# Autonomy in Relatedness: How Need Fulfillment Interacts in Close Relationships

Personality and Social Psychology Bulletin 2020, Vol. 46(4) 603–616 © 2019 by the Society for Personality and Social Psychology, Inc



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#### Abstract

A driving force of relationship maintenance is the fulfillment of basic psychological needs, in particular, the needs for relatedness and autonomy. Until now, research has considered the fulfillment of relatedness and autonomy needs as independent determinants of relationship functioning or as one merged construct called need fulfillment. Little is known about how motivational states interact, even though partners possess and pursue multiple needs at a time in everyday life. Combining theoretical insights from self-determination theory and family systems theory, we test the hypothesis that relatedness and autonomy need fulfillment interact to affect relationship maintenance behavior. In three studies (N = 388, N = 241, and N = 220), we found that relatedness was positively related to accommodation, but especially (or only) when participants reported high, rather than low, autonomy. This research emphasizes the importance of maintaining a sense of self while being closely connected to the partner.

#### **Keywords**

autonomy, relatedness, accommodation, self-determination theory, family systems theory, differentiation

Received October 12, 2018; revised accepted July 5, 2019

What is the secret to a happy, lasting relationship? Philosophers, writers, poets, musicians, and nowadays bloggers and vloggers, have struggled with this question for ages, and so have scientists. Over the past several decades, relationship science has uncovered many ingredients of good, and not so good, relationships. Initially, scientific research was focused on negative relationship processes such as relationship conflict, dysfunctional communication (e.g., Gottman, 1994), and the determinants of divorce (e.g., Amato, 2010). More recently, research has begun to understand the value of resources that can buffer the impact of conflict and stress, such as accommodation, responsiveness, forgiveness, impulse control, gratitude, and sacrifice (see Fincham & Beach, 2010). From this large body of research, we have learned important lessons about what partners should and should not do to maintain a healthy relationship. The question that we address here, however, is not so much what partners need to do to maintain their relationship, but what motivates and enables them to actually do it?

When considering the motivational underpinnings of relationship maintenance processes, a driving force is the fulfillment of basic psychological needs, in particular, the needs for relatedness and autonomy. Relatedness encompasses experiencing a sense of belonging, attachment, closeness, and intimacy with others (see Baumeister & Leary, 1995; Mikulincer & Shaver, 2016; Reis & Patrick, 1996). Autonomy refers to feeling volitional in one's actions and fully and authentically endorsing one's behaviors in the relationship (e.g., Deci & Ryan, 2000; Knee, Hadden, Porter, & Rodriquez, 2013). The fulfillment of relatedness and autonomy needs is essential for psychological growth and wellbeing (Patrick, Knee, Canevello, & Lonsbary, 2007) and motivates relationship behavior (Deci & Ryan, 2000).

Until now, research has considered the fulfillment of relatedness and autonomy needs as independent determinants of relationship functioning (e.g., Hadden, Rodriguez, Knee, & Porter, 2015; Reis, Sheldon, Gable, Roscoe, & Ryan, 2000), or as one merged construct called need fulfillment (e.g., LaGuardia, Ryan, Couchman, & Deci, 2000;

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Patrick et al., 2007). In this article, we argue that partners are more motivated and capable of relationship maintenance behaviors when they feel related to their partner and, at the same time, maintain a sense of autonomy. Specifically, we predict that the fulfillment of autonomy and relatedness needs interact to affect accommodation, defined as partners' ability to react constructively rather than destructively to a partner's potentially destructive behavior (Finkel & Campbell, 2001; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Under pressing circumstances, such as during conflict or when the partner behaves in a negative manner, the capacity to remain connected to the partner without compromising own wishes and needs becomes critical (Skowron, 2000). The ability to avoid destructive reciprocity prevents conflict escalation and is therefore considered an important behavioral maintenance mechanism that protects the relationship.<sup>1</sup>

# Relatedness and Autonomy Need Fulfillment in Close Relationships

The motivational attachment system serves to promote survival, ensuring that individuals maintain proximity to others who provide safety and security (e.g., caregivers, partners; Mikulincer & Shaver, 2016). Hence, the attachment system regulates the degree to which the need for relatedness is fulfilled. Indeed, when relatedness needs are met, partners are more strongly motivated to act in a pro-relationship manner and the relationship is generally more satisfying and stable (Patrick et al., 2007). For example, securely attached individuals are more likely to have long, stable, and satisfying relationships than insecurely attached individuals (e.g., Kirkpatrick & Davis, 1994; Simpson, 1990). Similarly, intimacy is positively related to relationship satisfaction (Greef & Malherbe, 2001), and a strong sense of closeness and commitment induce partners to respond pro-socially in their relationship, including engaging in more accommodation (Finkel & Campbell, 2001; Rusbult et al., 1991).

According to self-determination theory (Deci & Ryan, 2000), individuals need to feel that their actions are selfdirected and freely chosen (i.e., self-determined), rather than feeling coerced or pressured by others. Autonomy stresses authenticity of behaviors and choices that are congruent with one's own needs (Weinstein, Rodriguez, Knee, & Kumashiro, 2016), and this promotes well-being and relationship maintenance behaviors (Knee et al., 2013; Patrick et al., 2007). For example, autonomy predicts positive conflict responses and subsequent satisfaction after conflict (Knee, Lonsbary, Canevello, & Patrick, 2005), positive social interactions (Hodgins, Koestner, & Duncan, 1996), relationship-maintaining coping strategies (Knee, Patrick, Vietor, Nanayakkara, & Neighbors, 2002), and less defensive coping and selfhandicapping (Knee & Zuckerman, 1998). Individuals with higher relationship autonomy are also more supportive of their partners and show more pro-relationship responses to partner transgressions (Hadden, Baker, & Knee, 2017; Hadden et al., 2015).

It might seem that autonomy and relatedness are unique and separate, such that fulfillment of one has little to do with, or even comes at the expense of, fulfillment of the other. Indeed, it seems contradictory that autonomy refers to "selfrule," self-initiation, and self-directed choice (Knee et al., 2013), whereas relatedness refers to a sense of belonging (Baumeister & Leary, 1995), attachment (Mikulincer & Shaver, 2016), and intimacy (Reis & Patrick, 1996), and that both promote relationship functioning. Can the fulfillment of these needs be reconciled in close relationships? We argue that they can. Autonomy, as defined here, should not be confused with independence or detachment from others (Patrick et al., 2007). As Hodgins and colleagues (1996) note, it is important to distinguish between the freedom to self-govern, to make informed choices based on an awareness of one's own needs and values, and the freedom from the governance of others, in the sense of independence and nonreliance on others. Autonomy in the first sense involves having a sense of volition, agency, and initiative that does not preclude feeling related to and connected with others. Rather, it stems from the reflective evaluation of options and a consideration of one's own interests and needs (Koestner & Losier, 1996).

Prior research indeed suggests that it is not a matter of *either/or*: Feeling related and feeling autonomous are both important in relationships (Patrick et al., 2007). However, Deci and Ryan (2000) observed that the dynamic interactions between the needs should not be ignored, because

much of the rich fabric of the human psyche is founded upon the interplay of the deep adaptive tendencies toward autonomy (individual integration) and relatedness (integration of the individual into a larger social whole) that are part of our archaic heritage and will, under optimal circumstances, be complementary but can, under less optimal circumstances, become antagonistic. (p. 253)

Consistent with this general line of reasoning, we propose here that the association between need fulfillment and relationship outcomes depends on the degree to which both relatedness and autonomy needs are fulfilled. In other words, the combination of having a strong connection with the partner *and* feeling autonomous is essential for optimal relationship functioning.

We focus our test on accommodation as a key form of relationship maintenance when conflicts emerge or when individuals are confronted with their partner's negative behavior. Accommodation means controlling the impulse to reciprocate the partner's destructive behavior and instead respond constructively. It is essentially a self-regulatory variable (see also Finkel & Campbell, 2001) that requires not only the motivation to act in a pro-relationship manner but also the ability to resist being lured into negative reactivity.

Accommodation is generally operationalized by four types of reactions to a partner's negative behavior (Rusbult, Yovetich, & Verette, 1996): Voice is an active constructive response (calmly discussing the problem, suggesting solutions, changing the circumstances); Loyalty means passively and positively waiting for things to improve (waiting for the mood to change, forgiving and forgetting the situation, hoping for improvement); Exit is an active destructive response (threatening to leave, retaliating, walking away in anger); *Neglect* is a destructive response that involves passively allowing the situation to get worse (ignoring the problem, avoiding the partner, sulking). Accommodation means that partners display relatively high levels of Voice and Loyalty and low levels of Exit and Neglect, in response to negative behavior. Whereas others have shown that partners accommodate more when they are more committed to their relationship (Finkel & Campbell, 2001; Rusbult et al., 1991), score high on attachment security (Scharfe & Bartholomew, 1995), and when they feel accepted, valued and intimate with their partner (Overall & Sibley, 2008), we expected a link between relatedness need fulfillment and positive and constructive behaviors, and the absence of negative and destructive behaviors, especially under high rather than low levels of autonomy need fulfillment.

This prediction is based on the general idea that feelings of self-determination allow partners to connect and relate to each other authentically and in a positive and honest manner (Hodgins & Knee, 2002; Hodgins et al., 1996; Koestner & Losier, 1996). Autonomy allows for lower ego involvement in the relationship, meaning that highly autonomous partners focus less on the implications of a given relationship situation (such as negative partner behavior) for their self-concept and are less preoccupied with their self-image (Hadden, Øverup, & Knee, 2014; Hadden et al., 2015; Hodgins & Knee, 2002; Hodgins et al., 1996). They are thus able to approach conflict more openly and less defensively (Knee et al., 2002, 2005) giving more room to the influence of relatedness to respond in a relationship-constructive manner when conflicts arise. In contrast, when partners experience little autonomy in the relationship, they are more likely to interpret their partner's negative (e.g., irritable, critical, accusing, angry, etc.) behavior as a personal attack, judgment, or expectation, causing them to react defensively, to withdraw, or to counterattack (cf. Schnarch, 1997). Autonomy can thus strengthen or weaken the association between relatedness and accommodation.

Notably, this reasoning fits with a core tenet of family systems theory, developed in clinical psychology (Bowen, 1978; Kerr & Bowen, 1988; Miller, Anderson, & Keala, 2004). According to family systems theory, people vary in the degree to which they can *differentiate* within the family or the relationship, which means that they can develop and preserve their individuality and sense of autonomy in the presence of others (see Schnarch, 1997; Skowron, 2000). Differentiation involves balancing the drive for togetherness

(viz. relatedness), which motivates us to be part of the group or relationship, and the drive for individuality (viz. autonomy), which motivates us to follow our own directives and develop a unique identity (Schnarch, 1997). According to the theory, it is essential for relationship functioning that partners experience intimacy with and can support their partner without compromising their own wishes and needs, especially during pressing times. It posits that differentiation enables individuals to maintain a sense of self in the relationship in the midst of uncertain circumstances, such as relationship conflict (Bowen, 1978; Kerr & Bowen, 1988), while maintaining connection to those who disagree or hold different opinions (Skowron, 2000). These circumstances require the capacity to soothe one's own anxieties and resist being overwhelmed by, or reactant to, the partner's anxieties (Schnarch, 1997).

## **Current Research**

Two basic predictions can be derived from the reasoning above. First, we tested the central hypothesis that the positive association between relatedness and accommodation would be stronger when autonomy fulfillment is high rather than low. It could be argued that higher relatedness and autonomy would lead to higher levels of constructive forms of responding (Voice, Loyalty) and to lower levels of destructive responding (Neglect, Exit) to a partner's destructive behavior. However, relatedness in combination with autonomy may affect some types of accommodation more than others. For example, according to Drigotas, Whitney, and Rusbult (1995), Loyalty does not reliably yield favorable consequences as it is less visible for partners than the other responses. We explore this issue by examining the specific positive and negative components of accommodation. Second, we tested the prediction, derived from family systems theory, that the relatedness by autonomy interaction on accommodation is mediated by levels of differentiation (a mediated moderation). In Study 1a, we tested our hypotheses in a cross-sectional survey design among large samples of men and women involved in a serious relationship. Study 1b replicated this test in a different sample using identical recruitment methods and measurement. Study 2 used an experimental method to test whether manipulated levels of autonomy moderate the linkage between relatedness and accommodation.

## Studies Ia and Ib

#### Participants and Procedure

Two online surveys were conducted among Dutch individuals aged 18 years or above who were involved in a romantic relationship for at least 1 year. To recruit participants, we used social media and posted several announcements on a variety of Dutch Internet sites (Marktplaats.nl, Libelle, Psychologie Magazine, Relatieforum, Viva, and FOK!). The announcements contained the following text (translated from Dutch): "Have you been in an intimate relationship for at least one year? Fill in the questionnaire at [URL]." Participation was voluntary. Participants provided informed consent and could stop the questionnaire at any time for any reason. In return for participation, four (10) digital gift vouchers of  $\notin$ 25.00 ( $\notin$ 10.00) were raffled in Study 1a (1b).

To determine the minimal sample size, a power analysis for linear multiple regression analysis was conducted. Assuming a small effect, with  $\alpha = .05$ , 80% power, and seven predictors (including controls), we would have needed at least 119 participants for each study (G\*Power, Version 3.1.7, Faul, Erdfelder, Buchner, & Lang, 2009). Due to high response rates, these minimum thresholds were exceeded by a comfortable margin in all three studies.

In *Study 1a*, 405 participants completed the questionnaire. Thirteen participants were removed because they did not complete the questionnaire seriously (e.g., always giving the same answer), and four participants were removed because their relationships lasted less than 1 year or because they were below 18 years of age. Analyses were conducted on the remaining 388 participants (146 men and 242 women;  $M_{age} = 32.17$  years, SD = 12.85; mean relationship duration = 9.70 years, SD = 10.53). Of the participants, 28.9% were married, 33.8% were cohabiting, and 37.4% were dating; 34% had children, 80.7% had a paid job, 3.9% had completed lower vocational education or less, 31.2% had completed high school or secondary vocational education, and 64.9% had completed higher vocational education or university.

In *Study 1b*, 244 participants completed the questionnaire. Three participants were removed because they did not fill in the questionnaire seriously. Analyses were conducted on the remaining 241 participants (64 men and 177 women;  $M_{age} = 40.46$  years, SD = 13.45; mean relationship duration = 13.64 years, SD = 11.78). Of the participants, 51.8% were married, 29.5% were cohabiting, and 18.7% were dating; 53% had children, 83.8% had a paid job, 2.5% had completed lower vocational education or less, 17.4% had completed high school or secondary vocational education, and 80.1% had completed higher vocational education or university.

## Measures

The fulfillment of *relatedness* needs was measured in both studies with the three relatedness items from the Need Satisfaction in Relationships Scale (LaGuardia et al., 2000) and to better capture the broad and multifaceted nature of this concept, four items from other relatedness scales (Costa, Ntoumanis, & Bartholomew, 2015; Sheldon & Bettencourt, 2002). Sample items are "Within my relationship, I feel a lot of closeness and intimacy" and "Within my relationship, I feel a lot of distance towards my partner" (reversed; always 1 = completely disagree to 7 = completely agree; for the full

scale, see the Appendix in the Supplemental Material). Items were averaged to create one relatedness scale (Study 1a:  $\alpha = .93$ ; Study 1b:  $\alpha = .95$ ) with higher scores indicating greater relatedness.

The fulfillment of *autonomy* needs was measured in both studies with the three autonomy items from the Need Satisfaction in Relationships Scale (LaGuardia et al., 2000) and to have greater psychometric precision, eight items from other autonomy scales (Costa et al., 2015; Hall & Kiernan, 1992; Johnston & Finney, 2010). Sample items are "Within my relationship, I feel free to be who I am" and "Within my relationship, I feel controlled and pressured to be in certain ways (reversed)" (always 1 = completely disagree to 7 = completely agree; for the full scale, see the Appendix in the Supplemental Material). Items were averaged to create one autonomy scale (Study 1a:  $\alpha = .87$ ; Study 1b:  $\alpha = .91$ ) with higher scores indicating greater autonomy.

Differentiation was measured in both studies using the 32-item Differentiation of Self Inventory–Revised (DSI-R; Skowron & Friedlander, 1998). This scale taps emotional reactivity (finding it difficult to remain calm in response to the emotionality of others; reversed), I-position (maintaining a clear sense of self when pressured by others), emotional cut-off (being emotionally distant in reaction to others; reversed), and emotional fusion (depending on acceptance and emotional approval of others; reversed; 1 = I completely disagree to 7 = I completely agree). Items were averaged to create one differentiation scale (Study 1a:  $\alpha = .85$ ; Study 1b:  $\alpha = .86$ ) with higher scores indicating more differentiation.

Accommodation was measured in both studies with the 16-item EVLN (Exit, Voice, Loyalty, Neglect) scale (Rusbult et al., 1991). The scale is composed of four-item subscales that measure Voice (e.g., "When my partner behaves in an unpleasant manner, I calmly discuss things with him/her"; Study 1a:  $\alpha = .80$ ; Study 1b:  $\alpha = .76$ ), Loyalty (e.g., "When my partner does something thoughtless, I patiently wait for things to improve"; Study 1a:  $\alpha = .65$ ; Study 1b:  $\alpha = .66$ ), Neglect (e.g., "When my partner is rude to me, I ignore the whole thing"; Study 1a:  $\alpha = .68$ ; Study 1b:  $\alpha = .56$ ), and Exit (e.g., "When my partner says something really mean, I threaten to leave him/her"; Study 1a:  $\alpha = .65$ ; Study 1b:  $\alpha =$ .64; always 1 = I completely disagree to 7 = I completely *agree*). Items were averaged together per subscale to create four accommodation scales with higher scores indicating more Voice, Loyalty, Neglect, and Exit.<sup>2</sup>

Because some autonomy items refer to the partner's controlling or negative behaviors, those scoring low on autonomy might have more relationship conflict, which could possibly confound results. In Study 1a, we, therefore, included a conflict frequency measure as a control (Kluwer & Johnson, 2007). Participants indicated how often they had a difference of opinion, disagreement, fight, or argument about nine issues: money, family or in-laws, physical intimacy (e.g., sex), emotional intimacy, division of labor, chil-

	М	SD	2	3	4	5	6	7
I. Relatedness	6.20	(0.91)	.74***	.46***	01	40***	45***	.42***
2. Autonomy	6.15	(0.73)	_	.44***	11*	<b>42</b> ***	<b>-</b> .45***	.49***
3. Voice	5.51	(0.96)		_	<b> 4</b> **	<b>-</b> .56***	55***	.34***
4. Loyalty	3.43	(1.67)			_	.41***	01	01
5. Neglect	2.90	(1.16)				_	.54***	42***
6. Exit	2.96	(1.12)					_	<b>−.53</b> ****
7. Differentiation	4.84	(0.70)						_

**Table I.** Descriptive Statistics and Correlations (Study 1a; N = 388).

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

**Table 2.** Descriptive Statistics and Correlations (Study 1b; N = 241).

	М	SD	2	3	4	5	6	7
I. Relatedness	5.99	(1.16)	.75***	.39***	03	42***	<b>−</b> .29***	.47***
2. Autonomy	6.06	(0.88)	_	.39***	<b>-</b> .14*	38***	−.27****	.54***
3. Voice	5.49	(0.99)		_	02	<b>-</b> .43***	<b>-</b> .43***	.28***
4. Loyalty	3.56	(1.18)			_	.34***	11	.03
5. Neglect	3.04	(1.11)́				_	.45***	<b>−.40</b> ****
6. Exit	3.12	(1.14)					_	<b>−.49</b> ****
7. Differentiation	4.84	(0.67)						_

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

dren, how to spend leisure time, goals in life, and work (1 = never), to 7 = very often;  $\alpha = .76$ ). Items were averaged; higher scores indicated more frequent relationship conflict. In addition, we aimed to rule out that the results were affected by feelings of competence. In some previous work, self-esteem has been used as a proxy for competence (Reis et al., 2000; Sheldon, Ryan, & Reis, 1996). We, therefore, included a one-item self-esteem measure as a control variable in Study 1b.

#### Data Analyses

The main hypothesis was tested with multiple linear regression analyses in SPSS 23. Relatedness, autonomy, and differentiation were standardized to prevent multicollinearity in the interaction. Outliers were examined, but there were no reasons for deletion. We followed the procedures of Preacher, Rucker, and Hayes (2007) for moderation to test our hypothesis using the PROCESS macro (Hayes, 2012). In subsequent analyses, we controlled for conflict frequency (*Study 1a*) and self-esteem (*Study 1b*) as potential confounds (see Tables S1 and S2 in the Supplemental Material). We further tested whether the interaction of relatedness by autonomy on accommodation was mediated by differentiation (a mediated moderation effect) using the PROCESS macro (Model 8; Hayes, 2012) that generates 95% confidence intervals based on 5,000 bootstrap samples.

## Results and Discussion

Descriptive statistics for all study variables are reported in Tables 1 (*Study 1a*) and 2 (*Study 1b*). To test the hypothesis that relatedness is more strongly associated with accommodation when autonomy is high rather than low, we conducted a series of hierarchical regression analyses, in which relatedness, autonomy, and the interaction between relatedness and autonomy were entered as predictors of the four accommodation subscales. All regression models were significant in both studies (Table 3).<sup>3</sup>

Study 1a. The regression model for Voice showed significant positive main effects of relatedness and autonomy indicating that participants reported more Voice when their relatedness and autonomy needs were fulfilled to a greater extent. As predicted, the autonomy by relatedness interaction accounted for unique variance in Voice, such that the effect of relatedness was stronger for high ( $\beta = .43$ , t = 5.06, p < .001, 95% confidence interval [CI] = [0.2649, 0.6019]) than for low ( $\beta = .31$ , t = 4.91, p < .001, 95% CI = [0.1875, 0.4378]) levels of autonomy (Figure 1). Including conflict frequency as a control variable resulted in a negative main effect on Voice ( $\beta = -.13$ , t = 2.43, p = .016), but it did not change the results for the other predictors.

For Loyalty, we found main effects of relatedness and autonomy. Participants reported more Loyalty when their

	Stu	dy 1a (N = 38	8)	Study Ib ( $N = 241$ )				
_	β (b)	SE	t (þ)	β (b)	SE	t (þ)		
Voice								
Relatedness	.39 (.40)	0.08	5.24 (<.001)	.29 (.29)	0.10	3.20 (.001)		
Autonomy	.24 (.25)	0.07	3.54 (<.001)	.33 (.33)	0.09	3.44 (.002)		
Relatedness $ imes$ Autonomy	.15 (.07)	0.03	2.41 (.017)	.24 (.11)	0.04	2.87 (.004)		
	F(3, 384) =	41.76, p < .00	01, $R^2 = .25$	F(3, 237) =	9.66, $p < .001$ , $R^2 = .20$			
Loyalty					•			
Relatedness	.18 (.22)	0.11	2.09 (.038)	.15 (.18)	0.12	1.50 (.136)		
Autonomy	24 (30)	0.10	3.16 (.002)	35 (42)	0.13	3.35 (.001)		
Relatedness $ imes$ Autonomy	.00 (.00)	0.04	0.05 (.961)	14 (08)	0.05	1.54 (.125)		
	F(3, 384) =	= 3.44, p = .01	7, $R^2 = .03$	F(3, 237) =	237) = 3.80, $p$ = .011, $R^2$ = .05			
Exit	. ,			. ,				
Relatedness	27 (33)	0.08	4.04 (<.001)	29 (33)	0.11	3.04 (.003)		
Autonomy	31 (37)	0.09	4.10 (<.001)		0.12	2.40 (.017)		
Relatedness $ imes$ Autonomy	09 (05)	0.04	1.41 (.161)	27 (33)	0.08	4.04 (.001)		
	F(3, 384) =	41.76, p < .00	01, $R^2 = .24$	$F(3, 237) = 11.70, p < .001, R^2 = .13$				
Neglect					•			
Relatedness	25 (38)	0.08	5.24 (<.001)	<b>−.41</b> ( <b>–.45</b> )	0.10	4.56 (<.001)		
Autonomy	30 (32)	0.07	3.54 (<.001)	30 (33)	0.10	3.21 (.002)		
Relatedness $ imes$ Autonomy	11 (07)	0.04	1.73 (.084)	33 (17)	0.04	4.13 (<.001)		
	F(3, 384) =	32.50, p < .00	01, $R^2 = .20$	F(3, 237) = 2	24.82, p < .00	$I, R^2 = .24$		

Table 3. Results of Regression Analyses Predicting Accommodation Subscales (Studies Ia and Ib).

relatedness needs were fulfilled to a greater extent. However, more autonomous partners reported *less* Loyalty. The autonomy by relatedness interaction was not significant. Adding conflict frequency as a control resulted in a nonsignificant effect on Loyalty,  $\beta = -.06$ , t = 0.93, p = .352, and a somewhat weaker effect for relatedness on Loyalty,  $\beta = .16$ , t =1.84, p = .066. Along similar lines, the model for Exit showed significant negative effects of relatedness and autonomy: Participants reported less Exit when their relatedness and autonomy needs were fulfilled to a greater extent. The autonomy by relatedness interaction was not significant. Conflict frequency had a negative effect on Exit ( $\beta = .39$ , t = 7.96, p < .001), but it did not change the results for the other predictors.

The regression model for Neglect, finally, showed significant negative effects of relatedness and autonomy and a marginally significant interaction effect of autonomy by relatedness (p = .084), with regression lines in the expected direction (more negative associations between relatedness and Neglect under high autonomy,  $\beta = -.35$ , t = 3.26, p =.001, 95% CI = [-0.5572, -0.1382], than under low autonomy,  $\beta = -.24$ , t = 3.03, p = .003, 95% CI = [-0.3953, -0.0841]). Adding conflict frequency as a control resulted in a negative effect on Neglect ( $\beta = .17$ , t = 3.15, p = .002) and the marginally significant interaction became nonsignificant ( $\beta = -.10$ , t = 1.54, p = .125). We then tested whether the interaction of relatedness and autonomy on accommodation was mediated by differentiation. Of primary interest are (a) the interaction effect of relatedness by autonomy on differentiation, (b) the main effect of differentiation on accommodation, and (c) the product of both, which quantifies the indirect effect of the interaction between relatedness and autonomy on accommodation through differentiation (Hayes, 2012). A significant indirect effect indicates that the moderation is mediated.

Results showed, first, a relatedness by autonomy interaction on differentiation ( $\beta = .08, t = 3.25, p = .001$ ), with the effect of relatedness being stronger for high ( $\beta = .22, t =$ 3.62, p < .001, 95% CI = [0.1026, 0.3472]) than for low autonomy ( $\beta = .11, t = 2.30, p = .022, 95\%$  CI = [0.0158, 0.1974]).<sup>4</sup> Second, we found a significant effect of differentiation on Voice ( $\beta = .12, t = 2.34, p = .02$ ). Third, the indirect effect of the relatedness by autonomy interaction on Voice through differentiation was small, but significant ( $\beta =$ .01, *SE* = 0.01, 95% CI = [0.0010, 0.0213]), showing a significant indirect effect of relatedness via differentiation for high levels of autonomy ( $\beta = .04, SE = 0.02, 95\%$  CI = [0.0059, 0.0797]), but not for low levels of autonomy ( $\beta =$ .02, *SE* = 0.01, 95% CI = [-0.0010, 0.0404]).

We did not find evidence for mediated moderation for the Loyalty subscale. In contrast, the model for Exit showed a significant effect of differentiation ( $\beta = -.45$ , t = 8.27,

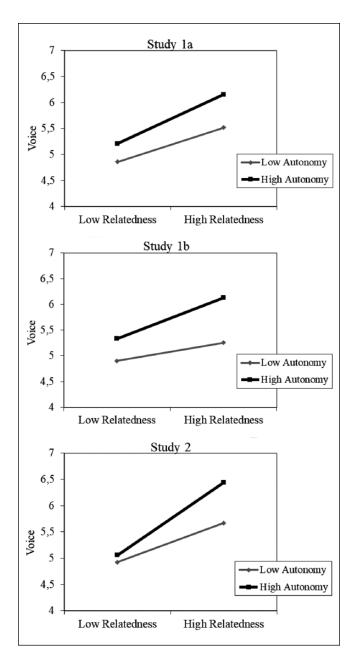


Figure 1. Interaction effects of relatedness and autonomy on Voice.

p < .001). The indirect effect of the relatedness by autonomy interaction on Exit through differentiation was also significant ( $\beta = -.04$ , SE = 0.01, 95% CI = [-0.0637, -0.0119]), showing an indirect effect of relatedness via differentiation for high levels of autonomy ( $\beta = -.14$ , SE = 0.05, 95% CI = [-0.2382, -0.0563]), but not for low levels of autonomy ( $\beta = -.06$ , SE = 0.03, 95% CI = [-0.1241, 0.0026]). The model for Neglect showed a significant effect of differentiation ( $\beta = -.29$ , t = 4.92, p < .001) and a significant indirect effect of the relatedness by autonomy interaction on Neglect through differentiation ( $\beta = -.02$ , SE = 0.01, 95% CI = [-0.0454, -0.0067]). The indirect effect of relatedness via differentiation was significant for high levels of autonomy ( $\beta = -.10$ , SE = 0.03, 95% CI = [-0.1674, -0.0350]), but not for low levels of autonomy ( $\beta = -.04$ , SE = 0.02, 95% CI = [-0.0859, 0.0004]).

Study 1b. The regression model for Voice was significant, showing significant positive effects of relatedness and autonomy. As predicted, and replicating Study 1a, the autonomy by relatedness interaction showed that the effect of relatedness was stronger for high ( $\beta = .38, t = 3.69, p < .001, 95\%$  CI = [0.1784, 0.5880]) than for low ( $\beta = .20, t = 2.33, p = .021, 95\%$  CI = [0.0311, 0.3729]) levels of autonomy (Figure 1). Including self-esteem as a control variable did not change these results. The regression model for Loyalty showed a significant positive main effect of relatedness and, like in Study 1a, a significant negative main effect of autonomy. As not significant.

The regression models for Exit and Neglect showed negative effects of relatedness and autonomy as well as the predicted autonomy by relatedness interaction. For Exit, the effect of relatedness was stronger for high autonomy ( $\beta =$ -.46, t = 3.66, p < .001, 95% CI = [-0.7060, -0.2122]) than for low autonomy ( $\beta = -.21, t = 2.04, p = .042, 95\%$  CI = [-0.4198, 0.0078]). Likewise, the effect of relatedness on Neglect was stronger for high ( $\beta = -.60, t = 5.26, p < .001,$ 95% CI = [-0.8231, -0.3748]) than for low ( $\beta = -.31, t =$ 3.31, p = .001, 95% CI = [-0.5010, -0.1270]) levels of autonomy. Including self-esteem as a control variable did not change these results. Plots of the interactions for Exit (Figure S1) and Neglect (Figure S2) can be found in the Supplemental Material.

As in Study 1a, we then tested whether the interaction of relatedness and autonomy on accommodation was mediated by differentiation. The model for differentiation showed a significant autonomy by relatedness interaction ( $\beta = .10, t =$ 2.92, p = .004).<sup>5</sup> The effect of relatedness on differentiation was significant for high ( $\beta = .21$ , t = 3.10, p = .002, 95% CI = [0.0758, 0.3409]), but not for low ( $\beta = .07, t = 1.24$ , p = .21, 95% CI = [-0.0401, 0.1774]) levels of autonomy. We did not find evidence for mediated moderation for the Voice and the Loyalty subscales. Consistent with Study 1a, however, the model for Exit showed a significant effect of differentiation ( $\beta = -.52$ , t = 6.67, p < .001) and a significant indirect effect of the relatedness by autonomy interaction on Exit through differentiation ( $\beta = -.05$ , SE = 0.02, 95% CI = [-0.1060, -0.0108]). The indirect effect of relatedness via differentiation was significant for high ( $\beta = -.16$ , SE = 0.06, 95% CI = [-0.2982, -0.0465]), but not for low autonomy ( $\beta = -.05$ , SE = 0.05, 95% CI = [-0.1481, 0.0392]). The model for Neglect also showed a significant effect of differentiation ( $\beta = -.24$ , t = 3.17, p = .002) and a significant indirect effect of the relatedness by autonomy interaction through differentiation ( $\beta = -.02$ , SE = 0.01, 95% CI = [-0.0534, -0.0034]). The indirect effect of relatedness via differentiation on Neglect was significant for high levels of autonomy ( $\beta = -.07$ , SE = 0.04, 95% CI = [-0.1614, -0.0157]), but not for low levels of autonomy ( $\beta =$ -.02, SE = 0.02, 95% CI = [-0.0771, 0.0170]).

In sum, the results of Studies 1a and 1b support our predictions. First, we found in both studies that the positive association between relatedness and Voice was more pronounced when autonomy was high rather than low. Study 1b also showed the interaction effects on the Exit and Neglect subscales, showing stronger negative associations between relatedness and Exit and Neglect when autonomy was high rather than low. We found no evidence for an interaction effect on the Loyalty subscale. Second, we found evidence for the prediction that the relatedness by autonomy interaction is mediated by differentiation for Voice (Study 1a), and for Exit and Neglect (Studies 1a and 1b). While supportive of our hypotheses, the design of Studies 1a and 1b prohibits causal inferences about the moderating role of autonomy. To fill this void, we conducted a third study in which we experimentally manipulated experienced autonomy with a writing task to test whether relatedness is more strongly associated with accommodation when autonomy is set high versus low.

## Study 2

#### Participants

Participants (N = 263) in a close relationship of at least 6 months were recruited through the online platform Prolific Academic (Palan & Schitter, 2017). Participation was voluntarily. Participants provided informed consent and could stop the questionnaire at any time for any reason. Of the 263 participants, 22 were removed because they did not complete the questionnaire and another 21 were removed because they did not complete the writing task. Analyses were conducted on the remaining 220 participants (109 men and 109 women, 2 gender unknown). Mean age was 37.54 years (SD = 11.22) and mean relationship duration was 12.36 years (SD = 10.24). Of the participants, 58.5% were married, 31.8% were cohabiting, and 9.7% were dating; 12.8% had completed lower vocational education or less, 18.3% had completed high school or secondary vocational education, and 68.8% had completed higher vocational education or university. Ninety-four percent were White/Caucasian. Participants received £1.50 paid through the Prolific platform.

## Procedure and Materials

We measured the fulfillment of *relatedness* needs with the same 7-item scale as in Studies 1a and 1b. Items were averaged (Cronbach's  $\alpha = .90$ ); higher scores indicated greater relatedness. Level of autonomy was manipulated using a writing task in which participants described a situation in their relationship in which they had felt authentic (high

autonomy) versus controlled (low autonomy).<sup>6</sup> Participants were randomly assigned to either the authentic or the controlled condition (Nauthentic = 117; Ncontrolled = 103). In the Authentic Condition instructions read,

Please take a moment to empty your mind, and consider the following: Think of a situation (or an aspect, area or time) in your relationship that makes (made) you feel authentic with your partner and allows you to express your true self and make your own decisions, in which you can be who you really are, without pretending or feeling pressured to be something that you are not. Please, write down a few sentences about this aspect or area (or time) in your relationship where you feel authentic.

#### In the Controlled Condition, participants read,

Please take a moment to empty your mind, and consider the following: Think of a situation (or an aspect, area or time) in your relationship that makes (made) you feel controlled by your partner and does not allow you to express your true self or make your own decisions, in which you cannot be who you really are and instead have to pretend or feel pressured to be something you are not. Please, write down a few sentences about this aspect or area (or time) in your relationship where you feel controlled.

To ensure that participants would take the time to think of a situation and describe it in detail, the minimum number of written words required was 50 in both conditions.

We tested this manipulation in a pilot study among 103 participants (49 males, 54 females) who were randomly assigned to the authentic versus controlled condition, described a situation, and then completed the 11-item autonomy scale that was used in Studies 1a and 1b (Cronbach's  $\alpha = .93$ ). Participants in the authentic condition reported significantly more autonomy (M = 5.82) than participants in the controlled condition (M = 5.24), t(101) = 2.71, p = .008. In the actual study, we measured autonomy need fulfillment as a manipulation check with seven items (i.e., these items indicated a significant difference between conditions in the pilot study; see the Appendix of the Supplemental Material; 1 = completely disagree to 7 = completely agree; Cronbach's  $\alpha = .91$ ).

Thinking of an authentic versus a controlled situation might affect how positive or negative participants feel about their relationship, and this could possibly confound the results. We, therefore, had participants indicate on one *relationship affect* item how positive or negative they felt about their relationship at that moment (1 = very negative, 4 = not negative or positive, to 7 = very positive).

Finally, *accommodation* was measured with the 16-item EVLN scale (Rusbult et al., 1991) as in Studies 1a and 1b. Items were averaged per subscale with higher scores indicating more Voice (Cronbach's  $\alpha = .83$ ), Loyalty ( $\alpha = .76$ ), Neglect ( $\alpha = .76$ ), and Exit ( $\alpha = .74$ ).<sup>7</sup>

	М	SD	2	3	4	5	6
I. Relatedness	5.84	(1.00)	.58***	.53***	.24***	28***	<b>-</b> .47***
2. Autonomy (scale)	5.29	(1.20)	_	.45***	.08	<b>−.3</b> 1***	<b>49</b> ***
3. Voice	5.60	(0.98)		_	.38***	40***	66***
4. Loyalty	4.57	(1.14)			_	.22**	39***
5. Neglect	2.77	(1.25)					.32****
6. Exit	2.53	(1.14)					_

**Table 4.** Descriptive Statistics and Correlations (Study 2; N = 220).

p < .05. p < .01. p < .01. p < .001.

## Results and Discussion

Manipulation check. As intended, participants in the authentic condition reported more autonomy (M = 5.74) than participants in the controlled condition (M = 4.79), t(218) = 6.39, p < .001. Participants in the authentic condition scored higher on the relationship affect item, indicating that they felt more positive about their relationship at that moment (M = 6.18) than participants in the controlled condition (M = 5.71), t(218) = 2.78, p = .006.

*Moderation by autonomy.* Table 4 summarizes descriptive statistics for the main variables. We first analyzed whether the manipulation of autonomy moderated the association between relatedness and accommodation. We conducted a series of hierarchical regression analyses, in which relatedness (measured), autonomy condition (dummy coded), and their interaction were entered as predictors of the four accommodation subscales. In subsequent analyses, we controlled for the one-item measure of relationship affect (see Table S3 in the Supplemental Material).

All four models were significant and showed significant main effects of relatedness and nonsignificant main effects of autonomy condition (Table 5). The interaction between relatedness and autonomy condition was marginally significant for Voice (p = .061). However, controlling for the relationship affect item resulted in a significant effect of relationship affect ( $\beta = .30, t = 3.20, p = .002$ ), a marginally significant effect of relatedness ( $\beta = .19, t = 1.77, p =$ .079), and a significant interaction between relatedness and autonomy condition ( $\beta = .16$ , t = 2.27, p = .024). As predicted, the effect of relatedness on Voice was stronger in the authentic condition ( $\beta = .46, t = 3.95, p < .001, 95\%$  CI = [0.2298, 0.6845]) than in the controlled condition ( $\beta = .19, t$ = 1.77, p = .08, 95% CI = [-0.0215, 0.3953]). The interaction between relatedness and autonomy condition was not significant for Loyalty, Exit, and Neglect, and including the relationship affect item as a control did not change these results.

Similar results were found when we replaced autonomy condition by the measure of autonomy (Table 5). The effect of relatedness on Voice was stronger for high levels of autonomy

 $(\beta = .69, t = 6.24, p < .001, 95\% \text{ CI} = [0.4740, 0.9115])$ than for low levels of autonomy ( $\beta = .34, t = 4.84, p < .001$ , 95% CI = [0.2020, 0.4791]; Figure 1). Controlling for the relationship affect item and autonomy condition did not change the results except for a nonsignificant effect of relatedness under low levels of autonomy ( $\beta = .15, t = 1.60, p =$ .11, 95% CI = [-0.0359, 0.3417] vs.  $\beta = .57, t = 4.87, p <$ .001, 95% CI = [0.3400, 0.8026] for high levels of autonomy). Although the autonomy by relatedness interaction was only marginally significant for Neglect (p = .069), the effects were in the expected direction ( $\beta = -.17$ , t = 1.64, p = .10, 95% CI = [-0.3658, 0.0339] for low levels of autonomy vs.  $\beta = -.42, t = 2.61, p = .01, 95\%$  CI = [-0.7360, -0.1026] for high levels of autonomy). Controlling for the relationship affect item and autonomy condition did not change the results (see Table S4 in the Supplemental Material).

The results are in support of our hypothesis and replicate the findings of Studies 1a and 1b for the Voice subscale. As predicted, the positive effect of relatedness on Voice was stronger when autonomy was high rather than low. This effect was found both for the autonomy manipulation and for the more general autonomy measure and could not be attributed to having more, or less, positive feelings about the relationship across conditions. We did not find evidence for an autonomy by relatedness interaction on Loyalty and Exit, and we found only a marginally significant trend for the interaction on the Neglect subscale.

## **General Discussion**

As soon as we enter a relationship and become interdependent, we find closeness and intimacy, but there are also bound to be expectations and obligations that we impose on ourselves and on each other, which may threaten our autonomy need fulfillment. How do we remain closely connected to our partners, who may disagree or have different preferences, without losing a sense of self-direction? Combining theoretical insights from self-determination theory (Deci & Ryan, 2000) and family systems theory (Bowen, 1978), we argued that partners are more motivated and capable of relationship maintenance behaviors when they feel related to their partner and, *at the same time*, maintain their sense of

	Autonomy manipulated			Autonomy measured			
-	β (b)	SE	t (þ)	β (b)	SE	t (þ)	
Voice							
Relatedness	.44 (.44)	0.07	6.14 (<.001)	.53 (.53)	0.08	6.78 (<.001)	
Autonomy	.08 (.16)	0.11	1.39 (.166)	.23 (.23)	0.07	3.35 (.001)	
Relatedness $ imes$ Autonomy	.13 (.23)	0.12	1.88 (.061)	.23 (.16)	0.05	2.32 (.001)	
	F(3, 2 6) =	30.05, p < .00	$I, R^2 = .29$	$F(3, 2 6) = 37.31, p < .001, R^2 = .34$			
Loyalty							
Relatedness	.22 (.26)	0.10	2.64 (.009)	.33(.39)	0.11	3.55 (<.001)	
Autonomy	.00 (.00)	0.15	0.03 (.980)	08 (10)	0.09	1.05 (.295)	
Relatedness $ imes$ Autonomy	.05 (.09)	0.16	0.54 (.588)	.06 (.05)	0.05	0.77 (.440)	
	F(3, 216) =	4.67, p = .004	$R^2 = .06$	$F(3, 216) = 5.19, p = .002, R^2 = .08$			
Exit		-			-		
Relatedness	42 (42)	0.07	5.64 (<.001)	30 (36)	0.08	3.74 (<.001)	
Autonomy	14 (32)	0.14	2.31 (.022)	33 (39)	0.10	4.67 (<.001)	
Relatedness $ imes$ Autonomy	06 (12)	0.15	0.79 (.432)	27 (33)	0.06	0.65 (.514)	
			$I, R^2 = .24$	$F(3, 216) = 11.70, p < .001, R^2 = .13$			
Neglect		-			-		
Relatedness	30 (39)	0.11	3.71 (<.001)	23 (30)	0.12	2.56 (.011)	
Autonomy	08 (20)	0.16	, ,	23 (30)		. ,	
Relatedness $ imes$ Autonomy	.05 (.12)		0.67 (.504)	I5 (I3)	0.07	1.83 (.069)	
,	· · /		, $R^2 = .09$	· · ·		,	

**Table 5.** Results of Regression Analyses Predicting Accommodation Subscales (Study 2; N = 220).

autonomy. We demonstrate across three studies that the combination of strong relatedness and high autonomy is associated with more self-reported accommodation in relationships. Our results thus provide evidence for an interactive model of how autonomy and relatedness need fulfillment affect relationship outcomes.

The results were consistent across studies for the Voice subscale: Relatedness need fulfillment was positively related with the ability to react constructively to a partner's negative behavior, but especially (or only) when participants reported high, rather than low, autonomy. The Voice subscale measures active and positive behaviors in response to negative partner behavior and, as such, is arguably most indicative of accommodation. The results for the Exit and Neglect subscales were significant in Study 1b: Destructive reactions to a partner's negative behavior were less likely when participants reported higher relatedness, but especially (or only) when participants also reported high autonomy. Thus, high relatedness combined with high autonomy was associated with more reported relationship-promotive responses and less reported negative tendencies associated with self-protection. Although not the focus of this article, we found significant autonomy by relatedness interactions on other pro-relationship responses such as forgiveness, taking responsibility for offenses, and partner acceptance showing similar patterns of results. Our findings are in line with a few empirical studies showing beneficial effects for relationships of the integration of autonomy and relatedness or similar concepts (Neff & Harter, 2003; Rankin-Esquer, Burnett,

Baucom, & Epstein, 1997; Schmahl & Walper, 2012; cf. Weinstein et al., 2016).

We did not find evidence for the predicted interaction effect for the passive constructive Loyalty subscale. In fact, the correlations of relatedness and autonomy with the Loyalty subscale were overall much weaker (or even nonsignificant) than the correlations with the other subscales (cf. Finkel & Campbell, 2001; Scharfe & Bartholomew, 1995). According to Drigotas and colleagues (1995), Loyalty is somewhat "peculiar" and often does not yield reliable results because acts of Loyalty are less visible than the other responses. Perhaps Loyalty operates in an indirect manner and, therefore, produces less extreme outcomes.

That our results are most consistent for the Voice subscale might be explained by the experience of power in the relationship. Previous research suggests that feeling autonomous and authentic affects a sense of having power (Gan, Heller, & Chen, 2018). Feeling authentic entails believing that the locus of control of one's behavior is internal instead of driven by external social influences (Deci & Ryan, 2000), an important component of subjective power, and that this leads to greater expression of one's true emotions, attitudes, values, and so on. For this reason, one might expect that more autonomous partners are likely to respond more actively rather than passively to conflict. Combined with high levels of relatedness, which motivates pro-relationship behavior, this would result in greater active/constructive responses (i.e., Voice).

Our findings are in line with prior research showing that partners accommodate more when they are more committed to their relationship (Finkel & Campbell, 2001; Rusbult et al., 1991); when they feel more accepted, valued, and intimate with their partner (Overall & Sibley, 2008); and when they are more securely attached (Scharfe & Bartholomew, 1995). Adding to this research, we showed that there are boundary conditions to the role of relatedness in motivating accommodation: The fulfillment of autonomy needs can strengthen or weaken the association between relatedness and accommodation. Feeling autonomous is a way of "quieting the ego" (Deci & Ryan, 2000; Hadden et al., 2014; Hodgins & Knee, 2002), enabling partners to communicate in open and constructive ways (Hadden et al., 2014; Knee et al., 2005). Low autonomy weakens the link between relatedness and accommodation, assumedly because self-directed concerns come into play.

This alludes to *differentiation* as conceptualized by family systems theory. More differentiated people maintain a clearly defined sense of self and adhere to personal convictions when pressured by others to do otherwise (Bowen, 1978; Skowron & Friedlander, 1998), and they are able to support their partner's interest without feeling a loss of self-direction in the process (Schnarch, 1997; Skowron, 2000). They have a "solid sense of self" (Schnarch & Regas, 2012). In contrast, people low in autonomy are characterized by relationshipcontingent self-esteem-meaning that one's self-regard depends on the nature, process, and outcome of the relationship (Knee, Canevello, Bush, & Cook, 2008). When their sense of self depends on the approval of the partner, partners find it difficult to remain calm in response to the emotionality of their partner and react strongly to negative partner behavior (Kerr & Bowen, 1988; Schnarch & Regas, 2012; Skowron & Friedlander, 1998). The partner's negative (e.g., irritable, critical, accusing, angry, etc.) behavior is more likely to be interpreted as a personal attack, judgment, or reproach, evoking defensive, withdrawing, or counterattacking behavior (cf. Schnarch, 1997). We found that high levels of both relatedness and autonomy are indeed associated with higher levels of differentiation and that differentiation mediates the effect of the relatedness by autonomy interaction on accommodation.

As evidenced in the plots of the interaction patterns, the most constructive (and least destructive) responses were reported when both relatedness and autonomy fulfillment were high. The interactions further showed relatively low levels of accommodation under low relatedness, largely irrespective of the level of autonomy. This suggests that the impact of relatedness can be amplified by high autonomy, but not compensated. There is evidence that people prioritize relatedness need fulfillment over autonomy need fulfillment (e.g., Hui, Molden, & Finkel, 2013; McClure & Lydon, 2018; Patrick et al., 2007), and that people can engage in autonomy-promoting activities with the confidence that partner support is available when needed (Feeney & Thrush, 2010; Mikulincer, Shaver, & Pereg, 2003).

We acknowledge that our definition and operationalization of relatedness is quite broad, encompassing a sense of belonging, attachment, closeness, and intimacy. As such, it is closely related to overall relationship quality and satisfaction. However, both relationship satisfaction and relationship quality involve global evaluations in which positive relationship features are salient and negative relationship features (such as conflict and distress) are relatively absent (e.g., Bradbury, Fincham, & Beach, 2000). Novel about our research is that

Fincham, & Beach, 2000). Novel about our research is that we showed that tendencies to accommodate in conflict situations fluctuate based on (and covary with) current feelings of relatedness and autonomy. Accommodation tendencies might fluctuate more strongly than overall satisfaction or quality, which arguably are more stable indicators of relationship well-being that are determined by many factors. Indeed, additional analyses (available in Tables S5 and S6 of the Supplemental Material) show no evidence of a relatedness by autonomy interaction on relationship satisfaction.<sup>8</sup>

## Limitations and Future Directions

The present work has several limitations. First, all three studies are based on self-reports of accommodation. Results would be strengthened if replicated by partner reports and/or independent observations of accommodation. In addition, the reliabilities of the Loyalty, Exit, and Neglect subscales were lower than desirable, which has been observed in other studies as well (Finkel & Campbell, 2001; Rusbult et al., 1991). The failure to detect consistent effects on these subscales could, therefore, be due to their lower reliability. Second, Study 2 did not include a control condition (e.g., in which participants wrote about an unrelated topic), which limits the causal claims that can be made on the basis of our results. Moreover, as we discussed previously, our autonomy manipulation in Study 2 might have suffered from valence issues (i.e., the autonomous condition might have created a more positive view of the relationship than the controlled condition). We included an overall affect control, but ideally, it would have been better to include control conditions that were positive and negative about the relationship, but did not emphasize high and low levels of autonomy.

Third, our studies were conducted using convenience samples including mainly higher educated participants from Western nations. An interesting question is to what extent autonomy need fulfillment, and its role in relationships, varies across education level and across culture. Schmahl and Walper (2012) found that low-educated partners more frequently reported reduced autonomy need satisfaction in their relationships than high-educated partners. Hence, including more lower educated partners in research might result in more variation in autonomy, which would provide a stronger test of our hypothesis. In addition, one could argue that the importance of autonomy might be lower in collectivistic cultures (Kagitcibasi, 2005). However, self-determination theory maintains that psychological needs are functionally relevant across context and culture (Deci & Ryan, 2000). Indeed, Chirkov, Ryan, Kim, and Kaplan (2003) showed that autonomy is similarly associated with well-being across diverse cultures (South Korea, Russia, Turkey, and the United States).

## Conclusion

A driving force of relationship maintenance is the fulfillment of basic psychological needs, in particular, the need for relatedness and the need for autonomy. Combining theoretical insights from self-determination theory and family systems theory, we showed evidence that relatedness and autonomy need fulfillment *interact* to affect relationship maintenance behaviors. Across three studies, we found that the combination of strong relatedness and high autonomy was associated with more accommodation. This research emphasizes the importance of maintaining a sense of self while being closely connected to the partner.

## **Author's Note**

Data storage: In accordance with the data storage protocol at Utrecht University, the data and materials will be stored on the faculty server, which meets the requirements to which data storage may be subject in terms of security, robustness (integrity and quality) and automatic backing up. Data and computing scripts will be made available by the corresponding author upon request.

#### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was financially supported by grants from Stichting Marriage Week, Stichting EFT-Nederland, and Stichting Niemeijer Fonds.

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#### **Supplemental Material**

Supplemental material for this article is available online.

#### Notes

 According to self-determination theory, people also have the need to feel competent and effective at what they do (e.g., Bandura, 1977; White, 1959). However, competence appears to be a less central predictor in close relationships (LaGuardia, Ryan, Couchman, & Deci, 2000; Patrick, Knee, Canevello, & Lonsbary, 2007). People often have ways to feel competent that are not within their primary relationships, such as in work, school, or leisure (LaGuardia et al., 2000). Because competence is less relevant with regard to the central issue that we aim to address (the interaction between autonomy and relatedness), we did not include a measure of competence in our research.

- 2. In both studies, we measured additional variables for other purposes. In Study 1a: self-disclosure, relationship-contingent self-esteem, partner acceptance, relationship acceptance, relationship satisfaction, relationship commitment, sexual satisfaction, self-esteem, and forgiveness. Regression analyses showed an autonomy by relatedness interaction on sexual satisfaction (p < .001), relationship acceptance (p = .018), and self-disclosure (p = .059). In Study 1b: partner acceptance, relationship acceptance, relationship satisfaction, relationship commitment, sexual satisfaction, forgiveness, taking responsibility for offenses, and sacrifice. Regression analyses showed autonomy by relatedness interactions on forgiveness (p < .001), taking responsibility for offenses (p < .001), partner acceptance (p < .001), passive sacrifice (p = .022), sexual satisfaction (p = .022).055) and avoidance-motivated sacrifice (p = .056). All analyses showed the expected pattern of results (see Tables S5 and S6 in the Supplemental Materials).
- 3. In both Studies 1a and 1b, gender, relationship duration, and number of children correlated with one or more key variables and were, therefore, added as control variables in additional analyses. In *Study 1a*, results did not change for Voice and Loyalty, but the autonomy by relatedness interaction became marginally significant for Exit ( $\beta = -.11$ , t = 1.81, p = .071) and Neglect ( $\beta = -.12$ , t = 1.92, p = .055). Results were in the expected direction with more negative associations between relatedness and Exit and Neglect under high autonomy than under low autonomy. In *Study 1b*, including the control variables did not change the results.
- 4. The model for differentiation further showed effects of relatedness ( $\beta = .24, t = 3.21, p = .001$ ) and autonomy ( $\beta = .44, t = 6.57, p < .001$ ). The model for Voice showed effects of relatedness ( $\beta = .35, t = 4.82, p < .001$ ) and autonomy ( $\beta = .18, t = 2.67, p = .008$ ), and a relatedness by autonomy interaction ( $\beta = .05, t = 2.01, p = .05$ ). The model for Exit showed an effect of relatedness ( $\beta = -.24, t = 3.04, p = .003$ ), but not autonomy ( $\beta = -.11, t = 1.54, p = .12$ ), and no interaction ( $\beta = -.00, t = 0.15, p = .88$ ). The model for Neglect showed effects of relatedness ( $\beta = -.22, t = 2.58, p = .01$ ) and autonomy ( $\beta = -.22, t = 2.72, p = .007$ ); the interaction was not significant ( $\beta = -.03, t = 0.96, p = .34$ ).
- 5. The model for differentiation further showed effects of relatedness ( $\beta = .21, t = 2.44, p = .015$ ) and autonomy ( $\beta = .54, t = 6.12, p < .001$ ). The model for Exit showed an effect of relatedness ( $\beta = -.23, t = 2.22, p = .03$ ), but not autonomy ( $\beta = .00, t = 0.03, p = .98$ ), and an interaction ( $\beta = -.10, t = 2.21, p = .03$ ). The model for Neglect showed an effect of relatedness ( $\beta = -.40, t = 4.10, p < .001$ ), autonomy ( $\beta = -.21, t = 1.87, p = .06$ ), and an interaction ( $\beta = -.15, t = 3.54, p = .001$ ).
- 6. Because participants might not be familiar with the word "autonomy," or interpret it as "independence," we used the words "authentic" and "controlled" for high versus low autonomy in the instructions.
- After we measured accommodation, we measured partner acceptance and state sexual desire for other purposes. Regression analyses showed no significant autonomy by relatedness interactions on these variables (see Table S7 in the Supplemental Materials).

8. We note that these analyses show that relatedness and relationship satisfaction are indeed largely overlapping constructs. We, therefore, ran additional analyses with relationship satisfaction instead of relatedness predicting accommodation (see Tables S8 and S9 in the Supplemental Materials). These analyses show no interactions in Study 1a and significant interactions for Voice, Exit, and Neglect in Study 1b. Although this raises the more general question to what extent the construct of relatedness can be distinguished from relationship satisfaction, these findings emphasize the importance of autonomy in close relationships.

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