# Handle with Care:

# Agreeableness and Responses to Hurt Feelings

by

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# **Author's Declaration**

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

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#### Abstract

What factors predict people's reactions to hurt feelings in romantic relationships? I propose that people higher in agreeableness (Agreeables) show more cognitive and behavioral responses to hurt feelings that reflect constructive intentions than do people lower in agreeableness (Disagreeables). I further propose that three features of agreeableness, namely trust, communal motivation, and self-regulation, help explain why Agreeables respond with more constructive intentions than do Disagreeables. Studies 1-3 showed that compared to Disagreeables, Agreeables reported (a) higher forgiveness, (b) lower perceptions that the partner was intentionally hurtful, (c) more use of positive-direct responses, and (d) less use of negative-direct responses in a past hurtful incident. Study 4 replicated the findings regarding positive-direct and negative-direct responses using partner's report. I experimentally manipulated cognitive load in Study 5, and found that agreeableness was positively associated with responses that reflect constructive intentions only among participants who were under high (vs. low) cognitive load. Also, results suggest that trust and communal motivation helped explain the associations between higher agreeableness and (a) higher forgiveness, (b) lower perceptions of a partner's hurtful intentions, and (c) more use of positive-direct responses. However, self-regulation helped explain only the link between higher agreeableness and less use of negative-direct responses. Finally, Study 6, which involved dyadic, behavioral, and longitudinal data collected by Pietromonaco and colleagues, showed that Agreeables sought care from their partner in conflicts more positively and directly than did Disagreeables. This research sheds light on the factors that predict seemingly constructive reactions to hurt feelings, and illustrates the cognitive and behavioral manifestations of trait agreeableness in romantic relationships.

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#### Introduction

Hurt feelings are inevitable even in the happiest relationships. When hurt feelings are not handled well, they can underlie conflicts that couples have and become the breeding ground for relationship dissatisfaction (Johnson, 2010). Ultimately, unsatisfying relationships can negatively impact people's health (e.g., Kiecolt-Glaser & Newton, 2001). I propose that people higher in agreeableness—who are nice, sympathetic, and cooperative—exhibit more cognitive and behavioral responses to hurt feelings that reflect constructive intentions than do people lower in agreeableness.

#### **Hurt Feelings**

People's feelings are hurt when they feel devalued and rejected (Fehr & Harasymchuk, 2009; Leary, Springer, Negel, Ansell, & Evans, 1998; Vangelisti, Young, Carpenter-Theune, & Alexander, 2005). Hurtful incidents can stem from major transgressions, such as broken promises and infidelity, as well as relatively minor events, such as being ignored by the partner (Feeney, 2004). Hurt feelings can motivate people to pay attention to and repair the damaged relationship (Ferris, Jetten, Hornsey, & Bastian, 2019; Lemay, Overall, & Clark, 2012).

How do people respond to hurtful incidents? Because research in this area is limited, I draw not only on existing research on hurt feelings, but also on past work on conflicts and partner transgressions, two contexts that may also bring about hurt feelings. Research has identified two types of cognition that follow partner transgressions: positive attributions, such as seeing the transgression as unintentional (e.g., Bradbury & Fincham, 1990; 1992), and forgiveness (e.g., Fincham, 2010; McCullough, Fincham, & Tsang, 2003). Both have been linked with favorable consequences for relationships. Positive attributions are positively correlated with relationship quality (Fincham & Bradbury, 1992; Leary et al., 1998) and seemingly constructive

expressions of hurt feelings (Bachman & Guerrero, 2006). Forgiveness is positively related to relationship commitment (Finkel, Rusbult, Kumashiro, & Hannon, 2002), satisfaction (Allemand, Amberg, Zimprich, & Fincham, 2007; Paleari, Regalia, & Fincham, 2005), trust (Strelan, Karremans, & Krieg, 2016), and constructive conflict resolutions (Fincham, Beach, & Davila, 2007).

Although limited, research also has shed light on people's behavioral responses to hurtful incidents. Some behaviors reflect destructive intentions, such as seeking revenge, ignoring the partner, and threatening to leave the relationship (Bachman & Guerrero, 2006; Leary & Springer, 2001; Vangelisti & Crumbley, 1998). Other behaviors appear to be more constructive (e.g., openly telling the partner that one is hurt, expressing affection; Bachman & Guerrero, 2006).

I can categorize the various behavioral responses to hurt feelings by drawing on Overall and McNulty's (2017) work on conflict resolution tactics. They identified the two dimensions of (a) cooperative versus oppositional goals to resolve conflicts and (b) direct versus indirect strategies to achieve those goals. Adapting Overall and McNulty's typology to the domain of behavioral responses to hurt feelings, I can identify two dimensions: positive versus negative and direct versus indirect. I conceptualize the resulting four categories as follows: positive-direct responses are open communications with the aim to resolve the hurtful incident (e.g., calm and direct communications of hurt feelings); negative-direct responses involve overt reciprocation of negativity with the goal to hurt the partner (e.g., seeking revenge); positive-indirect responses are behaviors that convey a willingness to maintain the relationship without directly expressing the hurt feelings (e.g., expressing affection, being optimistic that the partner will improve); negative-indirect responses include behaviors that hint to the partner that one is hurt, without directly saying so (e.g., acting distant, giving the partner the silent treatment).

Combining this typology of behaviors with the two cognitions discussed earlier forgiveness and perceptions of intentionality—I consider positive reactions to hurt feelings to be (a) high usage of positive-direct and positive-indirect responses to hurt feelings, (b) low usage of negative-direct and negative-indirect responses to hurt feelings, (c) high forgiveness, and (d) low perceptions that a partner's hurtful behaviors were intentional. I use the labels positive and negative to reflect the hurt person's intentions, rather than actual consequences of their responses. That is, I do not use these terms to imply successful or failed resolution of hurt feelings, because past research has shown that the effectiveness of the different responses is nuanced. For instance, although showing affection, a response that I consider to be positiveindirect, is positively associated with how rewarding people find their relationships (Bachman & Guerrero, 2006), positive-indirect communications are ineffective in changing a partner's problematic behaviors over time (Overall et al. 2009). Moreover, despite the unpleasantness brought by negative-direct conflict resolution tactics at the moment of using them, they are positively associated with changing the partner's problematic behaviors over time (McNulty & Russell, 2010). Negative-direct tactics are also negatively associated with problem severity over time if they are sensitive to situational demands (Overall, 2020). Similarly, forgiveness fails to prevent a partner from transgressing again if the partner is disagreeable (McNulty & Russell, 2016).

# **Agreeableness and Reactions to Hurt Feelings**

What factors predict people's reactions to hurt feelings in romantic relationships? I propose that agreeableness does. Agreeableness is a personality trait that describes individual differences in being likeable, pleasant, and harmonious in interpersonal relationships (Graziano & Tobin, 2013). Agreeable people strive to maintain interpersonal harmony (Graziano &

Eisenberg, 1997; Graziano & Tobin, 2009). Research has shown that agreeableness is especially important in predicting people's thoughts and behaviors in interpersonal situations that afford opportunities for people to behave destructively (Graziano, Habashi, Reese, & Tobin, 2007). As I illustrated above, hurtful incidents can lead to responses that are either positive or negative. Hence, agreeableness should be important in predicting whether people's reactions to hurt feelings reflect constructive or destructive intentions.

I propose that agreeable people's general goal to maintain interpersonal harmony is facilitated by three specific features, namely high trust, high communal motivation, and high self-regulation. I particularly focus on trust in the present investigation, because of its demonstrated importance to the functioning of romantic relationships (Rempel, Holmes, & Zanna, 1985), as well as its centrality to important theories in relationship science (e.g., to risk regulation theory [Murray, Derrick, Leder, & Holmes, 2008], and to attachment theory's concept of "felt security" [Hazan & Shaver, 1990]).

Classic theories on agreeableness posit that agreeable people have high trust that other people in general are nice and caring (e.g., Costa & McCrae, 1992; John et al., 1993). Recent research in my lab has shown that this trust extends to close relationships as well—agreeable people have faith that their partners will continue to value and care for them (McCarthy, Wood, & Holmes, 2017; Timoney, 2020). I draw on risk regulation theory (Murray et al., 2008) to argue that agreeable people's high trust should promote positive reactions to hurt feelings. When people face relationship insecurity (e.g., when a partner does something thoughtless), seeking psychological closeness with the partner comes with the risk that the partner may not reciprocate with care. According to risk regulation theory, people's trust determines how they respond to such risks. In particular, because people with high trust are strongly confident that their partner

loves them, they see low risks of being rejected in response to relationship insecurity. In turn, this high trust allows people to restore relational closeness. In contrast, relationship insecurity confirms the doubt of people low in trust, because their partner's bad behaviors are taken as a sign of lack of caring. Hence, people with low trust protect themselves by psychologically distancing themselves from their partner. Indeed, evidence indicates that when people feel insecure in their relationships, people with high trust value their partner even more than before, whereas people with low trust derogate their partner (Murray, Bellavia, Rose, & Griffin, 2003; Murray, Rose, Bellavia, Holmes, & Kusche, 2002). Moreover, trust positively predicts relational intimacy longitudinally (Derrick, Leonard, & Homish, 2012). Although risk regulation research has not investigated hurt feelings or agreeableness, I posit that hurtful incidents involve risk regulation, in that they entail relationship insecurity and risks of rejection. Hence, agreeable people's high trust should encourage positive responses to hurt feelings.

In addition to being trusting, agreeable people are communally motivated, meaning that they are concerned with satisfying close others' needs (Graziano & Eisenberg, 1997; Wiggins, 1991). For example, agreeable people strive to benefit their romantic partners: Relative to less agreeable people, agreeable people express affection in ways that are more focused on their partner's interests (Kwok, Wood, & Holmes, 2021), and they persist longer in a difficult task for their partner's benefit (Cortes, Kammrath, Scholer, & Peetz, 2014). After hurtful incidents, positive reactions, such as forgiveness and positive-direct responses, are likely what the hurtful partner wants to receive. Hence, I propose that high communal motivation helps explain agreeable people's positive reactions to hurt feelings.

At first glance, agreeableness may seem to be the same as communal motivation because both concepts are concerned with being interpersonally prosocial. Yet, although these two

constructs overlap, they differ. Communal motivation focuses specifically on being responsive to the feelings and needs of close others (e.g., a romantic partner; Clark, Ouellette, Powell, & Milberg, 1987; Le, Impett, Lemay, Muise, & Tskhay, 2017). In contrast, agreeableness concerns the prosocial tendencies towards others in general, and does not particularly emphasize responsiveness. In addition, highly agreeable people are not only kind, cooperative, and helpful (Graziano et al., 2007; Habashi, Graziano, & Hoover, 2016; John et al., 1991), they also by definition refrain from disagreeable behaviors, such as being quarrelsome, rude, cold, and critical. In addition, whereas agreeableness is a personality trait, communal motivation has been conceptualized as both a trait and a state, varying between and within one's relationships (Clark, 1986; Clark et al., 1987).

I have proposed that a third characteristic of highly agreeable people, in addition to trust and communal motivation, may facilitate positive responses to hurt feelings: self-regulation ability. Although self-regulation skills are not inherent in the definition of agreeableness, highly agreeable people are good at self-regulating, even in domains outside of interpersonal ones, such as dieting (Tangney, Baumeister, & Boone, 2004; Weston, Edmonds, & Hill, 2019). Such skills are a boon in the interpersonal domain, where it is helpful to self-regulate negative emotions and behaviors. For example, although agreeable children report feeling just as upset as children lower in agreeableness when they are in a conflict, they use more constructive conflict resolution tactics (Jensen-Campbell & Graziano, 2001). Similarly, agreeable people are less vengeful in interpersonal conflicts (Sindermann et al., 2018). I propose that this high level of self-regulation again helps agreeable people respond well to hurt feelings. According to the theory of accommodation (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), people's automatic responses to a partner's transgressions are negative (e.g., wanting to yell at the partner). Positive

responses emerge only after people down-regulate their negative tendencies. In hurtful incidents, then, having high self-regulation skills should help people refrain from responding negatively.

#### Agreeableness and Its Manifestations in Romantic Relationships

Examining the role of agreeableness in people's responses to hurt feelings serves a larger goal, namely to discover what agreeableness means, precisely, in romantic relationships. Past research on agreeableness has focused on such interpersonal contexts as interactions with friends and strangers (e.g., Graziano & Tobin, 2013; John et al., 1991; Meier & Robinson, 2004; Meier, Robinson, & Wilkowski, 2006). Little is known about the specific behaviors that agreeable people exhibit in romantic relationships. Although I have proposed that agreeableness is important in predicting people's responses to hurt feelings in romantic relationships, one may argue that agreeableness may not matter at all, for two reasons. First, because people in romantic relationships are expected to be communal and warm (Clark et al., 2010), the situational demands of being an agreeable partner may override the effects of trait agreeableness. Regardless of their level of agreeableness, people may feel compelled to respond positively even when they feel hurt. The second reason that agreeable people may not make a difference to hurt feelings in romantic relationships is that evidence suggests that agreeable people are more affronted than less agreeable people when others violate communal norms (Kammrath & Scholer, 2011). A hurtful partner may be perceived as violating the communal norms of a romantic relationship, and agreeable people may therefore respond to hurt feelings just as negatively as people lower in agreeableness. My investigation of agreeable people's responses to hurt feelings will shed light on whether agreeableness matters or not in romantic relationships.

Investigating the cognitive and behavioral manifestations of agreeableness is crucial to understanding what agreeableness is. How do high scores on self-report items (e.g., John,

Donahue, & Kentle, 1991) like, "I am someone who is helpful and unselfish with others," and "I am someone who is generally trust," translate into behaviors in everyday life in romantic relationships? An illustration of this approach is Matz's (2021) research on another Big 5 trait, openness to experience. Matz (2021) found that people high in openness to experience showed high variability in personal political ideologies, personal values, and events that they attended.

To conclude, I propose that hurtful incidents can showcase the cognitive and behavioral manifestations of agreeableness because hurtful incidents afford individual differences in being (dis)agreeable. I predict that higher agreeableness is associated with (a) higher forgiveness, (b) lower perceptions that a partner is intentionally hurtful, (c) more use of positive-direct responses to hurt feelings, and (d) less use of negative-direct and negative-indirect responses to hurt feelings. I do not have specific hypotheses regarding agreeableness and positive-indirect responses to hurt feelings. Past research has shown that when it is appropriate, agreeable people are just as confrontational as people lower in agreeableness (Kammrath, McCarthy, Cortes, & Friesen, 2015). In hurtful incidents, a confrontation may be warranted, and positive-indirect responses are not confrontational. One of these hypotheses has already received support: Higher agreeableness has been linked with higher forgiveness in interpersonal transgressions (Fehr, Gelfand, & Nag, 2010; McCullough & Hoyt, 2002). In addition to proposing that high agreeableness is associated with positive responses to hurt feelings, I posit that high levels of trust, communal motivation, and self-regulation help to explain (i.e., statistically mediate) these associations. Besides investigating how people respond to hurt feelings in their romantic relationships, this research should reveal whether agreeableness predicts important behaviors in romantic relationships.

#### **Overview of Current Research**

The current research aims to examine the role of agreeableness in people's cognitive and behavioral reactions that reflect constructive intentions to hurtful incidents in romantic relationships. I predict that through high levels of trust, communal motivation, and self-regulation, higher agreeableness is associated with reactions to hurt feelings that reflect higher constructive intentions. I focus especially on trust. Studies 1-3 examined the associations between agreeableness and positive reactions to hurt feelings, and the role of trust. In addition to agreeableness, positive reactions to hurt feelings, and trust, Study 2 investigated the role of communal motivation. Study 4 (pre-registered) strengthened our arguments regarding behavioral responses to hurt feelings using a dyadic design. Study 5 (pre-registered) manipulated cognitive load to highlight self-regulation and communal motivation. Study 6 (pre-registered) utilized data collected by Paula Pietromonaco and colleagues for a broad investigation of topics unrelated to the current research. This dyadic, behavioral, longitudinal dataset allowed me to conceptually replicate the findings regarding agreeable people's seemingly constructive behaviors in a conflict situation, a context commonly linked to hurt feelings.

In sum, this research aims to contribute to the current literature by (a) identifying the factors that promote reactions to hurt feelings that reflect constructive intentions, and (b) showing the cognitive and behavioral manifestations of agreeableness in romantic relationships, a domain that has been overlooked in agreeableness research.

#### Study 1

Study 1 had two purposes. First, I sought to classify people's behavioral responses to hurt feelings. I integrated a previous study on this topic (Bachman & Guerrero, 2006) with recent research on how people express negativity in relationships (Cortes, Wood, & Prince, 2019).

Second, I examined how people's reactions to hurt feelings vary with agreeableness and trust.

# **Participants**

For Studies 1-4 in this paper, an *a priori* power analysis, conducted using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007) assuming small to medium effect size (i.e.,  $f^2 = 0.08$ ), indicated that I needed 101 participants to ensure 80% power to detect the effect of agreeableness. This study included 212 undergraduate participants ( $M_{age} = 21.6$  years, Mdn = 21.0, SD = 5.63;  $M_{relationship\ length} = 33.5$  months, Mdn = 18.0, SD = 55.7; 19.8% male, 79.7% female, 0.5% non-binary; 92.0% exclusively dating/married, 5.7% casually dating, 0.9% open relationship, 1.4% did not report). A sensitivity analysis indicates that with 212 participants, and at 80% power and  $\alpha = .05$ , the minimum effect size that can be detected is  $f^2 = 0.04$ , which corresponds to a small effect size.

## **Procedure and Materials**

Following demographic questions (e.g., age, gender, relationship length), participants completed the 9-item Agreeableness subscale of the Big Five Inventory (John, Donahue, & Kentle, 1991; e.g., "I am someone who is helpful and unselfish with others," "I am someone who is considerate and kind to almost everyone;" 1 = very strongly disagree to 5 = very strongly

<sup>&</sup>lt;sup>1</sup> Initially, 295 participants completed the study. However, 69 of them did not describe any hurtful incidents, and another 14 of them did not complete the majority of the survey (e.g., did not complete measures of dependent variables). These 83 participants were excluded. These 83 excluded participants did not differ from the 212 included participants in their levels of agreeableness, t(280) = 0.89, p = .374. Participants who were excluded were in a shorter relationship (M = 15.3 months) than those who were included (M = 33.5 months), t(293) = -2.87, p = .004.

agree;  $\alpha = .75$ ). Next, participants open-endedly described a hurtful incident following the prompt, "Please take a few moments now to think about a time when you felt intensely hurt by your romantic partner. In the space below, please describe what happened, how you felt about the experience at the time. Please take your time to provide us with a complete picture of how you felt." After providing these descriptions, participants indicated how long ago this hurtful incident happened, and completed several items from the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) to indicate how "hurt" and "angry" they felt following the hurtful incident (1 = disagree strongly to 5 = agree strongly). The scale also included "distressed," "upset," "hostile," and "irritable," which we did not examine.

Then, to refresh participants' memory of their reactions following the hurtful incident, they open-endedly responded to the prompt, "Following the hurtful event that you just descried, what did you do? Were you with your partner when the hurtful incident happened? If so, what did you say to your partner and how did you behave towards your partner? If not, on the next occasion that you met with your partner following the hurtful event you just described, what did you say and how did you behave towards your partner?" After this procedure, participants completed the key dependent measure, which assessed their behavioral responses to hurt feelings. Following the stem, "When I was feeling hurt from the incident that I just described, I..." appeared 47 randomly ordered items, drawn in part from items used by Bachman and Guerrero (2006) and Cortes, Wood, and Prince (2019; 1 = strongly disagree to 7 = strongly agree). I conducted a principal component analysis on these items to classify types of behavioral responses to hurt feelings (see Results).

Next, participants were presented with four items assessing the degree to which they thought that their partner hurt them intentionally (Bachman & Guerrero, 2006; e.g., "my partner

was trying to hurt me," "my partner was insensitive or inconsiderate;"  $1 = disagree \ strongly$  to  $5 = agree \ strongly$ ;  $\alpha = .63$ ), and two items measuring forgiveness (Bachman & Guerrero, 2006, e.g., "I have forgiven my partner for hurting me;"  $1 = strongly \ disagree$  to  $7 = strongly \ agree$ ;  $\alpha = .90$ ). Also, participants completed a 6-item trust scale from McCarthy et al. (2017; e.g., "my partner is responsive to my needs," "my partner really listens to me;"  $1 = not \ at \ all \ true$  to  $9 = completely \ true$ ;  $\alpha = .92$ ).

At the end of Study 1 and other studies reported in this paper, participants recalled a positive memory in their relationship to alleviate any distress they might have experienced in the study. For potential exploration, I also included measures of self-esteem, relationship satisfaction, and commitment in all my studies (and a mind-reading expectation measure in Study 1) at different parts of the survey. I did not examine these measures for the present article.

## **Study 1 Results**

In all studies in this article, prior to analyses, I screened each variable for univariate outliers (i.e., > 3 SDs above or below mean) and missing data. Outliers were winsorized (i.e., replaced with the value at 3 SDs) and cases with missing data were excluded from analyses involving the missing variable. I regressed each outcome variable on agreeableness (mean-centered). See Table 1 for descriptive statistics and correlations among variables.

Table 1

Descriptive statistics and correlations among key variables in Study 1

	1	2	3	4	5	6	7	8	9	10	11	12
1. Agree.												
2. Trust	.25***											
3. Intent.	18**	32***										
4. Forgive.	.25***	.56***	38***									
5. PosDir.	.09	.28***	.06	.14*								
6. NegDir.	34***	30***	.43***	43***	11							
7. NegInd.	24***	16*	.11	05	21**	.33***						
8. Aff.	09	11	13†	.02	.06	.00	.19**					
9. Cov.	09	05	.03	.01	.04	.03	.26***	.30***				
10. Satis.	.21*	.68***	31***	.53***	.22**	30***	08	08	10			
11. Hurt	.08	.14*	.18**	.03	.13†	.04	06	34***	.04	.18**		
12. Anger	09	.02	.33***	17*	.01	.36***	.01	23***	08	.08	.40***	
n	211	211	211	211	211	211	210	211	211	211	211	211
Scale	1-5	1-9	1-7	1-7	1-7	1-7	1-7	1-7	1-7	1-9	1-5	1-5
Mean	3.74	7.02	2.61	5.63	5.13	2.61	2.99	2.36	4.10	7.24	4.60	3.86
SD	0.60	1.52	0.86	1.48	1.38	1.15	1.34	1.14	1.44	1.64	0.62	1.26
Skewness	-0.44	-0.72	0.45	-1.03	-1.01	0.41	0.22	0.78	-0.20	-0.89	-1.42	-0.97

*Note.* Agree. = Agreeableness. Intent. = Perceived partner intentionality. Forgive. = Forgiveness. PosDir. = Positive-direct responses. NegDir. = Negative-direct responses. NegInd. = Negative-indirect responses. Aff. = Affectionate behaviors. Cov. = Covert Optimism. Satis. = Relationship satisfaction. Hurt = Feeling Hurt. Anger = Feeling angry  $\dagger p < .100 * p < .050 *** p < .010 **** p < .001$ .

# Principal Component Analysis of Responses to Hurt Feelings Measure

Using the "principal" function in the "psych" package (Revelle, 2019) in R (R Core Team, 2019), I performed a principal component analysis with varimax rotation on these items (see Table 2). Results and a scree plot of this analysis generated using the "fa.parallel" function in the "psych" package yielded five types of behaviors that explained 54% of the total variance. One type of behavior described positive-direct responses to hurt feelings with seven items (e.g., "I openly tried to talk to my partner and reach an understanding of what happened;"  $\alpha$  = .88). Ten items constituted negative-direct responses (e.g., "I made hurtful/mean comments to my partner;"  $\alpha$  = .83). Negative-indirect responses were measured by eight items (e.g., "I acted like something was wrong but did not tell my partner until they asked;"  $\alpha$  = .83). Another seven items described affectionate behaviors (e.g., "I acted more affectionate toward my partner;"  $\alpha$  = .83). Finally, five items made up the covert optimism category (e.g., "I hoped that if I just hung in there, things would get better;"  $\alpha$  = .83).

Table 2.

Results of principal component analysis on behavioral responses to hurt feelings measure in Study 1.

	му 1.					
Ite	ems	Positive-	Negative-	Negative-	Affectionate	Covert
		direct	direct	Indirect		Optimism
1.	I tried to be romantic.				.75	
2.	I talked to my partner	.81				
	about what was					
	bothering me.					
3.	I waited and hoped that					.76
	things would get better.					
4.	I thought about or		.53			
	fantasized about dating					
	other people.					
5.	I made hurtful/mean		.63			
	comments to my partner.					
6.	I sought revenge.		.40			
7.	I ignored my partner	37		.53	31	
8.	I was more affectionate				.84	

9. I talked about our relationship	.72				
10. I was patient and waited to see what would					.66
happen 11. I told my partner that we should date others	33	.60			
12. I quarreled or argued with my partner		.58			
13. I tried to get back at my partner		.38		.41	
14. I gave my partner the "silent treatment"	35		.57		
15. I acted more affectionate toward my partner				.84	
16. I openly tried to talk to my partner and reach an understanding of what happened	.79				
17. I waited for things to improve					.78
18. I told my partner we should go our separate ways	32	.69			
19. I yelled or cursed at my partner	.34	.63			
20. I tried to "get even" with my partner		.47		.41	
21. I stopped initiating communication	44		.46		
22. I initiated romantic activities for us to do together				.75	
23. I explained my feelings to my partner	.86				
24. I hoped that if I just hung in there, things would get better					.75
25. I let things fall apart between us	43	.63			
26. I confronted my partner in an accusatory manner		.61			
27. I spent more time with my partner				.60	
28. I shared my hurt feelings with my partner	.83				

29. I held back from revealing the extent to which I was hurt	39				.37
30. I wished things would get better					.63
31. I figured out ways to get out of the relationship		.65			
32. I acted rude toward my partner		.66	.40		
33. I gave my partner a gift 34. I suggested things that	.64			.58	
might help us		70			
35. I thought about ending the relationship		.70			
36. I apologized for my behaviors				.39	
37. I calmly questioned my partner about their actions	.40				
38. I acted like I did not want to talk about it, when I really did	40		.59		
39. I hoped that my partner would press me for more information			.54		
40. I exaggerated how hurt I was			.43	.36	
41. I denied responsibility for my role in the matter			.44		
42. I acted like something was wrong but did not tell my partner until they			.68		
asked 43. I acted like I was in a bad mood (e.g., mope			.70		
around, sigh) 44. I did not say much, but expected my partner to			.76		
pick up my cues 45. I acted quiet and			.69		
preoccupied 46. I assumed my partner should know something was wrong			.66		

47. I ignored or rejected my partner's efforts to be supportive

.41

.56

*Note*. Item stem = "When I was feeling hurt from the incident that I just described," Factor loadings lower than .32 are not presented in the table. Items that cross-loaded were dropped, unless the difference between the factor loadings was greater or equal to .30, in which case the item would be included in the factor with the higher loading.

# Reactions to Hurt Feelings

Results supported my hypothesis that highly agreeable people react to hurt feelings in more positive ways than do less agreeable people (see Table 3). Despite feeling just as hurt and angry as less agreeable people, agreeable people reported (a) less likelihood of perceiving that their partner's hurtful behaviors were intentional, (b) higher forgiveness, and (c) less use of negative-direct and negative-indirect behavioral responses. However, highly agreeable people did not differ from less agreeable people in their reports of engaging in positive-direct behavioral responses to hurt feelings, affectionate behaviors, or covert optimism.

Table 3.

Summary of statistics of regression models in Study 1, regressing each outcome variable on agreeableness. 95% CI are presented below the b.

Outcome	b	SE	β	t	df	p
Feeling Hurt	0.08	0.07	.05	1.12	209	.265
	[-0.06, 0.22]					
Feeling Angry	-0.20	0.15	12	-1.35	209	.179
	[-0.48, 0.09]					
Perceived Partner Intentionality	-0.25	0.10	15	-2.60	209	.010
	[-0.45, -0.06]					
Forgiveness	0.61	0.17	.37	3.71	209	< .001
	[0.29, 0.95]					
Positive-Direct Response to Hurt	0.21	0.16	.13	1.33	209	.186
Feelings	[-0.10, 0.52]					
Negative-Direct Responses to	-0.65	0.12	39	-5.18	209	< .001
Hurt Feelings	[-0.89, -0.40]					
Negative-Indirect Responses to	-0.53	0.15	32	-3.52	208	< .001
Hurt Feelings	[-0.83, -0.23]					
Affectionate Behaviors	-0.18	0.13	11	-1.38	209	.169
	[-0.44, 0.08]					

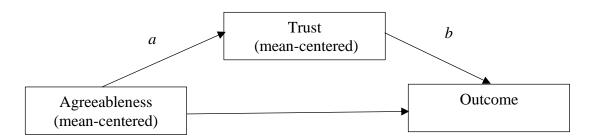
Covert Optimism	-0.21	0.17	13	-1.27	209	.205
	[-0.54, 0.12]					

#### **Trust Mediations**

Did trust mediate the relations between agreeableness and people's perceived partner intentionality, forgiveness, and behavioral responses to hurt feelings? I used the "lavaan" package (Rosseel, 2012) in R to test simple mediation models in which I used agreeableness (mean-centered) as the predictor and trust (mean-centered) as the mediator. Results showed that trust helped explain the relations between agreeableness and several positive reactions to hurt feelings (see Table 4). Agreeableness was positively associated with trust, and trust in turn was associated with reports of (a) less likelihood of perceiving that the partner was intentionally hurtful, (b) higher forgiveness, and behavioral responses to hurt feelings that were (c) more positive-direct, (d) less negative-direct, and (e) less negative-indirect.

Table 4.

Summary of statistics of mediation models in Study 1. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.



Outcome	Parameter	ab	а	b	Direct c'	
Intentionality	b	-0.11	0.65	-0.17	-0.15	
	SE	0.04	0.17	0.04	0.10	
	CI	[-0.18, -0.03]	[0.31, 0.98]	[-0.24, -0.09]	[-0.33, 0.04]	
	p		< .001	< .001	.129	
Forgiveness	b	0.33	0.65	0.51	0.28	
	SE	0.09	0.17	0.06	0.15	
	CI	[0.15, 0.52]	[0.31, 0.98]	[0.40, 0.62]	[-0.001, 0.57]	
	p		< .001	< .001	.051	

PosDir	b	0.16	0.65	0.25	0.05
	SE	0.06	0.17	0.06	0.16
	CI	[0.05, 0.28]	[0.31, 0.98]	[0.13, 0.38]	[-0.26, 0.36]
	p		< .001	< .001	.766
NegDir	b	-0.11	0.65	-0.17	-0.54
	SE	0.05	0.17	0.05	0.13
	CI	[-0.20, -0.03]	[0.31, 0.98]	[-0.27, -0.08]	[-0.78, -0.29]
	p		< .001	< .001	< .001
NegInd	b	-0.06	0.65	-0.09	-0.47
	SE	0.04	0.17	0.06	0.15
	CI	[-0.14, 0.02]	[0.31, 0.98]	[-0.24, 0.01]	[-0.77, -0.17]
	p		< .001	.132	.002

Note. Internationality = Perceived partner intentionality. PosDir = Positive-direct responses to hurt feelings. NegDir = Negative-Direct responses to hurt feelings. NegInd = Negative-Indirect responses to hurt feelings.

## **Study 1 Summary**

In this study, I identified five types of behavioral responses to hurt feelings. The items that described positive-direct, negative-direct, and negative-indirect behaviors aligned with previous research on conflict resolution (Overall & McNulty, 2017) and on expressions of hurt feelings (Bachman & Guerrero, 2006). The two other kinds of behavioral responses to hurt feelings, namely affectionate behaviors and covert optimism, are consistent with my conceptualization of positive-indirect responses. Consistent with my predictions, I found that despite feeling just as hurt and angry as less agreeable people, agreeable people reported being less likely to believe that their partner hurt them intentionally, more likely to forgive, and less likely to behave in in negative-direct and negative-indirect manners than people lower in agreeableness. Results were in line with the view that high trust played a role in explaining these associations. Also, agreeableness was positively associated with positive-direct behavioral responses indirectly through trust. However, agreeableness was not associated with the two positive-indirect responses (i.e., affectionate behaviors or covert optimism).

#### Study 2

Study 2 aimed to replicate Study 1's findings that higher agreeableness was associated with more positive reactions to hurt feelings. Study 2 also examined the role of communal motivation in the associations between agreeableness and behavioral reactions to hurt feelings.

## **Participants**

This study included 182 romantically involved undergraduates ( $M_{age} = 20.8$  years, Mdn = 19.0, SD = 5.1;  $M_{relationship\ length} = 28.1$  months, Mdn = 15.0, SD = 49.6; 12.6% male, 86.8% female, 0.5% non-binary; 98.9% exclusively dating/married, 0.5% casually dating, 0.5% open relationship). <sup>2</sup> A sensitivity analysis indicates that with 182 participants, the minimum effect size detected at 80% power and  $\alpha = .05$  is  $f^2 = 0.04$ , which corresponds to a small effect.

#### **Procedure and Materials**

Participants first completed the same measures of agreeableness ( $\alpha$  = .76) and trust ( $\alpha$  = .91) from Study 1. They then open-endedly described a hurtful incident following the prompt, "Please take a few moments now to think about a time that you were quite hurt by your current romantic partner. In the space below, please describe what happened, and how you felt about the experience at the time. Please take your time to provide us with a complete picture of how you felt." Participants also indicated when the hurtful incident happened.

Next, participants open-endedly described their behavioral responses to hurt feelings by responding to the prompt, "Following the hurtful incident that you just described, what did you do to let your partner know that you were hurt? Please take a few moments to think about what

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<sup>&</sup>lt;sup>2</sup> Initially, 200 participants completed the study. I excluded 13 participants because they did not report a hurtful incident, and an additional five participants because they did not complete the majority of the study (e.g., missing key DVs).

you did and provide us with a complete picture." With three trained, independent coders, we coded these descriptions for the extent to which participants were (a) positive-direct (i.e., "to what extent did the participant express their feelings through direct, positive manners;"  $\alpha$  = .94, ICC = .93), (b) negative-direct (i.e., "to what extent did the participant express their feelings through anger, mean/hurtful comments, and/or accusations;"  $\alpha$  = .95, ICC = .95), and (c) negative-indirect (i.e., "to what extent did the participant express their feelings through passive-aggressiveness, and/or being cold and distant;"  $\alpha$  = .92, ICC = .92; 1 = not at all to 7 = extremely). I averaged the three coders' ratings to create a score for each type of behavioral responses.<sup>3</sup>

Using the same items from the PANAS in Study 1, participants indicated how hurt and angry they felt. They also reported the extent to which they (a) believed their partner was intentionally hurtful (4-item measure;  $\alpha = .61$ ) and (b) forgave their partner (2-item measure;  $\alpha = .84$ ) using the same measures from Study 1. Next, participants were presented with their openended descriptions of expressions of hurt feelings. In response to these descriptions, they rated their agreement with 27 items that described various motives behind their actions (1 = disagree strongly) to 7 = agree strongly) following the stem, "I indicated that when my partner hurt me, I acted in ways that I described above because:" I conducted a principal component analysis to identify different types of motives (see Results). I used these motives to indicate communal motivation.

# **Study 2 Results**

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<sup>&</sup>lt;sup>3</sup> I did not code for positive-indirect responses because I did not expect them to be associated with agreeableness.

See Table 5 for descriptive statistics and correlations among variables.

Descriptive statistics and correlations among key variables in Study 2.

Table 5

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Agree													
2. Trust	.42***												
3. Intent	24**	28***											
4. Forgive	.35***	.62***	45***										
5. PosDir	.17*	.10	11	.09									
6. NegDir	08	09	.21**	13†	32***								
7. NegInd	08	01	03	.02	66***	09							
8. Satis	.30***	.74***	34***	.56***	.08	10	.03						
9. Hurt	01	.01	.17*	07	06	.15†	.02	02					
10. Anger	15*	06	.37***	27***	21**	.31***	.04	04	.34***				
11. Rev.	42***	40***	.40***	52***	42***	.37***	.18*	35***	$.14\dagger$	.38***			
12. Care	.10	.09	04	.06	.13†	14†	01	.14†	.20**	.11	.07		
13. Conf.	02	.04	.31***	11	10	.20**	.10	.02	.40***	.51***	.28***	.36***	
n	182	182	182	182	177	177	177	182	182	182	182	182	182
Scale	1-5	1-9	1-7	1-7	1-7	1-7	1-7	1-9	1-5	1-5	1-7	1-7	1-7
Mean	3.87	7.67	2.38	6.20	5.49	1.53	1.84	7.85	4.47	3.65	2.16	5.03	5.74
SD	0.59	1.15	0.81	1.03	1.82	1.36	1.65	1.27	0.71	1.33	1.18	1.32	0.99
Skewness	-0.19	-0.92	0.27	-1.28	-1.33	2.83	1.90	-1.33	-1.26	-0.77	1.20	-0.41	-0.74
		-			•	11.		-	Б Б:	Б			

*Note.* Agree = Agreeableness. Intent = Perceived partner intentionality. Forgive = Forgiveness. PosDir. = Positive-direct responses.

 $NegDir = Negative-direct\ responses.\ NegInd = Negative-indirect\ responses.\ Satis = Relationship\ satisfaction.\ Hurt = Feeling\ Hurt.$ 

Anger = Feeling angry. Rev. = Motive to seek revenge. 13 = Motive to seek care. 14 = Motive to confront partner. † p < .100 \* p < .050 \*\* p < .010 \*\*\* p < .001.

# Reactions to Hurt Feelings

Table 6.

As can be seen in Table 6, similar to Study 1, highly agreeable people reported feeling just as hurt as less agreeable people. Agreeable people also reported higher forgiveness and less likelihood of believing that their partner hurt them intentionally. However, unlike Study 1, highly agreeable people reported feeling less angry than did people lower in agreeableness, and agreeableness was not associated with my coders' ratings of negative-direct or negative-indirect responses to hurt feelings. Most importantly however, and supporting my hypothesis, my coders rated agreeable people as using more positive-direct behaviors than less agreeable people.

Summary of statistics of regression models in Study 2, regressing each outcome variable on agreeableness. 95% CI are presented below the b.

Outcome	b	SE	β	t	df	р
Feeling Hurt	-0.02	0.09	01	-0.20	180	.841
	[-0.19, 0.16]					
Feeling Angry	-0.33	0.17	19	-1.98	180	.049
	[-0.66, -0.001]					
Perceived Partner Intentionality	-0.33	0.10	19	-3.30	180	.001
	[-0.52, -0.13]					
Forgiveness	0.61	0.12	.36	4.99	180	< .001
	[0.37, 0.85]					
Positive-Direct Responses to	0.52	0.23	.31	2.27	175	.024
Hurt Feelings	[0.07, 0.97]					
Negative-Direct Responses to	-0.17	0.17	10	102	175	.102
Hurt Feelings	[-0.52, 0.17]					
Negative-Indirect Responses to	-0.21	0.21	13	102	175	.308
Hurt Feelings	[-0.63, 0.20]					
Revenge-Seeking Motives	-0.85	0.14	50	-6.28	180	< .001
	[-1.12, -0.58]					
Motives to Seek Care from	0.21	0.15	.12	1.31	180	.192
Partner	[-0.11, 0.54]					
Motives to Confront Partner	-0.04	0.13	04	0.29	180	775
	[-0.27, 0.22]					

#### **Trust Mediations**

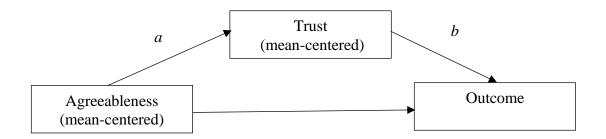
Results also provided support for my trust mediation hypothesis (see Table 7).

Agreeableness was positively associated with trust, which in turn was associated with reports of higher forgiveness and less likelihood of perceiving that the partner was intentionally hurtful.

Unlike Study 1, trust did not mediate the associations between agreeableness and coders' ratings of participants' positive-direct, negative-direct, or negative-indirect responses to hurt feelings.

Table 7.

Summary of statistics of mediation models involving trust in Study 2. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.



Outcome	Parameter	ab	а	b	Direct c'
Intentionality	b	-0.13	0.82	-0.15	-0.20
	SE	0.05	0.13	0.06	0.11
	CI	[-0.22, -0.03]	[0.56, 1.08]	[-0.26, -0.05]	[-0.41, 0.01]
	p		< .001	.005	.059
Forgiveness	b	0.42	0.82	0.52	0.19
	SE	0.08	0.13	0.06	0.11
	CI	[0.26, 0.59]	[0.56, 1.08]	[0.41, 0.63]	[-0.03, 0.40]
	p		< .001	< .001	.096
PosDir	b	0.05	0.82	0.06	0.47
	SE	0.10	0.13	0.13	0.25
	CI	[-0.16, 0.25]	[0.56, 1.08]	[-0.20, 0.32]	[-0.02, 0.96]
	p		< .001	.650	.059
NegDir	b	-0.07	0.82	-0.08	-0.11
	SE	0.08	0.13	0.10	0.19
	CI	[-0.22, 0.09]	[0.56, 1.08]	[-0.28, 0.11]	[-0.48, 0.26]
	p		< .001	.398	.558
NegInd	b	0.02	0.82	0.03	-0.24
	SE	0.10	0.13	0.12	0.23
	CI	[-0.16, 0.21]	[0.56, 1.08]	[-0.21, 0.27]	[-0.69, 0.21]
	p		< .001	.803	.293

Note. Internationality = Perceived partner intentionality. PosDir = Positive-direct responses to hurt feelings. NegDir = Negative-Direct responses to hurt feelings. NegInd = Negative-Indirect responses to hurt feelings.

## Motives Behind People's Responses to Hurt Feelings

The results and scree plot of a principal component analysis with varimax rotation suggest three types of motives (Table 8), which explained 46% of the total variance. The first 7-item category described motives to seek revenge (e.g., "I wanted to seek revenge;"  $\alpha$  = .83). The second 7-item category was characterized by motives to seek care from the partner (e.g., "I needed my partner to reassure me that they still loved me despite their actions;"  $\alpha$  = .80). Six items constituted the third category, which represented motives to confront the partner (e.g., "I wanted my partner to know what they did was wrong;"  $\alpha$  = .76).

Table 8

Results of principal component analysis on motives behind behavioral responses to hurt feelings measure in Study 2.

Items	Seek	Seek Care	Confront
	Revenge	from	Partner
		Partner	
1. I wanted to seek revenge.	.78		
2. I wanted my partner to feel as awful as I did	.70		
3. I wanted to get back at my partner.	.67		
4. I wanted to hurt my partner.	.78		
5. I needed to protect myself from being further hurt	.48		.42
by my partner.			
6. I wanted to stay away from my partner.	.66		
7. I wanted to move on from the situation and never	(.31)	(.28)	(05)
talk about it again			
8. I wanted to forget about the whole situation.	.37	.38	
9. I did not want the situation to become unnecessarily		.42	
complicated.			
10. Nothing I do could change my partner anyway.	.58		
11. It did not matter what I do	.57		
12. I needed my partner to reassure me that they still		.78	
loved me despite their actions.			
13. I wanted to know whether I was still important to		.56	
my partner or not.		.50	
14. I wanted my partner to comfort me.		.75	

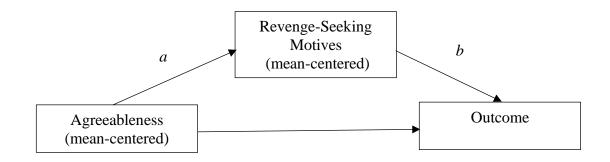
15. I wanted to feel connected to my partner again.		.72	
16. I wanted my partner's attention.		.59	
17. I wanted my partner to apologize.			.65
18. I wanted my partner to know they were wrong and I was right.	.46		.58
19. I wanted to change my partner's behaviors.			.47
20. I wanted my partner to never do the same to hurt			.75
me again.			
21. I wanted my partner to know what they did was			.76
wrong.			
22. I wanted to fix the situation.	47	.50	
23. I wanted to clear any misunderstanding.	42	.45	
24. I wanted to fix the relationship.		.61	
25. I wanted to reassure my partner that I loved them	34	.50	
no matter what.			
26. I wanted my partner to understand why I was hurt.			.64
27. I did not want this situation to happen again.			.62

*Note*. Factor loadings lower than .32 are suppressed and not presented in the table. Items that cross-loaded were dropped, unless the difference between the factor loadings was greater or equal to .30, in which case the item would be included in the factor with the higher loading.

As illustrated in Table 6 from above, consistent with the view that agreeableness encompasses communal motivation, agreeable people were less likely than less agreeable people to endorse revenge-seeking motives. However, people higher and lower in agreeableness did not differ in their endorsement of the motives to seek care from or to confront a partner. I also examined my mediational hypotheses regarding communal motivation by testing the indirect effect of revenge-seeking motives in the associations between agreeableness and the various behavioral responses to hurt feelings (see Table 9). Supporting my predictions, agreeable people were less likely than people lower in agreeableness to be motivated to seek revenge, which in turn was associated with reports of being (a) more positive-direct, (b) less negative-direct, and (c) less negative-indirect.

Table 9.

Summary of statistics of mediation models involving revenge-seeking motives in Study 2. The c' path represents the association between agreeableness and the outcome variable when revenge-seeking motives are controlled.



Outcome	Parameter	ab	а	b	Direct c'
PosDir	b	0.53	-0.82	-0.65	-0.01
	SE	0.13	0.15	0.12	0.23
	CI	[0.28, 0.78]	[-1.08, -0.55]	[-0.88, -0.42]	[-0.46, 0.44]
	p		< .001	< .001	.959
NegDir	b	-0.39	-0.82	0.47	0.21
	SE	0.10	0.15	0.09	0.18
	CI	[-0.58, -0.20]	[-1.08, -0.55]	[0.30, 0.65]	[-0.13, 0.56]
	p		< .001	< .001	.232
NegInd	b	-0.21	-0.82	0.25	-0.01
	SE	0.10	0.15	0.11	0.23
	CI	[-0.40, -0.01]	[-1.08, -0.55]	[0.03, 0.48]	[-0.45, 0.43]
	p		< .001	.028	.971

Note. PosDir = Positive-direct responses to hurt feelings. NegDir = Negative-Direct responses to hurt feelings. NegInd = Negative-Indirect responses to hurt feelings.

# **Study 2 Summary**

Replicating Study 1, Study 2 showed that agreeable people, compared to less agreeable people, reported being more forgiving and less likely to think that their partner hurt them intentionally. Results suggested that trust played a role in explaining these associations. Unlike Study 1, agreeableness was positively associated with the usage of positive-direct responses to hurt feelings, but it was not associated with the usage negative-direct or negative-indirect responses to hurt feelings. Moreover, trust did not mediate these associations. However, results were consistent with the view that lower revenge-seeking motives, which I conceptualize as a form of communal motivation, helped explain the associations between higher agreeableness and

being (a) more positive-direct, (b) less negative-direct, and (c) less negative-indirect in response to hurt feelings.

### Study 3

Thus far, my results suggest that people's trust in their partner's overall, chronic regard and care for them helps explain why agreeableness is associated with more positive reactions to hurt feelings. But, precisely how does chronic, overall trust in their partner's care translate into specific expectations for the partner in the context of hurt feelings? I included a proximate measure of trust more specific to the context of hurt feelings than the general measure of trust that I used in Studies 1 and 2. I proposed that high chronic trust would manifest in people's high expectations that their partner would respond favorably to their responses to hurt feelings.

## **Participants**

This study included 288 participants recruited from Amazon Mechanical Turk (MTurk) who were in a longer relationship than participants in the past two studies<sup>4</sup> ( $M_{age} = 37.9$  years, Mdn = 35.0, SD = 10.9;  $M_{relationship length} = 139.8$  months, Mdn = 103.0, SD = 122.1; 43.1% male, 56.3% female, 0.3% non-binary; 98.3% exclusively dating/married, 1.0% casually dating, 0.3% open relationship, 0.3% did not report). A sensitivity analysis indicates that with 288 participants, the minimum effect size detected at 80% power and  $\alpha = .05$  is  $f^2 = 0.03$  (i.e., a small effect size).

#### **Procedure and Materials**

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<sup>&</sup>lt;sup>4</sup> Initially, 301 participants completed the study. However, 11 participants did not describe a hurtful incident, one participant answered all questions uniformly, and one response were empty. These 13 participants were excluded.

Participants first completed the same measure of agreeableness ( $\alpha$  = .87) as in the past two studies. Then, they completed the McCarthy et al.'s (2017) trust measure, and a trust measure by Cortes & Wood (2019). I created a 6-item trust composite from selected items of these two trust scales (e.g., "I am confident that my partner accepts and loves me," "My partner is responsive to my needs;"  $\alpha$  = .93). Because participants rated these items with different anchors when responding to the two trust scales, I standardized their score on each of the six items before I averaged the items to create the trust composite.

Next, I used a measure of trust more specific to the expression of hurt feelings. Specifically, participants described how they expected their partners would react to four behavioral responses to hurt feelings: positive-direct responses (i.e., "If I tell my partner directly that I am hurt when they hurt me, I will..."), negative-direct responses (i.e., "If I act angrily at my partner when they hurt me, I will..."), negative-indirect responses (i.e., "If I give my partner the silent treatment when they hurt me, I will..."), and avoidant behaviors (i.e., "If I do not let my partner know that they hurt me, I will..."). For each of the four responses, participants responded to an 11-item measure (e.g., "...be understood by my partner," "...be accused by my partner of overreacting"). See Results for a principal component analysis.

Then, participants open-endedly described a past hurtful incident following the same prompt from Study 2. Using the same measures from Studies 1 and 2, they also reported how hurt and angry they felt, and the extent to which they thought their partner hurt them intentionally (4-item measure;  $\alpha = .72$ ). In addition, participants answered three new questions adapted from Bradbury et al.'s (1987) Marital Attribution Style Questionnaire that measured their negative attributions for their partner's hurtful behaviors (i.e., "is your partner's behavior (1 = completely unintentional to 7 = completely intentional)," "is your partner (1 = not at all

deserving of blame to 7 = highly deserving of blame," and "is your partner's behavior motivated by concerns that are  $(1 = entirely \ selfish$  to  $7 = not \ at \ all \ selfish$ )." I averaged responses to these three questions to create a negative attributions score  $(\alpha = .67)$ .

Next, participants responded to a 16-item, shortened measure of behavioral responses to hurt feelings adapted from the measure we used in Study 1. I shortened Study 1's measure to keep this survey at a reasonable length (i.e., about 30-minute long). Following the stem, "When I was feeling hurt from the incident that I just described, I," participants rated their agreement with each of the 16 items (1 = strongly disagree to 7 = strongly agree). See Results for a principal component analysis on these items. Participants then responded to the same 2-item forgiveness measure ( $\alpha = .86$ ) from Studies 1 and 2.

# **Study 3 Results**

See Table 10 for descriptive statistics and correlations among variables.

Table 10.

Descriptive statistics and correlations among key variables in Study 3.

	1	2	3	4	5	6	7	8	9
1									
2	.27***								
3	18***	34***							
4	11***	30***	.76***						
5	.28***	.54***	43***	36***					
6	.15***	.27***	08**	01	.20***				
7	21***	01	.36***	.28***	22***	.07*			
8	.06†	05†	.07*	.00	12***	24***	.27***		
9	01	.02	23***	25***	.07*	.05	31***	07*	
10	03	18***	01	05†	18***	39***	.05†	.43***	.19***
11	.24***	.84***	33***	30***	.53***	.27***	05†	05†	.09**
12	.12***	.16***	.11***	.12***	.02	.19***	.20***	.06†	26***
13	09**	.03	.33***	.29***	16***	.02	.62***	.18***	38***
14	.06*	.11***	05†	05	.08**	.03	.06*	.06†	.11***
15	19***	13***	.14***	.09**	14***	09**	.12***	.06*	.01
16	18***	19***	.11***	.09**	15***	05†	.11***	.06†	.01
n	288	288	288	288	288	288	288	288	288
Scale	1-5		1-5	1-7	1-7	1-7	1-7	1-7	1-7
Mean	3.88	0	2.99	4.47	6.08	5.45	4.06	3.87	2.62
SD	0.75	0.84	0.93	1.37	1.18	1.45	1.66	1.74	1.80
Skewness	-0.46	-1.32	0.16	-0.29	-1.23	-1.03	-0.18	-0.17	0.71

Note. 1 = Agreeableness. 2 = Trust. 3 = Perceived partner intentionality. 4 = Attribution. 5 = Forgiveness. 6 = Positive-direct responses. 7 = Negative-direct responses. 8 = Negative-indirect responses. 9 = Affectionate behaviors. 10 = Covert Optimism. 11 = Relationship satisfaction. 12 = Feeling Hurt. 13 = Feeling angry. 14 = Anticipated favorable reactions from a partner—aggregated. 15 = Anticipated partner's defensiveness—aggregated. 16 = Anticipated feeling hurt and vulnerable—aggregated. † p < .00 \* \*\* p < .010 \*\*\* p < .00. The trust scale involves selected items from two separate trust scales (i.e., Cortes & Wood, 2019; McCarthy, Wood, & Holmes, 2017). Because these items were measured using different scales (i.e., 1-7 for McCarthy et al (2017) and 1-9 in Cortes & Wood (2019), I standardized the items before creating the trust composite. As such, the mean is 0.

Table 10 Continued

Descriptive statistics and correlations among key variables in Study 3.

	10	11	12	13	14	15	16
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11	16***						
12	02	.05					
13	.01	03	.30***				
14	.06*	.13***	01	.05†			
15	.10***	16***	.03	.04	05		
16	.17***	20***	02	.02	19***	.31***	
n	288	288	288	288	288	288	288
Scale	1-7	1-9	1-5	1-5	1-7	1-7	1-7
Mean	3.24	7.34	4.65	4.01	3.50	3.63	3.65
SD	1.74	1.69	0.59	1.24	1.81	1.56	1.45
Skewness	0.32	-1.23	-1.68	-1.18	0.18	-0.16	0.02

Note. 1 = Agreeableness. 2 = Trust. 3 = Perceived partner intentionality. 4 = Attribution. 5 = Forgiveness. 6 = Positive-direct responses. 7 = Negative-direct responses. 8 = Negative-indirect responses. 9 = Affectionate behaviors. 10 = Covert Optimism. 11 = Relationship satisfaction. 12 = Feeling Hurt. 13 = Feeling angry. 14 = Anticipated favorable reactions from a partner—aggregated. 15 = Anticipated partner's defensiveness—aggregated. 16 = Anticipated feeling hurt and vulnerable—aggregated. † p < .100 \* p < .050 \* p < .010 \* \* \* p < .00. The trust scale involves selected items from two separate trust scales (i.e., Cortes & Wood, 2019; McCarthy, Wood, & Holmes, 2017). Because these items were measured using different scales (i.e., 1-7 for McCarthy et al (2017) and 1-9 in Cortes & Wood (2019), I standardized the items before creating the trust composite. As such, the mean is 0.

## Principal Component Analysis of Responses to Hurt Feelings Measure

Results and a scree plot of a principal component analysis with varimax rotation yielded five types of behaviors that together explained 71% of the total variance (Table 11). Four items reflected negative-direct responses to hurt feelings (e.g., "made hurtful / mean comments to my partner;"  $\alpha$  = .81). Positive-direct responses to hurt feelings included three items (e.g., "openly tried to talk to my partner and reach an understanding of what happened;"  $\alpha$  = .82). Three items constituted covert optimism (e.g., "hoped that if I did not say anything, things would get better;"  $\alpha$  = .78). One item (i.e., "acted affectionately toward my partner") described affectionate behavior following the hurtful incident. Last, negative-indirect responses were described by two items (e.g., "assumed my partner should know something was wrong;"  $\alpha$  = .55).

Results of principal component analysis on responses to hurt feelings measure in Study 3.

Table 11.

Ite	ems	Negative-	Positive-	Covert	Affectionate	Negative-
		Direct	Direct	Optimism		Indirect
1.	Talked to my partner		.84			
	about what was					
	bothering me					
2.	Openly tried to talk to		.85			
	my partner and reach an					
	understanding of what					
	happened					
3.	Shared my hurt feelings		.79			
	with my partner					
4.		.82				
_	comments to my partner					
5.		.54			.57	
	way.	0.2				
6.	Quarreled or argued with	.82				
7	my partner	00				
7.	, , , , , , , , , , , , , , , , , , ,	.82				
0	partner			40		57
8.	Acted like something			.42		.57
	was wrong but did not					
	tell my partner until they					
	asked					

9. Acted like I was in a bad mood (e.g., mope around, sigh)	.56				.48
10. Did not say much, but expected my partner to pick up my cues.		34	.36		.66
11. Assumed my partner should know something					.81
was wrong 12. Tried to be romantic				.84	
13. Acted affectionately toward my partner				.78	
14. Waited and hoped that things would get better			.72		
15. Hoped that if I did not say anything, things would get better			.82		
16. Felt hesitant to tell my partner I was hurt, even			.79		
though I wanted to					

*Note.* Factor loadings lower than .32 are suppressed and not presented in the table. Items that cross-loaded were dropped. Items that cross-loaded were dropped, unless the difference between the factor loadings was greater or equal to .30, in which case the item would be included in the factor with the higher loading.

#### Reactions to Hurtful Incident

As can be seen in Table 12, unlike Studies 1 and 2, agreeable people reported feeling more hurt than did people lower in agreeableness. Similar to Study 1 but different from Study 2, agreeable people were just as angry as less agreeable people. Supporting my predictions, higher agreeableness was associated with (a) less likelihood of perceiving that their partner was intentionally hurtful, (b) higher forgiveness, and responding to hurt feelings in (c) less negative-direct and (d) more positive-direct ways than did people lower in agreeableness. Echoing the perceived partner intentionality finding, agreeable people were marginally less likely than people lower in agreeableness to make negative attributions for a partner's hurtful behaviors.

Agreeableness was not related to negative-indirect reactions to hurt feelings, affectionate behaviors, or covert optimism.

Summary of statistics of regression models in Study 3, regressing each outcome variable on agreeableness. 95% CI are presented below the b.

Outcome	b	SE	β	t	df	р
Feeling Hurt	0.10	0.05	.07	2.09	286	.037
	[0.01, 0.19]					
Feeling Angry	-0.14	0.10	11	1.48	286	.140
	[-0.34, 0.05]					
Perceived Partner Intentionality	-0.23	0.07	17	-3.13	286	.002
	[-0.37, -0.08]					
Negative Attribution	-0.20	0.11	15	-1.85	286	.065
	[-0.41, 0.01]					
Forgiveness	0.45	0.09	.33	4.88	286	< .001
	[0.27, 0.62]					
Positive-Direct Responses to	0.30	0.11	.22	2.60	286	.010
Hurt Feelings	[0.07, 0.52]					
Negative-Direct Responses to	-0.47	0.13	35	-3.62	286	< .001
Hurt Feelings	[-0.72, -0.21]					
Negative-Indirect Responses to	0.01	0.15	.10	0.96	286	.339
Hurt Feelings	[-0.14, 0.40]					
Affectionate Behaviors	-0.02	0.14	02	-0.15	286	.879
	[-0.30, 0.26]					
Covert Optimism	-0.07	0.14	05	-0.47	286	.636
	[-0.34, 0.21]					

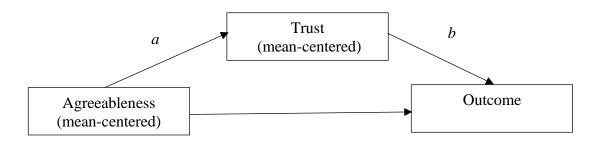
#### **Trust Mediations**

Table 12.

As illustrated in Table 13, results were consistent with my predictions that higher trust helped explain the associations between higher agreeableness and (a) less likelihood of believing that the partner was intentionally hurtful, (b) higher forgiveness, and (c) more use of positive-direct responses. However, trust did not mediate the relation between agreeableness and the usage of negative-direct or negative-indirect responses to hurt feelings in this study.

Table 13.

Summary of statistics of mediation models involving trust in Study 3. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.



Outcome	Parameter	ab	а	b	Direct c'
Intentionality	b	-0.11	0.30	-0.35	-0.12
	SE	0.03	0.06	0.06	0.07
	CI	[-0.16, -0.05]	[0.18, 0.43]	[-0.48, -0.23]	[-0.26, 0.02]
	p		< .001	< .001	.089
Forgiveness	b	0.21	0.30	0.70	0.24
	SE	0.05	0.06	0.07	0.08
	CI	[0.11, 0.31]	[0.18, 0.43]	[0.56, 0.84]	[0.08, 0.39]
	p		< .001	< .001	.003
PosDir	b	0.13	0.30	0.43	0.17
	SE	0.05	0.06	0.10	0.11
	CI	[0.05, 0.21]	[0.18, 0.43]	[0.23, 0.62]	[-0.05, 0.39]
	p		< .001	< .001	.148
NegDir	b	0.03	0.30	0.09	-0.49
	SE	0.04	0.06	0.12	0.13
	CI	[-0.04, 0.10]	[0.18, 0.43]	[-0.14, 0.32]	[-0.76, -0.23]
	p		< .001	.454	< .001
NegInd	b	-0.05	0.30	-0.15	0.18
	SE	0.04	0.06	0.13	0.14
	CI	[-0.12, 0.03]	[0.18, 0.43]	[-0.40, 0.10]	[-0.10, 0.46]
	p		< .001	.240	.214

Note. Internationality = Perceived partner intentionality. PosDir = Positive-direct responses to hurt feelings. NegDir = Negative-direct responses to hurt feelings. NegInd = Negative--ndirect Responses to hurt feelings.

## Proximate Trust Measure/Anticipated Outcomes Following Responses to Hurt Feelings

Results and a scree plot of a principal component analysis with varimax rotation of the anticipated outcomes measure suggest three types of anticipated outcome that explained 70% of the total variance (Table 14). See Footnote 5 for a detailed description of how I conducted this

principal component analysis.<sup>5</sup> The first type of anticipated outcome involved four items assessing favorable reactions from the partner (e.g., "be understood by my partner;"  $\alpha$  = .92). The second 3-item component involved defensiveness from the partner (e.g., "be accused by my partner of overreacting;"  $\alpha$  = .74). Finally, two items involved feeling hurt and vulnerable (e.g., "be hurt even further by my partner;"  $\alpha$  = .40).

Results of principal component analysis on proximate trust / anticipated outcomes of responses to hurt feelings measure in Study 3.

Table 14

Items	Favorable	Defense	Vulnerable
1. Be understood by my partner	.88		
2. Improve my relationship with my partner	.90		
3. Be able to improve the situation—the issue that led	.90		
to my hurt feelings			
4. Be comforted by my partner	.87		
5. Be ignored by my partner	34		.60
6. Be accused by my partner of overreacting		.71	.40

<sup>&</sup>lt;sup>5</sup> Because participants responded to each item of the anticipated outcome measure four times, I had four data points for each item per participant in the dataset. To avoid entering the same item more than once in the principal component analysis, I reformatted the dataset such that instead of having each of the four responses to the same item laid out in four different columns in the same row (i.e., wide format), the four responses were organized vertically in the same column in four different rows (i.e., tall format). Each row corresponded to one of the four question stems. This reformatting allowed me to enter each item once instead of four times into the principal component analysis, which helped me distinguish to which component each item belonged. If I entered the same item four times in the principal component analysis, the same item could possibly load onto different components, making it difficult to determine the grouping of the items.

7. Be hurt even further by my partner	40	.70
8. Come across as being overly sensitive	.73	.39
9. Feel vulnerable		.70
10. Make my partner feel criticized	.86	
11. Make my partner feel guilty	.79	

*Note.* Factor loadings lower than .32 are suppressed and not presented in the table. Items that cross-loaded were dropped, unless the difference between the factor loadings was greater or equal to .30, in which case the item would be included in the factor with the higher loading. Favorable = Anticipated partner's favorable reactions. Defense = Anticipated defensiveness from partner. Vulnerable = Anticipated feelings of hurt and vulnerable.

Supporting my idea that these anticipated outcomes are indications of proximal trust—specifically, trust concerning the specific context of hurt feelings—they were related to indications of chronic trust. The chronic trust measure was associated (a) positively with anticipated favorable reactions from a partner, r(286) = .66, p < .001, (b) negatively with anticipated defensiveness from a partner, r(286) = -.35, p < .001, and (c) negatively with anticipated feelings of hurt and vulnerability, r(286) = -.37, p < .001. Next, I examined how these indicators of specific trust are associated with agreeableness and the different behavioral responses to hurt feelings.

I conducted multi-level modeling using the "lme4" package (Bates, Mächler, Bolker, & Walker, 2015) in R to take into account the nonindependence in the data that arises from the within-subject nature of this study by nesting responses in participant as random intercept. I regressed each of these anticipated outcomes on agreeableness (mean-centered), type of behavioral responses of hurt feelings (four levels: positive-direct responses, negative-direct responses, negative-indirect responses, and avoidance of expressing hurt feelings; effects coded, negative-indirect expressions as base group), and their product terms. To determine whether there is a significant two-way interaction, I conducted a deviance test to see whether a model including the product terms explained significantly more variance than a model with only the

main effects. When a significant two-way interaction emerged (i.e., the model including product terms explained significantly more variance than the model with only the main effects), I used dummy codes to probe for simple effects of agreeableness within each type of responses to hurt feelings.

As shown in Table 15, in line with the view that agreeable people have higher specific trust—more favorable expectations for partners' reactions to their responses to hurt feelings—agreeable people on average anticipated more favorable reactions from their partner, less defensiveness from their partner, and feeling less hurt and vulnerable than did less agreeable people. Moreover, these main effects of agreeableness were qualified by two-way interactions with types of responses to hurt feelings.

Table 15.

Summary of statistics of multi-level regression models and deviance test results in Study 3. We regressed each proximate trust/anticipated outcome on agreeableness (mean-centered), type of responses to hurt feelings (effects coded; negative-indirect responses as base group), and their interaction. 95% CI are presented below the b.

Outcome	Deviance Test	Predictor	b	SE	t	df	p
Favorable	$\chi^2(3) = 13.94,$	Agreeableness	0.15	0.07	2.07	286.00	.040
	p = .003		[0.01, 0.30]				
		Positive-Direct	1.71	0.07	24.86	858.00	< .001
		Responses	[1.58, 1.85]				
		Negative-Direct	-0.21	0.07	-2.98	858.00	.003
		Responses	[-0.34, -0.07]				
		Avoidance	-0.73	0.07	-10.62	858.00	< .001
			[-0.87, -0.60]				
Defensive	$\chi^2(3) = 10.17,$	Agreeableness	-0.40	0.07	-5.44	286.00	< .001
	p = .017		[-0.54, -0.25]				
		Positive-Direct	-0.12	0.06	-2.01	858.00	.046
		Responses	[-0.23, -0.00]				
		Negative-Direct	0.71	0.06	12.36	858.00	< .001
		Responses	[0.60, 0.83]				
		Avoidance	-1.14	0.06	-19.67	858.00	< .001
			[-1.25, -1.02]				
Hurt,	$\chi^2(3) = 15.29$ ,	Agreeableness	-0.35	0.08	-4.26	286.00	< .001
Vulnerable	p = .002		[-0.51, -0.19]				

Positive-Direct	-0.27	0.06	-4.73	858.00	< .001
Responses	[-0.38, -0.16]				
Negative-Direct	-0.01	0.06	-0.17	858.00	.868
Responses	[-0.12, 0.10]				
Avoidance	0.42	0.06	7.26	858.00	< .001
	[0.31, 0.53]				

Note. Favorable = Anticipated favorable reactions from partner. Defensiveness = Anticipated partner's defensiveness. Hurt, Vulnerable = Anticipated feelings of hurt and vulnerability.

As can be seen in Table 16, agreeable people expected that their partner would react more favorably than did people lower in agreeableness only when they were responding to hurt feelings in positive-direct and negative-direct ways, but not when they were using negative-indirect or avoidant responses (Figure 1). Moreover, the difference between more agreeable and less agreeable people in their expectations for their partner's defensiveness appeared to be most pronounced for positive-direct responses than for other responses to hurt feelings (Figure 2). Finally, agreeableness was associated with anticipating feeling less hurt and vulnerable if they were to respond in positive-direct, negative-direct, and negative-indirect ways (Figure 3). Agreeableness was only marginally associated with anticipating lower feelings of hurt and vulnerability following avoidant behaviors.

Table 16.

Summary of statistics of simple effects of agreeableness on proximate trust/anticipated outcomes within each type of responses to hurt feelings in Study 3. 95% CI are presented below the b.

Outcome	Condition	b	SE	t	df	р
Favorable	Positive-Direct	0.36	0.12	3.06	1039.52	.002
	Responses	[0.13, 0.59]				
	Negative-Direct	0.32	0.12	2.72	1039.52	.007
	Responses	[0.09, 0.55]				
	Negative-Indirect	-0.12	0.12	-1.04	1039.52	.298
	Responses	[-0.35, 0.79]				
	Avoidance	0.05	0.12	0.41	1039.52	.685
		[-0.18, 0.28]				
Defensive	Positive-Direct	-0.61	0.10	-5.77	910.57	< .001
	Responses	[-0.82, -0.41]				

	Negative-Direct	-0.32	0.11	-3.01	910.57	< .001
	Responses Negative-Indirect Responses	[-0.52, -0.11] -0.23 [-0.44, -0.02]	0.11	-2.16	910.57	.031
	Avoidance	-0.42 [-0.63, -0.21]	0.11	-3.97	910.57	< .001
Hurt,	Positive-Direct	-0.64	0.11	-5.71	809.97	< .001
Vulnerable	Responses	[-0.86, -0.42]				
	Negative-Direct	-0.25	0.11	-2.23	809.97	.026
	Responses	[-0.47, -0.03]				
	Negative-Indirect	-0.31	0.11	-2.71	809.97	.007
	Responses	[-0.52, -0.09]				
	Avoidance	-0.31	0.11	-2.71	809.97	.085
		[-0.52, -0.09]				

Note. Favorable = Anticipated favorable reactions from partner. Defensive = Anticipated partner's defensiveness. Hurt, Vulnerable = Anticipated feelings of hurt and vulnerability.

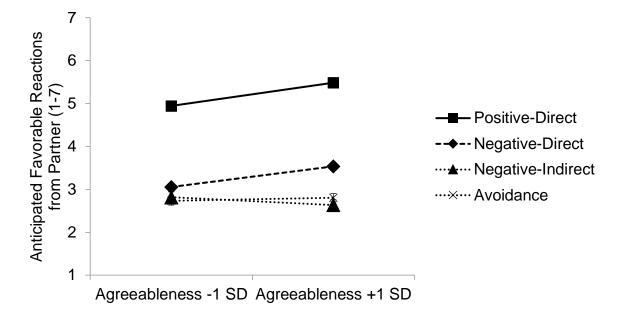


Figure 1. Anticipated favorable reactions from a partner as function of agreeableness and types of responses to hurt feelings, with  $\pm 1$  standard error bars.

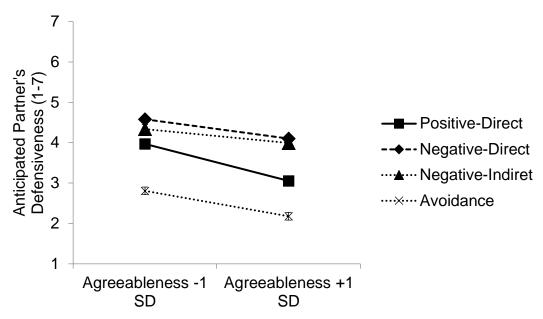


Figure 2. Anticipated partner's defensiveness as a function of agreeableness and types of responses to hurt feelings, with  $\pm 1$  standard error bars.

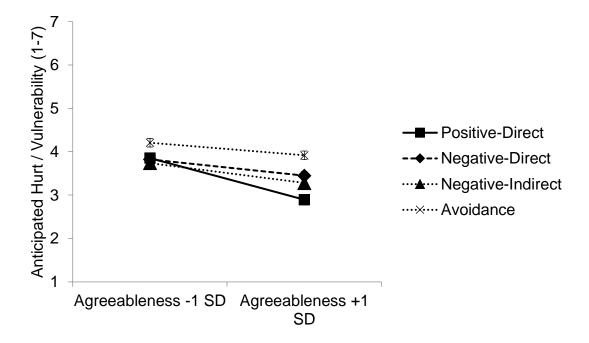


Figure 3. Anticipated levels of hurt and vulnerability as a function of agreeableness and types of responses to hurt feelings with  $\pm 1$  standard error bars.

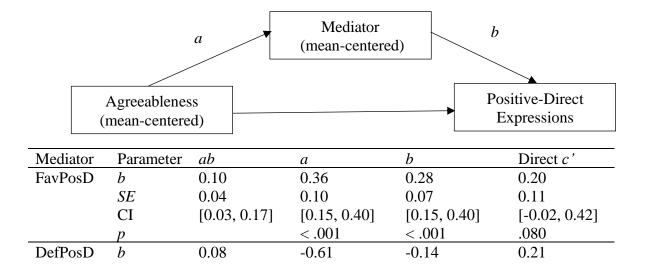
In sum, agreeable people's anticipated outcomes following positive-direct responses to hurt feelings aligned with their chronically high trust in their partner's regard and care:

Compared to people lower in agreeableness, highly agreeable people anticipated that, if they responded to hurt feelings in positive-direct ways, they would receive more favorable reactions from their partner, lower defensiveness from their partner, and that they would feeling less hurt and vulnerable.

Next, I examined whether these anticipated outcomes, like indices of chronic trust, would help explain the associations between agreeableness and positive-direct responses to hurt feelings. To test this prediction, I first created scores of anticipated favorable reactions from a partner, defensiveness from a partner, and feelings of hurt and vulnerability with the items that specifically followed the stem for positive-direct responses. I then used these scores (mean-centered) as mediators in my analyses. Results (see Table 17) were in line with the view that highly agreeable people responded in more positive-direct ways than did less agreeable people because they expected more favorable reactions from their partner, less defensiveness from their partner (marginal indirect pathway), and that they would feel less hurt and vulnerable.

Summary of statistics of mediation models involving anticipated outcomes in Study 3. The c' path represents the association between agreeableness and the outcome variable when the mediator is controlled.

Table 17.



	SE	0.04	0.10	0.07	0.12
	CI	[-0.00, 0.17]	[-0.81, -0.42]	[-0.27, -0.01]	[-0.02, 0.45]
	p		< .001	.043	.076
HurtPosD	b	0.11	-0.64	-0.17	0.19
	SE	0.05	0.10	0.07	0.12
	CI	[0.02, 0.20]	[-0.84, -0.45]	[-0.30, -0.04]	[-0.05, 0.42]
	p		< .001	.011	.117

Note. FavPosD = Anticipated favorable reactions from partner following positive-direct responses to hurt feelings. DefPosD = Anticipated partner's defensiveness following positive-direct responses to hurt feelings. HurtPosD = Anticipated feelings of hurt and vulnerability following positive-direct responses to hurt feelings.

### **Study 3 Summary**

Supporting my predictions, Study 3 showed that higher agreeableness was related to reports of (a) less likelihood of believing that a partner was intentionally hurtful, (b) making fewer negative attributions for a partner's hurtful behaviors, and (c) being more forgiving.

Agreeable people reported responding to hurt feelings in less negative-direct and more positive-direct manners than did less agreeable people. These associations appeared to be indirectly explained in part through general trust. Also, I showed that agreeable people anticipated more favorable outcomes than did people lower in agreeableness if they were to respond to hurt feelings positively and directly. Echoing my general trust mediations, these anticipated outcomes helped explain why agreeable people were more positive-direct than less agreeable people.

## **Mega-Analysis: Integrating Studies 1, 2, and 3**

Although the direction of the associations between agreeableness and positive reactions to hurt feelings in the last three studies followed our predictions, these associations were not always significant. Thus, I conducted a mega-analysis in which I pooled together the data from these studies to examine the overall significance of these associations. A mega-analysis utilizes all data from my studies, affording greater statistical power than an internal meta-analysis (Curran & Hussong 2009, 2009; Sung et al., 2014). I conducted multi-level modelling in which I

nested participants within study as random intercept, and regressed each outcome variable on agreeableness (mean-centered).

# **Results and Summary**

Table 18.

As can be seen in Table 18, pooled results from Studies 1-3 showed that in response to hurtful incidents, highly agreeable people reported feeling marginally more hurt and significantly less angry than did less agreeable people. Also, consistent with my predictions, agreeable people reported (a) less likelihood of believing that their partner hurt them intentionally, (b) higher forgiveness, and responding to hurt feelings in (c) more positive-direct and (d) less negative-direct manners than did less agreeable people. Agreeableness was not associated with negative-indirect responses.

Summary of statistics of multi-level regression models in mega-analysis, regressing each outcome variable on agreeableness. 95% CI are presented below the b.

Outcome	b	SE	β	t	df	р
Feeling Hurt	0.07	0.04	0.04	1.84	678.58	.067
	[-0.00, 0.14]					
Feeling Angry	-0.20	0.04	13	2.69	678.74	.007
	[-0.34, -0.05]					
Perceived Partner Intentionality	-0.25	0.05	17	510	677.39	< .001
	[-0.35, -0.16]					
Forgiveness	0.53	0.07	.35	7.59	677.96	< .001
	[0.39, 0.66]					
Positive-Direct Responses to	0.33	0.09	.22	3.71	673.98	< .001
Hurt Feelings	[0.16, 0.50]					
Negative-Direct Responses to	-0.45	0.08	30	-5.53	672.07	< .001
Hurt Feelings	[-0.61, -0.29]					
Negative-Indirect Responses to	-0.11	0.09	07	-1.16	671.13	.245
Hurt Feelings	[-0.29, -0.07]					

Study 4

The past three studies provided support to my hypotheses that agreeable people are less negative-direct and more positive-direct than were less agreeable people when responding to hurt

feelings. However, these studies used self-report measures that are susceptible to memory and self-serving biases. Study 4 recruited romantic couples to address this limitation. As a pre-registered study (https://osf.io/fp2qd), one member of the couple (the target) reported their own agreeableness, and the other member (the partner) reported a past incident in which they hurt the target's feelings and indicated how the target responded to hurt feelings.

### **Participants**

This study included 223 undergraduate romantic couples (446 individuals;  $M_{age\ of\ Partner}$   $P_{articipants} = 20.6$  years, Mdn = 20.0, SD = 4.7;  $M_{age\ of\ target\ Participants} = 21.4$  years, Mdn = 20.0, SD = 5.5;  $M_{relationship\ length} = 25.6$  months, Mdn = 18.0, SD = 31.1; among partner participants, 22.4% male, 77.1% female, 0.4% "queer/nonbinary;" among target participants, 73.1% male, 26.5% female, 0.4% prefer not to say; 99.1% exclusively dating/married, 0.9% casually dating,). A sensitivity analysis indicates that with 223 units of analysis, the minimum effect size detected at 80% power and  $\alpha = .05$  is  $f^2 = 0.04$ , which corresponds to a small effect size.

#### **Procedure and Materials**

This study was part of a larger project. Below, I described the procedures that pertained to the current research. For full procedure and materials, see our pre-registration form.

## Partners' Survey

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<sup>&</sup>lt;sup>6</sup> Initially, 274 couples completed the study. However, 13 partners described a time that they were hurt by the target, 24 partners did not describe a hurtful incident, one target did not provide consent, one partner's response was empty, and 12 targets' response was empty. These 51 couples were excluded based on my pre-registered exclusion criteria.

Participants first provided demographic information (e.g., age, gender), and completed the same measure of agreeableness from the aforementioned studies ( $\alpha = .77$ ). Next, they described a past incident in which they hurt their partner following the prompt, "Please take a few moments now to think of a time that you hurt your current romantic partner quite a bit. In the space below, please describe what happened, what you did to hurt your partner, and how you and your partner felt about the experience at the time. Please take your time to provide us with a complete picture of what happened. Your partner will not have access to your response." Then, to refresh their memory on what their partner did, they open-endedly answered the questions, "How did your partner react after the hurtful incident that you just described? What did your partner do to let you know that they were hurt?" Then, they completed the key dependent measure, a 47-item closed-ended measure of the target's responses to hurt feelings that we adapted from the measure we used in Study 1. Partners responded to each of the items following the prompt, "When my partner was feeling hurt from the incident that I just described, they:" (1 = strongly disagree to 7 = strongly agree). See Results for a principal component analysis of these items.

# Targets' Survey

Participants first provided demographic information (e.g., age, gender), and then reported their own agreeableness ( $\alpha = .76$ ) and trust ( $\alpha = .88$ ) using the same scales from Study 1.

## **Study 4 Results**

See Table 19 for descriptive statistics and correlations among variables.

Table 19

Descriptive statistics and correlations among key variables in Study 4.

1	2	3	4	5	6	7	8

1. Agree—								
T								
2. Agree—	.07							
P								
3. Trust—T	.34***	.25***						
4. PosDir.	.08	.09	.18**					
5. NegDir.	27***	21**	39***	21**				
6. NegInd.	07	12†	10	27***	.38***			
7. Aff.	.07	03	.08	.32***	19**	17*		
8. RelDis.	18**	15*	21**	05	.57***	.32***	13*	
n	223	223	221	223	223	223	223	223
Scale	1-5	1-5	1-9	1-7	1-7	1-7	1-7	1-7
Mean	3.75	3.77	7.18	5.18	2.31	3.31	3.09	1.67
SD	0.61	0.64	1.41	1.41	1.91	1.31	1.32	1.07
Skewness	-0.16	-0.29	-0.81	-0.87	1.04	0.25	0.44	1.69

*Note.* Agree—T = Agreeableness of Target. Agree—P = Agreeableness of Partner. Trust—T = Trust of Target. PosDir. = Positive-direct responses. NegDir. = Negative-direct responses. NegInd. = Negative-indirect responses. Aff. = Affectionate Behaviors. RelDis. = Behaviors that suggest relationship dissolution. † .050 .

## Principal Component Analysis of Responses to Hurt Feelings Measure

Consistent with my pre-registration, I did a principal component analysis with varimax rotation to identify categories of responses to hurt feelings. Results of this analysis and the scree plot suggested five types of behaviors (see Table 20) that explained 52% of the total variance. Negative-direct responses included 11 items (e.g., "made hurtful/mean comments to me;"  $\alpha$  = .88). Six items described positive-direct responses (e.g., "openly tried to talk to me and reach and understanding of what happened;"  $\alpha$  = .84). Negative-indirect responses included 10 items (e.g., "gave me the 'silent treatment;"  $\alpha$  = .86). Eight items described affectionate behaviors (e.g., "tried to be romantic;"  $\alpha$  = .83). Five items described the target's behaviors that suggested relationship dissolution (e.g., "thought about or fantasized about dating other people;"  $\alpha$  = .83).

Results of principal component analysis on responses to hurt feelings measure in Study 4.

Table 20

				,	
Items	Negative-	Negative-	Affectionate	Positive-	Relationship
	Indirect	Direct		Direct	Dissolution

1. they tried to be romantic.			.77		
2. they talked to me about				.79	
what was bothering				.17	
me.					
3. they waited and hoped	.46		.52		
-	.40		.52		
that things would get better.					
					61
4. they thought about or					.64
fantasized about dating					
other people.		70			
5. they made		.79			
hurtful/mean					
comments to me.		<i>c</i> 0			
6. they sought revenge.	<i>c</i> 1	.60			
7. they ignored me	.61	.35	77		
8. they were more			.77		
affectionate					
9. they talked about our				.66	
relationship			~0		
10. they were patient and			.50		
waited to see what					
would happen					= -
11. they told me that we					.76
should date others					
12. they quarreled or		.71			
argued with me					
13. they tried to get back		.55			
at me					
14. they gave me the	.69				
"silent treatment"			70		
15. they acted more			.73		
affectionate toward me					
16. they openly tried to				.66	
talk to me and reach an					
understanding of what					
happened	4.5		50		
17. they waited for things	.45		.52		
to improve					00
18. they told me we should					.80
go our separate ways		71			
19. they yelled or cursed at		.71			
me 20 they tried to "get even"		70			
20. they tried to "get even"		.70			
with me					

<ul><li>21. they stopped initiating communication</li><li>22. they initiated romantic</li></ul>	.65		.69		
activities for us to do together				0.4	
23. they explained their feelings to me				.84	
24. they hoped that if they	.39		.49		
just hung in there,					
things would get better					
25. they let things fall		.34			.66
apart between us		<i>C</i> 1			
26. they confronted me in an accusatory manner		.61			
27. they spent more time			.60		
with me					
28. they shared their hurt				.79	
feelings with me					
29. they held back from	.47				
revealing the extent to which they were hurt					
30. they wished things	.50				
would get better	.50				
31. they figured out ways					.75
to get out of the					
relationship					
32. they acted rude toward		.72			
me 33. they gave me a gift			.59		
34. they suggested things			.42	.48	
that might help us				. 10	
35. they thought about					.68
ending the relationship					
36. they apologized for			.40		
their behaviors				<i>5</i>	
37. they calmly questioned me about me actions				.54	
38. they acted like they did	.67				
not want to talk about					
it, when they really did					
39. they hoped that I	.49				
would press them for					
more information		.63			
40. they exaggerated how hurt they were		.03			
mare diey were					

41. they denied		.56		
responsibility for their				
role in the matter				
42. they acted like	.63			
something was wrong				
but did not tell me				
until I asked				
43. they acted like they	.57			
were in a bad mood				
(e.g., mope around,				
sigh)				
44. they did not say much,	.65			
but expected me to				
pick up their cues				
45. they acted quiet and	.72			
preoccupied				
46. they assumed I should	.52			
know something was				
wrong				
47. they ignored or	.58			
rejected my efforts to				
be supportive				

*Note*. Item stem = "When my partner was feeling hurt from the incident that I just describe," Factor loadings lower than .32 are suppressed and not presented in the table. Items that cross-loaded were dropped.

### Pre-Registered Analyses: Responses to Hurt Feelings

As planned in pre-registration, I conducted three separate linear regressions in which I regressed partner's report of target's positive-direct, negative-direct, and negative-indirect responses to hurt feelings on target's agreeableness (mean-centered), controlling for partner's agreeableness (mean-centered; see Table 21). Supporting my hypothesis, agreeable targets were rated by their partner as responding to hurt feelings in less negative-direct ways than were less agreeable targets. Contrary to my hypothesis, according to their partner, agreeable people did not differ from less agreeable people in their usage of positive-direct or negative-indirect responses. Table 21.

Summary of statistics of regression models in Study 4. 95% CI are presented below the b.

Outcome Predictor b SE β t df

Positive-Direct Responses	Target's	0.18	0.15	.11	1.17	220	.245
	Agreeableness	[-0.12, 0.49]					
	Partner's	0.18	0.15	.12	1.24	220	.218
	Agreeableness	[-0.11, 0.48]					
Negative-Direct	Target's	-0.49	0.13	30	-3.95	220	< .001
Responses	Agreeableness	[-0.59, -0.12]					
-	Partner's	-0.35	0.12	22	-2.97	220	.003
	Agreeableness	[-0.59, -0.12]					
Negative-Indirect	Target's	-0.13	0.14	08	-0.91	220	.363
Responses	Agreeableness	[-0.41, 0.15]					
-	Partner's	-0.25	0.14	17	-1.79	220	.075
	Agreeableness	[-0.52, 0.03]					
Affectionate Behaviors	Target's	0.16	0.15	.10	1.09	220	.276
	Agreeableness	[-0.13, 0.44]					
	Partner's	-0.08	0.14	05	-0.58	220	.561
	Agreeableness	[-0.36, 0.19]					
Behaviors that Suggested	Target's	-0.29	0.12	18	-2.52	220	.012
Relationship Dissolution	Agreeableness	[-0.52, -0.06]					
- -	Partner's	-0.23	0.11	15	-2.08	220	.039
	Agreeableness	[-0.45, -0.01]					

## Secondary Analyses

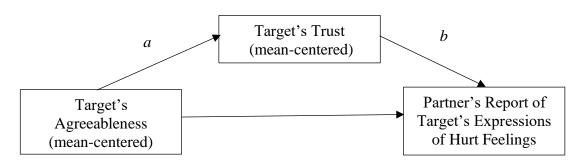
I also conducted secondary analyses investigating the associations between target's agreeableness and partner's report of the target's affectionate behaviors and behaviors that suggested relationship dissolution. Moreover, I investigated the indirect pathways from target's agreeableness to partner's report of target's responses to hurt feelings through target's chronic trust. To be consistent with my pre-registered analysis plan, I controlled for partner's agreeableness in these secondary analyses as well.

As shown in Table 21 above, partners indicated that highly agreeable targets were less likely to behave in ways that suggested relationship dissolution than less agreeable targets. Highly agreeable targets did not differ from less agreeable targets in the use of affectionate behaviors.

Results of mediation analyses (see Table 22) were in line with the idea that higher trust helped explain the associations between higher agreeableness and (a) more use of positive-direct responses to hurt feelings and (b) less use of negative-direct responses to hurt feelings. Trust did not mediate the association between agreeableness and negative-indirect responses.

Table 22.

Summary of statistics of mediation models involving trust in Study 4. The c'path represents the association between agreeableness and the outcome variable when trust is controlled. I also controlled for partner's agreeableness (not shown in diagram) in all paths in our analyses.



Outcome	Parameter	ab	а	b	Direct c'
PosDir	b	0.12	0.72	0.16	0.04
	SE	0.06	0.14	0.07	0.16
	CI	[0.00, 0.23]	[0.45, 0.99]	[0.02, 0.31]	[-0.28, 0.36]
	p		< .001	.030	.807
NegDir	b	-0.20	0.72	-0.28	-0.28
	SE	0.06	0.14	0.06	0.13
	CI	[-0.31, -0.09]	[0.45, 0.99]	[-0.39, -0.17]	[-0.52, -0.03]
	p		< .001	< .001	.026
NegInd	b	-0.05	0.72	-0.07	-0.06
	SE	0.05	0.14	0.07	0.15
	CI	[-0.14, 0.05]	[0.45, 0.99]	[-0.20, 0.07]	[-0.35, 0.24]
	p		< .001	.348	.700

Note. PosDir = Positive-direct responses to hurt feelings. NegDir = Negative-direct responses to hurt feelings. NegInd = Negative-indirect responses to hurt feelings.

### **Study 4 Summary**

In sum, this pre-registered study using partner's report further strengthens my claim that agreeable people respond to hurt feelings in less negative-direct ways than do people lower in agreeableness. Moreover, secondary analyses showed that higher agreeableness was associated

with behavioral responses that were (a) more positive-direct and (b) less negative-direct indirectly through higher trust. Highly agreeable people were also rated by their partner as less likely to behave in ways that suggested relationship dissolution than less agreeable people.

### Study 5

Study 5 was a pre-registered study that aimed to replicate the findings of the above studies. I also included measures of general communal motivation and self-regulation in addition to trust. As a way to examine self-regulation, I asked not only how people would behave in response to a future hurtful incident, but what they would be tempted to do. People may be tempted to respond to hurt feelings in ways that they will not actually carry out. If agreeable people react less negatively to hurt feelings than less agreeable people because they down-regulate their negative tendencies, then agreeable people should report being tempted to behave negatively, but report actually behaving less destructively.

Furthermore, I experimentally manipulated cognitive load to highlight agreeable people's self-regulation skills and communal motivation. I made two competing predictions regarding the moderating role of cognitive load in the associations between agreeableness and positive reactions to hurt feelings. Past research suggests that inhibiting one's negative responses (e.g., yelling at a partner) and reacting constructively to a partner's transgression requires self-regulation (Rusbult et al., 1991). However, self-regulation can be impeded when people experience high cognitive load, or high demand on one's mental resources (e.g., Gilbert & Hixon, 1991). It follows, then, that under high cognitive load, agreeable people may not react positively to hurt feelings because their self-regulatory effort is reduced. As such, my first prediction is that the associations between higher agreeableness and more positive reactions to hurt feelings are weaker among people who experience high cognitive load than those who

experience low cognitive load. Findings that support this hypothesis would highlight the importance of self-regulation in explaining agreeable people's positive responses to hurt feelings.

However, Perunovic and Holmes (2008) found that under high cognitive load, agreeable people reported responding even *more* positively to a partner's transgressions than usual. They reasoned that agreeable people's constructive tendencies are so ingrained and automatic that when they are incapable of monitoring their behaviors (e.g., under high cognitive load), their communal tendencies shine through. Therefore, I make a second, competing prediction that the positive associations between agreeableness and positive reactions to hurt feelings are stronger among people who experience high cognitive load than those who experience low cognitive load. Findings that support this hypothesis would highlight agreeable people's communal tendencies by showing that their "default" or automatic response to hurt feelings is to be positive.

## **Participants**

As outlined in my pre-registration, a power analysis assuming small to medium effect size of all predictors indicated that I needed 250 participants to ensure 80% power with an alpha level of .05. This study included 244 participants recruited from MTurk ( $M_{age} = 37.9$  years, Mdn = 26.0, SD = 9.9;  $M_{relationship \ length} = 124.1$  months, Mdn = 97.0, SD = 99.6; 117 Male; 127 Female; 100% exclusively dating/married). <sup>7</sup> A sensitivity analysis indicates that with 244 people, the minimum effect size detected at 80% power and  $\alpha = .05$  is  $f^2 = 0.05$  (i.e., a small effect size).

<sup>&</sup>lt;sup>7</sup> Of the initial 264 participants who completed the study, eight participants did not complete measures of the dependent variables, seven participants provided empty responses, and five participants provided non-sensical open-ended responses (e.g., "good" for all questions). As per my pre-registration, I excluded these 34 participants.

#### **Procedure and Materials**

First, participants completed the same agreeableness measure from the past four studies (i.e., the Agreeableness subscale of the Big Five Inventory;  $\alpha$  = .84). In addition, they completed the 20-item Agreeableness subscale of the Big Five Aspect Scale (John, Naumann, & Soto., 2008; e.g., "I feel others' emotions;" 1 = *strongly disagree* to 5 = *strongly agree*;  $\alpha$  = .90), and the 2-item Agreeableness subscale of the Ten Item Personality Inventory (Gosling, Rentfrow, & Swan, 2003; e.g., "I see myself as sympathetic, warm;" 1 = *disagree strongly* to 7 = *agree strongly*;  $\alpha$  = .49). Then, participants responded to a 6-item trust scale that we used in Study 3 (1 = *not at all true* to 7 = *completely true*;  $\alpha$  = .95), as well as a 13-item communal motivation measure (Clark, Ouellette, Powell, & Milberg, 1987; "when making a decision, I take other people's needs and feelings into account," "I believe people should go out of their way to be helpful;" 1 = *extremely uncharacteristic* to 5 = *extremely characteristic*;  $\alpha$  = .80) and an 8-item measure of self-regulation (Tangney, Baumeister, & Boone, 2004; "people would say that I have iron self-discipline," "I am good at resisting temptation;" 1 = *not at all* to 5 = *very much*;  $\alpha$  = .82).

Next, following the same prompt from Study 2, participants described a time that their partner hurt their feelings. This task was designed to remind participants of the experience of being hurt, in preparation for subsequent questions about their reactions to a future hurtful incident. After this recall task, participants were randomly assigned to either a high cognitive load or a low cognitive load condition by being asked to memorize either a 9-digit (580938976) or 3-digit (307) number, respectively. This procedure has been shown to effectively manipulate cognitive load (e.g., Cavallo, Holmes, Fitzsimons, Murray, & Wood, 2012; Gilbert & Hixon, 1991). The instructions were as follow:

"You will see a [9-digit/3-digit] number on the next screen. We would like you to remember this number for a later part in the study. Please rehearse and memorize this number during the study until you are asked to list them again. Please note that it is very important to our research that you do not use external aids to help you memorize the number (e.g., writing the number on a piece of paper, asking someone else to help you remember). Using external aids instead of your own memory will invalidate the data and severely compromise our research. We would greatly appreciate it if you try your best. If you can accurately recall this number when we ask for it at the end of the study, you will receive a bonus of \$0.30."

Immediately following the manipulation, participants responded to a 9-item closed-ended measure that described how they would respond next time when they encounter a hurtful incident, "Earlier in the study, you recalled a time that you were emotionally hurt by your romantic partner. Before you answer the following questions, please take a brief moment to think about what your partner did, and how your partner made you feel. Next time when you encounter a hurtful incident like the one that you just described, to what extent will you do the following"  $(1 = definitely \ will \ not \ do \ it \ to \ 7 = definitely \ will \ do \ it)$ . See Results for a principal component analysis of these items.

Next, following the prompt, "Next time when you encounter a hurtful incident like the one that you just described," participants indicated (a) their forgiveness using the same two items from Studies 1-3 ( $\alpha$  = .90) and (b) the extent to which they would think that their partner hurt them intentionally by responding to six items that combined the perceived partner intentionality and the negative attributions measures we used in Study 3 ( $\alpha$  = .85;1 = *definitely will not think this way* to 5 = *definitely will think this way*).

Then, participants indicated their state positive relationship attitudes using a 4-item closed-ended measure (e.g., "I feel committed to my relationship right now," "I feel close to my partner right now;" 1 = not at all to 7 = extremely;  $\alpha = .89$ ; see Appendix A for results regarding this variable), and the extent to which they would feel hurt and angry using items from the PANAS described in Studies 1-3. Furthermore, following the prompt, "Sometimes people are tempted to do things that they won't actually do. Next time when you encounter a hurtful incident like that one that you just described, to what extent will you want to do the following," participants indicated the extent to which they might be tempted to do different behaviors (1 = definitely will not want to do it to 7 = definitely will want to do it; see Results for results of a principal component analysis on these items).

## **Study 5 Results**

#### **Zero-Order Correlations**

Before testing our hypotheses, I first examined the zero-order correlations among the three measures of agreeableness, and the three characteristics associated with agreeableness (i.e., trust, communal motivation, and self-regulation; see Table 23). The agreeableness subscales of the Big-Five Inventory (BFIA), Big Five Aspect Scale (BFAS), and the Ten Item Personality Inventory (TIPI) were highly correlated with each other (rs > .70). Moreover, these three measures of agreeableness were similarly and positively correlated with trust, communal motivation, and self-regulation. Overall, these results suggest that the three agreeableness measures share common variance in describing agreeableness. To be consistent with the previous four studies, I presented the findings using BFIA in this article. Patterns of results of preregistered analyses were largely similar using BFAS and TIPI.

Table 23

Descriptive statistics and correlations among key variables in Study 5.

	1	2	3	4	5	6	7	8	9
1.									
2.	.66***								
3.	.78***	.70***							
4.	.31***	.31***	.24***						
5.	.52***	.75***	.55***	.26***					
6.	.39***	.29***	.30***	.23***	.18**				
7.	11†	.01	05	24***	.07	11†			
8.	.28***	.13*	.21***	.48***	.08	.20**	52***		
9.	.18**	.26***	.14*	.51***	.22***	.11†	20**	.36***	
10.	30***	26***	27***	13*	13*	25***	.43***	31***	14*
11.	02	31***	10	11†	22***	05	13*	.19**	15*
12.	.27***	.17**	.18**	.74*	.10	.24***	32***	.52***	.41***
13.	.02	.27***	.16*	.02	.24***	09	.35***	12†	.10
14.	10	.09	.01	13*	.13*	10	.56***	38***	07
15.	37***	33***	34***	15*	17**	31***	.41***	27***	14*
16.	16*	31***	14*	34***	26***	18**	.03	13†	57***
17.	.31***	.29***	.23***	.70***	.16*	.32***	32***	.49***	.43***
n	244	244	244	244	244	244	244	244	244
Scale	1-5	1-5	1-7	1-7	1-5	1-5	1-7	1-7	1-7
Mean	3.91	4.02	5.57	5.88	3.77	3.53	3.10	3.62	5.60
SD	0.75	0.63	1.24	1.10	0.59	0.80	1.00	1.18	1.43
Skewness	-0.44	-0.67	-0.71	-1.22	-0.35	-0.14	-0.02	-0.52	-1.09

Note. 1 = Big-Five Inventory—Agreeableness Subscale. 2 = Big Five Aspect Scale—Agreeableness Subscale. 3 = Ten Item Personality Inventory—Agreeableness Subscale. 4 = Trust. 5 = Communal Motivation. 6 = Self-Regulation. 7 = Perceived Partner Intentionality. 8 = Forgiveness. 9 = Positive-Direct Responses to Hurt Feelings. 10 = Negative-Direct Responses to Hurt Feelings. 11 = Affectionate Behaviors and Covert Optimism. 12 = Relationship Satisfaction. 13 = Feeling Hurt. 14 = Feeling Angry. 15 = Tempted vengeful acts. 16 = Tempted passiveness. 17 = State positive relationship attitude  $$\Rightarrow p < .050 ** p < .050 ** p < .010 ** p < .001 ** p$ 

Table 23 Continued

Descriptive statistics and correlations among key variables in Study 5.

	10	11	12	13	14	15	16	17
1.								
2.								
3.								
1.								
5.								
ó.								
7.								
3.								
).								
10.								
1.	.05							
2.	12†	05						
13.	.21***	24***	06					
14.	.48***	21**	24***	.63***				
15.	.61***	.01	12†	.25†	.45***			
16.	.18**	.43***	27***	.13***	03	.22***		
17.	16*	12†	.77***	05	20**	24***	36***	
n	244	244	244	244	244	244	244	244
Scale	1-7	1-7	1-9	1-7	1-7	1-7	1-7	1-7
Mean	3.45	3.24	3.30	5.56	4.53	3.11	2.64	5.61
SD	1.58	1.64	0.70	1.77	2.07	1.57	1.44	1.52
Skewness	0.29	0.48	-1.13	-1.13	-0.34	0.38	0.41	-0.99

Note. 1 = Big-Five Inventory—Agreeableness Subscale. 2 = Big Five Aspect Scale—Agreeableness Subscale. 3 = Ten Item Personality Inventory—Agreeableness Subscale. 4 = Trust. 5 = Communal Motivation. 6 = Self-Regulation. 7 = Perceived Partner Intentionality. 8 = Forgiveness. 9 = Positive-Direct Responses to Hurt Feelings. 10 = Negative-Direct Responses to Hurt Feelings. 11 = Affectionate Behaviors and Covert Optimism. 12 = Relationship Satisfaction. 13 = Feeling Hurt. 14 = Feeling Angry. 15 = Tempted vengeful acts. 16 = Tempted passiveness. 17 = State positive relationship attitude 17 = Perceived Partner 17 = Perceived Partner

## Analytic Strategy

As planned in pre-registration, I regressed each outcome variable on agreeableness (mean-centered), condition (effects coded; -1 = low cognitive load condition, 1 = high cognitive load condition), and the interaction between agreeableness and condition. I probed significant interactions by investigating the simple effects of agreeableness in each condition using dummy codes. For mediations, I investigated the indirect pathways from agreeableness (mean-centered) to each outcome variable through trust (mean-centered), communal motivation (mean-centered), and self-regulation ability (mean-centered) separately using the same procedure in the past four studies.

#### Principal Component Analysis of Responses to Hurt Feelings Measure

Following my pre-registration, I did a principal component analysis with varimax rotation to identify categories of responses. Results of this analysis and the scree plot suggested three types of behaviors (see Table 24) that explained 68% of the total variance. Two items described positive-direct responses to hurt feelings (e.g., "openly try to talk to your partner and reach an understanding of what happens;"  $\alpha = .83$ ). The second type of behavior contained three items that described negative-direct responses (e.g., "make hurtful/mean comments to your partner;"  $\alpha = .72$ ). Finally, a two-item category described affectionate acts and covert optimism (i.e., "try to be romantic," "wait and hope things will get better;"  $\alpha = .57$ ).

Table 24.

Results of principal component analysis on responses to hurt feelings measure in Study 5.

Items	Positive-	Negative-	Affection,
	Direct	Direct	Covert
			Optimism
1. Openly try to talk to your partner and reach an	.88		
understanding			
2. Share your hurt feelings with your partner	.90		
3. Make hurtful/mean comments to your partner		.77	

4.	Act angry at your partner		.86	
5.	Act like something is wrong but will not tell your	39	.42	.53
	partner until they ask			
6.	Assume your partner should know something is		.74	
	wrong			
7.	Try to be romantic			.83
8.	Wait and hope things will get better			.77
9.	Feel hesitant to tell your partner that you are hurt,	60		.43
	even though you want to			

*Note.* Factor loadings lower than .32 are suppressed and not presented in the table. Items that cross-loaded were dropped. Items that cross-loaded were dropped, unless the difference between the factor loadings was greater or equal to .30, in which case the item would be included in the factor with the higher loading.

## Pre-Registered Analyses: Reactions to Hurt Feelings

Supporting my predictions, on average, highly agreeable people reported (a) marginally less likelihood of believing that their partner would hurt them intentionally, (b) higher forgiveness, and responding to hurt feelings in (c) more positive-direct and (d) less negative-indirect manners than did less agreeable people in response to a future hurtful incident (see Table 25).

Table 25.

Summary of statistics of regression models in Study 5. I regressed each outcome variable on agreeableness (mean-centered) condition (effects coded; -1 = low cognitive load, 1 = high cognitive load), and their interaction. 95% CI are presented below the b.

Outcome	Predictor	b	SE	β	t	df	p
PosDir	Agreeableness	0.34	0.12	.26	2.86	240	.005
		[0.11, 0.58]					
	Condition	0.13	0.09	.13	1.42	240	.166
		[-0.05, 0.31]					
	Interaction	0.21	0.12	.15	1.71	240	.099
		[-0.03, 0.44]					
NegDir	Agreeableness	-0.64	0.13	48	-4.94	240	< .001
		[-0.89, -0.38]					
	Condition	-0.14	0.10	14	-1.47	240	.144
		[-0.33, 0.05]					
	Interaction	-0.10	0.13	07	-0.77	240	.442
		[-0.35, 0.15]					
Intentionality	Agreeableness	-0.16	0.08	11	-1.84	240	.066
		[-0.32, 0.01]					

	Condition	-0.10	0.06	10	-1.56	240	.120
	Interaction	[-0.22, 0.03] -0.15 [-0.32, 0.02]	0.08	11	-1.76	240	.080
Forgiveness	Agreeableness	0.46	0.10	.35	4.77	240	< .001
C	C	[0.27, 0.65]					
	Condition	0.07	0.07	.07	0.95	240	.345
		[-0.07, 0.21]					
	Interaction	0.27	0.10	.20	2.78	240	.006
		[0.08, 0.46]					
Feeling Hurt	Agreeableness	0.02	0.15	.02	0.17	240	.868
		[-0.27, 0.32]					
	Condition	-0.14	0.11	14	-1.25	240	.211
		[-0.36, 0.08]					
	Interaction	-0.46	0.15	35	-3.12	240	.002
		[-0.76, -0.17]					
Feeling Angry	Agreeableness	-0.31	0.13	23	176	240	.080
		[-0.65, 0.04]					
	Condition	-0.13	0.13	13	-0.99	240	.323
		[-0.39, 0.13]					
	Interaction	-0.48	0.17	36	2.75	240	.006
		[-0.82, -0.14]					
Tempt Venge	Agreeableness	-0.78	0.09	59	-6.23	240	< .001
		[-1.03, -0.53]					
	Condition	-0.002	0.09	002	-0.02	240	.986
		[-0.19, 0.18]					
	Interaction	-0.14	0.13	09	-1.10	240	.273
		[-0.38, 0.11]					
Tempt Passive	Agreeableness	-0.32	0.12	24	-2.60	240	.010
		[-0.56, -0.08]					
	Condition	-0.09	0.09	09	-1.03	240	.305
		[-0.27, 0.09]					
	Interaction	-0.11	0.12	09	-0.94	240	.349
		[-0.36, 0.13]					

Note. PosDir = Positive-direct responses to hurt feelings. NegDir = Negative-direct responses to hurt feelings. Intentionality = Perceived partner intentionality. Tempt Venge = Tempted vengeful acts. Tempt Passive = Tempted passiveness.

Moreover, the cognitive load manipulation marginally moderated the associations between agreeableness and positive-direct responses to hurt feelings (Figure 4) and perceived partner intentionality (Figure 5), and significantly moderated the association between agreeableness and forgiveness (Figure 6). The pattern of these interactions all supported my

second competing hypothesis (see Table 26): Higher agreeableness was associated with more use of positive-direct responses, lower perceived partner intentionality, and higher forgiveness only among participants under high (vs. low) cognitive load.

Table 26.

Summary of statistics of simple effects of agreeableness on each outcome variable within each condition in Study 5. 95% CI are presented below the b.

Outcome	Condition	b	SE	β	t	df	p
PosDir	Low cognitive	0.14	0.16	.10	0.84	240	.400
	load	[-0.18,					
		0.46]					
	High cognitive	0.55	0.18	.41	3.11	240	.002
	load	[0.20, 0.90]					
Intentionali	Low cognitive	-0.01	0.11	01	-0.07	240	.948
ty	load	[-0.23,					
		0.22]					
	High cognitive	-0.30	0.12	23	-2.45	240	.015
	load	[-0.55, -					
		0.06]					
Forgivenes	Low cognitive	0.19	0.13	.14	1.46	240	.146
S	load	[-0.07,					
		0.45]					
	High cognitive	0.73	0.14	.55	5.14	240	< .001
	load	[0.45, 1.01]					
Feeling	Low cognitive	0.49	0.20	.37	2.52	240	.016
Hurt	load	[0.09, 0.89]					
	High cognitive	-0.44	0.22	33	-2.01	240	.046
	load	[-0.87, -					
		0.01]					
Feeling	Low cognitive	0.17	0.24	.13	0.73	240	.467
Angry	load	[-0.29,					
		0.64]					
	High cognitive	-0.79	0.26	59	-3.07	240	.002
	load	[-1.29, -					
		0.28]					

Note. PosDir = Positive-direct responses to hurt feelings. Intentionality = Perceived partner intentionality.

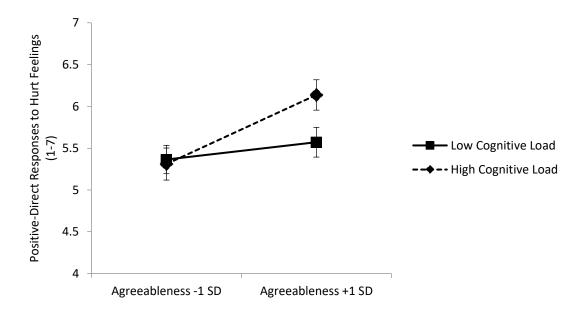


Figure 4. Positive-direct responses to hurt feeling as a function of agreeableness and condition, with  $\pm 1$  standard error bars.

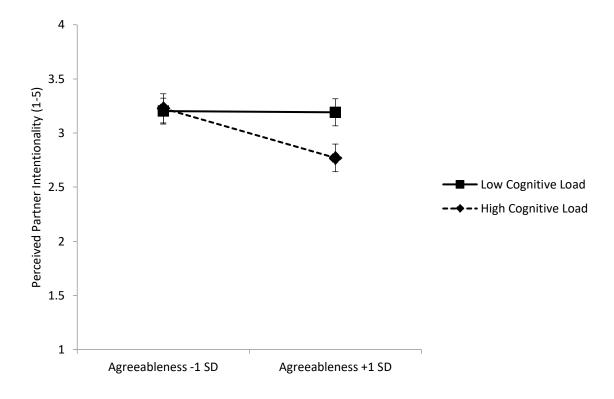


Figure 5. Perceived partner intentionality as a function of agreeableness and condition, with  $\pm 1$  standard error bars.

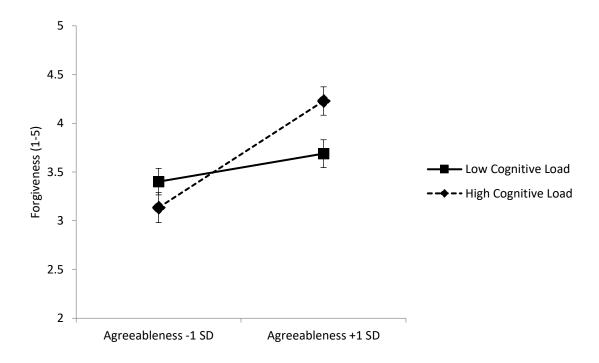


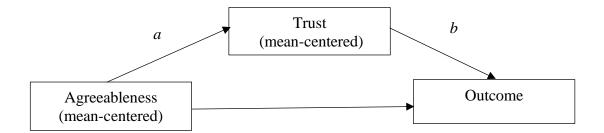
Figure 6. Forgiveness as a function of agreeableness and condition, with  $\pm 1$  standard error bars.

## Pre-Registered Analyses: Mediations

**Trust.** Indirectly through higher trust (see Table 27), higher agreeableness was associated with reports of (a) more use of positive-direct responses to hurt feelings, (b) less likelihood of perceiving that a partner would be intentionally hurtful, and (c) higher forgiveness in response to a future hurtful incident. Trust did not mediate the association between agreeableness and negative-direct responses.

#### Table 27.

Summary of statistics of mediation models involving trust in Study 5. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.

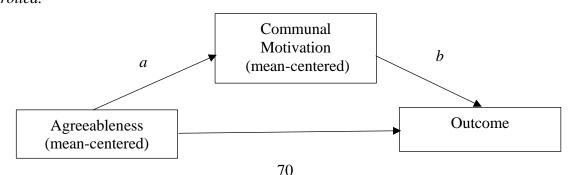


Outcome	Parameter	ab	а	b	Direct c'
PosDir	b	0.30	0.46	0.65	0.04
	SE	0.07	0.09	0.08	0.11
	CI	[0.17, 0.43]	[0.29, 0.63]	[0.50, 0.80]	[-0.18, 0.25]
	p		< .001	< .001	.737
NegDir	b	-0.02	0.46	-0.05	-0.61
	SE	0.04	0.09	0.09	0.14
	CI	[-0.11, 0.06]	[0.29, 0.63]	[-0.23, 0.13]	[-0.88, -0.35]
	p		< .001	.570	< .001
Intentionality	b	-0.10	0.46	-0.21	-0.06
	SE	0.03	0.09	0.06	0.09
	CI	[-0.16, -0.03]	[0.29, 0.63]	[-0.33, -0.09]	[-0.23, 0.12]
	p		< .001	< .001	.523
Forgiveness	b	0.22	0.46	0.23	0.23
	SE	0.05	0.09	0.09	0.09
	CI	[0.12, 0.31]	[0.29, 0.63]	[0.05, 0.41]	[0.05, 0.41]
	p		< .001	.013	.013

Communal Motivation. As can be seen in Table 28, results showed that the indirect pathway from higher agreeableness to more use of positive-direct responses to hurt feelings through higher communal motivation was significant. However, agreeable people's higher communal motivation was associated with perceiving *higher* intentionality of a partner's hurtful behaviors, meaning that agreeable people were actually more blaming of their partner than were less agreeable people through communal motivation. Communal motivation did not mediate the associations between agreeableness and negative-direct responses or forgiveness.

Table 28.

Summary of statistics of mediation models involving communal motivation in Study 5. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.

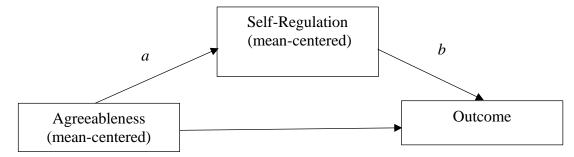


Outcome	Parameter	ab	а	b	Direct c'
PosDir	b	0.18	0.41	0.44	0.16
	SE	0.08	0.04	0.18	0.14
	CI	[0.03, 0.33]	[0.32, 0.39]	[0.09, 0.79]	[-0.11, 0.43]
	p		< .001	.013	.256
NegDir	b	0.04	0.41	0.11	-0.68
	SE	0.08	0.04	0.19	0.15
	CI	[-0.11, 0.20]	[0.32, 0.39]	[0.32, 0.49]	[-0.97, -0.39]
	p		< .001	.577	< .001
Intentionality	b	0.13	0.41	0.31	-0.28
	SE	0.05	0.04	0.13	0.10
	CI	[0.02, 0.23]	[0.32, 0.39]	[0.06, 0.55]	[-0.47, -0.09]
	p		< .001	.014	.005
Forgiveness	b	-0.07	0.41	-0.18	0.52
	SE	0.06	0.04	0.14	0.11
	CI	[-0.19, 0.05]	[0.32, 0.39]	[-0.46, 0.11]	[0.29, 0.74]
	p		< .001	.224	< .001

**Self-Regulation.** As shown in Table 29, the indirect pathways from agreeableness to positive-direct responses to hurt feelings, perceived partner intentionality, and forgiveness through self-regulation were not significant. However, results were consistent with the idea that self-regulation helped explain the negative association between agreeableness and negative-direct responses to hurt feelings.

Table 29.

Summary of statistics of mediation models involving self-regulation in Study 5. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.



Outcome	Parameter	ab	а	b	Direct c'
PosDir	b	0.04	0.41	0.09	0.30
	SE	0.05	0.06	0.12	0.13
	CI	[-0.06, 0.13]	[0.29, 0.53]	[-0.16, 0.33]	[0.05, 0.56]
	p		< .001	.488	.020
NegDir	b	-0.13	0.41	-0.30	-0.51
	SE	0.06	0.06	0.13	0.14
	CI	[-0.24, -0.01]	[0.29, 0.53]	[-0.56, -0.05]	[-0.79, -0.24]
	p		< .001	.018	< .001
Intentionality	b	-0.04	0.41	-0.09	-0.11
	SE	0.04	0.06	0.09	0.09
	CI	[-0.11, 0.03]	[0.29, 0.53]	[-0.26, 0.08]	[-0.29, 0.07]
	p		< .001	.282	.215
Forgiveness	b	0.06	0.41	0.16	0.38
-	SE	0.04	0.06	0.10	0.10
	CI	[-0.02, 0.15]	[0.29, 0.53]	[-0.04, 0.35]	[-0.17, 0.58]
	p		< .001	.111	< .001

# Secondary Analyses

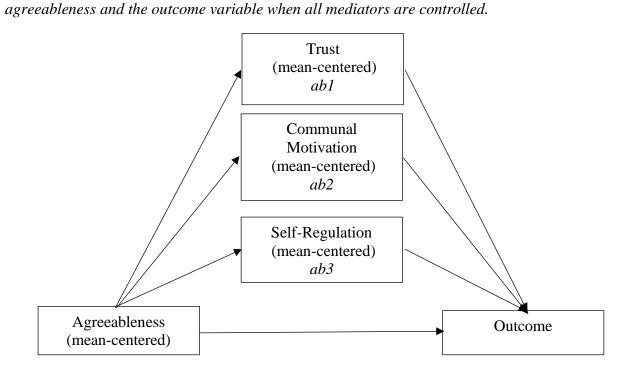
To further compare the role of trust, communal motivation, and self-regulation, I performed a secondary mediation analysis in which I examined these three constructs as simultaneous mediators in the indirect pathways from agreeableness to the different reactions to hurt feelings. Moreover, following comments made by my dissertation committee members, I ran moderated mediation analyses in which I examined whether the indirect pathways from agreeableness to each reaction to a future hurtful incident through trust are moderated by cognitive load. I also investigated people's feelings of hurt and anger and behaviors that they may be tempted to engage in following a future hurtful incident.

**Simultaneous Mediation.** Results of the simultaneous mediation analysis largely paralleled the results of the mediation models that examined only one mediator at a time (see Table 30). Results were consistent with the view that among the three mediators (i.e., trust, communal motivation, and self-regulation), only higher trust and higher communal motivation

played a role in explaining the links between agreeableness and the usage of positive-direct responses to hurt feelings, perceived partner intentionality, and forgiveness. Self-regulation did not mediate these associations. However, the indirect pathway from higher agreeableness to less use of negative-direct responses through self-regulation was significant. Trust and communal motivation did not mediate this association.

Summary of statistics of mediation models involving trust, communal motivation, and self-regulation simultaneously in Study 5. The c' paths represents the association between

Table 30.



Outcome	Parameter	ab1	ab2	ab3
PosDir	b	0.22	0.09	-0.01
	SE	0.05	0.05	0.03
	CI	[0.12, 0.32]	[-0.01, 0.18]	[-0.07, 0.06]
NegDir	b	-0.01	0.03	-0.09
	SE	0.03	0.06	0.04
	CI	[-0.07, 0.05]	[-0.08, 0.15]	[-0.17, -0.01]
Intentionality	b	-0.08	0.11	-0.01
	SE	0.03	0.04	0.03
	CI	[-0.13, -0.03]	[0.03, 0.19]	[-0.07, 0.04]

Forgiveness	b	0.17	-0.10	0.02
_	SE	0.04	0.04	0.03
	CI	[0.09, 0.24]	[-0.17, -0.01]	[-0.03, 0.08]

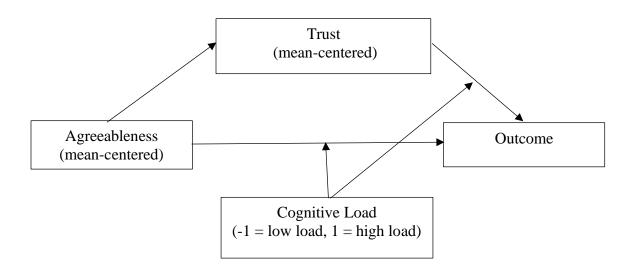
I further examined whether the indirect pathways through trust were different from the indirect pathways through communal motivation by contrasting them (i.e., computing a contrast between these indirect pathways in the mediation models and examining the CI of this contrast). Results suggest that compared to communal motivation, trust played a stronger role marginally in the association between higher agreeableness and more use of positive-direct responses to hurt feelings, b = 0.14, SE = 0.07, CI [-0.01, 0.28], and significantly in the relations between agreeableness and lower perceived partner intentionality, b = -0.19, SE = 0.05, CI [-0.29, -0.09], and higher forgiveness, b = 0.26, SE = 0.06, CI [0.14, 0.37].

Moderated Mediation. To conduct the moderated mediation analyses, I used the "mediation" package (Tingley, Yamamoto, Hirose, Keele, & Imai, 2014) in R. Specifically, I tested the significance of the indirect pathways using bootstrapping procedures. Unstandardized indirect effects were computed for each of 10,000 bootstrapped samples, and the 95% confidence interval was computed by determining the indirect effects at the 2.5th and 92.7th percentiles. Results (see Table 31) showed that the indirect pathways from higher agreeableness through higher trust to (a) more positive-direct behavioral reactions and (b) higher forgiveness were marginally stronger among people in the high cognitive load condition than those in the low cognitive load condition. These findings provided further support for my second hypothesis that agreeable people's trust is so ingrained that its role in the positive associations between agreeableness and (a) positive-direct behaviors and (b) forgiveness is even more salient under high (vs. low) cognitive load. However, the indirect pathways from agreeableness to (a)

negative-direct behavioral reactions and (b) perceptions of a partner's hurtful intention were not different across people in the high and low cognitive load conditions.

Table 31.

Summary of statistics of moderated mediation models involving trust as mediator and cognitive load manipulation as moderator in Study 5. ab represents the indirect pathway from agreeableness to outcome variable through trust.



Outcome	Parameter	ab in low load	ab in high load	Difference of ab
PosDir	b	0.18	0.43	-0.25
	CI	[0.04, 0.25]	[0.20, 0.72]	[-0.57, 0.03]
	р	.017	< .001	.078
NegDir	b	-0.04	0.10	-0.14
	CI	[-0.18, 0.02]	[-0.07, 0.33]	[-0.38, 0.06]
	p	.251	.270	.156
Intentionality	b	-0.07	-0.08	0.01
	CI	[-0.16, -0.02]	[-0.22, 0.02]	[-0.13, 0.16]
	p	.019	.149	.878
Forgiveness	b	0.11	0.28	-0.17
	CI	[0.02, 0.23[	[0.14, 0.47]	[-0.37, 0.23]
	p	.020	< .001	.089

**Feelings of Hurt and Anger.** On average, agreeable people reported that they would feel less angry and just as hurt as people lower in agreeableness (see Table 25 from above). These

predicted feelings differed by condition (see Table 26). Among participants under high cognitive load, higher agreeableness was associated with feeling less hurt (Figure 7) and less angry (Figure 8). However, under low cognitive load, agreeable people reported feeling more hurt and just as angry as people lower in agreeableness.

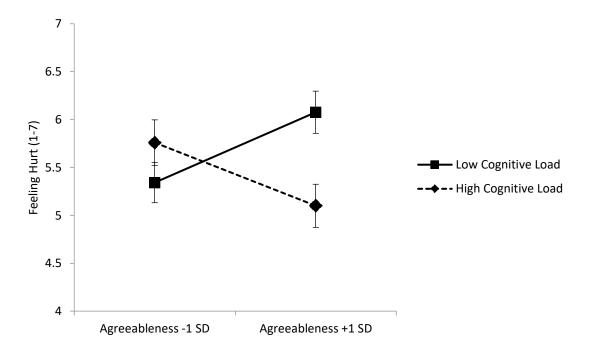


Figure 7. Feeling hurt as a function of agreeableness and condition, with  $\pm 1$  standard error bars.

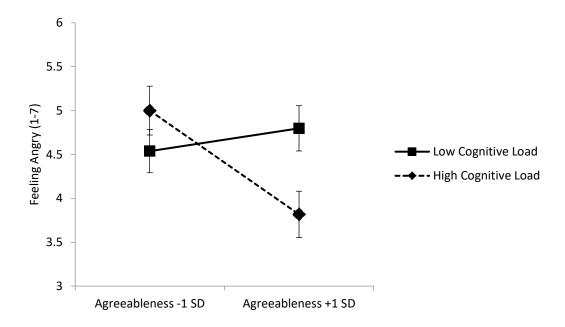


Figure 8. Feeling angry as a function of agreeableness and condition, with  $\pm 1$  standard error bars.

Behaviors that People May be Tempted to Do. Results of a principal component analysis with varimax rotation and the scree plot suggested two types of behaviors (see Table 32) that explained 61% of the total variance. Three items constituted behaviors that described fantasized vengeful acts (e.g., "seek revenge in some way;"  $\alpha = .76$ ). Another factor captured tempted passiveness with two items (e.g., "hope that if you do not do anything, things will get better;"  $\alpha = .51$ ). Agreeable people reported lower likelihoods of fantasizing being vengeful and engaging in tempted passive behaviors than did people lower in agreeableness (see Table 25 from above). There was no significant effect of the cognitive load manipulation, or interaction between agreeableness and the cognitive load manipulation on these tendencies.

Results of principal component analysis on responses to hurt feelings that people may be tempted to do measure in Study 5.

Items	Vengeful Acts	Passiveness
·	Acis	
1. Talk to your partner about what was bothering you		52
2. Seek revenge in some way	.67	.33
3. Quarrel or argue with your partner	.85	
4. Act like you are in a bad mood (e.g., mope around, sigh)	.83	
5. Not say much, but expect your partner to pick up your	.50	.62
cues		
6. Act affectionate toward your partner	39	.63
7. Hope that if you do not do anything, things will get better		.84

*Note.* Factor loadings lower than .32 are suppressed and not presented in the table. Items that cross-loaded were dropped. Items that cross-loaded were dropped, unless the difference between the factor loadings was greater or equal to .30, in which case the item would be included in the factor with the higher loading.

#### **Study 5 Summary**

Table 32.

This pre-registered experiment showed that higher agreeableness was related to reports of

(a) less likelihood of perceiving that their partner would hurt them intentionally, (b) higher
forgiveness, and (c) more use of positive-direct responses and (d) less use of negative-direct
responses to hurt feelings. Results of secondary analyses also showed that agreeable people
anticipated feeling less hurt and angry, and reported being less tempted to act vengefully or
passively than did people lower in agreeableness. Moreover, the associations between higher
agreeableness and more use of positive-direct responses to hurt feelings, lower perceived partner
intentionality, and higher forgiveness were stronger among people under high (vs. low) cognitive
load. Results of moderated mediation analyses also showed that the indirect pathway from higher
agreeableness through higher trust to (a) more positive-direct behavioral reactions and (b) higher
forgiveness through higher trust are marginally stronger among people under high (vs. low)
cognitive load. These findings supported my second competing hypothesis that agreeable
people's default, automatic responses to hurt feelings are to be interpersonally positive and

trusting. The negative association between agreeableness and the usage of negative-direct responses to hurt feelings was not moderated by the cognitive load manipulation. One reason for this lack of moderation is that refraining from responding to hurt feelings in negative-direct ways may require conscious effort (Rusbult et al., 1991), and therefore, is not a "default" or automatic behavior that can be enhanced by cognitive load.

Results of mediation analyses suggested trust was more important than communal motivation in helping to explain the links between higher agreeableness and (a) more use of positive-direct responses to hurt feelings, (b) less likelihood of perceiving that a partner is intentionally hurtful, and (c) higher forgiveness. Surprisingly, results showed that agreeable people's higher communal motivation was associated with perceiving *higher* intentionality. Although this finding contradicted my prediction, it is in line with research showing that highly agreeable people, who I believe are also highly communally motivated, report being more upset in response to others who commit an interpersonal transgression than do less agreeable people (Kammrath & Scholer, 2011).

Two findings suggest that self-regulation seemed important for negative-direct responses hurt feelings. First, the indirect pathways involving self-regulation were only significant when we investigated negative-direct responses as the outcome. Second, the association between agreeableness and negative-direct responses were explained in part only through self-regulation, but not through trust or communal motivation. These results point to two possible routes through which agreeableness is linked to avoidant- or approach-oriented reactions to hurtful incidents. Agreeable people's low tendency to engage in negative-direct responses to hurt feelings could reflect avoidance motivation—avoiding a behavior—and refraining from behaviors that are tempting requires self-regulation (Tangney, Baumeister, & Boone, 2004), explaining why self-

regulation played a role in this association whereas trust and communal motivation did not. However, responding in positive-direct ways, perceiving lower partner intentionality, and being forgiving may help agreeable people attain relational harmony, and high trust and communal motivation can provide the approach motivation needed for agreeable people to engage in these approach-oriented behaviors (Cavallo, Fitzsimons, & Holmes, 2009).

# Study 6

In this final study, I have the honor of using Dr. Paula Pietromonaco and her colleagues' data from the Growth in Early Marriage Project (GEM) to conceptually replicate my findings regarding agreeableness and behavioral responses to hurt feelings that reflect constructive intentions. GEM is a study of couples who are newly married, focusing on how couples change over time and how close relationships can affect health (e.g., Beck, Pietromonaco, DeBuse, Powers, & Sayer, 2013; Beck, Pietromonaco, DeVito, Powers, & Boyle, 2014; Pietromonaco, Overall, Beck, & Powers, 2020).

In this longitudinal study that spanned three years, newlywed couples came into the lab three times to have a video-taped discussion of a topic of disagreement in their relationship. I reasoned that such disagreements often involve hurt feelings. Trained observers on the Pietromonaco team coded the discussion videos for each member's secure-base-use behaviors (Crowell, Pan, Gao, Treboux, & Waters, 1998; Crowell et al., 2002), which, I propose, align with reactions to hurt feelings that reflect constructive intentions to connect with a partner. This coding measured the extent to which participants positively and directly signalled their distress to the partner. Each member of the couple also responded to measures of agreeableness and trust.

I make two hypotheses in this study. First, I predict that highly agreeable people display more secure-base-use behaviors during conflicts than do less agreeable people in conflicts. My

second hypothesis is that this positive association is stronger for discussions that involved more (vs. less) hurt. I believe that hurtful incidents, compared to non-hurtful incidents, may provide greater affordances for agreeableness to manifest itself. In particular, when a partner behaves in a negative and hurtful manner, many people, perhaps most, will feel justified to behave negatively in return. If, instead, highly agreeable people react in positive rather than negative ways, that would be a striking demonstration of how agreeableness may lead to constructive behaviors in close relationships. Thus, hurtful incidents may be especially effective in testing a person's agreeableness, by giving it a chance to shine. Because Pietormonaco and colleagues often focus on attachment styles, I controlled for attachment styles in my analyses, to ensure that any results I obtain do not merely duplicate theirs. (Pre-registration form can be found here: osf.io/q89kj).

# **Participants**

Potential couples were identified by Pietromonaco and colleagues from marriage licenses filed in several municipalities in western Massachusetts. They were invited to participate in the study via mail and phone. In addition, flyers and advertisements were used to identify and recruit couples who lived in the local area but had married elsewhere (resulting in eight couples). To be eligible for participation in the study, both partners of a romantic couple were required to be (a) in their first marriage, (b) between the ages of 18 and 50 years, (c) not have any children, (d) able to participate within seven months after the date of their marriage, and (e) not expecting a baby at the time of the laboratory session. For certain research goals, Pietromonaco and colleagues screened the respondents for endocrine disorders that are known to influence hormone levels. Couples were ineligible if, at Time 1, either partner had an endocrine disorder (e.g., diabetes) or worked overnight shifts, which can alter the circadian rhythm of cortisol (e.g., Federenko, Nagamine, Hellhammer, Wadhwa, & Wüst, 2004; James, Cermakian, & Boivin, 2007).

The initial sample size (N = 229) was determined for another research goal, and was estimated based on prior work examining the connection between adult attachment and cortisol reactivity and recovery among couples (Powers, Pietromonaco, Gunlicks, & Sayer, 2006). The final sample included 219 couples at Time 1 (438 individuals; wives' mean age = 27.72 years [SD = 4.79], husbands' mean age = 29.13 years [SD = 5.27]; 93% wives = White, 96% husbands = White;  $M_{relationship length} = 60.36$  months [SD = 35.21]), 184 couples at Time 2, and 164 couples at Time 3. For details regarding attrition and exclusion, see Beck et al. (2013), the original paper that used this sample. Although no *a priori* analyses were conducted for the current investigation, the number of dyads (219 couples at Time 1) and repeated assessments (567 discussions) exceed the sizes in studies examining couples' discussion of conflicts (e.g., Overall, Hammond, McNulty, & Finkel, 2014; Overall, Girme, Lemay, & Hammond 2014).

#### **Procedure and Materials**

I will describe the procedure of Pietromonaco and colleagues' study that pertains to the current investigation on hurt feelings. Romantic couples came into the lab three times: Time 1 (married less than or equal to 7 Months), Time 2 (approximately 19 months after Time 1), and Time 3 (approximately 37 months after Time 1). At Time 1, each member of the couple completed (a) the 20-item agreeableness subscale of the International Personality Item Pool (IPIP; Goldberg, 1999; e.g., "I sympathize with others' feelings," "I am on good terms with nearly everyone;" 1 = very inaccurate to 5 = very accurate;  $\alpha_{husbands} = .89$ ,  $\alpha_{wives} = .86$ ; each participant's agreeableness score was the sum of their responses to these items), the 36-item Experiences in Close Relationships measure of attachment anxiety and avoidance (Brennan, Clark, & Shaver, 1998; e.g., "I worry a lot about my relationships," "I get uncomfortable when a romantic partner wants to be very close;" 1 = Strongly disagree to 5 = Strongly agree;  $\alpha_{husbands}$ 

avoidance = .87,  $\alpha_{wive's avoidance}$  = .82,  $\alpha_{husbands' anxiety}$  = .88,  $\alpha_{wives' anxiety}$  = .91), and the 3-item trust subscale of the Perceived Relationship Quality Components scale (Fletcher, Simpson, Thomas, & Giles, 2000; i.e., "How much do you trust your partner," "How much can you count on your partner," and "How dependable is your partner?"  $1 = not \ at \ all$  to 7 = extremely;  $\alpha_{husbands} = .82$ ,  $\alpha_{wives} = .83$ ).

Then, each partner identified three important and unresolved areas of disagreement in their relationship and rated the intensity of each on a 7-point scale from 1 (*not at all intense [calm]*) to 7 (*extremely intense [heated]*). For each couple's conflict discussion, the experimenter chose a topic that both partners had listed and that had the highest combined intensity rating, when possible. Otherwise, the experimenter chose a topic that had the highest intensity rating or chose a topic randomly (by flipping a coin), if two were tied. After the discussion, each member of the couple rated how hurt they felt. At Times 2 and 3, both members of the couple engaged in a similar discussion as Time 1, but with a different topic of disagreement.

Each discussion was video-taped, and each members' secure-base-use behaviors were coded by trained, independent coders using Crowell et al.'s (1998) secure-base-use coding system (four coders at Time 1, three coders at Time 2, and five coders at Time 3). This coding system involves the following facets: (a) the individual's strength, intensity, and clarity of initial signal of distress to the partner (*ICCsacross Times 1 to 3 for wives* = .87 - .95; *ICCsacross Times 1 to 3 for husbands* = .91 - .93), (b) the individual's active and persistent maintenance of a clear distress signal (*ICCsacross Times 1 to 3 for wives* = .87 - .94; *ICCsacross Times 1 to 3 for husbands* = .89 - .94), (c) approach to the attachment figure (i.e., clear and direct expression in behaviors, words, and affect of the desire and need for the partner and help of the partner; *ICCsacross Times 1 to 3 for wives* = .93 - .95; *ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 for husbands* = .91 - .93), (d) the individual's ability to be comforted and pleased (*ICCsacross Times 1 to 3 f* 

Times 1 to 3 for wives = .93 - .97; ICCsacross Times 1 to 3 for husbands = .92 - .96), and (e) the overall quality of the individual's behaviors as positive and direct (ICCsacross Times 1 to 3 for wives = .91 - .93; ICCsacross Times 1 to 3 for husbands = .89 - .94). I used all facets of the secure-base-use behaviors as dependent variables.

#### **Study 6 Results**

See Table 33 for correlations and descriptive statistics among key variables.

Table 33

Descriptive statistics and zero-order correlations among key variables in Study 6.

	1	2	3	4	5	6	7	8	9
1. Agree									
2. Avd	33***								
3. Anx	09**	.36***							
4. Trust	.20***	53***	35**						
5. Ini	.20***	15***	.004	.04					
6. Mai	.24***	21***	04	.13***	.63***				
7. App	.22***	23***	07*	.19***	.56***	.83***			
8. Com	.11***	22***	16***	.23***	.37***	.54***	.67***		
9. CarS	.21***	23***	09**	.19***	.64***	.84***	.92***	.78***	
n	382	382	382	382	1110	1108	1105	1099	1106
Mean	77.84	1.78	2.62	6.5	5.53	5.58	5.24	4.45	5.11
SD	996	0.68	0.93	0.69	1.26	1.16	1.35	1.39	1.18
Skew	-0.19	1.06	0.73	-1.55	-0.63	-0.77	-0.58	-0.01	-0.54

*Note*. Agree = Agreeableness. Avd = Attachment Avoidance. Anx = Attachment Anxiety. Ini = Initial Signal of Distress. Mai = Maintenance of Distress. App = Approaching the Partner. Com = Ability to be Comforted. CarS = Overall Care-Seeking Behaviors. † .050

## Analytic Strategy

Because each couple's topic of discussion involved an unresolved disagreement in the relationship (as opposed to an explicit hurtful incident), participants may or may not have felt hurt. Following my pre-registered plan, I tested my moderation hypothesis—that the associations between agreeableness and secure-base-use behaviors are stronger in response to incidents with

higher versus lower hurt—in two ways. First, I reviewed the topics of discussion and, drawing on prior theory (e.g., Leary et al., 1998, Vangelisti et al., 2005), classified them as either hurtful or not. Past research suggests that hurt feelings are caused by relational devaluation, such as violations of support/intimacy, infidelity, rejection, communication problems, and challenge to individual character (e.g., Buckley et al., 2004, Feeney, 2005, Leary et al., 1998, & Vangelisti et al., 2005). Together with two trained, independent coders, I coded each topic as either hurtful or non-hurtful (ICC = .90;146 topics were coded as non-hurtful, and 45 topics were coded as hurtful). A regression analysis that investigated the relation between topic (-1 = non-hurtful, 1 = non-hurtful)hurtful) and how hurt participants self-reported feeling after the conflict discussion showed that participants felt marginally more hurt following conversations coded as hurtful than conversations coded as non-hurtful, b = 0.08, SE = 0.04, t(935.43) = 1.78, p = .076. I then investigated whether the associations between agreeableness and secure-base-use behaviors is stronger among participants who discussed a hurtful topic versus a non-hurtful topic. Second, participants reported how hurt they felt following each discussion. I investigated whether the associations between agreeableness and secure-base-use behaviors is stronger among those who reported feeling more (vs. less) hurt.

Also, because each couple had a maximum of three discussions, there are up to six ratings for each dependent variable (i.e., secure-base-use behavior; three from the wife and three from the husband). Hence, to take into account the non-independence in the data, as well as to accommodate missing data (not every couple had three discussions), I used multi-level modeling in which I crossed each response to the dependent variables with couple membership (i.e., wife or husband), which was further crossed with couple.

Using this framework, I regressed each dependent variable on agreeableness (grand mean-centered), whether the topic discussed was coded as hurtful or not (effect coded: -1 = non-hurtful, 1 = hurtful), and their interaction term using the "lme4" package (Bates et al., 2015) in R. I used dummy codes to investigate the simple effect of agreeableness for hurtful topics and for non-hurtful topics. Similarly, I regressed each dependent variable on agreeableness (grand mean-centered), participants' self-reported feelings of hurt (grand mean-centered) and their interaction term. I investigated simple effects of agreeableness at one standard deviation above and below the mean of feelings of hurt. In all my pre-registered analyses, I included attachment anxiety and avoidance as control variables, to show that the associations between agreeableness and the outcome variables were above and beyond the effect of attachment style. In separate exploratory analyses, I controlled for time.

### Pre-Registered Analyses: Secure-Base-Use in Conflicts

As seen in Tables 34 and 35, results supported my prediction that agreeable people reacted with more constructive intentions in response to hurt feelings than did less agreeable people: Highly agreeable people showed (a) higher initial signals of distress, (b) clearer and more direct maintenance of distress, (c) more direct approach to the partner, and (d) more positive and direct overall care-seeking behaviors than did less agreeable people. Agreeableness was not associated with the ability to be comforted by the partner.

Contrary to my prediction, these associations were not moderated by whether the discussion topics were classified as hurtful or not (Table 35), or by participants' feelings of hurt (Table 36), with two exceptions. First, there was a significant interaction between agreeableness and self-reported feelings of hurt on approaching the partner (see Figure 9). Among those who reported feeling more hurt than others, agreeableness was marginally and positively associated

with people's approach behaviors, b = 0.01, SE = 0.06, t(1095.48) = 1.82, p = .069. Among those who were less hurt, this positive association between agreeableness and people's approaching the partner was significant, b = 0.03, SE = 0.01, t(1076.96) = 5.29, p < .001.

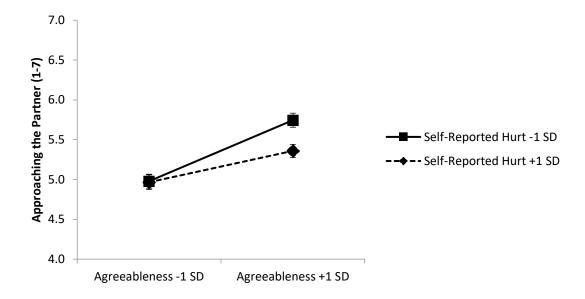


Figure 9. Approaching the partner as a function of agreeableness and self-reported feelings of hurt, with  $\pm 1$  standard error bars.

Second, there was a marginally significant interaction between agreeableness and self-reported feelings of hurt on overall care-seeking behaviors (see Figure 10). Among those who felt more hurt, agreeableness was positively associated with overall care-seeking behaviors, b = 0.01, SE = 0.00, t(1098.92) = 2.05, p = .041. Among those who were less hurt, the association between agreeableness and overall care-seeking behaviors seemed stronger, b = 0.02, SE = 0.004, t(4.31) = 1095.13, p < .001.

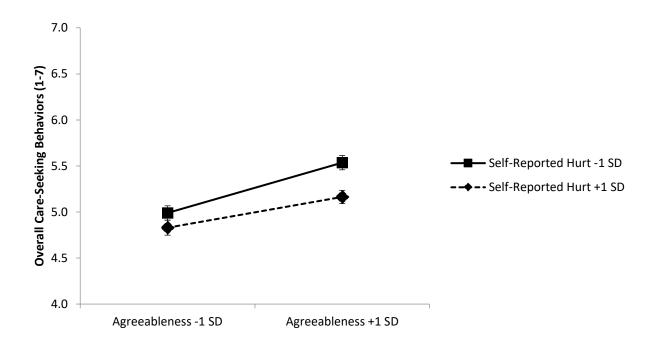


Figure 10. Overall care-seeking behaviors as a function of agreeableness and self-reported feelings of hurt, with  $\pm 1$  standard error bars.

Because these interactions (a) emerged only when using self-reported hurt as the moderator, and (b) were not consistently obtained in other outcome variables, I recommend interpreting them with caution. These associations held after controlling for attachment anxiety and attachment avoidance.

Table 34. Summary of statistics of multi-level regression models in Study 6, regressing each outcome variable on agreeableness, whether the discussion topic was hurtful or not (-1 = non-hurtful, 1 = hurtful), and their interaction, with avoidance and anxiety as covariates. 95% CI are presented below the b.

Outcome	Predictor	b	SE	β	t	df	p	<i>ICCco</i>	ICCPartnerMemb
								uple	ership within Couple
Initial	Agree	0.02	0.00	.19	3.94	582.39	< .001	.15	.01
	Topic	[0.01, 0.03] 0.09 [0.01, 0.18]	0.04	.09	2.11	906.85	.035		
	Int.	0.003	0.00	.04	0.93	1073.64	.352		
	Avd	-0.27 [-0.40, -0.15]	0.06	18	-4.26	750.59	< .001		

	Anx	0.12 [0.03, 0.20]	0.04	.11	2.68	588.99	.008		
Maintain	Agree	0.02 [0.01, 0.03]	0.00	.02	5.00	567.01	< .001	.19	.05
	Topic	0.07 [-0.01, 0.15]	0.04	.07	1.69	907.38	.091		
	Int.	0.00 [-0.01, 0.01]	0.00	.00	0.34	1053.10	.732		
	Avd	-0.29 [-0.40, -0.18]	0.06	29	-4.97	789.62	< .001		
	Anx	0.08	0.04	.08	1.96	607.71	< .001		
Approach	Agree	0.02 [0.01, 0.03]	0.01	.21	4.22	1059.77	< .001	.24	.00
	Topic	0.04 [-0.06, 0.13]	0.05	.04	0.75	1088.71	.455		
	Int.	0.00 [-0.01, 0.01]	0.00	.03	0.74	1046.22	.461		
	Avd	-0.39 [-0.52, -0.26]	0.07	26	-5.85	1096.82	< .001		
	Anx	0.04 [-0.04, 0.13]	0.05	.04	0.96	1097.67	.337		
Comfort	Agree	-0.0001 [-0.01, 0.01]	0.01	00	-0.02	1091.91	.987	.37	.00
	Topic	-0.09 [-0.18, 0.00]	0.05	09	-1.94	1087.93	.053		
	Int.	0.004 [-0.00, 0.01]	0.00	.04	0.97	993.75	.332		
	Avd	-0.25 [-0.38, -0.12]	0.07	17	-3.79	1077.74	< .001		
	Anx	-0.10 [-0.19, -0.01]	0.04	09	-2.20	1073.19	.028		
CareSeek	Agree	0.02 [0.01, 0.02]	0.00	.16	3.69	1087.99	< .001	.30	.00
	Topic	0.02 [-0.06, 0.10]	0.04	.02	0.42	1098.65	.673		
	Int.	0.003 [-0.00, 0.01]	0.00	.04	0.97	1026.08	.334		
	Avd	-0.30 [-0.41,18]	0.06	20	-5.20	1097.63	< .001		
	Anx	0.02	0.04	.02	0.47	1096.39	.641		
		[ 0.00, 0.07]						_	

*Note.* Initial = Initial Signal of Distress. Maintain = Maintenance of Distress. Approach = Approaching the partner. Comfort = Ability to be comforted. CareSeek = Overall Care-Seeking Behaviors. Agree = Agreeableness. Topic = Hurtful Topic or Not (-1 = Non-hurtful, 1 = hurtful) Int. = Agreeableness by Topic interaction. Avd = Avoidance. Anx = Anxiety.

Table 35.

Summary of statistics of multi-level regression models in Study 6, regressing each outcome variable on agreeableness, self-reported feelings of hurt, and their interaction, with avoidance and anxiety as covariates. 95% CI are presented below the b.

Outcome	Predictor	b	SE	β	t	df	p	ICCco uple	ICCPartnerMemb ership within Couple
Initial	Agree	.02 [0.01, 0.03]	0.00	.17	3.88	422.60	< .001	.16	.01
	Hurt	0.03	0.03	.03	0.78	1094.85	.435		
	Int.	-0.003 [-0.01, 0.00]	0.00	04	-0.97	941.05	.333		
	Avd	-0.27 [-0.40, -0.14]	0.06	18	-4.22	744.24	< .001		
	Anx	0.12 [0.03, 0.20]	0.04	.11	2.59	619.55	.010		
Maintain	Agree	0.02 [0.01, 0.03]	0.00	.22	5.56	416.06	< .001	.19	.05
	Hurt	-0.03 [-0.09, 0.03]	0.03	03	-0.99	1097.04	.325		
	Int.	-0.00 [-0.01, 0.00]	0.00	03	-0.82	970.76	.410		
	Avd	-0.28 [-0.40, -0.17]	0.06	20	-4.83	787.02	< .001		
	Anx	0.09 [0.01, 0.17]	0.04	.09	2.23	640.62	.027		
Approach	Agree	0.02 [0.01, 0.03]	0.00	.21	4.68	1025.73	< .001	.23	.00
	Hurt	-0.06 [-0.13, 0.00]	0.03	08	-1.93	1089.79	.054		
	Int.	-0.01 [-0.01, -0.00]	0.00	10	-2.68	1076.77	.007		
	Avd	-0.38 [-0.51, -0.25]	0.07	26	-5.75	1095.35	< .001		
	Anx	0.07 [-0.02, 0.16]	0.05	.06	1.46	1095.98	.145		
Comfort	Agree	0.002 [-0.01, 0.01]	0.00	.02	0.50	1080.20	.614	.33	.00
	Hurt	-0.28	0.03	33	-8.73	1054.39	< .001		
	Int.	[-0.34, -0.22] -0.004	0.00	05	-1.35	1033.34	.178		
	Avd	[-0.01, 0.00] -0.23 [-0.36, -0.11]	0.06	16	-0.23	1085.11	< .001		

	Anx	-0.01 [-0.10, 0.08]	0.04	01	-0.01	1084.24	.784			
CareSeek	Agree	0.02 [0.01, 0.02]	0.00	.16	4.16	1065.32	< .001	.28	.00	
	Hurt	-0.10 [-0.16, -0.05]	0.03	12	-3.63	1078.12	< .001			
	Int.	-0.00 [-0.01, 0.00]	0.00	06	-1.79	1060.22	.073			
	Avd	-0.28 [-0.39, -0.17]	0.06	19	-5.03	1098.64	< .001			
	Anx	0.05 [-0.03, 0.13]	0.04	.05	1.32	1098.33	.188			

*Note.* Initial = Initial Signal of Distress. Maintain = Maintenance of Distress. Approach = Approaching the partner. Comfort = Ability to be comforted. CareSeek = Overall Care-Seeking Behaviors. Agree = Agreeableness. Hurt = Self-reported feelings of hurt. Int. = Agreeableness by Hurt interaction. Avd = Avoidance. Anx = Anxiety.

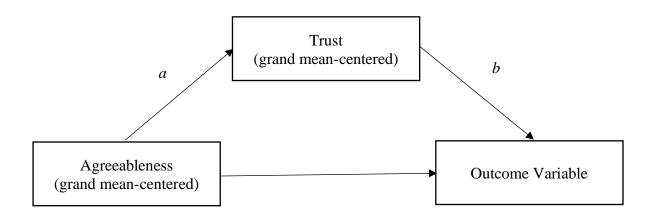
# Secondary Analyses: Trust Mediation, and Controlling for Time

Trust Mediation. I examined whether the associations between agreeableness and secure-base-use behaviors are explained in part through trust. To do so, I used the "mediation" package (Tingley et al., 2014) in R to investigate the indirect pathways from agreeableness (grand mean-centered) to each secure-base-use behavior through trust (grand mean-centered). This package handles multi-level/mixed-effects models, and thus, is suitable for this dataset. However, the package is unable to analyze models with more than two levels, so I examined whether one level could be removed. The *ICCs* of partner membership is close or equal to 0 in our previous models (see Tables 34 and 35), which indicates that the interdependence that arises from partner membership is close to non-existent. Hence, I simplified the models by not taking into account the partner membership for this mediation analysis. I tested the significance of the indirect pathways using bootstrapping procedures. Unstandardized indirect effects were computed for each of 10,000 bootstrapped samples, and the 95% confidence interval was computed by determining the indirect effects at the 2.5th and 92.7th percentiles. See Table 36 for a summary of statistics of these mediation analyses.

Consistent with the findings of my previous studies, results of this study were in line with the view that high trust helped explain the indirect pathways from high agreeableness to (a) clear maintenance of distress, (b) directly approaching the partner, (c) high ability to be comforted by the partner, and (d) positive and direct overall care-seeking behaviors. However, the indirect pathway from agreeableness to initial signal of distress through trust was not significant.

Table 36.

Summary of statistics of mediation models in Study 6. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.



Outcome	Parameter	ab	а	b	Direct c'
Initial	h	0.00	0.01	0.00	0.02
	CI	[-0.00, 0.00]	[0.01, 0.02]	[-0.11, 0.12]	[0.01, 0.03]
	p	.960	< .001	.951	<.001
Maintain	b	0.002	0.01	0.13	0.03
	CI	[0.000, 0.00]	[0.01, 0.02]	[0.03, 0.23]	[0.02, 0.03]
	p	.012	< .001	.012	< .001
Approach	b	0.003	0.01	0.28	0.03
	CI	[0.002, 0.01]	[0.01, 0.02]	[0.16, 0.39]	[0.02, 0.03]
	p	< .001	< .001	< .001	< .001
Comfort	b	0.005	0.01	0.37	0.0002
	CI	[0.003, 0.01]	[0.01, 0.02]	[0.25, 0.49]	[-0.01, 0.01]
	p	< .001	< .001	< .001	.964
CareSeek	b	0.003	0.01	0.21	0.02
	CI	[0.001, 0.00]	[0.01, 0.02]	[0.10, 0.31]	[0.01, 0.03]
	p	< .001	< .001	< .001	< .001

*Note*. Initial = Initial Signal of Distress. Maintain = Maintenance of Distress. Approach = Approaching the Partner. Comfort = Ability to be Comforted. CareSeek = Overall Care Seeking Behaviours.

**Controlling for Time.** In my pre-registered analysis, I controlled for attachment style in the analyses that investigated the relations between agreeableness and secure base seeking behaviors. Here, I investigated whether these relations held when controlling for time. The statistical models were the same as my pre-registered analysis plan, with the exception that time (Time 1 = 1, Time 2 = 2, Time 3 = 3) was used as a covariate instead of attachment anxiety and avoidance. As shown in Tables 38 and 39, results indicated that the pattern of the associations remained identical when controlling for time: Agreeableness remained positively and significantly associated with (a) clear initial signal of distress, (b) clear maintenance of distress, (c) directly approaching the partner, and (d) positive overall care-seeking behaviors. Agreeableness was not associated with the ability to be comforted by the partner. These associations also were not moderated by (a) whether the topic was hurtful or not (Table 37), and (b) participants' self-reported feelings of hurt when controlling for time (Table 38), with one exception. There was a significant interaction between agreeableness and self-reported feelings of hurt on approaching the partner when controlling for time (see Figure 11), such that among people who felt less hurt, agreeableness was positively associated with approaching the partner, b = 0.04, SE = 0.01, t(609.78) = 6.50, p < .001, and this association seemed less strong among people who felt more hurt, b = 0.02, SE = 0.01, t(3.37) = 562.35, p < .001.

Table 37. Summary of statistics of multi-level regression models in Study 6, regressing each outcome variable on agreeableness, hurtful topic (hurtful topic = 1, non-hurtful topic = -1), and their interaction, with time as covariate. 95% CI are presented below the b.

Outcome	Predictor	b	SE	β	t	df	p	ICC <sub>Co</sub>	ICC Partner Memb
Initial	Agree	0.02	0.00	.24	5.13	601.73	< .001	.13	ership within Couple .04
	C	[0.01, 0.03]							
	Topic	0.08	0.04	.08	1.79	899.13	.074		
	т.,	[-0.01, 0.17]	0.04	02	0.72	1070 16	460		
	Int.	0.003	0.04	.03	0.73	1078.16	.469		
	Time	[-0.01, 0.01] -0.20	0.04	20	-4.74	774.67	< .001		
	Time	0-0.28, -0.12]	0.04	.20	7./7	774.07	< .001		
Maintain	Agree	0.03	0.00	.27	6.31	580.29	< .001	.18	.09
	C	[0.02, 0.04]							
	Topic	0.05	0.04	.05	1.24	905.65	.215		
		[-0.03, 0.12]							
	Int.	0.00	0.00	.005	0.13	1047.86	.897		
	Time	[-0.01, 0.01] -0.25	0.04	25	-6.80	754.99	< .001		
	Time	[-0.32, -0.17]	0.04	23	-0.80	134.33	< .001		
Approach	Agree	0.03	0.00	.28	5.78	539.85	< .001	.24	.04
<b>F</b> F	8	[0.02, 0.04]							
	Topic	-0.0003	0.04	00	-0.01	901.51	.994		
		[-0.09, 0.09]							
	Int.	0.002	0.00	.02	0.49	1041.40	.626		
	Time	[-0.01, 0.01]	0.07	41	10.05	746.22	< 001		
	Time	-0.41 [-0.50, -0.33]	0.07	41	-10.05	746.23	< .001		
Comfort	Agree	0.002	0.00	.02	0.47	1088.48	.642	.43	.00
Common	118100	[-0.01, 0.01]	0.00		0117	10000			
	Topic	-0.12	0.05	12	-2.67	1079.02	.008		
		[-0.21, -0.03]							
	Int.	0.003	0.00	.03	0.62	979.12	.536		
	æ.	[-0.01, 0.01]	0.04	41	10.16	002.42	. 001		
	Time	-0.41	0.04	41	-10.16	923.43	< .001		
CareSeek	Agree	[-0.48, -0.33] 0.02	0.00	.21	5.09	496.92	< .001	.33	.00
Carcock	Agicc	[0.01, 0.03]	0.00	.41	3.07	470.72	< .001	.55	.00
	Topic	-0.01	0.04	09	-0.23	896.62	.922		
	1	[-0.09, 0.07]							
	Int.	0.002	0.00	.02	0.67	1020.39	.506		
		[-0.00, 0.01]							

Time	-0.31	0.04	31	-8.76	739.24	< .001
	[-0.38, -0.24]					

*Note.* Initial = Initial Signal of Distress. Maintain = Maintenance of Distress. Approach = Approaching the partner. Comfort = Ability to be comforted. CareSeek = Overall Care-Seeking Behaviors. Agree = Agreeableness. Topic = Hurtful Topic vs. Non-Hurtful Topic. Int. = Agreeableness by Topic interaction.

Table 38. Summary of statistics of multi-level regression models in Study 6, regressing each outcome variable on agreeableness, self-reported feelings of hurt, and their interaction, with time (Time 1 = 1, Time 2 = 2, Time 3 = 3) as covariate. 95% CI are presented below the b.

Outcome	Predictor	b	SE	β	t	df	p	$ICC_{Co}$	ICC <sub>PartnerMemb</sub>
								uple	ership within Couple
Initial	Agree	0.02	0.00	.22	5.41	411.85	< .001	.13	.04
		[001, 0.03]							
	Hurt	0.03	0.03	.03	0.88	1088.72	.381		
		[-0.03, 0.09]							
	Int.	-0.002	0.00	03	-0.78	969.80	.433		
		[-0.01, 0.00]							
	Time	-0.20	0.04	20	-4.82	776.38	< .001		
		[0.29, -0.12]							
Maintain	Agree	0.03	0.00	.27	7.17	409.68	< .001	.17	.10
		[0.02, 0.04]							
	Hurt	-0.03	0.03	04	-1.20	1101.58	.230		
		[-0.09, 0.02]							
	Int.	-0.001	0.00	02	-0.52	1013.20	.602		
		[-0.01, 0.00]							
	Time	-0.25	0.04	25	-6.83	758.22	< .001		
		[-0.32, -0.18]							
Approach	Agree	0.03	0.00	.28	6.60	376.95	< .001	.22	.05
		[0.02, 0.04]							
	Hurt	-0.08	0.03	09	-2.51	1082.78	.012		
		[-0.14, -0.01]							
	Int.	-0.01	0.00	09	-2.38	938.62	.018		
		[-0.01, -0.00]							
	Time	-0.41	0.04	41	-10.04	750.67	< .001		
		[-0.50, -0.33]							
Comfort	Agree	0.01	0.00	.05	1.37	1092.43	.172	.39	.00
		[-0.00, 0.01]							
	Hurt	-0.28	0.03	34	-9.51	1044.85	< .001		
		[-0.34, -0.22]							
	Int.	-0.003	0.00	04	-1.15	1016.79	.249		
		[-0.01, 0.00]							
	Time	-0.39	0.04	39	-10.11	926.50	< .001		
		[-0.47, -0.32]							

CareSeek	Agree	0.02	0.00	.21	5.93	342.18	< .001
		[0.01, 0.03]					
	Hurt	-0.11	0.03	13	-4.02	1060.34	< .001
		[-0.16, -0.05]					
	Int.	-0.004	0.00	05	-1.49	894.02	.137
		[-0.01, 0.00]					
	Time	-0.31	0.04	31	-8.73	742.08	< .001
		[-0.38, -0.24]					

*Note.* Initial = Initial Signal of Distress. Maintain = Maintenance of Distress. Approach = Approaching the partner. Comfort = Ability to be comforted. CareSeek = Overall Care-Seeking Behaviors. Agree = Agreeableness. Hurt = Self-reported feelings of hurt. Int. = Agreeableness by Hurt interaction.

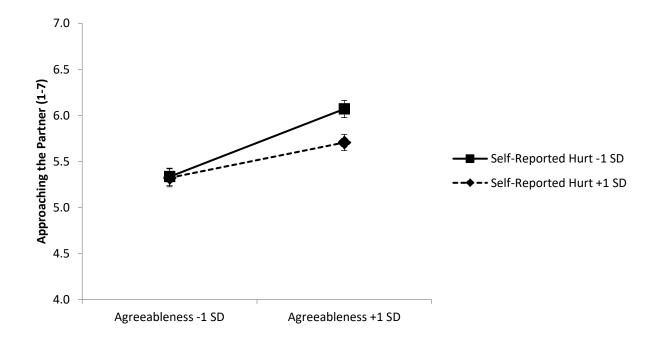


Figure 11. Approaching the partner as a function of agreeableness and self-reported feelings of hurt, controlling for time, with  $\pm 1$  standard error bars.

# **Study 6 Summary**

This pre-registered, dyadic, behavioral, longitudinal study conceptually replicated the findings from my previous studies. In conflict discussions in which many people probably experienced hurt feelings, agreeable people behaved in ways that were seemingly more constructive than did less agreeable people: They more directly and positively (a) signalled their

distress and needs, (b) maintained their distress signals, (c) approached their partner, and (d) sought care from their partner. Secondary analyses also showed that, consistent with my previous studies, agreeable people's high trust helped to explain these prosocial behaviors. Furthermore, these secure-base-use behaviors were highly correlated with each other, with high scores on these behaviors reflecting a direct and positive approach toward the partner, which I believe reflected one's constructive intentions to resolve the conflict.

Results did not suggest that the positive associations between agreeableness and secure-base-use behaviors were stronger in situations that were coded as more hurtful or rated as more hurtful by participants than situations that were coded as less hurtful or rated as less hurtful by participants, with two exceptions. Highly agreeable people demonstrated less use of (a) approach behaviors and (b) overall care-seeking behaviors when they reported feeling more hurt than less hurt, whereas less agreeable people's behaviors did not change based on how hurt they felt. Because these interactions did not emerge (a) for other dependent variables, or (b) when I used the coded hurtful versus non-hurtful topic as the moderator, I do not trust that they are reliable. I would want to see them replicated before interpreting them.

I originally proposed that hurtful incidents would be more likely to put people's agreeableness to the test than non-hurtful situations. In retrospect, I realize that this prediction called for an unlikely result: Why would people, even highly agreeable ones, behave *even nicer* than usual when hurt? I now realize that it is impressive that, even when they feel hurt, agreeable people remain nicer than less agreeable people. This study suggested that compared to disagreeable people, highly agreeable people continue to prioritize prosocial, connecting behaviors toward a partner in conflicts.

## **General Discussion**

Hurt feelings are inevitable in romantic relationships, and resolving hurt feelings in constructive ways is important for relationship maintenance. What factors predict the cognitions and behaviors that reflect constructive intentions to resolve hurt feelings? This research examined the role of agreeableness, and its associations with trust, communal motivation, and self-regulation. Past research has focused on agreeableness in interactions with friends and strangers (e.g., Graziano & Tobin, 2013; John et al., 1991). Research on whether agreeableness is important in predicting people's specific tendencies in romantic relationships has been limited. I proposed that hurtful incidents in romantic relationships should highlight individual differences in being agreeable and constructive, and thus the effects of agreeableness should be particularly manifest in this context. However, I also recognized that agreeableness differences may not emerge, because there may be strong situational demands to be communal and warm in romantic relationships (Clark et al., 2010), and because agreeable people may be more affronted than disagreeable people in response to others' violations of communal norms (Kammrath & Scholer, 2011). In six studies, I predicted that because agreeable people have high trust, high communal motivation, and high self-regulation skills, they respond to hurt feelings in ways characterized by stronger constructive intentions than do less agreeable people.

I found evidence for my hypothesis: Higher agreeableness was associated with higher forgiveness, less likelihood of believing that the partner was intentionally hurtful, more use of positive-direct behavioral responses (e.g., calmly letting the partner know that one is hurt, directly and positively seeking care from the partner), and less use of negative-direct behavioral

responses to hurt feelings (e.g., making mean comments to the partner). 8 However, agreeableness was not associated with the use of negative-indirect (e.g., giving partner the silent treatment) or positive-indirect behavioral responses (e.g., passively hoping that the partner will improve eventually). I reason that this lack of associations is due to the non-confrontational nature of these indirect responses. Given evidence that highly agreeable people handle conflicts well (e.g. Jensen-Campbell & Graziano, 2001), one might suspect that they would be less confrontational

<sup>&</sup>lt;sup>8</sup> Some items of the Big-Five Inventory—Agreeableness subscale overlapped with the content of our measures of general trust, forgiveness, and general communal motivation. These items were "I am someone who is generally trusting," "I am someone who has a forgiving nature," and "I am someone who is helpful and unselfish with others." To rule out the possibility that my findings were due to content overlap, I conducted additional analyses excluding these items when investigating general trust, forgiveness, and general communal motivation. The results of these analyses were consistent with the results that included these items. For example, like the analyses with the overlapping items, results of analyses without the overlapping items showed that higher agreeableness was significantly associated with (a) higher forgiveness in Studies 1-5, (b) less likelihood of believing that a partner is intentionally hurtful in Studies 1-5, (c) more use of positive-direct responses in Studies 2, 3, and 5, and (d) less use of negative-direct responses in Studies 1, 3, 4, and 5. Patterns of results of trust mediation analyses with and without the overlapping items were also identical: Higher agreeableness was associated with higher trust, which in turn was associated with higher forgiveness, less likelihood of perceiving that a partner is intentionally hurtful, more use of positive-direct responses, and less use of negative-direct responses.

than other people. But, past research has shown that agreeable people are confrontational when the situation permits (Kammrath et al., 2015), and hurtful incidents may warrant confrontations. Perhaps highly agreeable people adjust their confrontational behavior to the situation, thereby weakening any association with indirect responses.

#### Mediators of Agreeableness—Trust, Communal Motivation, and Self-Regulation

I also proposed that agreeable people's trust, communal motivation, and self-regulation promote agreeable people's positive responses to hurt feelings, which should serve agreeable people's general goal to maintain interpersonal harmony. Supporting my theorizing, agreeableness is moderately and positively correlated with these traits in my studies. Moreover, chronic levels of trust and communal motivation helped to explain the associations between higher agreeableness and (a) higher forgiveness, (b) less likelihood of believing that a partner's hurtful behaviors were intentional (only for trust), and (c) more usage of positive-direct behavioral responses to hurt feelings. In Study 5, comparisons between the indirect effects through chronic trust and through chronic communal motivation showed that the indirect effects through trust were stronger. Chronic trust may be more important than chronic communal motivation because hurtful incidents more directly put people's trust to the test. By definition, people are hurt when they believe that their partner does not care for them, which means that they do not trust their partner at the moment of feeling hurt. Hence, they may consult their chronic trust to inform how they should respond to hurt feelings. Also, hurtful incidents are risky—responding in ways that promote closeness may be rebuffed by the hurtful partner. Risk regulation theory states that chronic trust is especially important in governing people's responses to such risks (e.g., Murray et al., 2002; 2003). As such, chronic trust, rather than communal motivation, may be especially relevant to people's responses to hurt feelings. Future research can investigate other contexts in relationships in which the role of communal motivation is central. For example, in incidents involving sacrifice, in which people need to put their needs behind those of their partner, communal motivation may be more important than trust. In those cases, people may need to be strongly motivated to respond to a partner's needs—that is, highly communally motivated—to make the sacrifice.

I also found that self-regulation helped to explain the negative association between agreeableness and the usage of negative-direct responses, but not the associations between agreeableness and other responses in Study 5. These results may point to two systems through which agreeableness governs people's positive reactions to hurt feelings: Self-regulation may primarily function to inhibit negative responses (see Rusbult et al., 1991), and trust and communal motivation may together promote positive responses. High forgiveness, high perceptions that a partner's hurtful behaviors are unintentional, and high positive-direct behavioral responses may stem from an underlying motivation to promote and rebuild relational bonds following hurtful incidents. This underlying motivation may be fueled by the general approach motivation associated with having high trust (Cavallo, Fitzsimons, & Holmes, 2009) and the prosocial tendency of high communal motivation (Le, Impett, Lemay, Muise, & Tskhay, 2018). Future research is needed to investigate the possibility that two different systems underlie the effects of agreeableness on people's reactions to hurt feelings.

# The Importance of Agreeableness in Romantic Relationships

This investigation is one of the first to suggest that agreeableness is important in explaining cognitions and behaviors in romantic relationships. Agreeable people's positive reactions to hurtful partners can be viewed as connection-seeking behaviors, which are key to the maintenance of romantic relationships (e.g., Murray et al., 2008; Rempel, Holmes, & Zanna,

1985). For example, approaching the partner when hurt and calmly and directly discussing one's hurt feelings allow one to rebuild relational closeness.

How important is agreeableness in close relationships relative to other personality traits? I compared the effects of agreeableness on people's responses to hurt feelings with the effects of another variable that is important in partner transgressions: self-esteem (e.g., Murray et al., 2002; 2003). In my studies, self-esteem was largely unassociated with the different reactions to hurt feelings, whereas agreeableness was (see Appendix J for further details). For example, in most studies, self-esteem was not associated with perceptions that a partner is intentionally hurtful or the usage of negative-direct behavioral responses, whereas agreeableness was consistently and negatively associated with these reactions. The agreeableness findings also remained consistent even after controlling for self-esteem. Agreeableness may be more important than self-esteem in predicting reactions to hurt feelings in romantic relationships because unlike self-esteem, agreeableness encompasses not only trust, but also communal motivation and self-regulation, which are important to promote connection-seeking behaviors in relationships. Altogether, the current research advances the close relationships literature by (a) providing evidence for the novel, and often overlooked, suggestion that agreeableness plays a key role in relationship functioning, and (b) shedding new light on the mechanisms through which agreeableness is linked to connection-seeking behaviors.

# **Theoretical Contributions to the Understanding of Agreeableness**

Past research on agreeableness in interpersonal relationships has focused heavily on the role of communal motivation (e.g., Cortes et al., 2014; Graziano & Eisenberg, 1997; Kammrath & Scholer, 2011; Wiggins, 1991) and self-regulation (e.g., Graziano & Tobin, 2013; John et al., 1991; Meier & Robinson, 2004; Meier, Robinson, & Wilkowski, 2006). Even though it is well-

Shafer, 1990; Murray et al., 2008), limited research has focused on the influence of agreeable people's trust on their thoughts and behaviors. To my knowledge, McCarthy et al.'s (2017) investigation was the only one that examined agreeableness and trust in a relationship context. Specifically, McCarthy et al. found that agreeableness was positively associated with trust, which was in turn positively associated with direct communications of negative events that occurred outside of the relationship (e.g., a bad day at work). The present research put forth a more comprehensive theoretical model than McCarthy et al.'s by focusing on the roles of communal motivation and self-regulation in addition to trust. The present research also investigated the link between agreeableness and behaviors in response to negativity that arises from within the relationship. Furthermore, this research showed that trust might even play a stronger role than communal motivation in explaining the link between agreeableness and the usage of positive reactions to hurt feelings (see Study 5).

#### Other Contributions to the Literature

The present research contributes to the relationships literature in several ways. First, I extended risk regulation theory to the novel context of hurtful incidents. I showed that trust translates into responses that probably help repair relational damage after hurtful incidents, a finding that is consistent with past work suggesting that trust permits people to seek psychological connection in response to relationship insecurity (e.g., Murray et al., 2006). Moreover, whereas risk regulation research has focused on self-esteem as a proxy for trust (e.g., Murray et al., 2003; 2006), I also showed that self-esteem is not the only personality variable linked to trust: so is agreeableness. Finally, my work suggests that trust, communal motivation,

and self-regulation contribute to positive responses to hurt feelings, which may point to possible interventions to help couples resolve hurtful incidents.

## **Limitations and Strengths**

The current investigation involved only North American samples, so future research should investigate whether the findings generalize to other samples. This research also focused only on predictors of responses to hurt feelings, but not downstream consequences of the different responses to hurt feelings for relationship quality. Despite these limitations, this research has certain strengths. The use of a dyadic design in Study 4 in addition to the self-reports used in the other studies helps bolster the confidence in my findings. Moreover, the dyadic, behavioral, and longitudinal design of Study 6 strongly bolsters the findings from my other studies. I also followed certain best practices, such as conducting *a priori* power analyses and post-hoc sensitivity analyses whenever possible to ensure that each study was reasonably powered, clarifying our *a priori* exclusion criteria, and including three studies with pre-registered analyses and hypotheses.

#### **Conclusions**

Hurt feelings are common in romantic relationships and they have to be handled with care. Agreeableness, and its associations with high levels of trust, communal motivation, and self-regulation, appear to contribute to positive cognitive and behavioral responses to hurt feelings, which are likely to promote relationship repair after hurtful incidents.

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### Appendix A

# State Relationship Attitudes Results in Study 5

The inclusion of a measure of state relationship attitudes allowed me to test a hypothesis regarding risk regulation theory. According to risk regulation theory, when people face relationship threat (e.g., reminded of a time that they felt hurt by their partner), their trust governs how they react (Murray et al., 2006). Specifically, people with high trust would seek further psychological connection with their relationship and partner than before (e.g., evaluating the relationship more positively), whereas people with low trust would psychologically distance themselves from the relationship (e.g., devaluing the relationship). Moreover, research on risk regulation has shown that under high cognitive load, people with high trust would exhibit tendencies similar to those of people with low trust (e.g., psychologically distance themselves in the face of relationship threat; Murray et al. 2002). As such, I examined whether agreeableness, cognitive load, and trust would be associated with people's state relationship attitudes.

As shown in Table 39 in this Appendix, agreeableness was positively associated with having positive attitudes toward the relationship. However, the manipulation of cognitive load did not affect people's state relationship attitudes or moderate the association between agreeableness and state relationship attitudes. I also examined whether trust mediated the positive association between higher agreeableness and higher state relationship attitude. Result of the indirect pathway suggests that it did (see Table 40). These results were consistent with risk regulation theory that highly agreeable people, who have high trust, are more likely to seek psychological connection than less agreeable people when they face relationship threats (i.e., being reminded of a time when their partner hurt their feelings).

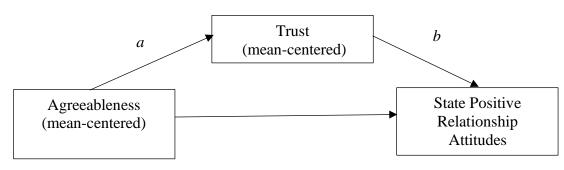
Table 39.

Summary of statistics of regression model in Study 5 involving state relationship attitudes as the outcome variable. 95% CI are presented below the b.

Predictor	h	SE	ß	t	df	n
Agreeableness	0.64	0.12	.48	5.12	240	< .001
	[0.39, 0.88]					
Condition	0.05	0.09	.05	0.58	240	.561
Interaction	[-0.13, 0.24] 0.21	0.12	.15	1.66	240	.099
	[-0.04, 0.45]	0.12	.13	1.00	210	.077

Table 40.

Summary of statistics of mediation models investigating the indirect pathway from agreeableness to state relationship attitudes through trust in Study 5. The c' path represents the association between agreeableness and the outcome variable when trust is controlled.



Parameter	ab	а	b	Direct c'
b	0.42	0.46	0.92	0.20
SE	0.09	0.09	0.07	0.10
CI	[0.25, 0.60]	[0.29, 0.63]	[0.79, 1.06]	[0.01, 0.39]
p		< .001	< .001	.040

## Appendix B

Agreeableness subscale of the Big Five Inventory (Studies 1-5; John, Donahue, & Kentle, 1991)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who is generally trust? Using the scale below, please rate the extent to which you agree or disagree with each statement.

Disagree Strongly	Disagree A Little	Neither Agree Nor Disagree	Agree A Little	Agree Strongly
1	2	3	4	5

- 1. I am someone who tends to find fault with others.
- 2. I am someone who is helpful and unselfish with others.
- 3. I am someone who starts quarrels with others.
- 4. I am someone who has a forgiving nature.
- 5. I am someone who is generally trust.
- 6. I am someone who can be cold and aloof.
- 7. I am someone who is considerate and kind to almost everyone.
- 8. I am someone who is sometimes rude to others.
- 9. I am someone who likes to cooperate with others.

Agreeableness subscale of the International Personality Item Pool (Study 6; Goldberg, 1999)

You will view phrases describing people's behaviors. Please use the rating scale below to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be kept in absolute confidence. Please reach each statement carefully, and then enter your answer.

Very Inaccurate	Moderately Inaccurate	Neither Inaccurate Nor	Moderately Accurate	Very Accurate
		Accurate		
1	2	3	4	5

### Appendix C

Perceptions of a Partner's Intentionality (Bachman & Guerrero, 2006; Studies 1, 2, 3)

Please rate the following statements using this scale.

Disagree	Disagree A	Neither Agree	Agree A Little	Agree Strongly
Strongly	Little	Nor Disagree		
1	2	3	4	5

- 1. The hurtful incident was an accident.
- 2. My partner did not mean to hurt me.
- 3. My partner was insensitive or inconsiderate.
- 4. My partner was trying to hurt me.

Perceptions of a Partner's Intentionality Measure (adapted from Bachman & Guerrero,

2006; and Bradbury et al., 1987, Studies 5)

Please rate the following statements using this scale. Next time when you encounter a hurtful incident like the one that you just described, to what extent will you think the following?

Definitely Will Not Think This				Definitely Will Thnk This Way
Way				j
1	2	3	4	5

- 1. The hurtful incident is an accident.
- 2. My partner is insensitive or inconsiderate.
- 3. My partner is trying to hurt me.
- 4. My partner's behavior is intentional.
- 5. My partner is deserving of blame.
- 6. My partner's behavior is motivated by concerns that are selfish.

# Appendix D

Forgiveness Measure (Bachman & Guerrero, 2006; Studies 1, 2, 3, and 5)

Think about each item that follows and rate the degree to which you agree or disagree with it on the following scale.

Strongly Disagree			Neither Agree Nor Disagree			Strongly Agree
			Disagree			
1	2	3	4	5	6	7

- 1. I have forgiven my partner for hurting me.
- 2. I completely forgave my partner.

### Appendix E

## *Trust Measure (McCarthy et al., 2017)*

Think of your current romantic partner, rate your agreement with the following statements using the scale provided.

Not At All		Somewhat True		Moderately True		Very True		Completely True
True								
1	2	3	4	5	6	7	8	9

## My partner:

- 1. is an excellent judge of my character.\*
- 2. "gets the facts right" about me.
- 3. esteems me, shortcomings and all.
- 4. values my abilities and opinions.
- 5. really listens to me.
- 6. is responsive to my needs.\*

### Trust Measure (Cortes & Wood, 2019)

Please respond to the following statements using the scale provided.

Not At All			Moderately			Completely
True			True			True
1	2	3	4	5	6	7

- 1. I am confident that my partner accepts and loves me.\*
- 2. My partner believes I have many good qualities.
- 3. My partner regards me as very important in his/her life.\*
- 4. My partner values and admires my personal qualities and abilities.\*
- 5. My partner is responsive to my needs.
- 6. My partner would not help me if it meant he/she had to make sacrifices
- 7. My partner is committed to our relationship.
- 8. Though times may change and the future is uncertain, I know my partner will always be ready and wiling to offer my strength and support.\*
- 9. My partner is never concerned that unpredictable conflicts and serious tensions may damage our relationship because he/she knows we can weather any storm.
- 10. Whenever we have to make an important decision in a situation we have never encountered before, I know my partner will be concerned about my welfare.

Note. Studies 1, 2, and 4 used the McCarthy et al., (2017) trust measure.

\*These items were used to form the trust composite in Studies 3. The trust measure in Study 5 contained only these items.

# Trust Subscale of Perceived Relationship Quality Component (Fletcher et al., 2000; used in Study 6)

Not At All						Extremely
1	2	3	4	5	6	7

- 1. How much do you trust your partner?
- 2. How much can you count on your partner?3. How dependable is your partner?

### Appendix F

Communal Motivation Measure (Clark, Ouellete, Powell, & Milberg, 1987; Study 5)

Please rate how characteristics each of the following statements is of you using the scale provided.

Extremely				Extremely
Uncharacteristic				Characteristic
1	2	3	4	5

- 1. It bothers me when other people neglect my needs.
- 2. When making a decision, I take other people's needs and feelings into account.
- 3. I'm not especially sensitive to other people's feelings.
- 4. I believe people should go out of their way to be helpful.
- 5. I don't especially enjoy giving others aid.
- 6. I expect people I know to be responsive to my needs and feelings.
- 7. I often go out of my way to help another person.
- 8. I believe it's best not to get involved taking care of other people's personal needs.
- 9. I'm not the sort of person who often comes to the aid of others.
- 10. When I have a need, I turn to others I know for help.
- 11. When people get emotionally upset, I tend to avoid them.
- 12. People should keep their troubles to themselves.
- 13. When I have a need that others ignore, I'm hurt.

# Appendix G

Self-Regulation Measure (Tangney, Baumeister, & Boone, 2004; Study 5)

Using the scale provided, please indicate how much each of the following statements reflects how you typically are.

Not At All				Very Much
1	2	3	4	5

- 1. I am good at resisting temptation.
- 2. I have a hard time breaking bad habits.
- 3. I am lazy.
- 4. I say inappropriate things.
- 5. I do certain things that are bad for me, if they are fun.
- 6. I refuse things that are bad for me.
- 7. I wish I had more self-discipline.
- 8. People would say that I have iron self-discipline.

# Appendix H

# Relationship Attitude Measure (Study 5)

Please consider how you feel about your relationship right now. To what extent do you feel the following?

Not At All						Extremely
1	2	3	4	5	6	7

- 1. I feel committed to my relationship right now.
- 2. I feel close to my partner right now.
- 3. I feel distant from my partner right now.
- 4. I feel unsatisfied with my relationship right now.

# Appendix I

Self-Esteem Measure (Rosenberg, 1965)

Think about each statement that follows and rate the degree to which you agree or disagree with it on the following scale.

Very		Moderately		Neutral		Moderately		Very
Strongly		Disagree				Agree		Strongly
Disagree								Agree
1	2	3	4	5	6	7	8	9

- 1. I feel that I am a person of worth, at least on an equal basis with others.
- 2. I feel that I have a number of good qualities.
- 3. All in all I am inclined to feel that I am a failure.
- 4. I am able to do things as well as most other people.
- 5. I feel I do not have much to be proud of.
- 6. I take a positive attitude toward myself.
- 7. On the whole I am satisfied with myself.
- 8. I wish I could have more respect for myself.
- 9. I certainly feel useless at times.
- 10. At times, I think I am no good at all.

#### Appendix J

#### Comparing Agreeableness and Self-Esteem

To examine the unique role of agreeableness in predicting reactions to hurt in romantic relationships, I conducted exploratory analyses to compare the effects of agreeableness with the effects of another well-known construct that affects people's behaviors in response to a partner's transgression: self-esteem (e.g., Murray et al., 2002; 2003). To do so, I regressed each of the main dependent variables (i.e., perceptions that a partner is intentionally hurtful, forgiveness, positive-direct and negative-direct behavioral responses) on agreeableness (mean-centered) and self-esteem (mean-centered) in Studies 1-4. (Because Study 5 involved a cognitive load manipulation that was not included in Studies 1-4, Study 5 was not suitable for comparing the main effects of agreeableness and self-esteem. See Appendix A for results involving self-esteem and other relevant dependent variables, such as relationship evaluations, in Study 5. I also did not examine self-esteem in Study 6, which was conducted by Pietromonaco and colleagues.)

Only Studies 1-3 measured perceived partner's intention to be hurtful and forgiveness. Results of these studies showed that self-esteem was not associated with perceived partner's intentionality, or forgiveness (except for Study 3), whereas agreeableness was (see Table 40 below). Studies 1-4 all measured positive-direct and negative-direct behavioral reactions to hurt feelings. As shown in Table 41, self-esteem was not associated with negative-direct behavioral responses in Studies 1-3), or positive-direct behavioural responses in Studies 1, 2, and 4. However, similar to the results reported in the main paper, higher agreeableness was consistently associated with (a) lower negative-direct behaviors in Studies 1, 3, and 4, and (b) positive-direct behaviors in Study 2.

These results suggest that agreeableness plays a unique role above and beyond selfesteem in explaining positive cognitions and behaviors in response to hurt feelings in romantic relationships.

Table 41.

Summary of statistics of analyses comparing the associations between reactions to hurt feelings with (a) agreeableness and (b) self-esteem.

wiii (u) ugi	Intentionality	V	Dogitima Ding -t	Magatina Dinast
	Intentionality	Forgiveness	Positive-Direct	Negative-Direct
S1 Agree	b = -0.21, $SE =$	b = 0.65, SE =	b = 0.17, SE =	b = -0.59, $SE =$
	0.11, t(208) = -	0.18, t(208) = 3.57,	0.17, t(208) =	0.14, t(208) = -
	1.95, p = .052	p < .001	0.98, p = .331	4.32, p < .001
S1 SE	b = -0.04, $SE =$	b = -0.03, $SE =$	b = 0.04, SE =	b = -0.05, SE =
	0.04, t(208) = -	0.06, t(208) = -	0.06, t(208) =	0.05, t(208) = -
	1.07, p = .287	0.45, p = .651	0.59, p = .556	1.08, p = .283
S2 Agree	b = -0.29, $SE =$	b = 0.55, SE =	b = 0.55, SE =	b = -0.17, SE =
	0.10, t(179) = -	0.13, $t(179) = 4.33$ ,	0.24, $t(174) =$	0.18, $t(174) = -$
	2.80, p = .006	p < .001	0.24, p = .022	0.95, p = .344
S2 SE	b = -0.05, SE =	b = 0.08, SE =	b = -0.05, SE =	b = -0.01, $SE =$
	0.04, t(179) = -	0.05, $t(179) = 1.68$ ,	0.09, $t(174) = -$	0.07, $t(174) = -$
	1.28, p = .202	p = .094	0.50, p = .615	0.12, p = .905
S3 Agree	b = -0.25, SE =	b = 0.33, $SE =$	b = 0.16, SE =	b = -0.51, $SE =$
	0.08, t(285) = -	0.10, t(285) = 3.32,	0.13, t(285) =	0.15, t(285) = -
	2.99, p = .003	p = .001	1.23, p = .219	3.52, p < .001
S3 SE	b = 0.02, SE =	b = 0.13, $SE =$	b = 0.15, SE =	b = 0.05, SE =
	0.04, $t(285) = 0.47$ ,	0.065 t(285) =	0.06, $t(285) =$	0.07, t(285) = 0.65,
	p = .639	2.53, p = .012	2.39, p = .018	p = .517
S4 Agree	N/A	N/A	b = 0.13, $SE =$	b = -0.42, SE =
			0.16, $t(218) =$	0.13, $t(218) = -$
			0.79, p = .432	3.23, p = .001
S4 SE	N/A	N/A	b = 0.06, SE =	b = -0.12, $SE =$
			0.06, $t(218) =$	0.05, t(218) = -
			0.94, p = .347	2.40, p = .017

Note. S1 = Study 1. S2 = Study 2. S3 = Study 3. S4 = Study 4. Agree = Agreeableness. SE = Self-esteem. Intentionality = Perceived Partner's Intention to be Hurtful. N/A = Did not measure.