors' Conflict rating this past week in Study 4

		Moc	Model Estimates	es		95% CI	CI	Effe	Effect Size
	Estimate	SE	DF	t	Sig	Lower Upper	Upper	d	partial r
Time $I = 254$ couples									
IVs				10	DV: Actor Conflict	Conflict			
Actor Self-Silencing	0.27	0.03	252	8.96	.000	0.21	0.33	1.13	.49
Partner Self-Silencing	0.12	0.03	252	3.93	.001	0.06	0.18	0.50	.24
IVs				D1	DV: Actor Conflict	Conflict			
Actor Self-Silencing	.30	0.03	251	9.53	.000	.24	.36	1.20	.51
Partner Self-Silencing	.14	0.03	251	4.61	.000	.08	.21	.58	.28
Actor*Partner Self-Silencing	:11	0.04	251	-3.08	.002	19	04	39	19
IVs				DI	DV: Actor Conflict	Conflict			
Actor Self-Silencing	0.28	0.03	249	8.98	.000	0.22	0.34	1.14	.50
Partner Self-Silencing	0.12	0.03	249	4.02	.000	0.06	0.18	0.51	.25
Actor Emotional Suppression	0.00	0.02	249	.11	0.91	-0.05	0.05	0.01	.00
Partner Emotional Suppression	-0.03	0.02	249	-1.20	023	000	0 00	-0.15	07

Note. Independent variables were grand-mean centered in all models so that the results reflect deviations from the sample mean.





results reflect deviations from the sample mean. conflict rating, while controlling for actors' T1 conflict rating. Independent variables in both models were grand-mean centered so that conflict rating. The right panel, Panel B, depicts the pattern of effects of actors' and partners' self-silencing at T1 on actors' T2 silencing in Study 4. The left panel, Panel A, depicts the pattern of effects of actors' and partners' self-silencing at T1 on actors' T1 Note. This figure depicts actors' ratings of conflict over the past week predicted by the interaction of actors' and partners' selfResults indicated significant positive simple slopes at both low and high levels of partner self-silencing (low= -1 SD; represented by the blue line, high = +1SD; represented by the orange line). The pattern of results found at low levels of partner self-silencing, b =.41(.05), t(251)=7.70, p<.001, suggest that conflict is lowest when both actor and partner are low in self-silencing, but that conflict rises as actor self-silencing increases. In other words, low partner self-silencing does not buffer the positive effect of high actor self-silencing on conflict. We also observed a positive slope when partners were high self-silencing, b =.19(.04), t(251)=4.56, p<.001. While this slope is comparatively flatter to the former one, it suggests that as actors' or partner's self-silencing increases so does actors' reports of conflict. Taken together, these results suggests that conflict is lowest when both partners are low in self-silencing, but that if even just one member of couple is high in self-silencing conflict levels rise.

**Self-Silencing and Emotional Suppression.** Next, we controlled for actors' and partners' emotional suppression and found that the effects of self-silencing on conflict for both the actor and partner remained whereas there were no effects of emotional suppression on conflict. This was true for both the main effects of actors' and partners' self-silencing as well as their interaction. These results can be found in Table 7.

## **Actor-Partner Effects Over Time**

Expanding on our findings from Study 3, we sought to test the effect of self-silencing on conflict over time and examine the potential bidirectionality of this effect in our subset of participants who had follow-up data. The statistical results are presented in Table 8.

**Self-Silencing Predicting Conflict Over Time.** The effects of actors' and partners' self-silencing at T1 were tested on actors' conflict one to three weeks later at T2. There was an over-time effect of partner self-silencing on conflict such that partners' self-silencing at T1 positively predicted actors' ratings of conflict at T2, while controlling for actors' levels of conflict at T1. In other words, people whose partners reported high levels of self-silencing at T1 were more likely to report increased conflict over time relative to people whose partners self-silenced less. Main effects for the actor were not observed over time, a point we return to below.

Next, similar to the analysis done for the cross-sectional models, we tested if the interaction of actors' and partners' self-silencing at T1 predicted actors' levels of conflict at T2, while controlling for actors' T1 conflict. Results are depicted in Panel B of Figure 3, and once again a significant interaction was observed, and the simple slopes were tested. Similarly to T1, the simple slopes were significant at both low and high levels of partner self-silencing (low= -1 SD; represented by the blue line, high = +1SD; represented by the orange line). At low levels of partner self-silencing, b = .18(.08), t(97)=7.70, p<.05, we see evidence to suggest that the same pattern of results observed at T1 holds over time. That is, conflict at T2 is lowest when both actor and partner were low in self-silencing at T1, but that low partner self-silencing at T1 is not enough to buffer the positive effect of high actor self-silencing on conflict at T2. Indeed, the data suggest that T2 conflict is actually highest when actors were high in self-silencing while their partners were low. Then, in contrast to the positive effect observed at T1 for high partner self-silencing, at T2 we observed a significant negative effect, b = ..10(.05), t(97)=-2.04, p<.05. This suggests that actors who were low in self-silencing at T1 but had partners who were high in self-silencing were likely to report higher conflict at T2. However, when both actors and partners

were high in self-silencing at T1, high partner self-silencing is the better predictor of conflict over time as evidenced by a non-significant main effect of actor self-silencing at T2. Taken together, this pattern of results suggests that partners' self-silencing plays an important role when longitudinally examining conflict. Moreover, in both graphs in Figure 3, conflict at both T1 and T2 were lowest when both actor and partner were low in self-silencing. Lastly, it should be noted that the data currently cannot explain why we observed the highest conflict levels when actors were high in self-silencing while partners were low in self-silencing, but we offer some speculation in the Discussion.

Conflict Predicting Self-Silencing Over Time. Next, we tested the bidirectionality of the self-silencing-to-conflict link by entering actors' and partners' ratings of conflict at Time 1 as predictors of the actor's self-silencing at Time 2, controlling for self-silencing at T1. There was evidence for a bidirectional effect; however, in contrast to the other direction, we only observed actor effects. Partner effects were not observed. The actor effect suggests that even when accounting for an individual's initial self-silencing levels and a partner's level of self-silencing, people who reported experiencing higher levels of conflict with their partner at Time 1 were more likely to experience increases in self-silencing three weeks later.

Lastly, we tested the interaction between actor and partner self-silencing at Time 1 on actor conflict at Time 2, but a significant interaction was not observed. These results can be found in the supplemental materials.

Table 8.

Over Time and Bidirectional APIM Multilevel Models for Indistinguishable Dyads in Study 4

		Mod	Model Estimates	ıtes		95% CI		Effec	Effect Size
	Estimate	SE	DF	t	Sig	Lower	Upper	d	partial r
Self-Silencing Predicting Conflict Over Time									
IVs				DV:Ac	tor's Tim	DV: Actor's Time 2 Conflict	ict		
Actor T1 Self-Silencing	-0.02	0.04	98	-0.40	0.69	-0.11	0.07	-0.08	04
Partner T1 Self-Silencing	0.10	0.04	98	2.47	0.02	0.02	0.19	0.50	.24
Actor T1 Conflict	0.61	0.07	98	8.80	0.00	0.47	0.75	1.78	.66
IVs				DV: Ac	tor's Tim	DV: Actor's Time 2 Conflict	ct		
Actor T1 Self-Silencing	.04	0.05	98	0.85	0.39	-0.05	.13	.17	.08
Partner T1 Self-Silencing	.16	0.04	98	3.53	.001	0.07	.24	.71	.33
Actor*Partner T1 Self-Silencing	15	0.05	99	-3.26	.002	-0.24	-0.06	-0.66	31
Actor T1 Conflict	.57	0.07	98	8.16	.000	.43	.70	1.65	.64
Conflict Predicting Self- Silencing Over Time									
IVs				DV: Actor	's Time 2	? Self-Sile	ncing		
Actor T1 Conflict	0.23	0.10		2.23	0.03	0.03	0.44	0.45	.22
Partner T1 Conflict	0.02	0.10	98	0.25 0.80 -0.17 0.22	0.80	-0.17	0.22	0.05	.02
Actor T1 Self-Silencing	0.50	0.06	98	7.99	.000	0.37	0.62	1.61	.63

controlling for actors' self-silencing at T1. direction, actors' and partners' self-silencing at T1 was used to predict actors' conflict at T2, while controlling for actors' conflict at models were grand-mean centered so that the results reflect deviations from the sample mean. To assess the self-silencing to conflict Note. T2 self-silencing and conflict were examined in separate models to test for bidirectionality and independent variables in all T1. In the conflict to self-silencing direction, actors' and partners' conflict at T1 was used to predict actors' self-silencing at T2, while

#### **Discussion**

Overall, these findings provide support for the bidirectionality of the association between self-silencing and conflict and highlights the importance of considering the dyad, especially when examining effects over time. Once again, we found that self-silencing and conflict are positively linked and, building on Study 3's daily diary findings, we found evidence to suggest that time plays an integral role in these processes. The results from Study 4 suggest that the effect of the self-silencing-to-conflict link may be cumulative and that, in addition to being observed concurrently, may unfold over a longer period of time, such as a few weeks.

Study 4 further contributes to the literature by utilizing dyadic methodology and points to how the self-silencing of each individual in a romantic couple may influence both couple members' experiences of conflict. In adding partners' rating of self-silencing, we were able to model a more complete picture of how these relationship dynamics may develop. Both Studies 3 and 4 found that actor self-silencing robustly predicted relationship conflict cross-sectionally, but by incorporating dyadic methodology in Study 4 we were able to uncover further nuances such that partner self-silencing may be an even stronger predictor of an actor's repots of future conflict. Moreover, the significant interactions found both cross-sectionally and over time between actor and partner self-silencing provide strong evidence to suggest that relationship conflict is lowest when both couple members are low in self-silencing, which is in line with our previous studies. However, interestingly, we observed that conflict was highest when actors were high in self-silencing and their partners were low. Given all the data we've presented thus far, why isn't conflict highest when both partners are high in self-silencing? We can only speculate, but a possible explanation could be that high self-silencing from both actors and partners may coincide with below average communication more generally. What is there to fight about if couples are not really engaging with each other? Another possible explanation is that being below average in self-silencing may not always be the most adaptive approach, especially when your partner is above average in self-silencing. To illustrate, imagine a scenario in which one person is saying every contentious thought that occurs to him/her without any "filter" and the other is constantly biting their tongue. Further research is needed to test both these possible explanations.

Lastly, Study 4 continued to separate the effect of self-silencing on conflict from the effects of other related constructs and behaviors. While Study 1 provided evidence to suggest that self-silencing and emotional suppression are related, when actors' and partners' self-reported emotional suppression were entered as covariates alongside actors' and partners' self-silencing, neither actor nor partner emotional suppression yielded unique effects on conflict.

## **General Discussion**

Conflict is primarily perceived as harmful to one's relationships and those seeking to maintain satisfying and high-quality romantic relationships often wish to avoid it. Self-silencing is one behavior that partners may engage in to try to evade conflict, yet research examining the association between self-silencing and conflict has been limited. The present research aimed to begin filling this gap by addressing six major aims across four studies using multiple methods,

including cross-sectional designs, daily diary methodology, and a dyadic longitudinal design. These six aims were:

**Aim 1:** Examine how frequently people engage in self-silencing and their lay beliefs about its adaptiveness (i.e., whether it helps people avoid conflict) and its authenticity

Aim 2: Test if self-silencing may actually be related to more and worse relationship conflict

Aim 3: Test for bidirectional links between self-silencing and conflict

**Aim 4:** Examine whether self-silencing may also lower subjective feelings of relational authenticity and if this might help explain the proposed counterintuitive association between self-silencing and worse conflict

**Aim 5:** Incorporate a dyadic approach examining the link between self-silencing and conflict **Aim 6:** Examine the effects of self-silencing alongside related constructs and processes (i.e., self-disclosure and emotional suppression) to ascertain the unique influence of self-silencing on conflict

## **Aims and Findings**

Although Aim 1 was the focus of Study 1, we found evidence across all studies to suggest that most people engage in self-silencing to avoid conflict at least to some degree. In Study 1 we found that, on average, people engage in self-silencing with moderate frequency (*M*=3.79 out of 7), although there is individual variability (*SD*=1.36). In Study 2, 98% percent of participants were able to recall a self-silencing experience with their current romantic partner, 79% of people in Study 3 reported self-silencing to some degree over the course of the 14-day diary study, and 65% of people reported self-silencing during the past week in Study 4. Furthermore, we did not observe sex differences in these figures, suggesting that self-silencing is a commonly engaged in behavior across men and women. These findings suggest that self-silencing behavior extends beyond clinical populations, which has been the focus of most early research on self-silencing.

Turning to Aim 1's focus on lay beliefs, Study 1 showed that the average person has a moderate to strong lay belief in self-silencing's adaptiveness (i.e., believes it can be used to avoid conflict), and engages in the behavior to achieve various goals related to avoiding conflict (e.g., immediately end an argument, even at the cost of conflict resolution). Not surprisingly, the more people hold such beliefs, the more they report engaging in self-silencing. In Study 2, higher trait self-silencing was positively correlated with all three goals related to avoiding conflict that were assessed. In terms of lay beliefs associated with the authenticity of self-silencing, Study 1 participants' ratings fell at the midpoint, suggesting that people's views may be mixed when it comes to the perceived authenticity of self-silencing. Still, quite sensibly, the less participants viewed self-silencing to be inauthentic, the more they reported engaging in the behavior. Together, these findings set the stage for examining whether perceptions of the adaptiveness and authenticity of self-silencing mirror what actually unfolds when people self-silence.

Studies 2-4 provided evidence consistent with Aim 2, testing whether self-silencing is actually associated with more and worse relationship conflict, contrary to lay beliefs about its adaptiveness. Study 2 showed that higher trait-level self-silencing was positively correlated with more frequent and negatively-valenced episodes of conflict, and negatively correlated with conflict resolution of a recalled episode of self-silencing—associations which all held while

controlling for the importance of the conflict topic. In Study 3 we found both within- and between-person effects of daily self-silencing on daily conflict, suggesting that self-silencing more than one's typical amount is associated with higher levels of conflict that day, and that those who self-silence more on average likely experience more conflict in daily life relative to those who self-silence less. Additionally, Study 3's 1-1-1 mediation results revealed that the positive association between daily fluctuations in self-silencing and conflict held even after adjusting for lower relational authenticity and time, suggesting that an increase in daily self-silencing predicts an increase in conflict relative to the previous day. Also, in Study 3's 1-1-1 mediation, the random effect associated with c' was quite small, suggesting that there is very little variation in the direct effect from self-silencing to conflict. In other words, for most people in Study 3's sample, an increase in daily self-silencing predicts an increase in conflict relative to the previous day. Lastly, in Study 4 the positive association between self-silencing and conflict was replicated both cross-sectionally and longitudinally.

Aim 3, which focused on bidirectionality, was examined in Studies 3 and 4, both of which provided some evidence for bidirectional links between self-silencing and conflict. In Study 3, we conducted a series of lagged analyses and observed positive effects in both directions suggesting that greater self-silencing today is associated with an increase in conflict today relative to the previous day and that an increase in conflict today is associated with an increase in self-silencing today relative to the previous day. However, another series of lagged analyses in which we examined if today's self-silencing predicted greater conflict the following day (tomorrow), while controlling for today's conflict, only yielded a positive autoregressive effect for conflict. In other words, today's self-silencing did not predict changes in conflict from today to tomorrow. Similarly, when we examined if greater conflict today predicted more selfsilencing the following day (tomorrow), while controlling for today's self-silencing, only a positive autoregressive effect for self-silencing emerged. Thus, today's conflict did not predict an increase in self-silencing from today to tomorrow. We will consider the divergence of Study 3's two sets of lagged analyses in discussing limitations and future directions below. In Study 4, in addition to showing the influence of T1 actor and partner self-silencing on T2 actor conflict (see Aim 5 below), this study also tested for bidirectionality by examining the influence of T1 actor and partner conflict on T2 actor self-silencing. Actor, but not partner, conflict predicted T2 actor self-silencing (controlling for T1 actor self-silencing), constituting evidence for the bidirectionality of actor effects in the link between self-silencing and conflict.

Aim 4 examined whether self-silencing may also lower subjective feelings of relational authenticity and if this might help explain the proposed counterintuitive association between self-silencing and worse conflict. Consistent with these possibilities, in Study 2 we found that trait self-silencing was negatively correlated with relational authenticity, and that relational authenticity was negatively correlated with conflict. Trait-level relational authenticity also positively predicted both conflict resolution and positive valence of the recalled self-silencing episodes, while controlling for the rated importance of the conflict topic. Also consistent with a self-silencing-to-relational-authenticity link, in Study 3 we found that on days when people self-silenced more than they typically did across the 14-day period, they reported experiencing lower levels of relational authenticity; however, between-person effects were not observed. Study 3's 1-1-1 mediation also yielded evidence suggesting that daily self-silencing may have a positive indirect effect on daily conflict through lowered daily relational authenticity, even after

controlling for the previous day's conflict. Interestingly, the moderate variation in the random effect for the self-silencing-to-relational-authenticity path in Study 3's 1-1-1 mediation suggests that while increases in daily self-silencing tend to be associated with decreases in daily relational authenticity for the average person, this pattern may not hold true for everyone, supporting the notion that self-silencing does not automatically lower relational authenticity. On the other hand, there was very little variation in the negative association between relational authenticity and conflict, supporting the idea that lower relational authenticity is associated with increased conflict for most people.

To address Aim 5, Study 4 incorporated a dyadic approach to examine the link between self-silencing and conflict and found that actors' and partners' self-silencing each had a unique positive effect on actors' reports of conflict. These findings suggest that people reported greater conflict over the past week if they self-silenced more. Cross-sectionally, Above and beyond the effect of their own self-silencing, actors also reported greater conflict if their partner selfsilenced more. Then in Study 4's longitudinal component, the main effects of actors' and partners' self-silencing at T1 were tested on actors' conflict three weeks later at T2. There was an over-time main effect of partner, but not actor, self-silencing such that partner's self-silencing at T1 positively predicted actor's ratings of conflict at T2, while controlling for actor's levels of conflict at T1. In other words, people whose partners reported high levels of self-silencing at T1 were more likely to experience increased conflict over time relative to people whose partners self-silenced less. Future research is needed to understand why only partner but not actor effects emerged for self-silencing on conflict over time. However, the results from our interaction analyses offer some insights and show the value of incorporating a longitudinal dyadic perspective. Specifically, at both time points we found that conflict was lowest when both actor and partner were low in self-silencing and that conflict was highest when the actor was high and the partner was low. The finding that conflict is lowest when both actor and partner are low in self-silencing is in line with previous research, but we can only speculate as to why we observed the highest levels of conflict when couples were mismatched in their self-silencing levels.

Finally, several studies addressed Aim 6, which was to examine the effects of selfsilencing alongside related constructs and processes to ascertain the unique influence of selfsilencing on conflict. First, Study 1 showed that engaging in self-silencing was negatively correlated with the use of self-disclosure, while it was positively correlated with the use of suppression, self-concealment, and stonewalling. These correlations ranged from -. 18 to .64, suggesting that self-silencing overlaps in varying degrees with other relationship constructs and behaviors in terms of frequency of use, but that self-silencing remains relatively distinct. In Study 3, we put daily self-silencing and daily self-disclosure as simultaneous predictors of conflict and relational authenticity in two separate analyses. While daily self-silencing continued to predict daily conflict, the same was not true of daily self-disclosure. Both daily self-silencing and daily self-disclosure continued to predict relational authenticity, indicating they have unique associations with relational authenticity and further supporting the independence of self-silencing and self-disclosure. Then, in Study 4, we found support for the independence of self-silencing and emotional suppression. Specifically, we controlled for actors' and partners' emotional suppression and found that the effects of self-silencing on conflict for both the actor and partner remained while there were no effects of emotional suppression on actors' conflict.

To summarize, across four studies using a range of methods, we were able to address six aims designed to further our understanding of the link between self-silencing and conflict. Though theorizing on the construct, as well as lay beliefs, imply that self-silencing helps to minimize or avoid conflict, our findings suggest that self-silencing may actually be associated with more and worse conflict. Study 3's results raise the possibility that relational authenticity may help account for the self-silencing-to-conflict link. At the same time, we produced evidence across multiple studies for bidirectionality—that conflict may also give rise to self-silencing. Finally, by taking a dyadic approach in Study 4, we were able to provide initial evidence for the importance of considering both actor and partner effects in the study of self-silencing and conflict.

# **Constraints on Generality and Other Limitations**

The current set of studies has several strengths, such as its use of multiple methods (e.g., cross-sectional, daily diary, and longitudinal dyadic approach), with these findings substantially advancing the limited body of research examining the association between self-silencing and conflict. However, a number of important constraints on the generalizability of these findings and limitations should be noted. Foremost, we did not manipulate self-silencing in the current set of studies and therefore we are unable to make causal claims about its effect on conflict. Experimental work is needed to test if self-silencing causes changes in both the frequency and nature of conflict.

Another important constraint is our exclusive reliance on healthy samples who likely had high base rates of relationship satisfaction, thereby limiting the generalizability of our results to clinical populations. On the other hand, given that much of the past research on self-silencing has focused on clinically depressed individuals in distressing relationships, our focus on healthy samples could also be considered a strength.

A third constraint is our limited examination of related relationship constructs and behaviors. While we did offer evidence to suggest that the construct and effects of self-silencing are unique from those of self-disclosure and emotional suppression, Study 1 showed that use of self-silencing was also substantially related to use of both self-concealment and stonewalling. Previous research has linked self-concealment to lower relationship satisfaction, commitment, and daily conflict (Uysal et al., 2012), while stonewalling has been robustly linked to negative relationship outcomes including divorce and poorer physical health (Gottman & Levenson, 2000; Haase et al., 2016). Future research should examine how self-silencing may be distinct from or overlapping with both self-concealment and stonewalling.

Finally, we must return to a discussion of Study 3's series of lagged analyses. We cannot know with certainty why our first series of analyses yield positive results in both directions while our second series yielded null results. It is possible that these findings are in fact complementary, rather than discrepant. That is, perhaps the self-silencing-to-conflict link is both immediate, unfolding within the same day (I self-silence when we start fighting in the morning but that leads to more fighting later in the day), but also cumulative, building up over time (the more one of us self-silences, especially if it makes us feel inauthentic, the more we end up fighting). This could explain why we see self-silencing and conflict increasing together in time and over a few weeks,

but not finding a lagged effect over the course of 24 hours. Nevertheless, with our current set of studies we cannot say definitively whether this is the case or not; future research that examines the time dynamics of these processes is needed.

#### **Future Directions**

There are many possible directions for future research, beyond addressing the limitations noted above. For example, although our studies suggest that, on average, self-silencing is associated with more and worse conflict, it remains possible that there are some instances in which self-silencing may be beneficial. Perhaps situational features and/or partner behaviors moderate the relationship between self-silencing and conflict. Along these lines, research has shown that people may be particularly motivated to self-silence when they perceive their partner's mood to be negative (Ussher & Perz, 2010), suggesting that context and partner behaviors are factors that should be considered in future research. For example, if voicing concerns in the present moment will not be constructive, then maybe it is adaptive to self-silence until a more appropriate time arises. Relatedly, another area for future research tied to the adaptiveness of self-silencing involves deeper examination of the temporal dynamics of selfsilencing's effects. Specifically, as noted, future research is needed to explore the time frame in which the self-silencing-to-conflict link unfolds. Are there different outcomes associated with self-silencing across different lengths of time? For example, is self-silencing for shorter periods of time (i.e., waiting for the appropriate context) adaptive whereas self-silencing for longer periods of time is maladaptive? The present research is one of very few studies to consider temporal dynamics when investigating self-silencing, but there is still much more work to be done.

In a related vein, do the motivations driving self-silencing behavior play a role in its adaptiveness? Paralleling the findings in the relationship sacrifice and accommodation literatures (Impett et al., 2013; Van Lange et al., 1997), it seems promising to consider self-silencing motivations within an approach/avoidance framework. Study 1 found that lay beliefs about whether self-silencing is an authentic behavior were not clearly in one direction or the other, and the results from our 1-1-1 mediation in Study 3 indicated that there is considerable variation in the degree to which self-silencing is related to subjective feelings of authenticity—findings that both suggest that nuances exist in how self-silencing is associated with relationship outcomes. One avenue for future research is to investigate if, like sacrifice and accommodation behaviors, self-silencing may be beneficial when motivated by approach goals but harmful when motivated by avoidance goals.

In a different vein, Studies 3 and 4 are among the first studies to demonstrate that there is day-to-day and week-to-week variation, respectively, in self-silencing, significantly advancing the extant literature on self-silencing which has nearly exclusively treated the construct as a trait-level variable. Future research is needed to further explore reasons for fluctuations in state-level self-silencing. For example, might personality characteristics such as higher neuroticism and lower openness (Witte et al., 2001), or individual differences in rejection sensitivity (Ayduk et al., 2003; Romero-Canyas et al., 2013), predict fluctuations in self-silencing? One way to get at this would be to use ecological momentary assessment (EMA) methodology to measure self-silencing and conflict as they occur. EMA can enable further examination of situational factors that may be linked to changes in state-level self-silencing over time and advance research

investigating the bidirectionality of the self-silencing-to-conflict link. Additionally, using EMA may reveal moderators of the relationship between self-silencing and conflict because it can better capture the situational factors that are associated with state-level fluctuations. For example, we suspect that a conflict situation filled with criticism, contempt, defensiveness, and/or stonewalling (Gottman, 1994) may elicit higher state-level self-silencing than one characterized by more constructive behaviors, but future research is needed to test this notion.

Finally, Study 4 adds to the budding literature examining romantic relationship functioning during the historic time of the world-wide COVID-19 pandemic (Kirzinger et al., 2020; Luetke et al., 2020; Prasso, 2020; Rosenberg et al., 2020). Given that self-silencing theory originated within a depression framework and recent research showing that divorce rates following the COVID-19 outbreak are on the rise (Prasso, 2020), our research investigating selfsilencing and conflict behavior could not be more timely. Sheltering-in-place often resulted in romantic partners being mostly confined in their homes, which significantly increased the amount of time spent together and drastically limited other social outlets (Kirzinger et al., 2020; Rosenberg et al., 2020). Understandably, these abrupt and completely novel alterations to daily life, combined with the stress and anxiety of the pandemic, likely influenced self-silencing and conflict behavior between romantic partners. Indeed, one recent study using a nationally representative sample reported that approximately 34% of American couples experienced some degree of increased relationship conflict after the first month of sheltering in place (Luetke et al., 2020). More generally, recent studies have documented higher rates of anxiety and depression (American Psychiatric Association, 2020; (Li et al., 2020) associated with the spread of COVID-19, and a meta-analysis points to how relationship conflict is often exacerbated under conditions of emotional distress (Proulx et al., 2007). All of this suggests more research is needed to continue tracking self-silencing and conflict as individuals adjust and habituate to the new structure of their lives during and after the pandemic.

#### Conclusion

The current research shows that self-silencing is a common relationship behavior and, in contrast to popular lay beliefs, self-silencing may be generally maladaptive. More specifically, self-silencing was found to be related to more and worse conflict, perhaps due to decreases in relational authenticity. We also found that partner's self-silencing, as well as one's own, have unique effects on an individual's experience of relationship conflict, at least within the context of the COVID-19 pandemic. These findings indicate that when individuals self-silence to avoid a conflict from arising in the moment, that conflict may arise later with increasing intensity. At the same time, we also found evidence for bidirectionality—such that conflict may breed further self-silencing—suggesting a downward spiraling of self-silencing and conflict. Taken as a whole, the present set of studies add substantially to the existing literature on self-silencing in its findings and in its use of various contexts, samples, and methods. Work of this kind is needed in order to gain a better understanding of the processes that are related to conflict in close relationships so that people can work towards healthy resolution when conflict inevitably arises.

# **Open Research Statement**

Data analysis for Studies 3 and 4 were pre-registered after data collection was complete. Data and data analysis code for all studies, along with the materials used in this research, are available on the Open Science Framework [https://osf.io/678ad/].

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