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Relationship autonomy and support provision in romantic relationships

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Abstract Researchers have recently argued that SDT is a fundamental theory of relationship functioning and development. Specifically, prior research has proposed that self-determined motivations to be in one's relationship—known as relationship autonomy—are associated with more adaptive relationship functioning. While empirical research has explored the association between relationship autonomy and defensiveness, the link with pro-partner behaviors such as support provision has received relatively little attention. The present research tested, across three studies, whether relationship autonomy is associated with more care for one's partner. Three studies—one cross-sectional, one diary, and one dyadic study—suggest that relationship autonomy is associated with overall supportiveness both in the form of secure base support and basic psychological need support. Additionally, relationship autonomy was associated with less intrusiveness, suggesting that higher relationship autonomy is not simply associated with hyper-vigilance and being overbearing, but rather attention to the partner's needs.

Keywords Self-determination theory · Relationship autonomy · Close relationships · Support provision

Introduction

Self-determination theory (SDT; Deci and Ryan 2000) is a theory of motivation that integrates personality, development, and basic psychological needs to describe growth and optimal well-being. Research has argued that self-determination theory describes the fundamental mechanisms of relationship functioning (for review, see Knee et al. 2013), and outlined a sixth mini-theory of SDT known as relationship motivation theory (RMT; Deci and Ryan 2014). A self-determination perspective suggests that relationship autonomy—defined as fully endorsing one's involvement in the relationship, rather than feeling coerced, guilty, or not knowing why one is involved in the relationship (Knee et al. 2005)—is associated with healthier, more adaptive relationships (Blais et al. 1990). Theoretically, this occurs because relationship autonomy decreases defensiveness and ego-involvement (Hodgins and Knee 2002), which in turn allows people to approach conflict more openly and see the conflict as an opportunity to understand their partner rather than attack or shut them out (e.g., Knee et al. 2005).

Recently, researchers have argued that relationship autonomy should also promote the manifestation of pro-partner motivations such as support provision (Deci and Ryan 2014; Knee et al. 2013). The association between relationship autonomy and pro-partner motivations has not, to our knowledge, received empirical attention. In the present research, we focus on two conceptualizations of support provision that reflect support of one's partner's growth and exploration: Secure base support and basic psychological need support. We focus on these forms of support primarily because support provision has been repeatedly shown to be an essential element of high quality relationships (e.g., Reis et al. 2004a, b; Reis and Shaver 1988). The importance of growth and exploration support is also central to several prominent theories of optimal development such as attachment theory (e.g., Feeney and Thrush 2010) and self-determination theory (e.g., Deci and Ryan 2000), but it has largely gone unstudied in research on social support (Feeney and Collins 2014).

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Self-determination theory

According to self-determination theory (Deci and Ryan 1985, 2000, 2008), to be self-determined means that one engages in activities due to freely chosen and fully endorsed reasons rather than pressures from external forces or internal expectations. SDT emphasizes the authenticity of actions and choices that emerge from the fulfillment of basic psychological needs. A key principle of SDT is that behaviors are not integrated into and regulated by the true self to the same degree. Behaviors can be conceptualized along a continuum from being entirely not endorsed by the self to being almost entirely determined by the self, depending on the degree to which the behavior has become integrated into one's sense of identity. Behaviors become more self-determined to the degree that they are more fully integrated and involve valuing the behavior as important to one's identity. At the low end of the continuum, behaviors are amotivated, meaning people do not know why they do them and there is no self-involvement. At the next point on the continuum, behavior can be externally motivated, whereby the behavior satisfies some external expectation. Behaviors enacted out of internal pressures are considered introjected. These behaviors are partially internalized, but not fully accepted. Identified behaviors are enacted out of their importance for a self-endorsed goal. Integrated behaviors resonate with overarching identities. Finally, behaviors are intrinsically motivated when they are enacted for the spontaneous positive feelings that are not separable from the behavior itself. More complete integration of the motivation to enact behaviors and the self is considered to be more self-determined and is denoted as autonomous motivation.

It is important to briefly distinguish SDT's concept of autonomy from other concepts with synonymous labels such as independence, detachment, or self-interest. Autonomy in SDT is not equitable to independence and often promotes greater dependence and interrelation. Grolnick and Ryan (1989) showed that autonomy among teenagers involves acceptance by and reliance on parents rather than detachment from them. Further, Koestner et al. (1999) dubbed Deci and Ryan's version "reflective autonomy" and the latter concepts as "reactive" autonomy, which are only weakly correlated and are associated with different behaviors (Koestner and Losier 1996; Koestner et al. 1999). For instance, reflective autonomy predicted more intimate interactions with peers and openness to expert advice, compared to reactive autonomy. Other research has found that reflective autonomy predicts more satisfying and honest interactions with family and friends (Hodgins et al. 1996) and fewer attempts to blame others when awkward social events occur (Hodgins and Liebeskind 2003; Hodgins et al. 1996) suggesting that SDT's conceptualization of autonomy is divergent from self-interest.

According to the hierarchical model of motivation (Vallerand 1997), self-determination can be conceptualized hierarchically, from general disposition levels (e.g., trait or personal autonomy) to domain-specific levels (e.g., relationship autonomy) to situational levels (e.g., motivation for a specific behavior). Although dispositional self-determination predicts relationship processes, the effect is largely mediated by the degree of domain-specific relationship autonomy (Knee et al. 2005). Thus, relationship autonomy is the most proximate motivation in shaping relational experiences, although similar predictions may be made regarding general autonomous motivation. As such, we derive our current predictions considering the domain-specific motivation of relationship autonomy.

Self-determination in relationships

Relationship autonomy has been defined as having more fully integrated one's relationship into the true self and reflects a genuine desire to be with one's partner (Blais et al. 1990). Those who experience higher relationship autonomy more fully endorse being in their relationship, rather than being with their partner due to pressures such as fear of being alone or a desire to prove oneself as valuable (Hodgins and Knee 2002). Furthermore, Blais et al. (1990) seminal study on self-determination in relationships found that relationship autonomy is related to more adaptive relationship behaviors such as more consensus between partners, better teamwork, and overall higher satisfaction.

Prior work on relationship autonomy has largely focused on how relationship autonomy is associated with less defensiveness and fewer self-protective mechanisms. According to this line of research, integration allows one to be less ego-involved with one's relationship (e.g., Hodgins and Knee 2002). That is, higher autonomy allows for one to focus less on the implications a given situation has for one's self-concept and to approach interactions with less intent to craft a specific image (Hadden et al. 2014; Hodgins et al. 1996). As a result of lower ego-involvement, relationship autonomy promotes the tendency to approach relationship conflicts more openly and less defensively which in turn predicts higher relationship quality (Knee et al. 2002, 2005). However, it remains to be seen whether relationship autonomy simply lowers defensiveness or also promotes desire to care for and support partners' needs.

Support provision in relationships

Many theories such as the interpersonal process model of intimacy (Reis and Shaver 1988) assert that providing support is a key element to the development of intimacy in

close relationships. This assertion is supported by ample evidence showing that responsiveness and support predict increased relationship quality over time (e.g., Crocker and Canevello 2008; Laurenceau et al. 2004; Reis et al. 2004a, b; Reis and Shaver 1988). Further, recent theorizing has suggested the importance of interpersonal support that promotes opportunities for growth and development (Feeney and Collins 2014). This is in line with several theories of optimal development such as SDT (Deci and Ryan 2000) and attachment theory (Feeney and Thrush 2010; Hazan and Shaver 1994), which outline specific dimensions of support that are particularly important for promoting growth, largely arguing that partners must encourage growth and exploration by being encouraging of one's partner's independent abilities while still providing a sense of connection.

Specifically, attachment theory outlines three primary ingredients for providing partners with a "secure base." Secure base support is a specific form of support which captures intentions to help one's partner grow, including availability, encouragement, and non-interference (Feeney and Thrush 2010). That is, according to attachment theory, it is important for people to encourage partners to try new, challenging tasks while also being available to help if needed. In addition to being available, partners must also avoid being overbearing and intrusive by interfering with partners' activities when it is uncalled for, such as when one's partner does not need help. Taken together, secure base support has been found to boost one's partner's happiness and self-esteem (Feeney 2004; Feeney and Thrush 2010), as well as perceptions of partners as helpful and supportive (Feeney and Thrush 2010).

SDT proposes three basic psychological needs: Autonomy, competence, and relatedness. Relatedness support is the extent to which one feels that his or her relationship partner provides a sense of connection. Competence support is the extent to which one feels that his or her relationship promotes a sense of efficacy and ability. Finally, autonomy support refers to the extent to which one feels that his or her relationship allows him or her to act and choose freely. These psychological needs are considered to be basic because they cannot be reduced to simpler factors and are thought to be universal for all individuals (see Deci and Ryan 2000 for a review of why these are considered basic psychological needs). Further, research has shown that these three needs are fundamental for optimal development, and research has shown that the extent to which these needs are supported is associated with increased relationship quality (Patrick et al. 2007) and well-being (Reis et al. 2000). Further, among friendships, autonomy support has been shown to promote feelings of overall need fulfillment and well-being (Deci et al. 2006). Taken together, it appears that receiving need support holds a number of benefits for recipients, from relationship quality to overall feelings of well-being.

Although secure base support and basic psychological need support arise from two distinct theoretical backgrounds, prior theorizing has suggested a fair amount of common ground (see Knee et al. 2013 for a review). Central to both of these perspectives is the notion that partners should promote growth by supporting feelings of connectedness while not being overbearing. That is, people must be available should partners need help while simultaneously providing autonomy support by not interfering and undermining the partner's confidence. As such, it is important to understand how relationship autonomy is associated not just with lower ego-involvement, but with greater levels of support provision as well.

Relationship autonomy and support provision

We propose that, in addition to lowering negative responses (e.g., being less defensive in response to conflict or threatening situations), relationship autonomy is also associated with more beneficial processes. Specifically, we anticipate that relationship autonomy is associated with pro-partner motivations—a subset of pro-relationship motivations that reflects a desire to maximize one's partner's interests (Wieselquist et al. 1999). We draw this primarily from theorizing regarding the RMT (Deci and Ryan 2014; Knee et al. 2013) which posits that autonomous motivations promote interest in partners' perspectives and well-being, as well as the energy and desire to empathize with close others, which increases supportive behaviors toward romantic partners. Importantly, our conceptualization of pro-partner motivations in the present paper is a distinct subset of the more general concept of pro-relationship motivations. Whereas motivations to maximize one's partner's interests (pro-partner) can be considered relatively altruistic, the umbrella of pro-relationship motivations includes selfish desires such as promoting the relationship to protect one's identity. According to interdependence theory, people have impulses to pursue immediate self-interests. In order to act pro-socially, people must transform such selfish motivations to focus on the relationship or the partner's needs (Kelley and Thibaut 1978).

As relationship autonomy reflects a genuine endorsement of one's relationship with one's current partner (Hodgins and Knee 2002), it is possible that relationship autonomy helps to facilitate the transformation of motivations, leading to concern for one's partner's interests. In other words, people who have more fully integrated their relationship should more naturally focus on supporting their partner's needs because they truly value their partner and have the energy to empathize with the partner's

perspectives and feelings. This is indirectly suggested by prior research which has found that participants higher in relationship autonomy were also more likely to see disagreement as an opportunity to understand their partner better (Knee et al. 2002), which suggests an interest in one's partner's point of view. As such, individuals higher in relationship autonomy should be more willing and ready to attend to their partner's needs. We expect that the ability to transform from selfish to relatively altruistic pro-partner motivations brought about by relationship autonomy will manifest in support provision, such that one cares for and encourages one's partner's interests.

We are unaware of direct empirical evidence that has examined a link between autonomous motivation and giving support to close others. Instead, most research that has examined the association between autonomous motivation and autonomy support has focused on non-egalitarian relationships such as teachers and students or parents and children. For instance, several studies have shown that receiving autonomy support fosters more intrinsic motivation in a variety of domains, such as learning and sports (e.g., Gagné et al. 2003; Grolnick and Ryan 1989; Soenens and Vansteenkiste 2005). Additionally, some studies suggest that autonomous motivations among teachers, parents, and coaches are associated with more autonomous motivation among children, specifically because of higher perceived autonomy support. For example, teachers who are autonomously motivated to teach have students who report receiving more autonomy support in the classroom (Pelletier et al. 2002; Roth et al. 2007) and autonomously motivated coaches are more autonomy-supportive of players (Taylor and Ntoumanis 2007; Taylor et al. 2008). Although these studies suggest a link between autonomous motivation and autonomy support for authority figures, it remains to be seen if such a link exists in more egalitarian relationships, such as romantic relationships.

Research has also examined the benefits of self-determined motivation for one's own well-being. For example, research has shown that, among couples coping with cancer, autonomous motivations in caregivers was associated with greater feelings of intrapersonal well-being (Kim et al. 2008). Further, research has found that when people autonomously engage in prosocial acts, they report feeling more need fulfillment and higher well-being (Weinstein and Ryan 2010). However, it is important to note that although the studies discussed thus far provide empirical evidence of the importance of autonomous motivation for one's own well-being, none of these studies have examined the possibility that motivation promotes support provision. That is, it remains to be seen whether autonomous motivation for being in a relationship is associated with providing support to close partners.

Some indirect evidence provides support for the assertion that relationship autonomy is associated with support provision. For instance, people report greater appreciation and gratitude toward the hypothetical helper when they thought that he or she was motivated by more self-determined reasons (Weinstein et al. 2010a). This is presumably because the recipients perceive that those with self-determined motivations to help genuinely care for the recipient, whereas helpers with low self-determined motivations are less focused on the person they are helping. In another set of studies, Weinstein and Ryan (2010) found that autonomous motivations for caregiving are associated with higher need fulfillment, vitality, self-esteem, and positive affect among recipients.

Finally, some research does suggest that autonomous motivations may be associated with more support provision within close relationships. For instance, in one set of studies, researchers had pairs of strangers engage in a nonverbal communication task (charades). Across two studies, dyads who were primed with feelings of autonomy were rated as being closer and more encouraging of each other (Weinstein et al. 2010b). These findings suggest that autonomy may be associated with more support of partners. Additionally, these studies provide much needed evidence for the causal role of autonomous orientations in promoting better dyadic interactions. However, these studies looked exclusively at strangers who were either purely hypothetical (Weinstein et al. 2010a) or randomly paired together for the study (Weinstein et al. 2010b; Weinstein and Ryan 2010). Thus, it is unclear whether and how this applies to close relationships or everyday assessments of support. We suggest that, because integration of the relationship with the true self facilitates transformations from pro-self to pro-partner motivations, people who are higher in relationship autonomy should be more supportive of their romantic partners.

Overview of studies and hypotheses

The present research tested the association between relationship autonomy and pro-partner motivation in the form of support provision. Additionally, although prior research has established the importance of receiving autonomy support for the development of autonomous motivations, this is the first research that tests whether the reverse association exists, such that autonomous motivations are associated with more support provision. We tested these associations in three studies with different methodologies. Study 1 was a cross-sectional survey design. Study 2 employed a diary design to obtain more accurate assessments of support provision. Finally, Study 3 utilized a dyadic design in which we were able to test whether one's

partner's motivation is associated with one's own perception of support.

Studies 1 and 2 assessed supportiveness as both secure base support and a more general measure of emotional responsiveness. We anticipated that relationship autonomy would be positively associated with emotional responsiveness, as well as with overall secure base support. Within secure base support, we expected relationship autonomy would be associated with providing both more availability and encouragement to partners. We also expected that relationship autonomy would be negatively associated with intrusiveness. Study 3 tested whether relationship autonomy promotes support in the form of basic psychological need support as reported by one's partner. As integration of one's relationship should facilitate a transformation of motivations to maximize the partner's interests, we expected that, one's own relationship autonomy would be associated with one's partner reporting more basic psychological need support. Specifically, we anticipated that relationship autonomy would be positively associated with partner reports of both overall basic psychological needs as well as each individual psychological need (i.e., relatedness, competence, autonomy).

Additionally, we tested whether the proposed mechanism is distinct from several more selfish explanations for supporting one's partner. For instance, it is possible that relationship autonomy promotes support simply because one feels better about oneself or the relationship in general, and not because of pro-partner motivations. We also tested whether pro-partner motivations are distinct from contingencies of self-worth based upon one's relationship. Whereas motivations to maximize the partner's interests can be considered relatively altruistic, promoting the relationship to protect one's identity would suggest a more ego-driven reason for engaging in relationship-promoting behaviors.

Study 1

Study 1 tested for evidence of an association between relationship autonomy and supportiveness using a cross-sectional design. Prior work has referred to trait autonomy as a form of "true self-esteem" (Deci and Ryan 1995) and has linked autonomy support with self-esteem (Heppner et al. 2008). As such, in Study 1 we wanted to rule out the possibility that people high in relationship autonomy are more supportive of close others simply because they have higher self-esteem. It is also possible that relationship autonomy is associated with giving support simply because people who are more satisfied with their relationship are more supportive of their partner, or that people who are in relationships longer are both more autonomous and responsive to their partner's needs. As such, in Study 1, we ruled out self-esteem and relationship satisfaction.

Participants

Participants were recruited from psychology classes at a large Southwestern University and were offered extra credit for their participation. One-hundred sixty-six (143 females) participants completed the survey. All participants were in romantic relationships for at least 3 months. The sample was ethnically diverse, with 34 % Hispanic/Latino, 29 % Caucasian, 18 % Asian, 13 % African-American, 4 % Middle Eastern and 2 % reporting being other. Age ranged from 18 years to 51 years ($M = 23.22$, $SD = 5.48$). The average relationship duration was about 35 months ($SD = 36.58$ months).

Procedure and measures

Participants signed up online and were given a link to a series of questionnaires to complete at their own pace. Upon completion, they read a debriefing page and were offered extra credit for participation.

Relationship autonomy

Motivations to be in one's relationship were assessed using the Couples Motivation Questionnaire (CMQ) (Blais et al. 1990). This 18-item scale was developed to measure relationship autonomy and has been widely used throughout the literature on self-determination in relationship contexts (e.g., Brunell and Webster 2013; Gaine and La Guardia 2009; Hui et al. 2013; Knee et al. 2005; Patrick et al. 2007). The scale has six subscales with three questions each that represent the six different levels of internalization: Intrinsic, integrated, identified, introjected, external, and amotivated. The questionnaire begins with the stem, "Why are you in this relationship?" Each of the 18 items then provides a reason for being in the relationship that varies along a continuum from reasons that are less self-determined (e.g., "There is nothing motivating me to stay in my relationship with my partner") to more self-determined (e.g., "Because I value the way my relationship with my partner allows me to improve myself as a person"). The scale was scored with the following algorithm (Blais et al. 1990) that weighs each type of intention based on its relative location on the self-determination continuum: (Intrinsic $\times$ 3) + (Integrated $\times$ 2) + (Identified $\times$ 1) + (Introjected $\times$ -1) + (External $\times$ -2) + (Amotivation $\times$ -3). Amotivated and autonomous motivations are treated as two poles of the self-determination continuum. Participants rated how much each statement represents a reason they are currently in their relationship on a 7-point likert-

type scale from "does not correspond at all" to "corresponds exactly" ($\alpha = .75$).

Supportiveness

The degree to which one provides support to one's partner was assessed with two scales. Both scales begin with the instructions to "select the answer that corresponds to how much you feel the following statements are accurate about you." Participants completed the Responsiveness Scale (Cutrona et al. 1997) which measures how responsive one is to one's partner. The scale is comprised of six items (e.g., "I try to be sensitive to my partner's feelings"). Participants rated the extent to which they generally try to be responsive toward their partner on a 7-point likert-type scale from "not at all" to "very much so" ($\alpha = .96$).

Additionally, the Secure Base Scale (Feeney and Thrush 2010) measured a specific form of social support for one's partner that promotes autonomy, growth, and exploration. There are three subscales with five items each that measure the extent to which one is available for one's partner ("When my partner is facing a challenging or difficult situation, I try to make myself available to him/her in case he/she needs me") ($\alpha = .81$), intrusiveness ("I sometimes interfere with my partner's ability to accomplish his/her personal goals.") ($\alpha = .65$), and encouragement ("When my partner tells me about something new that he/she would like to try, I usually encourage him/her to do it") ($\alpha = .91$). These subscales were also combined to create an overall score on secure base supportiveness (reversing intrusiveness) ($\alpha = .85$). Participants rated how much they felt the statements were accurate on a 7-point likert-type scale from "not at all" to "very much so."

Trait self-esteem

Self-esteem was assessed with the 10-item Rosenberg (1965) Self-Esteem Questionnaire, which uses a 5-point likert-type scale ranging from "strongly disagree" to "strongly agree". Participants were instructed to "read each statement and consider the extent to which [they] typically and generally agree or disagree." An example item is, "I feel I do not have much to be proud of (reverse scored)" ($\alpha = .91$).

Satisfaction

Participants completed the 5-item satisfaction subscale of the Rusbult Investment Model (RIM) (Rusbult et al. 1998). The scale instructs participants to "…indicate how much you agree with the following statements." Participants were also told that "[t]hese statements pertain to your relationship with your *CURRENT romantic partner*." Participants rated how much each statement (e.g., "My relationship is close to ideal") accurately reflected their relationship on a 9-point likert-type scale ranging from "do not agree at all" to "agree completely" ($\alpha = .94$).

Results and discussion

Means, standard deviations, and correlations can be found in Table 1. Relationship autonomy was associated with both self-esteem and satisfaction. Additionally, relationship autonomy was associated with responsiveness toward one's partner, overall secure base support, and each of the three subscales of secure base support—availability, intrusiveness (negatively), and encouragement. Trait self-esteem and satisfaction were associated with responsiveness, secure base support, availability, and encouragement. Self-esteem was also negatively associated with intrusiveness.

Next, we computed a series of multiple regressions in which relationship autonomy, trait self-esteem, and satisfaction were entered as simultaneous predictors in order to rule out self-esteem and satisfaction as possible explanations for the associations between relationship autonomy and partner support. Relationship autonomy remained significantly associated with the responsiveness scale

Table 1 Correlations among all study variables (Study 1)

	Mean (*SD*)	1	2	3	4	5	6	7
1. Relationship autonomy	19.90 (12.20)							
2. Self-esteem	4.03 (0.80)	.70***						
3. Satisfaction	7.54 (1.72)	.47***	.31***					
4. Availability	5.91 (1.09)	.66***	.42***	.48***				
5. Intrusiveness	4.78 (1.12)	−.26***	−.06	−.24**	−.39***			
6. Encouragement	6.00 (1.04)	.58***	.35***	.44***	.71***	.36***		
7. Secure base support	5.57 (0.88)	.61***	.34***	.48***	.86***	.73***	.84***	
8. Responsiveness	6.37 (0.93)	.64***	.47***	.44***	.72***	.24***	.71***	.68***

* $p \leq .05$; ** $p < .01$; *** $p < .001$

($\beta = .52$, $SE = .01$, $p < .001$), the composite of secure base support ($\beta = .62$, $SE = .01$, $p < .001$), as well as each secure base subscale—availability ($\beta = .62$, $SE = .01$, $p < .001$), intrusiveness ($\beta = -.36$, $SE = .01$, $p = .05$), and encouragement ($\beta = .54$, $SE = .01$, $p < .001$).[1] Further, in additional analyses requested by an anonymous reviewer, relationship autonomy remained a significant predictor of each outcome while also controlling for relationship duration.

In sum, these analyses provide evidence of an association between relationship autonomy and greater support for one's partner. Relationship autonomy was also negatively associated with intrusiveness, suggesting that participants who have autonomous motivations to be in the relationship are not simply overbearing, but rather focused on their partners' needs. These data also provide evidence in line with SDT that relationship autonomy is a unique construct that is important for relationship functioning beyond simply feeling good about oneself or one's relationship. That is, the results of the regression analyses revealed that genuine desire to be in one's relationship is associated with giving support beyond any association with self-esteem and relationship satisfaction.

[1] At the request of an anonymous reviewer, we also ran exploratory analyses for Studies 1–3 in which relationship autonomy was broken down into two subscales reflecting autonomous motivations and controlled motivations. In doing so, we constructed these scales based on scoring done by Hui et al. (2013), in which the autonomous relationship motivation subscale was calculated by the first part of the algorithm: (Intrinsic × 3) + (Integrated × 2) + (Identified × 1) ($\alpha = .90$), and the controlled relationship motivation subscale was calculated by the second part of the algorithm: (Introjected × −1) + (External × −2) + (Amotivation × −3) ($\alpha = .78$). We then replicated the main analyses reported in each study, replacing relationship autonomy with the subscales of autonomous and controlled relationship motivations. In Studies 1 and 2, autonomous relationship motivations were uniquely associated with more availability, encouragement, and (margainally) overall secure base support. Additionally, autonomous relationship motivations were associated with marginally less intrusiveness in Study 2, but not Study 1. Controlled relationship motivations, meanwhile, were associated with less availability, encouragement, and overall secure base support, and more intrusiveness in Studies 1 and 2. Further, although autonomous and controlled relationship motivations were associated with more and less responsiveness in Study 1, respectively, neither was significantly associated with responsiveness in Study 2. Further, in Study 3, partner autonomous relationship motivations were associated with more relatedness, autonomy, and overall need support received, but were not associated with competence support. Partner controlled relationship motivations, meanwhile, were marginally associated with less relatedness, competence, and overall need support, but not with autonomy support. These additional results generally suggest that the associations between relationship autonomy and support provision are not driven solely by autonomous or controlled motivations, but rather by the entire continuum of self-determination.

Study 2

The design of Study 1 was limited by the retrospective nature of the cross-sectional design, which required participants to gauge how much support was given to one's partner in a general, rather than a specific timeframe. Study 2 obtained more current and reliable assessments of support by evaluating reports of outcomes every day over a 14-day period. We also wanted to rule out another alternative explanation. Specifically, because relationship autonomy reflects integration of the relationship within the self, support may not be due to pro-partner motivations but rather to feeling that one's self-worth is wrapped up in the outcome of the relationship, leading one to desire to protect and promote the relationship to preserve self-worth. This type of self-worth is known as relationship-contingent self-esteem (RCSE; Knee et al. 2008). As such, it is important to rule out the possibility that people higher in relationship autonomy provide more support to protect their own sense of self-worth.

Participants

Participants were 118 students recruited from psychology classes at a large Southwestern university. Three participants were dropped from analyses because they did not provide enough information in the initial survey, and 16 more were dropped because they did not provide any daily records. All participants were in romantic relationships for at least 3 months.

Of the 99 participants included in the analyses, 17 were male and 82 were female. The average age of participants was 21.7 years of age (*SD* 5.71). The sample was 21 % Asian/Pacific Islander, 12 % African American, 24 % Caucasian, 31 % Latino/a, 2 % Middle Eastern, and 9 % chose other. The average duration of relationships was about 33 months (*SD* 32.37). Among the sample, 2 % of people were in casual dating relationships, 61 % were in exclusive or serious dating relationships, 30 % were engaged or nearly engaged, and 7 % were married.

Procedure

Participants signed up for the study online and attended an in-lab orientation session that outlined the study procedures, and took place during the school week. They then completed a one-time questionnaire online before Saturday. The next Sunday, participants began completing daily records each night for 14 days in which they rated the extent to which they supported their partner that day. Participants were instructed to fill out the survey before going to sleep and were told not to go back to fill out diaries if they failed to complete a diary record. Records completed after 5am the next morning were deleted. All questionnaires in this part of the diary were reworded to ask about that specific day.

Measures

Relationship autonomy

Relationship autonomy was measured at baseline using the same methods as in Study 1 ($\alpha = .87$).

Support

Support was measured daily using the Secure Base Scale (composite $\alpha = .72$; availability $\alpha = .83$; intrusiveness $\alpha = .67$; encouragement $\alpha = .88$) and Responsiveness Scale ($\alpha = .89$) from Study 1.

Satisfaction

Relationship satisfaction was measured daily using the same scale as in Study 1 ($\alpha = .93$).

RCSE

RCSE was measured daily using the Relationship-Contingent Self-Esteem scale (Knee et al. 2008) which contains 11 items about thoughts and behaviors in committed relationships (e.g., "My feelings of self-worth are based on how well things are going in my relationship,"). Responses were rated on a 5-point Likert-type scale (1 = *not at all like me,* 5 = *very much like me*) corresponding to how much each item reflected how participants felt that day. Items were averaged such that higher scores indicate basing one's self-worth on one's romantic relationship to a greater extent ($\alpha = .92$).

Results and discussion

Preliminary analyses

Participants recorded 991 daily diary entries during the 14 day period, with the average participant completing 10.01 entries. Means and standard deviations along with correlations among the variables can be found in Table 2. For daily variables, participants' scores were aggregated from the daily observations such that each participant had one score that represented his or her average score on the measure. Relationship autonomy was associated with both relationship satisfaction and RCSE. Additionally, relationship autonomy was associated with responsiveness, secure base support, each individual subscale of secure base support—availability, intrusiveness (negatively), and encouragement. Similarly, relationship satisfaction was associated with overall responsiveness and secure base support, as well as with each subscale—availability, intrusiveness (negatively), and encouragement. RCSE was associated with responsiveness and two subscales of secure base support—availability and (marginally) with encouragement. RCSE was not associated with either overall secure base support or the subscale of intrusiveness.

Main analyses

Plan of analysis In order to test whether relationship autonomy predicted giving support beyond relationship satisfaction and RCSE, we computed a series of analyses using multilevel modeling to model non-independence within participants over the diary period. Analyses were computed using SAS PROC MIXED with restricted maximum likelihood estimation. In multilevel modeling, variables can exist at multiple levels: the daily level (level 1), which captures the fluctuations between days within people and the person level (level 2), which reflects individual differences. As relationship autonomy was exclusively between-person, the following analyses were conducted at the person level (level 2), and should be interpreted as between-person differences. Further, although satisfaction and RCSE were measured daily, they contain both between- (level 2) and within-person (level 1) variance. As relationship autonomy exists purely as a between-person variable, by controlling for satisfaction and RCSE, we are controlling for the person-level variance of these variables.

Table 2 Correlations among all study variables (Study 2)

	Mean (*SD*)	1	2	3	4	5	6	7
1. Relationship autonomy	23.68 (10.03)							
2. RCSE	4.99 (1.19)	.22*						
3. Satisfaction	7.48 (1.40)	.55***	.33***					
4. Availability	5.95 (0.89)	.56***	.21*	.75***				
5. Intrusiveness	5.22 (0.92)	−.30**	.01	−.36***	−.48***			
6. Encouragement	6.11 (0.86)	.52***	.18†	.67***	.81***	.55***		
7. Secure base support	5.76 (0.77)	.53***	.14	.68***	.88***	.79***	.91***	
8. Responsiveness	6.10 (0.91)	.53***	.30**	.75***	.76***	.39***	.78***	.74***

† $p \leq .10$; * $p \leq .05$; ** $p < .01$; *** $p < .001$

Variables 2–8 are daily variables, created by averaging individuals' scores over the 14-day period

Table 3 Hierarchical analyses for relationship autonomy controlling for daily relationship satisfaction and RCSE (Study 2)

	Availability		Intrusiveness		Encouragement		Secure Base		Responsiveness	
	b	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Relationship Autonomy	.03***	.004	−.03***	.007	.03***	.005	.03***	.006	.01*	.005
Daily Satisfaction	−.31***	.018	.02	.021	.21***	.018	.14***	.012	.47***	.021
Daily RCSE	.01	.029	.09*	.038	−.01	.030	−.01	.025	.01	.031

* $p \leq .05$; *** $p < .001$

Finally, all predictor variables in the following analyses were grand mean centered.

Relationship autonomy and support A series of multilevel models were computed in which relationship autonomy (referred to as RA in the following equations), daily relationship satisfaction (referred to as Sat in the following equations), and daily RCSE were simultaneously included as predictors. Because satisfaction and RCSE were measured daily, they include both within- and between-person variance. As such, inclusion of daily level covariates in the model with relationship autonomy controls for person-level differences in the observed associations between relationship autonomy and the outcome.

$$Support_{ij} = \gamma_{00} + \gamma_{01}RA + \gamma_{10}Sat + \gamma_{20}RCSE + u_{0j} + e_{ij}$$

Table 3 provides parameter estimates, standard errors, and significance levels. As shown in Table 3, relationship autonomy remained significantly associated with each measure of support provision when controlling for both relationship satisfaction and RCSE. Further, in additional analyses requested by an anonymous reviewer, relationship autonomy remained a significant predictor of each outcome while also controlling for relationship duration.

As such, these analyses replicated the findings of Study 1; higher integration of one's relationship was associated with higher pro-partner motivations in the form of support and responsiveness. Importantly, relationship autonomy was found to be negatively associated with intrusiveness, suggesting that higher relationship autonomy is associated with awareness of partner's needs, rather than simply showering partners with attention. These results also add to Study 1 in two important ways. First, the reports of support do not rely as heavily on retrospection, providing more reliable and accurate assessments. Second, Study 2 tested an additional covariate, further establishing the unique role of relationship autonomy. Despite the established strong association between relationship autonomy and satisfaction (e.g., Blais et al. 1990), these analyses rule out the possibility that people higher in relationship autonomy provide more support for partners simply because the relationship is of greater quality. Additionally, according to these data, although people higher in relationship autonomy have more fully integrated their relationships within themselves, the higher levels of support for one's partner are not due to one's self-worth being tied to the success of one's relationship.

Study 3

Study 3 addressed several limitations of the previous two studies. First, we wanted to examine a form of support that is derived directly from self-determination theory. As such, we included reports of basic psychological need support derived from their romantic relationship. As noted in the introduction, self-determination theory outlines three basic psychological needs: Relatedness, competence, and autonomy. Readers should note that although need support and secure base support derive from two separate theoretical frameworks, both forms of support conceptually highlight dimensions of support thought to be needed for optimal growth and development. Second, the previous studies relied on one's own report of support provision and thus, were subject to shared method variance bias. The current study utilized reports from both partners regarding support received. Obtaining data from both partners allows for tests of actor effects (i.e., one's own outcome as a function of one's own predictor) and partner effects (i.e., one's own outcome as a function of one's partner's predictor). Study 3 aimed to extend Studies 1 and 2 by assessing the link between self-reported relationship autonomy and *partner-reported* support receipt. Third, the previous studies had a considerable gender imbalance. In Study 3, we sampled heterosexual couples, which removed the gender imbalance and allowed for tests of gender differences.

In line with previous hypotheses, we expected people to report receiving more basic psychological need support from their partners to the extent that their partner is higher in relationship autonomy (partner effect). We expected this to emerge for all three psychological needs—relatedness,

competence, and autonomy. Additionally, we expected to find a positive association between one's own relationship autonomy and one's felt need support (actor effect), as prior research has found that need support increases autonomous motivations (e.g., Grolnick and Ryan 1989). Further, we did not expect to find any moderating effect of gender in the present analyses.

Methods

Study 3 included assessments from both partners in committed relationships. Individuals were recruited via research assistants visiting classrooms, flyers posted around the psychology building, and the online research management system. Interested participants either emailed the researcher for the link or began the survey through the link posted in the psychology department online research management system. Participants were asked for their partner's name and email address so they could be contacted to participate. Partners received emails with a link to complete the survey. In the instructions, individuals were asked to complete the survey independently from their romantic partner. Those who were undergraduates were issued extra credit in exchange for their participation.

Participants

Heterosexual couples completed the questionnaire, with a final sample of 68 couples (N = 136; 68 men, 68 women). Participants were, on average, 25.02 years old (SD = 5.88 years) and the sample was ethnically diverse, with 28.8 % Caucasian, 37.8 % Hispanic, 16.7 % Asian, 7.7 % African American, and 9.0 % reporting "Other." The average relationship length was 40.56 months (SD = 48.96). With respect to relationship status, 4 % of the sample reported casually dating, 50 % exclusively dating, 23 % nearly engaged, 8 % engaged, and 15 % married.

Measures

Relationship autonomy Relationship autonomy was measured using the same scale as in Study 1 and Study 2 (α = .79).

Basic psychological needs The extent to which one feels his or her basic psychological needs are met in one's relationship, which likely follows from need support by his or her romantic partner, was assessed with the 9-item Basic Psychological Needs Scale (La Guardia et al. 2000). Three subscales (3-items each) all followed the stem, "When I am with my romantic partner…" and measured relatedness (e.g., "I feel loved and cared about") (α = .83), competence (e.g., "I feel like a competent person") (α = .84), and autonomy (e.g., "I have a say in what happens and can voice my opinion") (α = .80) on a 7-point rating scale ranging from "strongly disagree" to "strongly agree." Following from previous research on need support and close relationships (e.g., Uysal et al. 2010), we also combined the subscales to create an overall measure of need fulfillment (α = .92).

Results and discussion

Preliminary analyses

Means and standard deviations as well as correlations between constructs and intraclass correlations (ICC) are also presented in Table 4. For both men and women, relationship autonomy was found to have significant positive correlations with both overall felt need support as well as each individual subscale—relatedness, competence, and autonomy. Paired samples t-tests were performed to test for differences between means for men and women. There were no gender differences on relationship motivation, overall need fulfillment, or on any of the need support subscales (all $ps > .25$).

Main analyses

Plan of analysis APIMs (Actor Partner Interdependence Model; Kenny 1996; Kenny et al. 2006) were computed to determine the associations between relationship autonomy and basic psychological need support. APIM partitions variance into actor effects (the unique association between one's own score on a predictor and one's outcome) and partner effects (the unique association between one's partner's score on a predictor and one's outcome). It is important to note that our use of the term effect in this context does not refer to an inference of causality, but is rather the standard terminology employed in APIM to denote whether the predictor was reported by oneself (i.e., actor effect) or one's partner (i.e., partner effect). Further, because our sample was composed exclusively of heterosexual couples, we treated couples as distinguishable by gender. Our main hypotheses concerned the partner effects, such that we expected to find associations between one's partner's relationship autonomy and one's own perception of basic psychological need support. However, we also expected actor effects such that one's own relationship autonomy

Table 4 Correlations among all study variables (Study 3)

	Mean (*SD*)	1	2	3	4	5
1. Overall need support	5.95 (1.23)	**.38*** **	.93***	.92***	.95***	.43***
2. Relatedness support	5.91 (1.42)	.90***	**.36** **	.75***	.85***	.51***
3. Competence support	6.00 (1.28)	.88***	.71***	**.24***	.83***	.28*
4. Autonomy support	5.93 (1.33)	.86***	.64***	.63***	**.36** **	.41***
5. Relationship autonomy	21.13 (10.60)	.66***	.60***	.65***	.48***	**.30***

* $p \leq .05$; ** $p < .01$; *** $p < .001$

ICCs are presented in diagonal with bold. Correlations for women are above the diagonal and correlations for men are below the diagonal

would be associated with felt need support. Thus, we tested all models with actor paths in order to (1) incorporate the nonindependence of the dyads and (2) establish the partner effect of relationship autonomy beyond previously established associations between motivation and support. All continuous predictors were grand mean centered and gender was effect coded such that men were coded as 1 and women as −1. Thus, all main effects represent the average association collapsed across gender.

Relationship autonomy and basic psychological need support In order to test our hypotheses concerning the role of relationship autonomy in explaining support of partners, we computed a series of models in which both actor and partner relationship autonomy, actor gender, as well as the actor relationship autonomy × actor gender and the partner relationship autonomy × actor gender interactions were entered as simultaneous predictors:

$$\begin{aligned} Support_{ij} = {} & \gamma_{00} + \gamma_{10} Actor\ RA + \gamma_{20} Partner\ RA \\ & + \gamma_{30} Actor\ Gender + \gamma_{40} Actor\ RA \\ & \times Actor\ Gender + \gamma_{50} Partner\ RA \\ & \times Actor\ Gender + e_{ij} \end{aligned}$$

Results can be found in Table 5. In line with our main hypotheses, a unique partner effect of relationship autonomy was significant, such that participants reported receiving higher overall need support as well as each individual subscale—relatedness, competence, autonomy—if their partner reported being higher in relationship autonomy. We also found that actor relationship autonomy was uniquely positively associated with one's own perceived need support, as well as each individual subscale. As predicted, there were no observed moderating effects of gender in the present analyses on either actor ($ps > .25$) or partner ($ps > .42$) effects, suggesting that the positive association between relationship autonomy and support provision is the same for both men and women. Further, we ran additional analyses that were requested by an anonymous reviewer in which we controlled for relationship duration. Both actor and partner relationship autonomy remained significant predictors of each outcome.

Study 3 provides additional support to Studies 1 and 2 in that relationship autonomy was found to be associated with support provision in the form of basic psychological needs. This study expanded upon Studies 1 and 2 by testing associations between relationship autonomy and support provision using a different measure of support which was derived directly from self-determination theory. Additionally, the present study addresses concerns of self-report bias by utilizing partner reports of support received, with results suggesting that participants who were more autonomously motivated to be in the relationship had partners who felt their basic psychological needs were more supported in the relationship. Finally, the present study provides evidence that these associations hold across gender, and are not specific to either men or women. One notable limitation in this study is that our measure of basic psychological needs does not tap directly into need support provided by partners, but rather the extent to which one's needs are met and supported in the relationship which, presumably, follow from need support. Overall, Study 3 provides further evidence for the hypothesized association between autonomous motivation and pro-partner motivations in the form of support provision.

General discussion

A romantic partner's willingness to provide support when needed is an integral element of close relationship functioning. Perceived partner responsiveness has been considered a key organizing construct for the field of close relationships because of its importance across several literatures (Reis et al. 2004a, b). We demonstrate, across three studies, that the way people are motivated to be in their relationship—from autonomous to controlled or amotivated motivations—predicts the degree to which they are supportive of romantic partners. These studies provided evidence of an association between autonomous motivation

Table 5 Results from APIMs (Study 3)

	Overall need support		Relatedness support		Competence support		Autonomy support	
	b	*SE*	*b*	*SE*	*b*	*SE*	*b*	*SE*
Actor relationship autonomy	.05***	.009	.06***	.01	.05***	.010	.05***	.010
Partner relationship autonomy	.03**	.009	.04***	.01	.02*	.010	.03**	.010
Gender	.08	.091	.12	.10	.10	.098	.01	.094
Actor RA × gender	.00	.009	.01	.01	.01	.010	−.01	.011
Partner RA × gender	.00	.009	.00	.01	.00	.010	−.01	.011

* $p \leq .05$; ** $p < .01$; *** $p < .001$

to be in one's relationship and support provision. Importantly, this association was demonstrated for several forms of support provision which have been derived from separate theoretical perspectives. It was also found using cross-sectional, longitudinal, and dyadic designs with reports coming from both the individuals themselves as well as their partners.

Further, whereas prior research has shown that relationship autonomy is associated with less ego-defensiveness and greater understanding during conflict, this is the first evidence to our knowledge that relationship autonomy is associated with pro-partner motivations such that one is more readily supportive of and responsive to the partner's needs. Study 1 employed a cross-sectional design and examined support provision, including greater responsiveness, availability, encouragement, and less intrusiveness. As hypothesized, being in the relationship for more autonomous reasons was associated with greater supportiveness on all dimensions except intrusiveness. Study 2 employed a multi-level daily diary design in which participants reported the extent to which they were responsive to and supportive of their partner on a daily basis for 14 days. As hypothesized, relationship autonomy was associated with greater responsiveness and support provision. Importantly, the results of Studies 1 and 2 were not explained by several alternative explanations, including self-esteem, satisfaction with the relationship, or with having one's self-esteem more contingent on the success and failure of the relationship.

Finally, Study 3 examined a conceptually related, but distinct, form of support. In this study, we examined a form of support specifically outlined by SDT in which partners reported the degree to which they felt their basic psychological needs were supported in their romantic relationship. Results suggest that one feels more need-supported when one's partner is higher in relationship autonomy. Importantly, this was found for general need support as well as all three basic psychological needs. This means that people who are in their relationships for more self-determined reasons are more supportive of feelings of connectedness, as well as partner's competence. Additionally, this was not at the cost of imposing on partner's autonomy and feelings of self-direction. These results complement the findings of Studies 1 and 2 by demonstrating that relationship autonomy is associated with separate conceptualizations of support provision.

Taken together, these results fit well into a larger literature on self-determination in close relationships. The present research suggests another possible mechanism by which autonomous motivation facilitates relationship functioning. Although previous research has found that relationship autonomy and need fulfillment are related to reduced ego-defensiveness (e.g., Knee et al. 2005), recent theoretical work has proposed that relationship autonomy should also increase desire to care for one's partner (e.g., Deci and Ryan 2014; Knee et al. 2013). The present research provides empirical support that relationship autonomy can promote care for partners. Although we were not able to test the proposed altruistic mechanism—that relationship autonomy facilitates transformation of motivations to be pro-partner, such that one wants to maximize one's partner's interests—the present findings rule out several alternatives. The research draws a distinction between pro-partner motivations—desire to maximize the partner's interests—and more selfish forms of pro-relationship motivations that derive from one's self-worth being contingent upon the relationship. This is, to our knowledge, the first empirical data that demonstrate a connection between relationship autonomy and pro-partner motivations.

These findings also expand the more general literature on self-determination. That is, prior research has examined the role of autonomy support in fostering intrinsic motivations, largely studying non-reciprocal relationships such as parent/child or teacher/student relationships (e.g., Grolnick and Ryan 1989). This research has found that receiving autonomy support develops intrinsic motivation. As such, this is the first research, to our knowledge, that suggests that the reverse may also be true—that is, that intrinsic motivation also fosters supportiveness. Some research has also found that promoting need fulfillment encourages prosocial behavior such as charity giving

(Gagné 2003; Pavey et al. 2011). However, the current research suggests the existence of a more cyclical relationship such that motivation may be important in facilitating support of others.

Limitations and future directions

The present research has several important limitations that should be considered when interpreting our data. First, the designs were correlational, and thus, we are unable to address causality or temporal precedence. In order to establish a causal pathway, experimental research would be needed. However, the dyadic design of Study 3, in which people reported feeling more supported if partners were higher in relationship autonomy rules out limitations common in self-reported studies such as self-report bias. The present work also presents researchers with a particularly interesting challenge for follow-up research. Namely, this research was not able to test whether the greater support was the result of truly altruistic and partner-focused, rather than selfish reasons. Although we ruled out several possible alternative reasons for providing more support, and the data indirectly suggest higher levels of altruism and pro-partner motivations, a more direct test is warranted to more fully understand the partner-focused nature of relationship autonomy. For instance, future research can test the associations between relationship autonomy and empathy and perspective taking, which may serve as mediators of the autonomy-support association. Additionally, future research can examine pro-partner motivations that involve a conflict between one's own and one's partner's interests, such as willingness to sacrifice for one's partner.

Additionally, it is possible that these results are explained by relationship-serving biases, such that people who are higher in relationship autonomy perceive their relationship as more supportive than it is. However, previous research has found that autonomous motivation is associated with fewer self-serving biases (Knee and Zuckerman 1996, 1998), and thus we feel it is unlikely that the results could be explained by people higher in relationship autonomy simply reporting better relationship outcomes. Nonetheless, it remains an interesting question for future research to examine the role of relationship-serving biases.

Finally, the present research exclusively on the associations between relationship autonomy and need support. Some researchers have suggested the importance of examining need thwarting as well. Studies 1 and 2 do examine the extent to which people intrude on partner's autonomy, suggesting relationship autonomy may also reduce thwarting. However, we could not directly test such a hypothesis. As such, future research may seek to examine whether autonomy is not just associated with more supportiveness, but also lower levels of need thwarting.

Conclusion

Prior literature has strongly demonstrated that relationship autonomy is associated with more positive relationship outcomes (Blais et al. 1990; La Guardia et al. 2000), finding that individuals with higher relationship autonomy are less likely to engage in relationship destructive behaviors (e.g., Hodgins and Knee 2002; Knee et al. 2005). The current studies expand upon this idea by demonstrating that these individuals are also more likely to be supportive of their partners. This is the first research to suggest that more positive relationship outcomes may emerge because people higher in relationship autonomy tend to demonstrate greater care for their partner and do not just avoid pitfalls of relationship. We found, across three studies, that relationship autonomy is associated with more focus and readiness to support one's partner's interests across two related forms of support—secure base provision and basic psychological need support. The results suggest that relationship autonomy is associated with the overall supportiveness of one's partner, indicating that more integration of the relationship within one's true self is associated with more pro-partner motivations.

References

Blais, M. R., Sabourin, S., Boucher, C., & Vallerand, R. (1990). Toward a motivational model of couple happiness. *Journal of Personality and Social Psychology, 59*, 1021–1031. doi:10.1037/0022-3514.59.5.1021.

Brunell, A. B., & Webster, G. D. (2013). Self-determination and sexual experience in dating relationships. *Personality and Social Psychology Bulletin, 39*, 970–987. doi:10.1177/0146167213485442.

Crocker, J., & Canevello, A. (2008). Creating and undermining social support in communal relationships: The role of compassionate and self-image goals. *Journal of Personality and Social Psychology, 95*, 555–575. doi:10.1037/0022-3514.95.3.555.

Cutrona, C. E., Hessling, R. M., & Suhr, J. A. (1997). The influence of husband and wife personality on marital social support interactions. *Personal Relationships, 4*, 379–393. doi:10.1111/j.1475-6811.1997.tb00152.x.

Deci, E. L., La Guardia, J. G., Moller, A. C., Scheiner, M. J., & Ryan, R. M. (2006). On the benefits of giving as well as receiving autonomy support: Mutuality in close friendships. *Personality and Social Psychology Bulletin, 32*, 313–327. doi:10.1037/t02175-000.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

Deci, E. L., & Ryan, R. M. (1995). Human autonomy: The basis for true self-esteem. In M. H. Kernis (Ed.), *Efficacy, agency, and self-esteem* (pp. 31–49). New York, NY: Plenum Press.

Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268. doi:10.1207/S15327965PLI1104_01.

Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne, 49*, 182–185. doi:10.1037/a0012801.

Deci, E. L., & Ryan, R. M. (2014). Autonomy and need satisfaction in close relationships: Relationships Motivation Theory. In N. Weinstein (Ed.), *Human motivation and interpersonal relationships* (pp. 53–73). New York: Springer.

Feeney, B. C. (2004). A secure base: Responsive support of goal strivings and exploration in adult intimate relationships. *Journal of Personality and Social Psychology, 87*, 631–648. doi:10.1037/0022-3514.87.5.631.

Feeney, B. C., & Collins, N. L. (2014). A new look at social support: A theoretical perspective on thriving through relationships. *Personality and Social Psychology Review*. doi:10.1177/1088868314544222

Feeney, B. C., & Thrush, R. L. (2010). Relationship influences on exploration in adulthood: The characteristics and function of a secure base. *Journal of Personality and Social Psychology, 98*, 57–76. doi:10.1037/a0016961.

Gagné, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation & Emotion, 27*, 199–223. doi:10.1023/A:1025007614869.

Gagné, M., Ryan, R. M., & Bargmann, K. (2003). Autonomy support and need satisfaction in the motivation and well-being of gymnasts. *Journal of Applied Sport Psychology, 15*, 372–390. doi:10.1080/714044203.

Gaine, G. S., & La Guardia, J. G. (2009). The unique contributions of motivations to maintain a relationship and motivations toward relational activities to relationship well-being. *Motivation and Emotion, 33*, 184–202. doi:10.1007/s11031-009-9120-x.

Grolnick, W. S., & Ryan, R. M. (1989). Parent styles associated with children's self-regulation and competence in school. *Journal of Educational Psychology, 81*, 143–154. doi:10.1037/0022-0663.81.2.143.

Hadden, B. W., Øverup, C. S., & Knee, C. R. (2014). Removing the ego: Need fulfillment, self-image goals, and self-presentation. *Self and Identity, 13*, 274–293. doi:10.1080/15298868.2013.815398.

Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5*, 1–22. doi:10.1207/s15327965pli0501_1.

Heppner, W. L., Kernis, M. H., Nezlek, J. B., Foster, J., Lakey, C. E., & Goldman, B. M. (2008). Within-person relationships among daily self-esteem, need satisfaction, and authenticity. *Psychological Science, 19*, 1140–1145. doi:10.1111/j.1467-9280.2008.02215.x.

Hodgins, H. S., & Knee, C. R. (2002). The integrating self and conscious experience. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 87–100). Rochester, NY: University of Rochester Press.

Hodgins, H. S., Koestner, R., & Duncan, N. (1996). On the compatibility of autonomy and relatedness. *Personality and Social Psychology Bulletin, 22*, 227–237. doi:10.1177/0146167296223001.

Hodgins, H. S., & Liebeskind, E. (2003). Apology versus defense: Antecedents and consequences. *Journal of Experimental Social Psychology, 39*, 297–316. doi:10.1016/S0022-1031(03)00024-6.

Hui, C. M., Molden, D. C., & Finkel, E. J. (2013). Loving freedom: Concerns with promotion or prevention and the role of autonomy in relationship well-being. *Journal of Personality and Social Psychology, 105*, 61–85. doi:10.1037/a0032503.

Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence* (p. 341). New York: Wiley.

Kenny, D. A. (1996). Models of non-independence in dyadic research. *Journal of Social and Personal Relationships, 13*, 279–294. doi:10.1177/0265407596132007.

Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis* (1st ed.). New York, NY: Guilford.

Kim, Y., Carver, C. S., Deci, E. L., & Kasser, T. (2008). Adult attachment and psychological well-being in cancer caregivers: The meditational role of spouses' motives for caregiving. *Health Psychology, 27*, S144–S154. doi:10.1037/0278-6133.27.2.

Knee, C., Canevello, A., Bush, A. L., & Cook, A. (2008). Relationship-contingent self-esteem and the ups and downs of romantic relationships. *Journal of Personality and Social Psychology, 95*, 608–627. doi:10.1037/0022-3514.95.3.608.

Knee, C. R., Hadden, B. W., Porter, B. W., & Rodriguez, L. M. (2013). Self-determination theory and romantic relationship processes. *Personality and Social Psychology Review, 4*, 307–324. doi:10.1177/1088868313498000.

Knee, C. R., Lonsbary, C., Canevello, A., & Patrick, H. (2005). Self-determination and conflict in romantic relationships. *Journal of Personality and Social Psychology, 89*, 997–1009. doi:10.1037/0022-3514.89.6.997.

Knee, C. R., Patrick, H., Vietor, N. A., Nanayakkara, A., & Neighbors, C. (2002). Self-determination as growth motivation in romantic relationships. *Personality and Social Psychology Bulletin, 28*, 609–619.

Knee, C. R., & Zuckerman, M. (1996). Causality orientations and the disappearance of the self-serving bias. *Journal of Research in Personality, 30*, 76–87. doi:10.1006/jrpe.1996.0005.

Knee, C. R., & Zuckerman, M. (1998). A nondefensive personality: Autonomy and control as moderators of defensive coping and self-handicapping. *Journal of Research in Personality, 32*, 115–130. doi:10.1006/jrpe.1997.2207.

Koestner, R., Gingras, I., Abutaa, R., Losier, G. F., DiDio, L., & Gagné, M. (1999). To follow expert advice when making a decision: An examination of reactive versus reflective autonomy. *Journal of Personality, 67*, 851–872. doi:10.1111/1467-6494.00075.

Koestner, R., & Losier, G. F. (1996). Distinguishing reactive versus reflective autonomy. *Journal of Personality, 64*, 465–494. doi:10.1111/j.1467-6494.1996.tb00518.x.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology, 79*, 367–384. doi:10.1037/0022-3514.79.3.367.

Laurenceau, J., Rivera, L. M., Schaffer, A. R., & Pietromonaco, P. R. (2004). Intimacy as an Interpersonal Process: Current Status and Future Directions. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 61–78). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Patrick, H., Knee, C. R., Canevello, A., & Lonsbary, C. (2007). The role of need fulfillment in relationship functioning and well-being: A self-determination theory perspective. *Journal of Personality and Social Psychology, 92*, 434–457. doi:10.1037/0022-3514.92.3.434.

Pavey, L., Greitemeyer, T., & Sparks, P. (2011). Highlighting relatedness promotes prosocial motives and behavior. *Personality and Social Psychology Bulletin, 37*, 905–917. doi:10.1177/0146167211405994.

Pelletier, L. G., Levesque, C. S., & Legault, L. (2002). Pressure from above and pressure from below as determinants of teachers' motivation and teaching behavior. *Journal of Educational Psychology, 94*, 186–196. doi:10.1037/0022-0663.94.1.186.

Reis, H. T., Clark, M. S., & Holmes, J. G. (2004a). Perceived Partner Responsiveness as an Organizing Construct in the Study of

Intimacy and Closeness. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Reis, H. T., Clark, M. S., & Holmes, J. G. (2004b). Perceived partner responsiveness as an organizing construct in the study of closeness and intimacy. In D. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Mahwah, NJ: Erlbaum.

Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck, D. F. Hay, S. E. Hobfoll, W. Ickes, & B. M. Montgomery (Eds.), *Handbook of personal relationships: Theory, research and interventions* (pp. 367–389). Oxford: Wiley.

Reis, H. T., Sheldon, K. M., Gable, S. L., Roscoe, J., & Ryan, R. M. (2000). Daily well-being: The role of autonomy, competence, and relatedness. *Personality and Social Psychology Bulletin, 26*, 419–435. doi:10.1177/0146167200266002.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Roth, G., Assor, A., Kanat-Maymon, Y., & Kaplan, H. (2007). Autonomous motivation for teaching: How self-determined teaching may lead to self-determined learning. *Journal of Educational Psychology, 99*, 761–774. doi:10.1037/0022-0663.99.4.761.

Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The Investment Model Scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5*, 357–391. doi:10.1111/j.1475-6811.1998.tb00177.x.

Soenens, B., & Vansteenkiste, M. (2005). Antecedents and outcomes of self-determination in three life domains: The role of parents' and teachers' autonomy support. *Journal of Youth and Adolescence, 34*, 589–604. doi:10.1007/s10964-005-8948-y.

Taylor, I. M., & Ntoumanis, N. (2007). Teacher motivational strategies and student self-determination in physical education. *Journal of Educational Psychology, 99*, 747–760. doi:10.1037/0022-0663.99.4.747.

Taylor, I. M., Ntoumanis, N., & Standage, M. (2008). A self-determination theory approach to understanding the antecedents of teachers' motivational strategies in physical education. *Journal of Sport & Exercise Psychology, 30*, 75–94.

Uysal, A., Lin, H. L., & Knee, C. R. (2010). The role of need satisfaction in self-concealmentvand well-being. *Personality and Social Psychology Bulletin, 36*, 187–199. doi:10.1177/0146167209354518.

Vallerand, R. J. (1997). Toward a hierarchical model of intrinsic and extrinsic motivation. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (pp. 271–360). San Diego, CA: Academic Press. doi:10.1016/S0065-2601(08)60019-2.

Weinstein, N., DeHaan, C. R., & Ryan, R. M. (2010a). Attributing autonomous versus introjected motivation to helpers and the recipient experience: Effects on gratitude, attitudes, and well-being. *Motivation and Emotion, 34*, 418–431. doi:10.1007/s11031-010-9183-8.

Weinstein, N., Hodgins, H. S., & Ryan, R. M. (2010b). Autonomy and control in dyads: Effects on interaction quality and joint creative performance. *Personality and Social Psychology Bulletin, 36*, 1603–1617. doi:10.1177/0146167210386385.

Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology, 98*, 222–244. doi:10.1037/a0016984.

Wieselquist, J., Rusbult, C. E., Foster, C. A., & Agnew, C. R. (1999). Commitment, pro-relationship behavior, and trust in close relationships. *Journal of Personality and Social Psychology, 77*, 942–966. doi:10.1037/0022-3514.77.5.942.