

The Implications of Relational Activity Motivations for Relationship Well-Being and Daily
Relational Functioning in Marriage

by

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Author's Declaration

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

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Abstract

People experience autonomy when they perceive their behaviour to be volitional and they feel controlled when their behaviour is driven by external demands or internal pressures. Gaine and La Guardia (2009) developed the Motivations for Relational Activities (MRA) scale to assess the extent to which romantic partners feel autonomous and controlled in a variety of specific relational activities. In a sample of mostly non-married individuals, Gaine and La Guardia (2009) found that the more willing and the less pressured individuals feel to engage in relational activities, the greater their relationship well-being. Study 1 examined whether autonomous and controlled activity motivations have similar implications for relationship well-being for married individuals. Results replicated the results from the non-married sample (Gaine & La Guardia, 2009). Study 2 assessed the relational activity motivation of both partners in married and common-law relationships and examined how one's own motives relate to one's own relationship well-being and one's partner's relationship well-being. Results suggested that one's own motivations toward relational activities predict one's own relationship well-being but not one's partner's well-being, with the exception of men's relationship satisfaction, which was positively predicted by women's autonomous activity motivation. Study 2 also employed daily diaries to examine the implications of each partner's activity motivations for partners' daily relational functioning and well-being. Results showed that when individuals are more willing and less pressured to engage in relational activities, they experience greater daily relationship well-being. Further, when individuals are more willing and less pressured in their relational activities, they are observed by their partner to be more engaged and responsive on a day-to-day basis. Finally, women's willing engagement of

relational activities emerged as a particularly important predictor of their own as well as men's relational functioning and wellness.

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Introduction

Across different perspectives, motivation toward behaviour has typically been conceptualized and measured as either a personality trait or as a context-specific orientation. Self-Determination Theory (SDT; Deci & Ryan, 2000) differentiates motivation by the extent to which behaviour is autonomous and volitional versus controlled and pressured. When autonomy and control have been assessed as personality traits or as orientations toward specific life domains (e.g., education, close relationships, health behaviour), research shows that the more people feel autonomous, the greater their well-being and the more positively they function in a given domain, while the more controlled they feel in their behaviour, the lower their well-being and the poorer their functioning within a domain (see Deci & Ryan, 2000 for review).

While personality and context-specific orientations provide useful information in the prediction of personal and interpersonal functioning, motivations within a given domain may be further differentiated. In the domain of romantic relationships, past research has examined the implications of autonomy and control measured as personality traits and as orientations toward particular relationships (Knee, Lonsbary, Canevello, & Patrick, 2005; Knee, Patrick, Vietor, Nanayakkara, & Neighbors, 2002). However, people's motivations toward a particular relationship may be further differentiated into their motivations to engage in specific activities of the relationship. Importantly, how people are motivated toward specific relational activities may be vital both to functioning within that activity and to overall relationship well-being (Feeney & Collins, 2003). As such, examining motivations for relational activities may be vital to understanding functioning uniquely within a given activity as well as the relationship as a whole. The present studies explore the implications of specific relational activity motivations

for individual and dyadic functioning both in general and in day-to-day interactions. I turn now to an overview of the SDT perspective on motivation and then specifically examine the application of SDT to the domain of romantic relationships.

Autonomy: A Self-Determination Theory Perspective

SDT defines a person's motivational orientation toward behaviours along a continuum of autonomy (see Figure 1 for illustration of this continuum). There are three general categories of motivation, including intrinsic, extrinsic, and amotivation (Ryan and Connell, 1989).

Intrinsic motivation is considered to evidence the greatest degree of autonomy as it is activity pursued because of interest or pleasure that the individual derives from the activity itself. In the context of romantic relationships, an example of intrinsic motivation is when individuals spend time with their partner because they find their interactions with their partner to be stimulating and exciting.

Extrinsic motivation reflects instrumental behaviour, in which action is aimed at producing some desired outcome that is separable from the activity itself. While early conceptualizations of extrinsic motivation portrayed it as invariably controlled (deCharms, 1968), SDT distinguishes several different forms of extrinsic motivation that differ in the extent to which they are experienced as pressured versus volitional (Deci & Ryan, 2000). The four regulatory styles of extrinsic motivation outlined by SDT are external regulation, introjected regulation, identified regulation, and integrated regulation. *External regulation* involves behaving to obtain external rewards or to avoid punishments. Thus, externally regulated behaviour is elicited by direct external contingencies. For example, people who are externally regulated to spend time with their partner might only do so to gain favours from their partner or to avoid the nagging or anger of their partner. *Introjected regulation* refers to

behaviour that is internally regulated but has not been personally endorsed by the individual. That is, the behaviour is regulated by intrapsychic pressures to maintain self-worth or to avoid guilt. Since the value the behaviour serves is not personally endorsed or “owned” by the individual, the behaviour is experienced as controlled. An example of introjected regulation is when partners spend time with each other because they feel it is their obligation to do so and they would feel guilty if they did not fulfill their role of being a “good” relationship partner. That is, in such cases time spent with the partner is done because they feel they “should.”

Identified regulation refers to behaviour that serves a personally endorsed value or goal. In identified regulation, individuals take “ownership” for their behaviour and act with a sense of willingness or choice. While the behaviour is extrinsically motivated (i.e., it serves a particular goal), it is experienced as autonomous since it is driven by the individual’s own endorsed value. An example of identified regulation is when individuals spend time with their partner because the interactions serve a personally endorsed value, such as intimacy or sharing experiences. Finally, *integrated regulation* refers to when the value served by a particular behaviour is integrated with other values and goals of the self. That is, the behaviour fits coherently with other important aspects of the self, which is not necessarily the case with identified regulation. Integrated regulation is regarded as the most autonomous form of extrinsic motivation because it involves the experience of acting from an integrated set of personal values and goals. An example of integrated regulation is when individuals’ activities with their partner are consistent with their personal goals regarding family, career, or leisure.

The third general category of motivation is *amotivation*. Amotivation is a state in which people lack the intention to behave and thus their behaviour is non-regulated¹. People become amotivated when they perceive a desired outcome as not being contingent on their

behaviour or they perceive that they lack the ability to produce the behaviour. An example of amotivation is when individuals disengage from their partner because emotionally sharing with their partner yields no response or reciprocal engagement.

Because each person has many different reasons for engaging in any behaviour, motivation is indexed by a combination of intrinsic, extrinsic, and amotivated orientations. These combinations have been examined in different ways, with some studies (e.g., Deci & Ryan, 1985) indexing motivation by broad orientations (e.g., autonomous, controlled, and amotivation), whereas other studies use a weighted combination of all regulatory styles into a relative autonomy index (e.g., Ryan & Connell, 1989). I turn now to the literature to illustrate how these indices have been used to predict personal functioning and then focus specifically on how these indices predict functioning in close relationships.

First, motivation has been assessed as a personality trait to feel autonomous and to seek opportunities for autonomous regulation across different domains. The General Causality Orientation Scale (GCOS; Deci & Ryan, 1985) is typically used to measure people's general tendencies toward autonomous, controlled, and impersonal (i.e., amotivated) behaviour regulation in a variety of life-domains. The autonomous orientation involves regulating behaviour on the basis of interests and self-endorsed values (i.e., intrinsic, identified, integrated regulation), the controlled orientation involves regulating behaviour on the basis of pressures and directives to behave (i.e., external, introjected regulation), and the impersonal orientation reflects feelings of ineffectance in behaviour (i.e., amotivation). Research has shown that the autonomous orientation is associated with less self-derogation, greater ego development, and higher self-esteem, while the controlled orientation is associated with an external locus of control (i.e., the belief that one cannot control outcomes), Type-A personality pattern, and

greater public self-consciousness (Deci & Ryan, 1985). The impersonal orientation is associated with an external locus of control as well as greater self-derogation, public self-consciousness, depression, social anxiety, and lower self-esteem (Deci & Ryan, 1985).

Motivation has also been measured in specific domains (e.g., education, interpersonal relationships, and health behaviour) by assessing people's perceived motivations to engage in specific behaviours and activities within the domain. In these specific domains, relative autonomy is typically measured by assessing people's perceived reasons for engaging in a behaviour or activity using the Self-Regulation Questionnaire (SRQ; adapted by domain)². Reasons consistent with each regulatory style (amotivation, external, introjected, identified, and integrated regulation, and intrinsic motivation) are rated and averaged within each regulatory style, and then a relative autonomy index is calculated by weighting each regulation score by its degree of autonomy (3 intrinsic motivation + 2 integrated regulation + 1 identified regulation - 1 introjected regulation - 2 external regulation - 3 amotivation). Research using the SRQ suggests that greater relative autonomy for engaging in specific activities is generally associated with improved performance, greater persistence, engagement, and well-being in the activity domain (e.g., Ryan & Connell, 1989).

Within the domain of interpersonal relationships, autonomy as a personality trait has been linked to more positive interpersonal functioning, such as less defensiveness and more positive and honest social interactions (Hodgins, Koestner, & Duncan, 1996). Further, within the specific context of romantic relationships, those higher in the autonomous orientation show more open communication and greater facility in conflict resolution, whereas those higher in the controlled orientation show a more closed, avoidant, and less positive approach to conflict (Knee et al., 2005; Knee et al., 2002). To supplement information provided by the personality

orientations toward autonomy and control, the Couple Motivation Questionnaire (CMQ; Blais, Sabourin, Boucher, & Vallerand, 1990) was developed to assess the degree to which people are involved in their romantic relationships for relatively autonomous reasons. The CMQ assesses the SDT regulatory styles by asking people to rate different reasons why they maintain their current romantic relationships. The scores for each regulatory style can be combined into a relative autonomy index, which indicates the overall degree of autonomy with which individuals maintain their romantic relationship. In a sample of married couples, results showed that the greater people's relative autonomy to maintain their relationship, the more positive their relationship functioned, as indicated by greater agreement and affection between partners, as well as greater couple happiness (Blais et al., 1990).

Notably, hierarchical models of motivation (see Vallerand, 1997) suggest that people's behavior in a particular domain is a consequence of their motivations at both the personality and context-specific levels. Several recent studies have together addressed this proposition within romantic relationships. First, Knee et al. (2002) investigated whether trait autonomy and control (as measured by the GCOS) influence how couples cope with and respond to conflict within the partnership. Results showed that the more people are autonomous overall, the more they show active coping, openness towards their partner, and attempt to understand their partner, as well as the less avoidant they are of their problems within their relationship. In contrast, the more people are controlled overall, the more they denied problems in their relationship and expressed their emotions through venting. Additionally, when observing partners while they discussed topics on which they disagreed, the autonomy orientation dimension was related to more positive interaction behaviours, such as approach, clarification, and attempts to understand the partner, whereas the control orientation dimension was

associated with displaying fewer of these positive interaction behaviours. It seems that feeling greater autonomy overall is associated with greater openness and flexibility in romantic relationships, whereas feeling more controlled overall is related to a more closed, avoidant, and less positive approach to conflict. Knee et al. (2005) then tested whether people's motivations to maintain their relationships (as measured by the CMQ) mediated the association between trait autonomy and relationship functioning. They demonstrated partial mediation such that trait autonomy (i.e. general autonomy orientation) allows one to have more open and less defensive responses to conflict in part because trait autonomy promotes autonomous reasons for maintaining the relationship. In sum, these findings provide evidence that relational functioning is best predicted by understanding both dispositional as well as contextually specific motivations.

Measuring Motivation toward Relational Activities

Both Blais et al. (1990) and Knee et al. (2005) measured relative autonomy toward the relationship using the Couple Motivation Questionnaire (CMQ), which assesses the willingness with which people maintain involvement in their relationship as a whole, or in other words, estimates a general disposition towards willingly maintaining the relationship. This general orientation, however, potentially does not capture whether people approach the various tasks of the relationship with the same degree of autonomy as they do the relationship as a whole. In line with a hierarchical conceptualization of motivation (Vallerand, 1997), a more complete assessment of motivation in relationships considers both global motivations (i.e., reasons for involvement) as well as specific motivations (i.e., reasons for engaging in activities of the relationship), with motivation toward the relationship as a whole and toward specific activities

each accounting for unique variance in effective functioning within the relationship (Feeney & Collins, 2003; Gaine & La Guardia, 2009).

Gaine and La Guardia (2009; see Appendix B for the original paper) examined the unique contributions of general motivations to maintain a relationship and motivations toward specific relational activities in the prediction of relationship well-being. They developed the Motivations for Relational Activities (MRA) scale, which assesses external regulation, introjected regulation, identified regulation, and intrinsic motivation within a variety of activities in romantic relationships, including sexual intimacy, physical intimacy, self-disclosure, social support, instrumental support, niceties, and support for the life aspirations of one's partner³. The relational activities of the MRA were selected to provide a relatively comprehensive set of the activities essential to most romantic relationships. Physical intimacy is a central and perhaps defining activity in romantic relationships. Separate subscales for sexual intimacy and physical intimacy (i.e., hugging, kissing, cuddling) were included as these two activities are related but distinct and have each been related to closeness and relationship well-being (Andersen, 1985; Birchler & Webb, 1977; Cupach & Comstock, 1990; Emmers & Dindia, 1995; Guerrero & Andersen, 1991; Haavio-Mannila & Kontula, 1977; Lawrance & Byers, 1995). Self-disclosure was included as it has been shown to be essential for the development of closeness in relationships (Finkenauer & Hazam, 2000; Hendrick, 1981; Laurenceau, Barrett, & Pietromonaco, 1998; Meeks, Hendrick, & Hendrick, 1998). Further, various forms of support were included that have been shown to be important to personal and relationship functioning, including social support (i.e., emotional support; Uchino, Cacioppo & Kietcolt-Glaser, 1996) and instrumental support (Wills, Weiss, & Patterson, 1974), support for the partner's life aspirations or goals (Kasser, 2002; Kasser & Ryan, 1996; Sheldon, Ryan,

Deci, & Kasser, 2004), and niceties (i.e., doing special things for partner; Belk & Coon, 1993; Huang & Yu, 2000).

Within each activity, Gaine and La Guardia (2009) found that the regulatory styles were clustered into two independent factors, reflecting *autonomous activity motivation* (identified regulation and intrinsic motivation were highly positively correlated and loaded on one factor) and *controlled activity motivation* (external and introjected regulation were highly positively correlated and loaded on another factor). Intercorrelations of autonomous activity motivation across relational activities were moderate and positive, suggesting that the more people felt autonomously engaged in one activity, the more they also reported feeling autonomous in other relational activities. A similar pattern of intercorrelations emerged for controlled activity motivation, suggesting that the more people felt pressured or coerced in one activity, the more they also reported feeling pressured or coerced to engage in other relational activities. Given that the MRA factor structure was consistent with two relatively independent factors of autonomous activity motivation and controlled activity motivation, Gaine and La Guardia (2009) modeled the autonomous and controlled scores separately, such that the autonomous activity motivation scores were modeled as indicators of an overall autonomous activity motivation factor and the controlled activity motivation scores were modeled as indicators of an overall controlled activity motivation factor.

Gaine and La Guardia (2009) sought to assess the potentially unique contributions of general motivations to maintain a relationship and motivations toward specific relational activities in the prediction of relationship well-being. They found that motivations to maintain a relationship, as measured by the CMQ, and motivations to engage in relational activities, as measured by the MRA, each accounted for unique variance in relational functioning (a latent

factor including commitment, satisfaction, intimacy, and vitality within the relationship). Indeed, the CMQ relative autonomy score and the MRA autonomous and controlled activity motivation scores each independently predicted relationship well-being and together they powerfully predicted relationship functioning, explaining approximately 80% of the variance in the general relationship well-being factor.

Beyond showing a unique and significant contribution of specific relational activity motivations to relationship well-being, Gaine and La Guardia (2009) showed that the relational activity motivation factors were linked to different personality traits and relationship processes. Specifically, greater autonomous activity motivation (MRA) was associated with less attachment avoidance (i.e., fears of closeness and dependency) and greater controlled activity motivation was associated with greater attachment anxiety (i.e., fears of rejection and abandonment). Notably, the distinctions of autonomy and control in the MRA may help to understand the unique patterns found in relation to the attachment dimensions of anxiety and avoidance. That is, as attachment avoidance reflects discomfort in being close to and depending on others, autonomous motivation—reflecting value for, interest in, and willing engagement in the activities with the partner—is expectedly negatively associated. Further, as attachment anxiety reflects worries that the self is unlovable and will be rejected, those higher on this dimension would likely view engagement in relational activities as more pressured and controlled—not something they "want to" or "enjoy" doing, but rather as something they "have to" or "must" do in order to preserve their sense of self as lovable or to prevent their partner from leaving them.

With respect to personality, Gaine and La Guardia (2009) found that autonomous and controlled activity motivation were related to separate dimensions of the Big Five dimensions

according to a gender-specific pattern. Specifically, women who were more rigid and closed to experience were likely to feel more pressured to engage in their relational activities, while those who were friendlier, more conscientious, and less emotionally negative were likely to be more willingly engaged in their relational activities. Men who were more disagreeable and experience more negative affect were likely to feel more controlled in their relational activities, while those who were more outgoing and experience more positive affect were likely to be more willingly engaged in their relational activities. While these analyses were exploratory, they suggest that distinguishing between the two motivational factors may be useful in understanding the contextual manifestations of personality within romantic relationships and the consequences of personality for behaviour regulation. However, it is noteworthy that the observed correlations were modest in magnitude, suggesting that activity motivations are relatively independent of personality.

There are several limitations to Gaine and La Guardia (2009) that are addressed in the present studies. The first issue is whether the MRA's factor structure and its associations with personal and relational functioning would hold for married couples. The participants in Gaine and La Guardia (2009) were mostly university students involved in non-married romantic relationships of relatively short length (mean relationship length was 1.54 years). Study 1 samples married individuals to examine whether the patterns observed in Gaine and La Guardia (2009) generalize to those involved in committed, longer-term romantic relationships.

A second limitation is that Gaine and La Guardia (2009) employed only self-report measures from one partner rather than reports from both partners of the dyad. Research using the CMQ suggests that the relative autonomy of each partner to maintain their relationship influences their own relationship well-being as well as their partner's relationship well-being,

such that the greater an individual's relative autonomy to maintain the relationship, the greater their own *and* their partner's relationship well-being (Blais et al., 1990; Knee et al., 2005). Further, in friendship dyads, research has shown that autonomy supportive behaviour towards a partner promotes both one's own functioning and the partner's functioning within the relationship (Deci, La Guardia, Moller, Scheiner, & Ryan, 2006). To address this limitation, in Study 2, I collected data from both members of married and common-law couples and explored the prediction of relationship well-being using each partner's MRA.

Finally, an issue that was not explored by Gaine and La Guardia (2009) was how autonomous and controlled activity motivation manifest behaviourally within the relationship. To address this issue, Study 1 explores individuals' self-reported relational behaviours within a variety of relational activities similar to those assessed by the MRA. Study 2 examines the implications of relational activity motivations for daily relational behaviour (e.g., daily engagement and responsiveness) over a two-week period.

Study 1

Gaine and La Guardia (2009) suggested that the factor structure of the MRA is captured by two dimensions of autonomous activity motivation and controlled motivation. Also, they demonstrated that people have greater relationship well-being when they feel more willing and less pressured to engage in the activities of the relationship. A limitation of that study is that the sample was comprised mostly of young adults in dating relationships. The purpose of Study 1 is to examine the factor structure of the MRA and its prediction of relationship well-being within married individuals. I expect that the factor structure as well as the relations of autonomy and control to relationship well-being will be similar across dating and married relationships. This similarity is expected because Gaine and La Guardia (2009) found that relationship length did not moderate any of their results, which suggests that autonomy and control function similarly in both short and long-term relationships.

In study 1, I also seek to further clarify the associations between activity motivations and select individual differences that possess some conceptual similarity to autonomous and controlled motivation. It is expected that activity motivations will be related to these individual differences but will not be overlapping with them, which would provide some evidence for the discriminant validity of autonomous and controlled activity motivation. In particular, in this study I explore the associations of relational activity motivation to attachment security, the Big-Five personality dimensions, and Behavioural Inhibition and Activation Systems (BIS/BAS).

As previously discussed, Gaine and La Guardia (2009) found that greater autonomous activity was associated with less attachment avoidance whereas greater controlled activity motivation was associated with higher attachment anxiety. Given that attachment avoidance

involves fears of closeness and dependency, it is reasonable to expect that autonomous motivation, which reflects interest and self-endorsed value in relationships, would be negatively related to attachment avoidance. Also, given that attachment anxiety involves fears of relationship dissolution, it is reasonable to expect that controlled motivation, which reflects acting from perceived internal or external pressure to maintain the relationship, would be positively related to attachment anxiety. However, while attachment avoidance and anxiety will likely be connected to autonomous and controlled motivation, I expect that they will not be empirically redundant since activity motivation is proposed to reflect an orientation toward a specific relational task rather than an enduring interpersonal pattern across relationships.

With respect to personality, Gaine and La Guardia (2009) found that the Big-Five Personality dimensions were associated with people's motivational orientations toward relational activities. It is proposed that because activity motivations reflect highly contextualized relational orientations, they will not be closely linked to de-contextualized personality traits. However, two particular personality dimensions bear resemblance to autonomous and controlled motivation. Specifically, given that Extraversion involves the positive approach of social connections, it is expected that autonomous motivation, which reflects interest and self-endorsed value in relationships, would be positively related to Extraversion. Also, given that Neuroticism involves emotional negativity, it is expected that controlled motivation, which reflects perceived pressure, would be positively related to Neuroticism.

In Study 1, I also explore the relations between autonomous and controlled activity motivation and Behavioural Inhibition and Activation Systems (BIS/BAS). Autonomy and control have some conceptual overlap with the inhibition (avoidance) and activation (approach)

systems. In particular, intrinsic motivation is a positive form of behaviour regulation as it involves willing engagement in an activity and clearly represents approach motivation (i.e., the activity is pursued because of interest or pleasure inherent in the activity). Identified regulation is also a positive form of behaviour regulation as it involves willing engagement in an activity, but it can be characterized by both approach and avoidance motives. For example, individuals who personally value intimacy in relationships could spend time with their partners either to increase the intimacy between them or to avoid distance in their relationship. Theoretically, then, autonomous activity motivation would be expected to relate positively to both BIS and BAS, since autonomy involves elements of both dimensions. However, the identified regulation items of the MRA involve only approach motivation, which is a limitation of the scale. Accordingly, I expect that greater autonomous activity motivation, which represents intrinsic motivation and an approach of personally-endorsed goals, will be linked to a greater tendency toward behavioural activation. I do not expect an association between behavioural inhibition and autonomous activity motivation, as the autonomy scales of the MRA do not contain items pertaining to the avoidance of negative outcomes.

Finally, introjected regulation encompasses behaviours driven by perceived internal rewards or pressures and external regulation encompasses behaviours driven by external rewards or pressures. That is, introjected and external regulations can involve both approach motives (i.e., pursuit of desired outcomes) and avoidance motives (i.e., prevention of undesired outcomes or escape from aversive events). Theoretically, I would expect a positive relationship between controlled activity motivation and both BIS and BAS. However, an examination of the item content of the MRA reveals that while some approach motivations are represented in introjected and external regulation items (e.g., life goals: “Because there are

personal benefits to having a successful partner”), negatively-valenced avoidance motivations are more frequently represented (e.g., self-disclosure: “Because my partner withdraws and becomes cold with me if I don’t share my feelings with him/her”). Given the bias toward avoidance items in the controlled activity motivation subscales of the MRA, I expect a modest positive association between behavioural inhibition and controlled activity motivation. I expect either no association or a slight positive association between behavioural activation and controlled activity motivation, as the controlled motivation scales of the MRA contain limited items pertaining to the approach of positive outcomes.

A final aim of study 1 is to examine how relational activity motivations relate to self-reported behaviour within each activity. For the purposes of this study, I developed a measure of relationship behaviours, mapping onto similar activities that are assessed by the MRA. The behaviour measure developed for this study was designed to assess behaviour within three general categories: Positive-approach, negative approach, and withdrawal/avoidance. Positive-approach refers to behaviours that are creative, spontaneous, responsive to the partner’s needs, and aimed at making a deeper, more intimate connection with the partner. Negative-approach refers to behaviours that are hostile, compulsive, and/or not aimed at connecting with the partner. Withdrawal/avoidance refers to individuals’ behaviours that are aimed at avoiding or escaping interactions with the partner, distracting themselves from the relational activities, or simply ignoring the partner altogether. These behaviours are passively dismissive and rejecting. The categories of positive-approach, negative-approach, and withdrawal/avoidance are offered as tentative categorizations of behaviour, which may be revised based on the cohesiveness of these subscales. The categories do, however, bear resemblance to current models of how one can respond to partner transgressions or destructive behaviour (Rusbult,

Verette, Whitney, Slovik, & Lipkus, 1991) and to positive partner events (Gable, Reis, Impett & Asher, 2004). These models postulate that relationship behaviour varies along two dimensions of constructive versus destructive and active versus passive. Constructive relationship behaviours serve to maintain and enhance the relationship, whereas destructive behaviours serve to undermine the relationship. Active behaviours address the relational problem at hand, whereas passive behaviours reflect behaviours that leave the problem unaddressed. I suspect that positive-approach resembles active-constructive behaviours, negative-approach resembles active-destructive behaviours, and withdrawal/avoidance resembles the passive-destructive and to a lesser extent passive-constructive behaviours. Notably, I have not included a separate measure of passive constructive relational behaviours because research has suggested that passive-constructive behaviours may not actually be constructive (i.e., they are associated with worse relational outcomes; Gable, Reis, Impett & Asher, 2004). I hypothesize that greater autonomous activity motivation will be associated with greater positive-approach and with less negative-approach and less withdrawal/avoidance within relational activities. In contrast, I predict that greater controlled activity motivation will be associated with greater negative-approach, greater withdrawal/avoidance, and less positive-approach.

Method

Participants and Procedure

One hundred eighty five married individuals (75 men, 110 women) were recruited through newspaper advertisements, online newsletters and advertisements, and posters. Participants completed the questionnaires online during one session and received two movie passes for their participation. The average age of the participants was 35.9 years (range 19 to 73 years, $SD = 10.6$ years). The participants were predominantly White (82% White, 5% Asian, 3% East Indian, 3% Hispanic, 2% Black, and 5% other). Participants reported being married to their current partner for a mean of 9.5 years (range 1 month to 40 years and 8 months, $SD = 10.4$ years). Fifty-nine percent of the sample reported having children, including biological, step, or adopted.

Measures

Motivations for Relational Activities (MRA). The MRA (Gaine & La Guardia, 2009) assesses external regulation, introjected regulation, identified regulation, and intrinsic motivation for eight relational activities, including sexual intimacy, physical intimacy, self-disclosure, social support, instrumental support, niceties, and support for partner's life aspirations. The *sexual intimacy* subscale assesses people's motivations to engage in sexual activities such as petting, oral sex, and intercourse. The *physical intimacy* subscale assesses people's motivations to hug, kiss, and cuddle with their partner. The *self-disclosure* subscales separately assess people's motivations to disclose their feelings and to disclose their thoughts and concerns to their partner. The *social support* scale assesses people's motivations to listen to their partner's problems (i.e., emotional support). The *instrumental support* subscale

assesses people's motivations to help solve their partner's problems and to do things that might reduce stress in their partner's life. The *niceties* subscale assesses people's motivation to do special things for their partner, including giving gifts, calling their partner, and taking their partner out. Finally, the support for partner's *life aspirations* subscale assesses people's motivations to support their partner's life goals, such as education, career, hobbies, family, and/or lifestyle choices. Each activity subscale begins with a stem that describes a targeted activity (e.g., physical intimacy) and then presents a series of different reasons for engaging in the activity that represent the different regulatory styles. Participants rate the extent to which each reason corresponds to why they engage in the target activity, using a 7-point Likert-type scale, ranging from "not at all true" (1) to "very true" (7). The range of reliabilities for each regulatory style across activities ranged from .56-.84 (external regulation), .58-.82 (introjected regulation), .77-.87 (identified regulation), and .73-.89 (intrinsic motivation). The derivation of the final scale scores is discussed further in the results section.

Relational Activity Behaviours. For the purposes of this study, I developed a scale assessing people's behaviour in specific relational activities. The activities map approximately onto the activity subscales of the MRA (Appendix A). Participants indicate whether each behaviour item corresponds to their behaviour within the target activity using a Likert-type scaling, ranging from "not at all true" (1) to "very true" (7). Each relational activity behaviour subscale assesses positive-approach, negative-approach, and withdrawal/avoidance behaviours. For the purposes of analyses, overall positive-approach, negative-approach, and withdrawal/avoidance behaviours indices were created by averaging the different behaviour subscales across activities. The internal reliabilities of these indices were .74 (average positive-approach), .89 (average negative-approach), and .88 (average withdrawal/avoidance).

Relationship well-being. Several constructs representing relationship well-being were assessed, including intimacy, commitment, satisfaction, and vitality within the relationship. Intimacy within the relationship was measured by the Personal Assessment of Intimacy in Relationships (PAIR; Schaefer & Olson, 1981). The scale contains 24 items rated on a 7-point Likert scale. Sample items include, “This person listens to me when I need someone to talk to,” “This person helps me clarify my thoughts,” “We have an endless number of things to talk about.” The average of the 24 items provides the intimacy score. Commitment to the relationship was measured by Rusbult’s (1980) commitment measure, which contains five items rated on a 7-point Likert scale. Sample items include, “To what extent are you committed to your relationship?”, “To what extent are you “attached” to your partner?”, and “For what length of time would you like your relationship to last?” The average of the five items provides the commitment score. Satisfaction in the relationship was measured by the State-Relationship Questionnaire, Trait Form (O’Connor, Bissell, Rohrbaugh, & Shoham, 1999). The scale provides 24 positive and negative adjectives that participants rate according to either how they usually feel toward their partner (e.g., “Connected”, “Interested”, “Irritated”, “Distant”) or how their partner usually makes them feel (“Understood”, “Content”, “Rejected”, “Unappreciated”). The satisfaction score is calculated by taking the difference between the average ratings of the positive adjectives and the negative adjectives. Finally, vitality within the relationship was measured by an adaptation of Ryan & Frederick’s (1997) vitality measure. The scale contains five items, rated on a 7-point Likert scale. Sample items include, “When I am with my partner I feel alive and vital,” “When I am with my partner I feel energized,” and “When I am with my partner I look forward to each new day.” The average of the five items indicates the vitality within the relationship. The internal reliabilities of these

relationship well-being indexes were .90 (intimacy), .79 (commitment), .88 (satisfaction), and .94 (vitality).

Attachment. Adult romantic attachment was measured by the Experiences in Close Relationships scale (ECR; Brennan, Clark, & Shaver, 1998). The scale consists of 36 items that assess individual differences in the dimensions of attachment anxiety (i.e., the extent to which people are insecure versus secure about the extent of their partner's availability and responsiveness) and attachment avoidance (i.e., the extent to which people are uncomfortable being close to others versus secure depending on others). The items are rated on a 7-point Likert scale according to how participants generally experience romantic relationships, not just with their current partner. Sample items assessing attachment anxiety include, "I worry about being abandoned," "I worry that romantic partners won't care about me as much as I care about them," and "I worry about being alone." Sample items assessing attachment avoidance include, "I prefer not to show a partner how I feel deep down," "I get uncomfortable when a romantic partner wants to be very close," and "I want to get close to my partner, but I keep pulling back." The attachment anxiety and avoidance scores are computed by taking the average of the relevant scale items. The internal reliabilities of these scores were .91 (Anxiety) and .92 (Avoidance).

Big Five Personality Dimensions. Personality was measured by the NEO Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992). The scale contains 60 items that measure five personality dimensions: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. The Neuroticism dimension contrasts adjustment or emotional stability with maladjustment or emotional instability. The Extraversion dimension contrasts the tendencies to be sociable, outgoing, and excitement-seeking with the tendencies to be reserved

and independent. The Openness dimension contrasts the tendencies to be curious and unconventional with the tendencies to be closed to new experiences, conventional, and conservative. The Agreeableness dimension contrasts the tendencies to be altruistic and sympathetic with the tendencies to be disagreeable, antagonistic, sceptical, and competitive. The Conscientious dimension contrasts the tendencies to be purposeful, strong-willed, and determined with the tendencies to be lackadaisical and disorganized (Costa & McCrae, NEO Manual). The scores for each personality dimension are computed by taking the average of the relevant items for each scale. The reliabilities of the five factors were .87 (Neuroticism), .76 (Extraversion), .69 (Openness), .83 (Agreeableness), and .84 (Conscientiousness).

Behavioural Activation and Inhibition. The behavioural activation system (BAS) and behavioural inhibition system (BIS) were measured by Carver and White's (1994) BIS/BAS Scales. The scale contains 20 items rated on a scale ranging from "strongly agree" (1) to "strongly disagree" (4). The Behavioural Inhibition contains seven items reflecting a concern over the possibility of a negative event and sensitivity to those events if they occur. Sample items include "I worry about making mistakes" and "Criticism and scolding hurts me quite a bit." Behavioural activation is measured by three subscales, reflecting the multidimensional nature of the behavioural activation system (Carver & White, 1994). The BAS Responsiveness to Reward subscale contains five items reflecting the tendency to respond positively to the occurrence or anticipation of a reward. Sample items include "When I get something I want, I feel excited and energized" and "When I'm doing well at something, I love to keep at it." The BAS Drive subscale contains four items concerning the persistent pursuit of desired goals. Sample items include "When I want something, I usually go all-out to get it" and "When I go after something I use a 'no holds barred' approach." Finally, the Fun Seeking subscale

contains four items representing the tendencies to seek out new rewarding experiences and to act quickly in pursuit of desired goals. Sample includes include “I crave excitement and new sensations” and “I often act on the spur of the moment.” An overall BAS index was calculated by taking the average of the three BAS subscales. The internal reliabilities of these subscales in the current sample were .79 (Behavioural Inhibition) and .74 (Behavioural Activation).

Results

Preliminary Analyses

A preliminary step was to examine the factor structure of the MRA subscales within this sample of married individuals and to derive the indices of motivation. First, for each relational activity, I entered the regulatory style subscales pertaining to that activity into a principal components factor analysis with a varimax rotation (Table 1). Within each activity, the data suggested that the regulatory styles were clustered into two factors, reflecting *autonomous activity motivation* (identified regulation and intrinsic motivation were highly positively correlated and loaded on one factor) and *controlled activity motivation* (external and introjected regulation were highly positively correlated and loaded on another factor). This two-factor structure is consistent with the factor structure observed in a previous sample of dating individuals (Gaine & La Guardia, 2009). Given these factor loadings, within each activity I computed a score for autonomous activity motivation (created by taking the mean of identified regulation and intrinsic motivation ratings) and a score for controlled activity motivation (created by taking the mean of the external and introjected regulation ratings). Table 2 shows the means and standard deviations of scores for autonomous and controlled motivation within each activity.

Next, I examined the intercorrelations among autonomous activity motivation scores across all activities and the intercorrelations among controlled activity motivation scores across all activities (see Table 3 for correlations). Intercorrelations of autonomous activity motivation were moderate and positive, suggesting that the more people feel autonomously engaged in one activity, the more they also report feeling autonomous in other relational activities⁴. A similar

pattern of intercorrelations emerged for controlled activity motivation (below the diagonal in Table 3), suggesting that the more people feel pressured or coerced in one activity, the more they also report feeling pressured or coerced to engage in other relational activities. Notably, for both of the correlation matrices described, people's motivations across activities were only moderately correlated, which suggests that their motivations toward different activities are not completely redundant and thus should be modeled as separate indicators. The pattern of intercorrelations among autonomous and controlled subscales observed in this married sample appears to be consistent with the pattern observed in a previous dating sample (Gaine & La Guardia, 2009).

Accordingly, The MRA factor structure appears to be consistent with two relatively independent factors of autonomous activity motivation and controlled activity motivation in both the current married and previous dating sample. To statistically test the similarity between the MRA's factor structure in the current married and the previous dating sample, I used AMOS to examine whether the MRA factor structure of this married sample fit well with the MRA factor structure of the previous dating sample. Figures 2 and 3 show the two factor model of autonomous and controlled activity motivation for men and women, with the factor loadings and correlation between autonomous and controlled activity motivation restricted to the estimates observed in the dating sample (Gaine & La Guardia, 2009). The model was evaluated for its goodness of fit with the married data using indices including the Generalized Likelihood Ratio (*CMIN*), the Comparative Fit Index (*CFI*), and the Root Mean Square Error of Approximation (*RMSEA*), with criteria for a reasonably well-fitting model of $CMIN/df < 2.5$, $CFI > .90$, and $RMSEA < .08$. Results showed that the restricted model did fit well with the married data ($CMIN = 583.64$, $df = 294$, $p < .001$, $CMIN/df = 1.99$, $CFI = .89$, $RMSEA =$

.073), providing confirmatory evidence that the MRA factor structure is similar across dating and married relationships.

Autonomous and Controlled Activity Motivation Predicting Relationship Well-Being

I next examined the relations of autonomous and controlled activity motivation to relationship well-being. Again, I modeled the autonomous and controlled scores separately, such that the autonomous activity motivation scores were modeled as indicators of an autonomous activity motivation latent variable and the controlled activity motivation scores were modeled as indicators of a controlled activity motivation latent variable (see Figures 4 and 5). The relationship well-being latent variable represents the common factor that explains people's scores on commitment, satisfaction, intimacy, and vitality within the relationship (see Table 4 for means and standard deviations of these variables; see Table 5 for the intercorrelations among the relationship well-being variables).

Multiple-group analysis in AMOS 18.0 (Arbuckle, 2009) was used to analyze data from men and women simultaneously. Examination of these fit indices suggested that the postulated model did not closely fit the observed correlations ($CMIN = 965.2$, $df = 414$, $p < .001$, $CMIN/df = 2.33$, $CFI = .83$, $RMSEA = .085$). This lack of fit was due to certain activities of the MRA being highly related to each other (e.g., sexual and physical intimacy), resulting in highly correlated motivations toward these activities. I therefore allowed correlated errors between three pairs of activities in order to explain commonalities between these activities that were not captured by the autonomous activity motivation and controlled activity motivation latent factors. The chosen pairs were sexual intimacy and physical intimacy (both involve physical closeness), disclosure of feelings and disclosure of thoughts (both involve self-disclosure), and

social support and instrumental support of problems (both activities emphasize helping one's partner cope with problems). The inclusion of these correlated errors substantially improved model fit, as evidenced by the change in *CMIN* [$965.2 (414) - 770.9 (400) = 194.3, df = 14, p < .001$], and resulted in acceptable fit with the observed correlations ($CMIN = 770.9, df = 400, p < .001, CMIN/df = 1.93, CFI = .89, RMSEA = .071$).

To assess whether there were differences between men and women on specific parameter estimates, I systematically set some parameters to be equal across gender and examined whether these restrictions significantly decreased model fit. First, to ensure that the autonomous activity motivation factor, controlled activity motivation factor, and the relationship well-being factor represented the same constructs across gender (i.e., metric equivalence), I held the factor loadings for the autonomous and controlled activity motivation scores and the relationship well-being indices constant across gender. These restrictions did not result in a significant decrease in model fit, suggesting that the latent factors of the MRA and relationship well-being were metrically equivalent across gender.

I then tested for gender differences among the latent variables (i.e., the structural model) by holding constant the variances of the latent variables and the covariances between the variables. These restrictions resulted in a significant decrease in model fit, as evidenced by a significant increase in *CMIN* [$788.6 (406) - 770.9 (400) = 17.7, df = 6, p < .01$]. This decrease in model fit suggests that the variances of the latent variables and/or the relations among the variables were not equivalent across gender. To identify the parameters that were unequal across gender, I separately held constant each latent variable variance and each covariance between the latent variables and examined the resulting change in model fit. The only parameter that resulted in a significant increase in *CMIN* when held constant across

gender was the regression weight of relationship well-being on autonomous activity motivation ($780.1 (401) - 770.9 (400) = 9.2, df = 1, p < .005$). Given that the regression weight between autonomous activity motivation and relationship well-being is stronger among women than men, the change in CMIN suggests that this relation is significantly stronger among women than men.

The standardized estimates are displayed in Figures 4 (men) and 5 (women). I present the model with no restrictions across gender because of the significant gender difference in the effect of autonomous activity motivation and because the unrestricted model provides descriptive information about men and women separately. First, examining the relation of autonomous to controlled activity motivation, results show that for both men and women, autonomous activity motivation and controlled activity motivation were not significantly correlated ($r = .16, n.s.$, for men; $r = .08, n.s.$ for women), suggesting that these two activity motivation factors are unrelated to each other in married individuals. Next, the more that married people were willingly engaged in the activities of their relationship (autonomous activity motivation), the greater their relationship well-being ($\beta = .40, p < .001$ for men; $\beta = .82, p < .001$ for women). Finally, the more people felt pressured or coerced to engage in the activities of their relationship (controlled activity motivation), the lower their relationship well-being ($\beta = -.45, p < .001$ for men; $\beta = -.45, p < .001$ for women)⁵.

Autonomous and controlled activity motivation both uniquely predicted relationship well-being and together explained 28% (men) and 78% (women) of the variance in the relationship well-being latent factor⁶. The difference in multiple R^2 for men and women was .50, with a 95% confidence interval of .32 to .68. Since the confidence interval did not contain zero, it can be concluded that the difference is significantly greater than zero. Thus, women's

activity motivations explain more variance in relationship well-being than do men's activity motivations, suggesting a closer link between motivations and relationship well-being among women than among men.

Relations of the MRA to Attachment Security, Personality, and Behavioural Activation and Inhibition

Next, I examined the correlations of autonomous and controlled activity motivation with dimensions of attachment, personality, and behavioural activation and inhibition (see Table 4 for the means and standard deviations of these indices; see Table 6 for the intercorrelations among these variables). To provide summary indices of the MRA, I calculated an overall autonomous activity motivation score by averaging across the MRA autonomous activity motivation scores ($M = 5.74$, $SD = 0.89$) and an overall controlled activity motivation score by averaging across the MRA controlled activity motivation scores ($M = 3.19$, $SD = 1.01$). I estimated the following correlations using AMOS 18.0 (Arbuckle, 2009) and then tested for differences in the magnitude of correlations. Gender differences were tested by examining decreases in model fit that resulted from holding the unstandardized covariances between variables constant across gender. Differences in the strength of association between different pairs of variables (e.g., autonomy and Neuroticism vs. autonomy and Extraversion) were tested by holding the unstandardized covariances between variables constant across different associations for each gender separately. Significant differences between correlations were evidenced by a significant decrease in model fit resulting from restrictions to the unstandardized covariances. In the following analyses, there was no evidence of differences in correlations unless otherwise specified.

First, examining associations to attachment, I computed correlations between relational activity motivation and dimensions of attachment anxiety (i.e., fear of rejection) and attachment avoidance (i.e., fear of closeness). When examining autonomous and controlled activity motivation separately, it appears that each relates differently to the dimensions of attachment. As predicted, autonomous activity motivation was negatively associated with attachment avoidance ($r = -.47, p < .001$ among men; $r = -.56, p < .001$ among women) but was unrelated to attachment anxiety ($r = -.11, n.s$ among men; $r = -.03, n.s.$ among women), such that the less fearful people are of closeness and the less they avoid dependence in relationships, the more willingly engaged they are in their relational activities. Tests of differences between correlations showed that autonomous activity motivation was more strongly associated with attachment avoidance than it was with attachment anxiety ($\Delta \chi^2 = 5.4, df = 1, p < .02$, for men; $\Delta \chi^2 = 23.1, df = 1, p < .001$, for women).

Notably, controlled activity motivation was positively associated with attachment avoidance among men ($r = .33, p = .007$) but not among women ($r = .13, n.s.$), such that the more men fear closeness and avoid dependence in their relationships, the more pressured they feel to engage in relational activities. As predicted, controlled activity motivation was positively associated with attachment anxiety ($r = .51, p < .001$ among men; $r = .49, p < .001$ among women), such that the more people fear rejection and abandonment by their partner, the more pressured they feel to engage in relational activities. Tests of differences between correlations showed that controlled activity motivation was more strongly associated with attachment anxiety than with attachment avoidance among women ($\Delta \chi^2 = 15.1, df = 1, p < .001$) but not among men ($\Delta \chi^2 = 3.6, df = 1, n.s.$). Importantly, the magnitude of the

correlations between activity motivations and attachment dimensions are moderate but not high enough to indicate that the constructs are overlapping.

Second, I explored the associations between motivations toward relational activities (MRA) and the Big-Five personality traits (Table 7). The correlations between the MRA and the Big-Five personality dimensions were modest, suggesting that activity motivation is relatively independent of personality. Both autonomous and controlled activity motivations showed associations to many of the Big Five dimensions. Among men, autonomous activity motivation was positively associated with Extraversion and Conscientiousness. Thus, men were more willingly engaged in relational activities when they were more outgoing, experienced more positive affect, and were more conscientious. Among women, autonomous activity motivation was positively correlated with Extraversion and Agreeableness. Thus, women were more willingly engaged in their relational activities when they were friendlier, more outgoing, and experienced more positive affect. As predicted, autonomous activity motivation was positively linked to Extraversion in both men and women, but the magnitude of these correlations were modest, suggesting that autonomous activity motivation is relatively independent from Extraversion.

Among men, controlled activity motivation was positively correlated with Neuroticism and negatively correlated with Openness and Agreeableness. Thus, men felt more pressured to engage in relational activities when they were more disagreeable, less open to experience, and experienced more negative affect. Among women, controlled activity motivation was positively correlated with Neuroticism and negatively associated with Openness and Conscientiousness. Women felt more pressured to engage in relational activities when they experienced more negative emotions and were more closed to experience, rigid, and less

responsible. Tests of differences between correlations suggested that the association of controlled activity motivation with Neuroticism was different than its associations with the other Big Five personality dimensions ($\Delta \chi^2 = 25.4$, $df = 4$, $p < .001$, for men; $\Delta \chi^2 = 29.6$, $df = 1$, $p < .001$, for women). Thus, as expected, controlled activity motivation was positively linked to Neuroticism, but again the modest size of these correlations suggests that controlled activity motivation is largely independent from Neuroticism.

Finally, I examined the relations between motivations toward relational activities (MRA) and the dimensions of behavioural activation (BAS) and inhibition (BIS)⁷. Autonomous activity motivation and BAS were positively associated among women ($r = .77$, $p < .001$) but were unrelated among men ($r = .27$, *n.s.*). That is, the more that women tend to approach and respond positively to achieving desired goals, the more willingly engaged they are in the activities of their relationship. The association between BAS and autonomous activity motivation was stronger among women than among men as evidenced by the significant decrease in model fit that resulted from holding the unstandardized covariances constant across gender ($\Delta \chi^2 = 3.9$, $df = 1$, $p < .05$). As predicted, autonomous activity motivation was unrelated to BIS among both men ($r = .11$, *n.s.*) and women ($r = .22$, *n.s.*). Further tests of differences between correlations showed that autonomous activity motivation was more strongly linked to BAS than to BIS among women ($\Delta \chi^2 = 8.9$, $df = 1$, $p < .01$) but not among men ($\Delta \chi^2 = 0.2$, $df = 1$, *n.s.*). These results only partly confirm the prediction that autonomous activity motivation is positively linked to BAS, since the association was only observed among women. Further, the large magnitude of association between BAS and autonomous activity motivation among women suggests that these constructs are closely related.

Controlled activity motivation and BIS were positively associated among men ($r = .39$, $p = .012$) but were unrelated among women ($r = -.04$, *n.s.*). That is, the more that men are concerned about the possibility of negative events happening and are sensitive to such events when they occur, the more that they feel pressured and obligated to engage in the activities of their relationship. The association between controlled activity motivation and BIS was stronger among men than among women as evidenced by the significant decrease in model fit that resulted from holding the unstandardized covariance constant across gender ($\Delta \chi^2 = 5.5$, $df = 1$, $p < .02$). Finally, controlled activity motivation was unrelated to BAS among men and women ($r = .20$, *n.s.*, for men; $r = .23$, *n.s.*, for women). These results only partly confirm the prediction that controlled activity motivation is positively linked to BIS, since the association was only observed among women. The magnitude of association between controlled motivation and BIS among men is moderately sized, suggesting that these constructs are not overlapping. Also, as expected, controlled motivation was not significantly related to BAS.

Relations between autonomous and controlled activity motivation and self-reported relational behaviour

Finally, to provide an indication of the behavioural manifestations of different activity motivations, I examined how autonomous and controlled activity motivations related to self-reported positive and negative approach behaviours and withdrawal/avoidance behaviours in the relationship. First, I examined the intercorrelations among the behaviour subscales averaged across activities (see Table 4 for the means and standard deviations of these indexes). The positive approach index was negatively correlated with the negative approach index ($r = -.25$, $p = .001$) and the withdrawal/avoidance index ($r = -.31$, $p < .001$), such that the more people engage in positive approach behaviours in their relationship, the less they engage in

negative approach behaviours and attempt to withdraw from or avoid their partner. The negative approach index was highly positively correlated with the withdrawal/avoidance index ($r = .92, p < .001$), such that the more people engage in negative approach behaviours, the more they also try to withdraw from or avoid their partner.

I next examined the associations between relational activity motivations and self-reported relational behaviour (Table 8). Autonomous activity motivation was positively associated with positive-approach behaviour, such that the more people were willingly engaged in the activities of their relationship, the more they reported engaging in positive-approach behaviours with their partner ($r = .73, p < .001$ for men and women). Autonomous activity motivation was negatively associated with negative-approach behaviours and withdrawal/avoidance, such that the more people were willingly engaged in relational activities, the less they reported engaging in negative-approach behaviour and withdrawal/avoidance of their partner (correlations ranged from $-.27$ to $-.38$). Tests of differences between correlations showed the association of autonomous activity motivation with positive-approach behaviour was significantly different than its association with negative-approach ($\Delta \chi^2 = 37.3, df = 1, p < .001$, for men; $\Delta \chi^2 = 46.6, df = 1, p < .001$, for women) and withdrawal/avoidance ($\Delta \chi^2 = 44.6, df = 1, p < .02$, for men; $\Delta \chi^2 = 51.3, df = 1, p < .001$, for women).

Controlled activity motivation was unrelated to positive-approach behaviour in both men and women. Controlled activity motivation was positively associated with negative-approach and withdrawal/avoidance, such that the more that people felt pressured and obligated to engage in relational activities, the more they reported engaging in negative-approach behaviours and withdrawal/avoidance of their partner (correlations ranged from $.46$

to .72). Tests of differences between correlations showed the association of controlled activity motivation with positive-approach behaviour was significantly different than its association with negative-approach ($\Delta \chi^2 = 10.9$, $df = 1$, $p < .001$, for men; $\Delta \chi^2 = 31.1$, $df = 1$, $p < .001$, for women) and withdrawal/avoidance ($\Delta \chi^2 = 9.2$, $df = 1$, $p < .005$, for men; $\Delta \chi^2 = 24.7$, $df = 1$, $p < .001$, for women).

Discussion

Factor structure of MRA and its associations with relationship well-being

The initial purpose of Study 1 was to assess the factor structure of the MRA among married individuals. As predicted, the factor structure that emerged for married individuals was similar to the structure observed by Gaine and La Guardia (2009) for those in dating relationships. Specifically, within each activity, I found that the regulatory styles were again clustered into two factors, reflecting *autonomous activity motivation* (identified regulation and intrinsic motivation were highly positively correlated and loaded on one factor) and *controlled activity motivation* (external and introjected regulation were highly positively correlated and loaded on another factor). Intercorrelations of autonomous activity motivation across relational activities were moderate and positive, suggesting that the more people felt autonomously engaged in one activity, the more they also reported feeling autonomous in other relational activities. A similar pattern of intercorrelations emerged for controlled activity motivation, suggesting that the more people felt pressured or coerced in one activity, the more they also reported feeling pressured or coerced to engage in other relational activities. These results suggest that people's motivations toward relational activities are organized similarly across relationships of different types (i.e., dating and marriage).

Study 1 also showed that when married individuals are more willing and less pressured to engage in relational activities, they experience greater relationship well-being, including greater intimacy, satisfaction, and vitality within their relationship. Interestingly, married women showed a stronger relation between their autonomous activity motivation and their relationship well-being as compared to men. This result suggests that in marriage, feeling volitional in relational activities is particularly important for women's relationship well-being.

This gender difference is consistent with some previous research that shows that women's positive relational engagement is more important to relationship well-being than it is for men (Laurent, Kim, & Capaldi, 2009; Weigel & Ballard-Reisch, 1999).

Relation between individual differences and relational activity motivations

I explored the associations between relational activity motivations and several individual difference constructs that possess some conceptual similarity to autonomous and controlled motivation, including attachment, personality, and behavioural approach and avoidance. The observed associations suggest that the dimensions of autonomous and controlled behaviour regulation are generally not redundant with or explained by any of the other individual differences dimensions measured in this study. Further, the associations found suggest that volitional engagement and pressured engagement are distinct dimensions in romantic relationships with their own links to individual and relational functioning.

First, examining associations with attachment, it appears that the dimensions of motivation relate clearly to different dimensions of attachment insecurity. In particular, the more willingly engaged people are in their relational activities, the less fearful they are of closeness and the less they avoid being dependent on relationships. In contrast, the more pressured people feel to engage in relational activities, the more they fear rejection and abandonment by their partner. The only exception to this pattern was that the more men feel pressured to engage in relational activities, the more they fear closeness and avoid dependence in their relationships. These associations are similar to those observed in a dating sample (Gaine & La Guardia, 2009), suggesting that type of relationship (dating vs. married) may not alter the links between attachment and activity motivation.

Exploring associations with personality, it appeared that autonomous and controlled activity motivation for the most part related to different dimensions of personality. Further, these associations seemed to differ somewhat based on gender. When men were more willingly engaged in relational activities, they tended to be more Extraverted and Conscientious. In comparison, when women were more willingly engaged in relational activities, they tended to be more Extraverted and Agreeable. Similar to associations with autonomous activity motivation, there were some relations between controlled activity motivation and personality that were shared by both men and women and some that were gender-specific. When men felt more pressured to engage in relational activities, they tended to be higher in Neuroticism and lower in Openness and Agreeableness. In comparison, when women felt more pressured to engage in relational activities, they tended to be higher in Neuroticism and lower in Agreeableness and Conscientiousness.

Some of these links between activity motivation and personality were observed in a dating sample (Gaine & La Guardia, 2009). In particular, Gaine and La Guardia (2009) found that when men were more willingly engaged in relational activities, they tended to be higher on Extraversion. Also, when women were more willingly engaged in relational activities, they tended to be higher on Agreeableness. They also found that when men were more pressured to engage in relational activities, they tended to be higher on Neuroticism and lower on Openness and Agreeableness. Lastly, when women were more pressured to engage in relational activities, they tended to be lower on Openness. The other links between motivation and personality were not consistent across the dating sample and the current married sample. These inconsistencies could be partly due to the different demands that accompany marriage (e.g., integrating lifestyles, sharing household tasks, and parenting) for which different

personality dimensions might be relevant. However, given that the size of the correlations between motivation and personality are small, I cannot be sure whether the inconsistency in associations across samples is due to actual substantive differences across samples or a lack of power to obtain significance in one or both samples.

Lastly, I examine the associations of autonomous and controlled activity motivation with the Behavioural Activation System (BAS) and the Behavioural Inhibition System (BIS). I predicted that greater autonomous activity motivation, which represents intrinsic motivation and an approach of personally-endorsed goals, would be linked to a greater tendency toward behavioural activation. I did not expect an association between autonomous activity motivation and behavioural inhibition, as the autonomy scales of the MRA do not contain items pertaining to the avoidance of negative outcomes. As predicted, Behavioural Activation (BAS) was positively associated with autonomous activity motivation but unexpectedly only among women. That is, when women are willingly engaged in the activities of the relationship, they tend to approach and respond positively to desired goals. Also, as predicted, autonomous activity motivation was unrelated to BIS among both genders. Given the bias toward avoidance items in the controlled activity motivation subscales of the MRA, I predicted a modest positive association between behavioural inhibition and controlled activity motivation as well as a modest positive association or no relation between behavioural activation and controlled activity motivation. Behavioural Inhibition (BIS) was positively associated with controlled activity motivation among men, but surprisingly they were not associated among women. That is, the more pressured and obligated men feel to engage in the activities of their relationship, the more they are concerned about the possibility of negative events or sensitive

to such events when they occur. Finally, as predicted, I found that controlled activity motivation was unrelated to BAS among both genders.

Notably, I predicted that autonomous activity motivation would be positively correlated with BAS but observed this only among women. Similarly, I predicted that controlled activity motivation would be positively correlated with BIS but observed this only among men. These results cannot likely be explained by biases in item content, which were discussed above, since both men and women presumably would respond similarly to these biases. A possible explanation for the gender difference may be that men and women are socialized differently, such that men have an independent or agentic self-construal and women to have an interdependent or communal self-construal (Cross & Madson, 1997; Eagly, 2009; Helgeson, 1994). Individuals who have an interdependent self-construal seek to maintain relatedness and closeness with others, while those who have an independent self-construal seek to maintain a sense of independence, uniqueness, and individuality (Cross & Madson, 1997; Eagly, 2009; Helgeson, 1994). Women's more interdependent self-construal might lead them to have more internalized personal goals to pursue and maintain close relationships. Thus, those women who have a greater tendency to approach desired goals (i.e., higher BAS), would likely approach the desired goal of closeness with their partner and experience their activities with their partner as autonomous, or consistent with their internalized goals to maintain relatedness to close others. In contrast, men's more independent self-construals might lead them to avoid becoming too close to their partner for fear of losing their independent identity. Thus, men who have a greater concern over the possibility of negative events and sensitivity to those events if they occur (i.e., higher BIS), may be more likely to avoid closeness with their partner for fear of losing independence. Consequently, such men might then perceive their

engagement in relational activities as due to perceived pressure, such as obligation or coercion by the partner. Future research should examine these potential differences in self-construal as an explanatory mechanism for the gender differences observed.

Self-reported behavioural correlates of relational activity motivations

A final aim of study 1 was to examine how relational activity motivations are associated with self-reported relational behaviour. Subscale reliabilities suggested that the items clustered in the proposed categories of positive-approach, negative-approach, and withdrawal/avoidance. The positive approach index was negatively correlated with the negative approach index and the withdrawal/avoidance index, such that the more people engage in positive approach behaviours in their relationship, the less they engage in negative approach behaviours and withdraw from or avoid their partner. The negative approach index was highly positively correlated with the withdrawal/avoidance index, such that the more that people engage in negative approach behaviours, the more they withdraw from or avoid their partner. Thus, it is reasonable to consider the scale as separating into positive approach relational behaviours and negative relational behaviours, including negative approach and withdrawal/avoidance of the partner.

I hypothesized that greater autonomous activity motivation would be associated with greater positive-approach and with less negative-approach and withdrawal/avoidance within a given activity. As predicted, I found that when people were willingly engaged in their relational activities, they reported engaging in more positive approach behaviour and less negative approach and withdrawal/avoidance. In contrast, I found that controlled activity motivation would be associated with greater negative-approach and withdrawal/avoidance and with less positive-approach. That is, when people feel more pressured to engage in relational

activities, they reported engaging in more negative approach behaviour and withdrawal from and avoidance of the partner. It is noteworthy that positive approach relational behaviours were linked to autonomous activity motivation but not controlled motivation. The lack of association between controlled activity motivation and positive approach behaviour is consistent with research on the consequences of controlled regulation. Research has suggested that, ironically, controlled regulation may not lead to the actions that the individual intends because the behaviour is not “owned” by the individual and instead it results in limited persistence of behaviour in the face of obstacles or competing temptations (Sheldon & Elliot, 1998; Pelletier, Fortier, Vallerand, and Brière, 2002).

Limitations

There are several limitations of Study 1. First, the sample was composed of individuals who were relatively satisfied in their relationships, which limits the applicability of the results to distressed couples. It is possible that in distressed couples, controlled activity motivation, or pressured engagement, might become a stronger negative predictor of relationship well-being. The results of the current study suggest that greater pressure is related to more negative approach behaviours and withdrawal from and avoidance of the partner. These clusters of negative relational behaviour bear resemblance to Gottman’s four destructive forms of partner communication: criticism, contempt, defensiveness, and stonewalling (Gottman, Coan, Carrere, & Swanson, 1998; Gottman & Levenson, 2000). These forms of communication have been observed in distressed couples and have been linked to the eventual demise of the relationship (Gottman, Coan, Carrere, & Swanson, 1998; Gottman & Levenson, 2000). Thus, in distressed couples, where conflict has become central, the presence of perceived pressure

and coercion to engage in relational activities could result in destructive communication behaviours, which could worsen already troubled relations.

A central limitation of Study 1 is that I only collected data from one individual rather than from both partners in the couple. Individual-level data ignores the fundamental interdependence that defines interpersonal relationships (Kelley & Thibaut, 1978). In particular, this study cannot address whether an individual's activity motivations have an influence on the partner's relational functioning and well-being. To address this limitation, I collected data from both members of the couple in Study 2 to examine the potential influence of each partner's motivations on the other's relational outcomes.

Finally, Study 1 provided an initial step toward understanding the behavioural correlates of autonomous and controlled relational activity motivations. However, this study assessed relational behaviour only through self-report. The correspondence between the self-report of these relational behaviours and objective indices is unclear. To provide converging information on the behavioural correlates of activity motivation, Study 2 I employ daily diaries in which partners rate each other's daily relational behaviour.

Study 2

A limitation of Gaine and La Guardia (2009) and Study 1 is that both examine motivational processes within the individual rather than within the couple. It is evident from Gaine and La Guardia (2009) and Study 1 that one's motivations toward relational activities are associated with one's relationship well-being. An unaddressed question is whether one's motivations toward relational activities affect one's partner's relationship well-being as well. Study 2 assesses the relational activity motivation of both partners in married and common-law relationships and examines how these motivations might affect each partner's relationship well-being.

In Study 2, data was collected from both members of married and common-law couples. The Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000) suggests that a person's standing on an independent variable affects that person's outcomes (actor effect) and the partner's outcomes (partner effect). Using APIM, Study 2 estimates the actor and partner effects of autonomous and controlled activity motivation on a number of relationship well-being indices, including intimacy, satisfaction, and vitality within the relationship. In addition to hypothesizing that one's own autonomous and controlled activity motivation will predict one's relationship well-being (actor effect), it is expected that one's relational activity motivation will predict one's partner's relationship well-being (partner effect). Knee et al. (2005) demonstrated that both partners' relative autonomy to maintain their relationship affected both their own and their partner's satisfaction with the relationship, such that the greater each partner's relative autonomy to maintain the relationship, the greater was their partner's satisfaction with the relationship. Similarly, Blais et al. (1990) showed a partner effect of relative autonomy to maintain a relationship on the perception of adaptive couple

behaviours (e.g., consensus, cohesion, and affectional expression). However, this partner effect was present only among women, such that the greater women's relative autonomy to maintain their relationship, the greater were men's perceptions of adaptive couple behaviours in the relationship. I expect that there will be partner effects of relational activity motivations on relationship well-being. In particular, I expect that the more willing and less pressured individuals feel to engage in relational activities, the greater will be their partner's relationship well-being. Although I do not expect gender differences, I test gender as a moderator of these effects.

Another limitation of Study 1 is that I assessed only general relational functioning at one time point. To address this limitation, in Study 2, I employ daily diaries to collect repeated measures of couples' daily relational functioning and well-being. As discussed above, one's own relational activity motivations are associated with one's own relational outcomes. Accordingly, I expect that individuals' relational activity motivations will predict their daily relationship well-being, including daily relationship satisfaction and daily psychological need satisfaction within the relationship. In particular, the more willing and the less pressured individuals are to engage in the activities of their relationship, the higher will be their daily relationship well-being. Also, I expect that there will be partner effects of relational activity motivation on daily relationship well-being. In particular, I hypothesize that when one's partner is more willing and less pressured to engage in the activities of the relationship, one is likely to report higher daily relationship satisfaction and daily psychological need satisfaction within the relationship.

To provide a more behavioural index of daily relationship well-being, participants rated the quality of their interactions with their partner that day. Higher quality interactions were

those that were more intimate, in-depth, smooth, and conflict-free. I expect that when individuals are more willing and less pressured to engage in relational activities, they will report greater daily interaction quality with their partner. It is also expected that when individuals are more willing and less pressured to engage in relational activities, their partner will observe greater daily interaction quality as well.

Study 1 was also limited in that it collected only self-report data. In Study 2, couples were asked to provide daily reports on their partner's relational behaviour, including the partner's daily engagement in a variety of relational activities as well as daily responsiveness. This data allows me to examine whether individuals' relational activity motivations are associated with their daily relational behaviour as observed by their partner. Results of Study 1 showed that greater autonomous activity motivation was associated with greater self-reported positive approach relational behaviour and lower self-reported negative approach relational behaviour and withdrawal/avoidance of the partner. Greater controlled activity motivation was associated with greater self-reported negative approach relational behaviour and withdrawal/avoidance of the partner. It is expected that these self-reported relational behaviours will be observable to the partner on a daily basis. In particular, it is hypothesized that the greater individuals' autonomous activity motivation and the lower their controlled activity motivation, the more their partner will observe them to be present and engaged in daily relational activities and responsive to the partner's needs.

In Study 2, I also explore the partner effects of autonomous and controlled activity motivation on daily engagement and responsiveness. Knee et al. (2005) showed that when one's partner has relatively autonomous reasons for maintaining the relationship, one is more likely to respond to conflict with less defensiveness (self-report and observed) and more

understanding (observed). This result suggests that a partner who maintains the relationship for relatively autonomous reasons provides an interactional context that encourages one to be less defensive and more understanding, probably in part because the partner is being less defensive and more understanding. In Study 2, I expect that when one's partner is more willing and less pressured to engage in relational activities, the partner will provide an interactional context that encourages one to be more engaged in daily relational activities as well as more responsive.

Method

Participants and Procedure

Seventy-three married and common-law couples were recruited through newspaper advertisements, online newsletters and advertisements, posters, and from information booths at shopping malls. The diary data of eight couples was excluded because the couples either did not adequately complete the daily diary or had technical difficulties with the palm pilots used to complete the diary. The average age of the overall sample was 32.4 years (range 18 to 62 years, $SD = 10.3$). The participants were predominantly White (68% White, 19% Asian, 7% East Indian, 3% Hispanic, and 3% other). Couples reported being married to or in common-law status with their current partner for a mean of 6.8 years (range 2 months to 40 years and 2 months, $SD = 8.3$ years). Thirty-four percent of the sample reported having children, including biological, step, or adopted.

The couples completed cross-sectional measures on two occasions separated by two weeks, during which time they completed the daily diary. During the first in-lab session, each member of the couple received a Tungsten 3 Palm Pilot on which to complete daily measures and an instruction sheet to remind them of the tasks for the 14 days of the diary study. Research assistants trained each participant on the use of the palm pilot and helped them navigate a complete set of the measures for the study, clarifying the meaning of any items contained in the diary, and answering any questions about the procedure.

At the end of each day, participants completed a variety of questions on their interactions with their partner that day. First, participants indicated the amount of time they spent with their partner as well as type of activities they engaged in together. They were then

asked to what extent their partner was “present and engaged” that day during a variety of relational activities. Then, they rated the overall quality of their interactions with their partner on that day. Next, they indicated their level of relationship satisfaction on that day and the degree to which their partner was responsive to their needs.

Participants came back to the lab after the two weeks and data was checked for compliance. Because each of the records were time and date stamped by the palm pilot when participants completed each record, research assistants were able to assess how well participants were adhering to the time of day requirements for day-end records (making a record at the actual end of day rather than recalling the previous day the next morning and making a record then). Because two couples did not meet the minimum standard of compliance (at least 70% of records valid), their diary data was dropped from the study. Each participant received \$15 for completing the two questionnaire packages and \$10 and a free movie ticket for adequately completing the diary measures.

Cross-Sectional Measures

Motivations for Relational Activities (MRA). Motivations toward relational activities were measured with the MRA (see Study 1 Method for description of the measure). For the purposes of the following analyses, I calculated overall autonomous and controlled activity motivation by averaging across relational activities. The internal reliabilities of these scores were .87 for average autonomous activity motivation, and .94 for average controlled activity motivation.

Relationship well-being. Several constructs representing relationship well-being were assessed, including intimacy, satisfaction, and vitality within the relationship. These constructs

were assessed using the same measures employed in Study 1. The internal reliabilities of these relationship well-being indices were .89 (intimacy), .94 (satisfaction), and .86 (vitality).

Day-End Measures

Daily relationship satisfaction. Daily satisfaction with the relationship was measured by the State-Relationship Questionnaire, modified to assess relationship satisfaction for the day (O'Connor, Bissell, Rohrbaugh, Shoham, 1999). Participants rated adjectives according to how they felt toward their partner and then how their partner made them feel on the given day. For days in which the partners interacted, a relationship satisfaction score was calculated by taking the difference between the average ratings of the positive adjectives and the negative adjectives. I computed an overall daily satisfaction score by averaging participants' daily satisfaction ratings across the two weeks. The reliability of this average score was .93.

Daily need satisfaction within the relationship. Daily need satisfaction in the relationship was measured by the Need Satisfaction Scale (La Guardia et al., 2000). The scale assesses the extent to which people feel their needs for autonomy, relatedness, and competence are being fulfilled in their current relationship. The scale contains three items for each psychological need, which are rated on a 7-point Likert scale according to how the person feels when they are with their partner that day. Sample items include, "Today with my partner, I felt free to be who I am" (autonomy), "Today with my partner, I felt like a competent person" (competence), and "Today with my partner, I felt loved and cared about" (relatedness). The score for each need is calculated by taking the average of the three relevant items for each subscale. For days in which the partners interacted, a need satisfaction score was computed using the average of the autonomy, competence, and relatedness need satisfaction scores. I

computed an overall need satisfaction score by averaging participants' daily need satisfaction ratings across the two weeks. The reliability of this average score was .94.

Daily interaction quality. Four items assessed the quality of the interactions with the partner, with 10-point scale anchors of “distant” to “intimate”, “superficial” to “in-depth”, “difficult” to “smooth”, and “conflictual” to “conflict free”. For days in which the partners interacted, interaction quality was indexed by the mean of the four items, with higher scores indicating more positive and depthful interaction with one's partner that day. I computed an overall interaction quality score by averaging participants' daily interaction quality ratings across the two weeks. The reliability of this average score was .88.

Partner engagement. To measure perceived partner engagement each day, participants indicated the extent to which their partner was “present and engaged” in different types of contact using a 5-point Likert scale from “not at all” (1) to “very much” (5). Types of contact included: 1) Listening to you, 2) Doing instrumental activities (chores, housework, paying bills, etc.), 3) Doing family or social activity, 4) Engaging in physical intimacy (cuddling, kissing, sex, etc.), 5) Arguing/disagreeing, 6) Doing a leisure/fun activity. If a couple did not have contact of a certain type during a given day, they were instructed to indicate that the contact type was “not applicable” for that day. For days in which participants interacted with their partner, a partner engagement score was computed by averaging the engagement scores across the applicable activities of that day. An overall partner engagement score was computed by averaging the daily engagement scores across the two weeks. The reliability of this average score was .92.

Partner responsiveness. The degree to which participants felt that their partner was responsive to them was assessed using a set of items developed for this study. On a 10-point scale from “not at all” (1) to “very much” (10), participants rated the extent to which their partner conveyed various forms of responsiveness. The items included: “I felt connected to him/her,” “I felt that he/she showed me empathy and provided support,” “I felt that she/she was responsive to my needs,” “He/she seemed aware of what I was thinking and feeling,” “He/she conveyed that he/she understands me,” “He/she really listened to me,” “He/she expressed liking and encouragement of me,” “He/she seemed interested in what I was thinking and feeling,” and “He/she seemed interested in doing things with me.” For days in which participants interacted with their partner, a partner responsiveness score was computed by averaging the responsiveness items. An overall partner responsiveness score was computed by averaging the daily responsiveness scores across the two weeks. The reliability of this average was .94.

Results

An initial step was to explore the intercorrelations among partners' autonomous and controlled activity motivations. In the analyses that follow, autonomous activity motivation represents the average of the autonomous motivation scores across activities ($M = 5.71$, $SD = 0.68$) and controlled activity motivation represents the average of the controlled motivation scores across activities ($M = 2.87$, $SD = 1.01$). Consistent with the results of Study 1, autonomous and controlled activity motivation were unrelated among men ($r = .02$, *n.s.*) and women ($r = .20$, *n.s.*). Men's autonomous activity motivation was unrelated to women's autonomous activity motivation ($r = .15$, *n.s.*) as well as women's controlled activity motivation ($r = -.04$, *n.s.*). Men's controlled activity motivation was unrelated to women's autonomous activity motivation ($r = .08$, *n.s.*) but was positively correlated with women's controlled activity motivation ($r = .50$, $p < .001$), such that the more pressured men felt to engage in relational activities, the more pressured women also felt.

I then used both partners' autonomous and controlled activity motivation scores to predict each partner's self-reported relationship well-being, average daily relationship well-being, and average daily engagement and responsiveness. Using AMOS 18.0, I simultaneously estimated the actor and partner effects of autonomous and controlled activity motivation on each outcome variable. All variables used in these analyses were standardized using the means and standard deviations of the entire sample, which causes the coefficients of the unstandardized model to appear in standardized form. Further, standardizing the variables makes the path coefficients directly comparable across gender allowing for tests of gender differences. Gender differences in actor and partner effects were evaluated by constraining the actor or partner effects of autonomous or controlled activity motivation to be equal across

gender and then assessing whether these constraints resulted in a significant decrease in model fit. There were no gender differences in actor and partner effects unless otherwise specified.

Three categories of outcome variables were considered in these analyses. The relationship well-being indices included intimacy, satisfaction, and vitality within the relationship. The average daily relationship well-being outcomes included daily relationship satisfaction, need satisfaction in the relationship, and perceived interaction quality. Lastly, the daily relational behaviour outcomes included average daily engagement in relational activities and responsiveness to the partner. The intercorrelations among these outcome variables suggest that these outcomes are for the most part moderately positively correlated (Table 9). Further, the intercorrelations provide some support for the grouping of outcome variables discussed above. That is, the largest intercorrelations occur among outcome variables within the same category, suggesting that those indices are tapping similar relational outcomes. The ranges of correlations among variables within the same category were .63 to .78 (relationship well-being), .82 to .94 (daily relationship well-being) and .69 (daily relational behaviour).

Actor and Partner Effects of Autonomous and Controlled Activity Motivation on Relationship Well-Being

First, I examined the prediction of partners' intimacy, satisfaction, and vitality within the relationship (see Table 10 for means and standard deviations of these variables). The estimates for the actor and partner effects of autonomous and controlled activity motivation on each of the relationship well-being indices can be seen in Table 11 and Figures 6-8 (note, the remaining tables and figures provide the same information but were both included to help the reader understand the pattern of results). Each partner's autonomous activity motivation positively predicted their own intimacy, satisfaction, and vitality scores, such that the more

people are willingly engaged in their relational activities, the greater their own intimacy, satisfaction, and vitality within the relationship. Similarly, each partner's controlled activity motivation was negatively related to their own intimacy, satisfaction, and vitality scores, such that the more pressured people feel to engage in relational activities, the less their own intimacy, satisfaction, and vitality within the relationship. There were no significant partner effects of autonomous and controlled activity motivation on the relationship well-being indices, with the exception of women's autonomous activity motivation on men's relationship satisfaction. These results suggest that the more volitional women are in their relational activities, the more satisfied are men with the relationship.

Relational Activity Motivations Predicting Average Daily Relationship Satisfaction, Daily Psychological Need Satisfaction within the Relationship, and Daily Interaction Quality

Next, I examined the prediction of partners' average daily relationship satisfaction and psychological need satisfaction within the relationship (see Table 10 for means and standard deviations of these variables). The estimates for the actor and partner effects of autonomous and controlled activity motivation on these indicators of daily relationship well-being can be seen in Table 12 and Figures 9 and 10. Each partner's autonomous activity motivation positively predicted their own daily relationship satisfaction and need satisfaction, such that the more people are willingly engaged in their relational activities, the greater their own daily relationship satisfaction and need satisfaction within the relationship. There was evidence that the magnitude of the actor effects of autonomous activity motivation were stronger among women than men. Specifically, when the paths between men's and women's autonomous activity motivation and their own daily satisfaction and need satisfaction were constrained to be equal, the model fit decreased ($\Delta \chi^2 = 4.8$, $df = 1$, $p < .05$, for relationship satisfaction; $\Delta \chi^2$

= 6.4, $df = 1$, $p < .02$, for need satisfaction). Each partner's controlled activity motivation negatively predicted their own daily relationship satisfaction and need satisfaction, such that the more pressured people feel to engage in their relational activities, the less their own daily relationship satisfaction and need satisfaction within the relationship.

Similar to the prediction of general relationship well-being in the previous section, there were no significant partner effects of autonomous and controlled activity motivation on daily relationship well-being, with the exception of women's autonomous activity motivation on men's daily relationship satisfaction and need satisfaction. In particular, the more volitional women are in their relational activities, the greater men's average daily relationship satisfaction and need satisfaction within the relationship. There was evidence that the partner effects of autonomous activity motivation on daily relationship satisfaction and need satisfaction were stronger for women than men. Specifically, when the paths between individuals' autonomous activity motivation and their partner's daily relationship satisfaction and need satisfaction were constrained to be equal across gender, the model fit decreases significantly for relationship satisfaction ($\Delta \chi^2 = 4.4$, $df = 1$, $p < .05$) and marginally for need satisfaction ($\Delta \chi^2 = 3.7$, $df = 1$, $p < .10$).

I then examined the prediction of men's and women's average ratings of daily interaction quality with their partner (see Table 10 for mean and standard deviation). The estimates for the actor and partner effects of autonomous and controlled activity motivation on men's and women's ratings of interaction quality can be seen in Table 12 and Figure 11. Women's autonomous activity motivation positively predicted their own ratings of interaction quality, such that the more willingly women engage in the activities of the relationship, the greater were their ratings of daily interaction quality with their partner. In contrast, men's

autonomous activity motivation was not related to their own ratings of daily interaction quality. There was evidence that the actor effect of autonomous activity motivation on interaction quality was stronger among women than men. Specifically, when the paths between men's and women's autonomous activity motivation and their own ratings of daily interaction quality were constrained to be equal, the model fit decreased significantly ($\Delta \chi^2 = 10.9$, $df = 1$, $p < .05$). The relations between men's and women's controlled activity motivation and their own ratings of daily interaction quality were marginally significant, such that when people felt pressured to engage in relational activities, they tended to report lower ratings of daily interaction quality with their partner.

Similar to the findings for general relationship well-being and daily relationship well-being discussed previously, there were no significant partner effects of autonomous and controlled activity motivation on interaction quality, with the exception of women's autonomous activity motivation on men's ratings of daily interaction quality. When women were more volitional in their relational activities, men reported greater daily interaction quality. There was evidence that the partner effect of autonomous activity motivation was stronger among women than men. When the path between individuals' autonomous activity motivation and their partner's ratings of interaction quality was constrained to be equal across gender, the model fit decreased significantly ($\Delta \chi^2 = 6.8$, $df = 1$, $p < .05$). These results are striking in that men's ratings of daily interaction quality are not significantly predicted by their own motivations toward relational activities but are predicted by women's autonomous activity motivation, suggesting that men's perceptions of daily interaction quality with their partner may be a function primarily of how willingly engaged women are in relational activities.

Relational Activity Motivations Predicting Average Daily Engagement and Responsiveness

I then examined the prediction of both partners' average daily engagement and responsiveness across the two weeks (see Table 10 for mean and standard deviation of this index). These outcome variables differ from the previous outcome variables in that they are partner ratings rather than self-report. For the purpose of clarity, individuals' engagement and responsiveness as observed by their partners will be referred to as their "own engagement and responsiveness", whereas their ratings of their partner's engagement and responsiveness will be referred to as their "partner's engagement and responsiveness."

The estimates for the actor and partner effects of autonomous and controlled activity motivation on men's and women's average daily engagement can be seen in Table 13 and Figure 12. Men's and women's autonomous activity motivation positively predicted their own daily engagement but the association was only marginally significant for women. That is, when individuals were more autonomously motivated toward their relational activities, the greater was their own daily engagement in the activities of the relationship. Men's and women's controlled activity motivation was not related to their own average daily engagement across the two weeks.

With respect to partner effects, Men's and women's autonomous activity motivation were positively related to the partner's engagement, such that the more volitional individuals felt in their relational activities, the greater was their partner's daily engagement across the two weeks. Men's and women's controlled activity motivation was negatively related to the partner's engagement, such that the more pressured individuals felt to engage in their relational activities, the lower was their partner's engagement across the two weeks. It appears then that when individuals are more volitional and less pressured in relational activities, they may

provide an interactional context that encourages their partner to be more engaged in daily relational activities.

Finally, I examined the prediction of responsiveness across the two weeks (see Table 10 for mean and standard deviation of this index). The estimates for the actor and partner effects of autonomous and controlled activity motivation on average daily responsiveness can be seen in Table 13 and Figure 13. Women's autonomous activity motivation positively predicted their own responsiveness, such that the more volitional they were in their relational activities, the greater was their own responsiveness across the two weeks. In contrast, men's autonomous activity motivation did not predict how responsive they were across the two weeks. There was evidence that the actor effect of autonomous activity motivation on daily responsiveness was stronger among women than men. Specifically, when the paths between men's and women's autonomous activity motivation and their own responsiveness were constrained to be equal, the model fit decreased significantly as evidenced by the change in the Chi-Square statistic ($\Delta \chi^2 = 5.6$, $df = 1$, $p < .02$). For both men and women, controlled activity motivation did not predict their own daily responsiveness.

With respect to partner effects, men's and women's autonomous activity motivation positively predicted their partner's responsiveness, such that the more volitional individuals feel in relational activities, the greater the partner's responsiveness across the two weeks. There was evidence that the partner effect of autonomous activity motivation was stronger among women than men. When the path between individuals' autonomous activity motivation and their partner's responsiveness was constrained to be equal across gender, the model fit decreased significantly ($\Delta \chi^2 = 8.0$, $df = 1$, $p < .005$). Men's controlled activity motivation did not predict their partner's responsiveness but women's controlled activity motivation

negatively predicted their partner's responsiveness, such that the more pressured women felt to engage in relational activities, the less responsive were men across the two weeks. It appears then that when individuals are more volitional and when women are less pressured in relational activities, they may provide an interactional context that encourages their partner to be more responsive on a daily basis.

Discussion

Actor effects of autonomous and controlled activity motivation on general relationship well-being and daily relational functioning

The results of Study 2 demonstrate that individuals' own activity motivations predict their own relationship well-being and daily relational functioning, even when controlling for the influence of the partner's activity motivations. In particular, the more willing and less pressured people were to engage in the activities of their relationship, the greater was their own intimacy, relationship satisfaction, and vitality within the relationship. Results also revealed actor effects of activity motivations on indicators of daily relationship well-being.

Specifically, men and women who felt more autonomous and less controlled in relational activities reported greater daily relationship satisfaction and psychological need satisfaction in the relationship across a two-week period. Also, when women were more willingly engaged in their relational activities, they reported that their daily interactions with their partner were of higher quality (i.e., more intimate, in-depth, smooth, and conflict-free). Overall, these findings further highlight the potential relational benefits of feeling more autonomous and less controlled in the activities of a romantic relationship.

A primary aim of Study 2 was to examine the behavioural correlates of activity motivations using daily partner reports rather than self-report. It appears that when individuals are willingly engaged in their relational activities, they appear to their partner to be more present and engaged in daily relational activities. This result is expected given the self-report findings in Study 1 suggesting that greater autonomous activity motivation is linked to greater positive approach relational behaviour and to less negative approach relational behaviour and withdrawal/avoidance of the partner. It is also consistent with research on Self-Determination

Theory that suggests that autonomous behaviour regulation leads to behavioural engagement, effort, and persistence (Deci & Ryan, 2000; Sheldon & Elliot, 1998; Pelletier, Fortier, Vallerand, and Brière, 2002; Turban, Tan, Brown, & Sheldon, 2007). Also, it seems that when women are willingly engaged in their relational activities, they appear to their partner to be more responsive on a daily basis. This finding is consistent with previous research suggesting that autonomy in relationships is linked to less defensiveness and more positive and honest social interactions, more open communication, and greater facility in conflict resolution (Hodgins, Koestner, & Duncan, 1996; Knee et al., 2002; Knee et al., 2005) – all of which would be conducive to being perceived as responsive to one's partner.

Study 2 revealed that the actor effect of autonomous activity motivation was stronger among women than men for a variety of relational variables. In particular, women's autonomy was a stronger predictor than was men's autonomy of daily relationship satisfaction, need satisfaction, ratings of interaction quality, and responsiveness. It appears then that feeling volitional in relational activities is more closely linked to daily relational functioning and well-being among women than men. This result is similar to the finding in Study 1 that women's autonomy was a stronger predictor of their own relationship well-being than was men's autonomy of their own relationship well-being.

The stronger relation between autonomous activity motivation and relationship well-being among women than men can perhaps be understood by considering the behavioural correlates of autonomous regulation in relationships. Study 1 showed that positive approach relational behaviours were linked to autonomous activity motivation but not to controlled activity motivation. That is, the more willingly engaged individuals are in their relational activities, the more they report engaging in relational behaviours that are creative, spontaneous,

and responsive to the partner's needs, and aimed at making a deeper, more intimate connection with the partner. Previous research (Knee et al., 2002; Knee et al., 2005) has also linked greater relationship autonomy to more understanding and less defensive responses to conflict. Notably, research has suggested that women's positive and constructive relational behaviour may play a particularly critical role in determining the quality and functioning of romantic relationships. Weigel and Ballard-Reisch (1999) examined the relative importance for relationship well-being of men's and women's relationship maintenance behaviours, which consist of behaviours that serve to prevent decline, enhance, or repair the relationship. Weigel and Ballard-Reisch (1999) found that women's use of maintenance behaviours had a stronger relationship with couple satisfaction, commitment, and love than did men's use of maintenance behaviours. Similarly, in a longitudinal study of depression in couples, Laurent, Kim, and Capaldi (2009) showed that women's positive and constructive engagement during conflict predicted lower depressive symptoms in both partners as well as greater relationship satisfaction for women. Assuming that autonomous activity motivation is an important antecedent to these positive and constructive relational behaviours, it follows that women's willingness in relational activities would be closely linked to their own functioning and well-being in the relationship.

Partner effects of autonomous and controlled activity motivation on general relationship well-being and daily relational functioning

In Study 2, data was collected from both members of the couple to examine whether individuals' relational outcomes were predicted by their partner's activity motivations. Notably, women's autonomous activity motivation emerged consistently as a predictor of men's relational outcomes, controlling for the influence of men's activity motivations on their

own outcomes. In particular, when women were more willingly engaged in their relational activities, men reported greater general relationship satisfaction as well as greater daily relationship satisfaction, need satisfaction within the relationship, and ratings of interaction quality. In contrast, men's autonomous activity motivation did not predict any of these relational outcomes for women. Overall, these findings suggest that men may benefit, in terms of relationship well-being, from a partner that approaches relational activities volitionally and willingly.

When considering daily engagement and responsiveness, there appears to be greater mutuality in the influence of men's and women's activity motivations. Both men and women appear to be more present and engaged in their relationships when their partner reported being more willing and less pressured to engage in relational activities. It seems then that when individuals are more autonomous and less controlled, they may provide an interactional climate that encourages the partner to be engaged in the activities of the relationship. A similar pattern emerged for daily responsiveness. When women were more willing and less pressured to engage in relational activities, men appear to women as more responsive on a daily basis. In comparison, women's responsiveness was predicted by men's autonomous activity motivation but not their controlled activity motivation, such that when men are more willingly engaged in relational activities, women appear to men to be more responsive. As discussed above, greater autonomous and less controlled regulation have been linked with less defensiveness and more positive and honest social interactions, more open communication, and greater facility in conflict resolution (Hodgins, Koestner, & Duncan, 1996; Knee et al., 2002; Knee et al., 2005). These interpersonal behaviours are likely to encourage partners to be more engaged and responsive in the relationship.

Similar to gender differences in the strength of the autonomous activity motivation actor effect, a consistent gender difference emerged in the strength of the partner effect of autonomous activity motivation across many outcome variables. In particular, women's autonomy was a significantly stronger predictor of men's daily relationship well-being, ratings of interaction quality, and responsiveness than was men's autonomy of women's same outcomes. The influence of women's autonomous activity motivation on men's daily relational functioning and well-being can potentially be understood in terms of the importance of women's positive and constructive relational behaviours to the quality of the relationship (Weigel & Ballard-Reisch, 1999; Laurent et al, 2009). That is, when women are more volitional in their relational activities, they may be more likely to engage in the positive and constructive relational behaviours that are conducive to men experiencing greater relationship well-being and functioning.

The possible influence of women's autonomous activity motivation on men's daily relational well-being and functioning can also be understood by considering gender roles, which may encourage women to take greater responsibility than men for maintaining intimacy and closeness in romantic relationships. Some theorists have argued that men and women are socialized to have different orientations toward relationships. Women are thought to be more communal or interdependent (i.e., oriented toward connection with others), whereas men are thought to be more agentic or independent (i.e., oriented toward self-assertion) (Cross & Madson, 1997; Eagly, 2009; Helgeson, 1994). Those with a communal orientation are thought to seek to maintain relatedness and connection with others (Cross & Madson, 1997; Eagly, 2009; Helgeson, 1994). Indeed, research suggests that women engage in more relationship maintenance behaviours than do men, including more sharing of tasks (performing household

responsibilities and chores that are considered the responsibility of both partners) and openness (encouraging self-disclosure and discussions about each other's feelings and thoughts about the relationship; Canary & Wahba, 2006). Women also tend to seek more change in their romantic relationships than men, and women's sought after changes center more on increasing intimacy, closeness, and instrumental support in the relationship than do men's (Heyman, Hunt-Martorano, Malik, and Slep, 2009). Further, research has found that women tend to be more engaged and demanding during conflict, whereas men tend to be more appeasing and withdrawing (Gottman & Levenson, 1988). Thus, it appears that an aspect of women's gender role in romantic relationships may be to actively monitor and maintain dyadic functioning and well-being. Notably, Aylor and Dainton (2004) found that partners higher in femininity tended to engage in more routine relational maintenance behaviour, which are maintenance behaviours that are frequent and habitual rather than strategically used just in response to needs for maintenance. Women's greater use of routine maintenance behaviour may help to explain why women's autonomous activity motivation was linked to men's average daily relationship well-being across a two-week period. That is, when women are willingly engaged in relational activities, they are perhaps motivated to perform routine relational maintenance behaviours that would have an effect specifically on men's daily relational functioning and well-being.

Limitations

There are several limitations of Study 2. First, the sample was composed of couples who were relatively satisfied in their relationships, which limits the applicability of the results to distressed couples. As discussed previously, I would expect that in distressed couples, conflict would be more prevalent and central in the relationship. Engaging in relational activities because of pressure or coercion would likely result in more negative approach

behaviours and withdrawal/avoidance, such as Gottman's criticism, contempt, defensiveness, and stonewalling (Gottman, Coan, Carrere, and Swanson, 1998; Gottman & Levenson, 2000). Hence, in distressed couples I would expect a greater influence of controlled activity motivation, both on an individual's own relational outcomes as well as the partner's.

A strength of the study was its use of daily diaries, which captured everyday behaviour more accurately by reducing the bias of retrospective reports. However, the completion of diaries at the end of each day introduces at least some retrospective bias and may lack the precision that is afforded by an event-contingent diary. Further, the study sampled behaviour across two weeks, which is a relatively brief time with which to capture a couple's characteristic patterns of relating. An alternative to the current methodology would be to sample multiple time points within a year or target specific relational events. It is possible that the findings might be different if a longer time period was sampled. In particular, I speculate that across time, relationship stressors might occur that could alter the patterns I observed. For example, masculinity has been linked to greater use of strategic relational maintenance, which involves use of maintaining behaviour when a demand for maintenance occurs such as a stressor (Aylor & Dainton, 2004). Thus, when stressors occur, I would expect that the more willingly engaged men are in relational activities, the more likely they would be to engage in strategic maintenance, which would possibly result in greater relationship well-being for women. In other words, across a longer time span including more relationship stressors, partner effects of men's autonomous activity motivation might be revealed.

The explanation offered for the greater impact on the relationship of women's autonomous motivation than men's autonomy relied on assumptions regarding gender roles as well as women's engagement in routine relational maintenance behaviours. However, neither

of these constructs was directly measured in the current study. I speculated that women in this sample were assuming a gender role high in femininity or communion and low in masculinity or agency, but this cannot be confirmed without measurement of gender roles. It is possible that when women are low in femininity, the importance of their autonomous activity motivation for relational functioning might be reduced. Similarly, when men are high in femininity, their autonomous activity motivation may have stronger effects due to engaging in more relational maintenance behaviours. In the same vein, I would expect that couples who hold egalitarian beliefs about gender roles in relationships would show reduced or no gender differences in the effect of autonomous activity motivation on relationship well-being because both partners theoretically would take equal responsibility for maintaining the relationship. The proposed explanation for the gender differences in the results suggests that the greater impact of women's autonomous activity motivation was due to engagement in maintenance behaviours. Study 1 suggested that greater willing engagement in relational activities was linked to positive approach relational behaviours and Study 2 showed that autonomy was linked to greater engagement among men and women and greater responsiveness among women. Thus, autonomous activity motivation could be an antecedent to relational maintenance behaviours. Nonetheless, future studies should attempt to measure the hypothesized consequences of autonomous regulation in relationships and evaluate whether they mediate the relation between activity motivations and relational outcomes.

General Discussion

Across two studies results showed that marital functioning and wellness are greater when partners engage in relational activities more volitionally and less felt obligation or pressure. These studies extended previous research on Self-Determination Theory in relationships by examining the potential influence of activity motivations on general marital functioning as well as daily relational interactions. In particular, Study 1 found that among married individuals the factor structure of the MRA and its associations with relationship well-being were similar to those observed in a previous dating sample (Gaine & La Guardia, 2009). That is, Study 1 showed that across dating and marital relationships, activity motivations are captured by the dimensions of autonomous regulation—which is conducive to relational functioning—and controlled regulation—which is detrimental to the well-being of the partnership.

Study 2 also added to previous results in the SDT literature by examining the implications of autonomous and controlled regulation for the day-to-day activities of a romantic relationship. Past research (Knee et al., 2002; Knee et al. 2005) has focused on the link between people's reasons for maintaining their relationships and their approaches to conflict within the partnership. Study 2 focused less on conflict than past research and more on how couple functioning in everyday relational activities is related to the couple's motivations toward those same tasks. In other words, Study 2 shows the utility of measuring relationship motivations at the level of relational activities when trying to understand the everyday behaviour of married couples.

The present studies highlighted the value of separating the relational implications of autonomous and controlled regulation. Previous research (Blais et al., 1990; Knee et al., 2002;

Knee et al. 2005) using the Couple Motivation Questionnaire has combined individuals' autonomous and controlled motivations into an overall relative autonomy index. While the relative autonomy index provides a theoretically meaningful summary of people's motivations, it has the downside of hiding the unique implications of the different regulatory styles. In the present studies, autonomous activity motivation appeared to be assuming a more influential role than controlled motivation in determining couple functioning. In particular, women's willing engagement of relational activities was highly predictive of their own relational functioning and well-being as well as their partner's relational outcomes. In addition, autonomous and controlled activity motivation generally related to separate individual difference dimensions, with the specific pattern of associations depending on gender. In particular, autonomous regulation in relational activities was linked to attachment avoidance, extraversion and, among women, behavioural activation. In contrast, controlled regulation was linked to attachment anxiety, neuroticism and, among men, behavioural inhibition. Hence, volitional and pressured activity engagement are not just differentiated statistically but also by the cognitive, emotional, and behavioural dispositions that they are associated with. Accordingly, I suggest that future research continues to examine the unique contributions of both autonomous and controlled motivations in relationships so as to further clarify the unique antecedents and consequences of each regulatory dimension.

The proposed two-dimensional structure of the MRA represents a different conceptualization of motivation than that offered by the SDT motivation continuum, which contrasts controlled regulation on the one end with autonomous regulation on the other. The MRA's two dimensions of autonomous and controlled activity motivation are statistically independent of each other rather than mutually exclusive or opposing ends of the same

construct. Any implications of the MRA's factor structure for Self-Determination Theory should be tempered as the MRA represents only one measure in one specific life context. Nonetheless, there is some research to suggest that that the relations among the SDT regulatory styles might not always be adequately captured by the autonomy continuum (Amabile, Hill, Hennessey, & Tighe, 1994; Fairchild, Horst, Finney, & Barron, 2004; Boiché, Sarrazin, Grouzet, Pelletier, & Chanal, 2008). In particular, research on motivations toward personal goals (Sheldon & Elliot, 2008) and work (Amabile et al., 1994) has suggested that autonomous and controlled motivations might sometimes be unrelated rather than opposed to each other. Similarly, the trait-level tendencies toward autonomous and controlled regulation across life domains are unrelated to each other (Deci & Ryan, 1985). Thus, the two-dimensional factor structure of the MRA fits with a body of findings that is suggestive of a two-dimensional structure of motivation in some life domains.

There are some interesting implications that follow from the independence of autonomous and controlled activity motivation. In particular, their independence leads to the non-intuitive possibility that an individual can be simultaneously willing and pressured to engage in relational activities. Notably, the independence of these dimensions could be a result of measuring activity motivations in general rather than in the moment. It is possible that an individual's moment-to-moment relational interactions might be dominated by a sense of willingness or pressure but across different times and situations both motivations could be present. Future research is needed to determine whether the dimensions might become mutually exclusive as more specific relational interactions are sampled. However, the present study provides reason to believe that the independence of autonomous and controlled

motivation could also be partly due to the different cognitive, emotional, and behavioural processes that are associated with the two dimensions.

The results of the present studies also have implications for gender differences in close relationships. It appears that women's autonomous activity motivation is more important than men's autonomous motivation for the couple's functioning and well-being. This result is consistent with other work suggesting that gender roles may play a part in relational functioning. Specifically, women's greater communal orientation may lead them to seek to maintain relatedness and connection with others (Cross & Madson, 1997; Eagly, 2009; Helgeson, 1994). Hence, when women are willingly engaged in relational activities, they are perhaps motivated to perform routine relational maintenance behaviours that would have an effect specifically on the couple's daily relational functioning and well-being. In offering this explanation of the observed gender differences, I do not want to suggest that women have a higher need for relatedness than men. Rather, I am suggesting that gender roles may encourage each gender to assume different responsibilities around maintaining connectedness. Indeed, some scholars (Eagly, 1999; Baumeister & Sommer, 1997) have argued that men and women both seek relatedness but their primary focus is different, with men seeking belongingness in larger social groups and women seeking it in smaller groups, including dyads. It is also possible that men and women seek to maintain connection and closeness at different times. As described previously, masculinity is linked to strategic relational maintenance behaviours whereas femininity is linked to routine everyday maintenance. Men may engage in more strategic or problem-focused maintenance because they are more concerned than women about the overall status and integrity of the relationship, whereas women may engage in more routine maintenance because they are more concerned than men about the everyday affective quality of

the relationship (Gove, Hughes, Styles, 1983). Regardless, future research is needed to verify that gender roles and relational maintenance behaviours account for the importance of women's autonomous activity motivation for the relationship.

Limitations and future directions

A set of limitations involve the construction of the MRA. These issues include differential biases in item content across regulatory style subscales, item comparability across activity subscales, and the limited incremental utility of measuring motivation toward multiple relational activities. The first issue is that items assessing autonomous activity motivation (i.e., intrinsic motivation and identified regulation) and those assessing controlled activity motivation (i.e., introjected regulation and external regulation) are imbalanced in terms of their valence and in terms of how they embody approach versus avoidance motivation. In Study 1, I included indices of the Behavioural Activation and Inhibition Systems (BAS/BIS) to determine the extent to which autonomous and controlled activity motivation were tapping these dimensions of behavioural approach and avoidance. Interestingly, I found that BAS was positively linked to autonomous activity motivation only among women and that BIS was positively linked to controlled activity motivation only among men. These results cannot likely be explained by biases in item content, since each gender presumably would respond similarly to the biases in items. I suggested above that this gender difference could be understood substantively in terms of men's and women's different socialization histories and gender roles. Nonetheless, future revisions of the MRA should seek a greater balance between positively-valenced and negatively-valenced approach and avoidance motives within the identified, introjected, and external regulatory styles.

The current construction of the MRA allows for an understanding of the relative role of autonomous and controlled motivations for relationship well-being. However, as it is currently constructed, it does not allow for an examination of whether individuals vary in their motivations across their different relational activities and whether this variation in itself has important consequences for relational functioning. The current version of the MRA uses activity-specific wording for each activity to capture the distinct manifestations of each regulatory style (intrinsic, identified, introjected, and external) within each activity. A consequence of this structure is that observed differences between activity scales could be due to differences in item content rather than differences in motivation per se. Thus, if the aim is to assess variability across relational activities, the MRA activity subscales should be revised to create greater uniformity in items across each subscale while not losing the unique flavour of each relational activity. When items are more closely matched in content, error variance attributable to the item content is reduced. If I offered some predictions regarding variability, I suspect that in undergraduate dating relationships, which are generally high in satisfaction because major problems have not yet arisen, individuals may show less variation in autonomy and control across different relational activities. In contrast, I suspect that in married couples, longer-term interdependence in their relationship may have provided more opportunities to experience both greater highs and lows within their partnership, and thus yield a more nuanced picture of partners' motivations toward different activities in the relationship. Further, distressed couples might show unique profiles in which motivation is deeply affected in certain sets of activities but not others.

A third issue with the MRA is the limited incremental utility of measuring motivation toward multiple relational activities. The factor structure of the MRA that emerged in a dating

sample (Gaine & La Guardia, 2009) and married sample in Study 1 suggests that people's motivations across a variety of relational activities is best captured by two broad dimensions of autonomous and controlled activity motivation. As demonstrated in Studies 1 and 2, these broad dimensions relate strongly to both general and daily relationship well-being and functioning. Accordingly, if the primary purpose of the MRA is to capture the dimensions of volitional and pressured engagement in relational activities, then future revisions could reduce the number of items or subscales to make the MRA a more efficient measure. Possible approaches to shortening the MRA include measuring broader activity domains, such as partner support activity, rather than highly specific activities, such as social support, instrumental support, and support for partner's life goals. An alternative approach would be to reduce the number of items per activity subscale. However, this approach has the downside of jeopardizing the reliability of activity subscale scores, which would eliminate the scale's potential for studying variability in activity motivations.

Another limitation of the present studies is that data is correlational and do not permit inferences about causality. However, the approach of using relational activity motivations to predict relational functioning and well-being rests on an implicit assumption that activity motivations have a causal influence on relational outcomes. Further, my interpretations of the results often suggest that motivations may be influencing both relational behaviour and outcomes. Indeed, there are theoretical reasons to postulate an influence of activity motivation on relationships. In SDT, the regulatory styles are postulated to be modes of energizing, directing, and regulating behaviour, which implies that they would have an effect on behaviour (Ryan & Deci, 2000). At the same time, SDT also postulates that the regulatory styles are themselves determined through previous psychological need satisfaction (Ryan & Deci, 2000).

That is, through need fulfilling or thwarting experiences in a domain, people develop reasons to engage in and regulate their behaviours in that domain. Theoretically, then, I would expect there to be a bidirectional influence between people's relational activity motivations and their relationship well-being. That is, greater volitional and lower pressured engagement in relational activities will enhance relationship well-being, while need satisfying experiences within the relationship will lead to greater autonomous and lower controlled regulation (La Guardia & Patrick, 2008).

Future research should seek to examine longitudinally the interplay between need satisfaction, activity motivations, and relational behaviour. The current studies represent a major step in this research agenda by revealing strong links between activity motivations and relationship well-being as well as daily relational behaviour as observed by the partner. Further, Study 2 identified the mutual influence of partners' motivations on each other's wellness in the relationship and ongoing daily behaviour. Future studies should build on these studies and model these processes longitudinally to verify the consequences of both autonomous and controlled regulation in relationships. An equally important research goal is to clarify the relational climate that provides need satisfaction for both partners and fosters the development of autonomous regulation while discouraging controlled regulation in the partnership (La Guardia & Patrick, 2008).

Conclusions

In summary, the present studies highlight the utility of measuring motivations to engage in relational activities. In particular, the studies showed that when individuals are more willing and less pressured to engage in relational activities, they experience greater general and daily

relationship well-being. Further, when individuals are more willing and less pressured in their relational activities, they are observed by their partner to be more engaged and responsive on a day-to-day basis. Notably, this research also showed the mutual influence of each partner's activity motivations on the other. Specifically, when one's partner is more willing and less pressured to engage in relational activities, one is more engaged and responsive to that partner. Finally, women's volitional engagement of relational activities emerged as an important predictor of their own as well as men's relational functioning and wellness.

Endnotes

1. Amotivation reflects non-intentional and non-regulated behaviour, whereas the other regulatory styles involve intentional and regulated behaviour. As such, I do not consider amotivation to belong on a continuum of regulated behaviour that ranges from autonomous to controlled behaviour. Further discussion of amotivation is included to accurately describe past research but it is omitted from the present studies due to its conceptual distinctness from autonomous and controlled motivation.
2. The Self-Regulation Questionnaire assesses people's perceived reasons for engaging in a particular behaviour. Research on implicit processes suggests that people are not aware of many psychological processes that influence their behaviour, including motivations and goals (Bargh, Gollwitzer, Lee-Chai, Barndollar, & Trötschel, 2001). Levesque and Pelletier (2003) showed that autonomous and controlled motivational orientations can be activated and influence behaviour without people's awareness. Accordingly, I consider self-reported motives to provide only partial information on people's motivational processes.
3. Gaine and La Guardia (2009) excluded integrated regulation toward relational activities from the MRA because it was judged that integration might not be adequately assessed through self-report measures since the construct would require individuals to consider how specific relational activity motivations fit within their larger self-system, including aspects of themselves in domains other than relationships.
4. The exception to this pattern was autonomous activity motivation toward sexual intimacy, which was less clearly associated with autonomous motivation toward the other activities. However, when I tested the SEM models presented later in the paper and allowed

autonomous motivation for sexual intimacy to contribute uniquely to relationship well-being outcomes rather than load on the autonomous motivation latent factor, the model was not improved. Thus, in the final analyses, it was included as an indicator of the autonomous motivation latent factor along with the other activity scales to provide the most parsimonious factor structure of the autonomous activity motivation scores.

5. This model treated the activity subscales as tapping the constructs of overall autonomous and controlled activity motivation, which were then used to predict relationship well-being. There was no evident utility for using the activity subscale scores directly to predict relational outcomes, since the correlations between the activity subscales scores and relationship well-being were very similar. In particular, the range of correlations between the autonomous activity motivation subscale scores and relationship being was .31 to .53, while the range of correlations of the controlled activity motivation subscale scores and relationship well-being was -.15 to -.34. The lack of variability in the magnitude of these correlations is best explained by the role of the general factors of autonomous and controlled activity motivation.
6. The interaction between autonomous and controlled activity was tested as a predictor of relationship well-being. However, the interaction term did not emerge as a significant predictor for men or women, suggesting that autonomous and controlled activity have independent effects on relationship well-being.
7. The BIS/BAS Scale (Carver & White, 1994) was added to the study partway through data collection. Hence, the following analyses are based on a subset of the overall sample consisting of 43 men and 54 women.

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Appendix A: Relational Activity Behaviours

Sexual intimacy (17 items)

The following statements concern your sexual activity in your relationship. Note that sexual activity refers to petting, oral sex, or intercourse. Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. When my partner initiates sexual activity, I tend to be responsive to him/her.
2. I often initiate sexual activity with my partner.
3. I am creative and spontaneous when engaging in sexual activity with my partner.
4. I try to set the mood so that we will have sex.
5. I try to make a romantic setting so that we will have sex.

Negative approach/controlling/compulsive:

1. When necessary, I can say “no” to my partner’s requests for sexual activity without feeling guilty.
2. I determine when my partner and I engage in sexual activity.
3. I withhold pleasuring my partner unless I am being pleased.
4. I am sometimes overly concerned with satisfying my partner’s sexual needs and forget about my own.
5. I often fake sexual interest and excitement when engaging in sexual activity with my partner.

Withdrawal/avoidance:

1. I try to avoid engaging in sexual activity with my partner.
2. When engaging in sexual activity with my partner, I feel that I just want to get it over and done with.
3. When sexually active with my partner, I sometimes feel uninterested and bored.
4. I avoid the bedroom until I absolutely want to go to bed.
5. I fake being asleep, sick, or tired when my partner wants to have sex so that I don’t have to do it.
6. I give my partner excuses so that he or she won’t approach me about having sex.
7. I’m not “into” having sex with my partner.

Physical intimacy (16 items)

The following statements concern your physical intimacy in your relationship. Note that physical intimacy refers to hugging, kissing, cuddling, or holding (do not include sexual activity when completing these statements). Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. I often seek out physical contact with my partner.
2. When my partner initiates physical intimacy with me, I tend to respond positively.
3. When embracing my partner, I am content to remain in contact for quite a while.
4. I hug and kiss my partner often so I can get close to him/her.
5. I often try to hold hands with my partner so I can get close to him/her.
6. I try to get close to my partner as often as I can.

Negative approach/controlling/compulsive:

1. I feel somewhat uncomfortable when being physically intimate with my partner.
2. I tend to decide when my partner and I are physically intimate and I decide when to stop.
3. I have trouble with saying “no” to my partner’s requests for physical intimacy.
4. I sometimes get physically clingy with my partner.
5. I often need to be touching my partner in some way when I am with him/her.
6. I sometimes give my partner quick hugs and kisses even though I don’t really feel like doing it.
7. I smother my partner with kisses and hugs whenever I see him/her.

Avoidance/withdrawal:

1. I seem to avoid being physically intimate with my partner.
2. I sometimes shun my partner’s attempts at being physically close and intimate with me.
3. When hugging, kissing, or cuddling with my partner, I often feel like I’m just going through the motions and am not really “into” it.

Self-disclosure (20 items)

The following statements refer to sharing your thoughts, feelings, and concerns with your partner. Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. I try to share my innermost feelings and concerns with my partner.
2. I am responsive to my partner's requests to know what I'm thinking and feeling, and I am generally happy to do so.
3. I don't keep very much hidden from my partner.
4. I am very open with my partner and I trust him/her a great deal.
5. I often call my partner during the day to tell him/her what I am thinking and feeling.

Negative approach/controlling/compulsive:

1. I get things off my chest without thinking about the effect it will have on my partner.
2. I sometimes can't stop myself from talking to my partner about my thoughts and feelings.
3. I must admit that at times I'm not completely honest with my partner about my feelings and concerns.
4. I tend to be touchy about sharing my thoughts and feelings with my partner.
5. When my partner asks me about my feelings and thoughts, I tend to share them with him/her even when I don't really want to.
6. I can't help calling my partner several times during the day to tell him/her what I am thinking and feeling.
7. I can't help venting to my partner even if he/she may not be able to take it all in.
8. I lie to my partner to protect him/her from what I am really feeling or thinking.
9. I tell my partner what I think he/she wants to hear just to avoid having any conflict.
10. I sometimes just say things to get a reaction out of my partner.
11. I often get focused on my thoughts and feelings even when my partner wants some attention or time to talk.

Withdrawal/avoidance:

1. I keep my thoughts and feeling guarded, and can be a bit "inaccessible" with my partner.
2. I avoid getting into conversations with my partner in which I'll have to share my personal feelings and thoughts.
3. I share my feelings and thoughts to appease my partner's requests.
4. I tell my partner that everything is fine, when actually I am feeling otherwise.

Social Support (16 items)

The following statements refer to listening to your partner's problems. Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. When listening to my partner's problems, I try to get in my partner's shoes as much as I can.
2. I listen to my partner until he/she seems calmer and has a grip on his/her problems.
3. When my partner needs me to listen to his/her problems, I am very responsive and available to him/her.
4. I often ask my partner whether he/she would like to talk about anything, even if he/she isn't explicitly asking for my help.

Negative approach/controlling/compulsive:

1. I try to quickly convince my partner that things will be okay and to change his/her view of the problem.
2. I tend to get sucked into my partner's problem and have trouble not getting overly emotional.
3. I tend to listen to my partner's problems and concerns only half-heartedly.
4. I tend to become impatient with my partner's problems.
5. I can be overly critical of my partner when he/she has problems that he/she wants my opinion on.
6. I sometimes dismiss my partner's thoughts and feelings as silly or foolish so that the conversation will stop going in the direction it is going.
7. I sometimes reject outright my partner's thoughts and feelings so that the conversation will stop going in the direction it is going.
8. When I see that my partner is upset, I try to fix it quick to make him/her happy again.

Withdrawal/avoidance:

1. Honestly, there are times when I tune out my partner when he/she is talking about his/her problems or concerns.
2. When my partner is bothered by something, I try to steer clear of him/her until he/she is in a better mood.
3. I often get distracted when listening to my partner and may even cut the conversation short.
4. I distract myself with other tasks or act busy so that my partner can't talk to me about his or her thoughts and feelings.

Instrumental support (13 items)

The following statements refer to helping your partner solve his/her problems or investing time and effort in trying to do things that make your partner's life easier or less stressful. Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. When I help my partner solve his/her problems I often provide creative suggestions about how to deal with those problems.
2. When my partner appears to be struggling with some problem, I will offer my assistance to help bring about a solution.
3. If my partner asks me to do something to help him/her deal with a problem, I will help with little or no hesitation.
4. I often pick up the slack when my partner is stressed out.
5. I often spontaneously do things to help out my partner, even if he/she isn't expecting me to help out.

Negative approach/controlling/compulsive:

1. I have a tendency to "take charge" when my partner has a problem and see that it gets resolved the right way.
2. I get all wrapped up in many of my partner's problems as if they were my own problems.
3. When my partner needs my help with a problem, I sometimes do what he/she asks but I won't go out of my way.
4. When my partner asks for my help with solving a problem, I don't invest much thought into how best I can help.
5. Often I neglect my own priorities to reduce stress in my partner's life.

Withdrawal/avoidance:

1. I sometimes don't do things well when helping my partner so he/she won't look to me to help solve his/her problems.
2. When my partner is dealing with a problem or concern, I usually steer clear of him/her until he/she has got things sorted out.
3. I am often too busy with my own concerns to help my partner out with his/her problems.

Household tasks (10 items)

The following statements refer to doing things around the household. Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. I try to do things on an everyday basis to help out in the household.
2. If something needs to be done around the house, I usually get to it right away.
3. I don't keep track of who does what around the house; I just do things when they need to be done.
4. I don't need to be nagged by my partner to do things around the house.

Negative approach/controlling/compulsive:

1. When things need to get done around the house, I do it my way.
2. I do most of the work around the house because I want our home to be as perfect as possible.
3. When completing tasks that my partner wants me to do, I will complete them in such a way as to show my partner that I didn't want to do it.

Withdrawal/avoidance:

1. I often don't do much around the house to help out.
2. Even though I know that my partner wants me to help out, I just avoid doing what he/she wants me to do because I just don't want to do it.
3. Even though my partner asks me to do some tasks regularly, I figure if I just don't do them or do them in the way that I know my partner wants it done, he/she will eventually stop asking me to do it.

Niceties (13 items)

The following statements refer to doing special things for your partner (e.g., give gifts, call partner, take partner out). Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. I am quite creative when planning gifts or special activities for my partner.
2. I try to do special things for my partner when he/she seems stressed or just needs a “boost”.
3. I tend to do special things for my partner, even when it is not expected of me.

Negative approach/controlling/compulsive:

1. The special things I do for my partner are fairly typical and sometimes I am not as creative as I could be.
2. For the most part, I do special things for my partner only when it is expected (e.g., birthdays, anniversaries, Christmas, Valentine’s Day).
3. I seem to go to “overboard” when preparing special gifts or activities for my partner.
4. I seem to set the agenda when doing special activities with my partner.
5. I sometimes give my partner gifts that I would like (e.g., car parts or accessories; tickets to theatre).

Withdrawal/avoidance:

1. I rarely think of doing special things for my partner.
2. I put little thought and effort into most of the special things I do for my partner.
3. My partner often has to tell me to plan special activities and tells me what gift to buy for him/her.
4. I often forget to do special things even on special occasions.
5. I often buy gifts or make arrangements last minute for important events (e.g., Valentine’s Day).

Life Aspirations (13 items)

The following statements refer to supporting your partner's goals (i.e., education, career, hobbies, family, or lifestyle). Using the scale provided, respond to each statement by indicating how true it is of your behaviour in your relationship.

Positive approach/responsive:

1. Sometimes I make sacrifices to ensure that my partner stays on track with his/her goals.
2. When my partner is concerned about his/her goals, I am there to help him/her sort things out and problem-solve.
3. I regularly encourage and praise my partner's efforts to achieve his/her goals.

Negative approach/controlling/compulsive:

1. I am sometimes quite pushy when it comes to getting my partner to achieve his/her goals.
2. Sometimes it seems that I am investing too much effort in and being overly-concerned with my partner's goals.
3. I often feel that I am faking my support for my partner's goals.
4. I often ask my partner about their achievements or lack thereof.
5. I set goals and schedules to see that my partner achieves his/her goals.
6. I think my partners goals are silly or fool-hearted, so I just try not to give them too much attention when he/she brings them up in the hopes that he/she will stop pursuing them.
7. I give my partner half-hearted encouragement in the hope that he/she will change or abandon his/her goals.

Withdrawal/avoidance:

1. I am generally uninvolved in my partner's pursuit of his/her goals.
2. I talk with my partner about his/her her goals, but I am not particularly interested or engaged.
3. When it comes to long-term goals, my partner and I lead separate lives.

Appendix B: The Unique Contributions of Motivations to Maintain a Relationship and Motivations toward Relational Activities to Relationship Well-Being (Gaine & La Guardia, 2009)

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The unique contributions of motivations to maintain a relationship and motivations toward relational activities to relationship well-being

Graham S. Gaine · Jennifer G. La Guardia

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Abstract People experience autonomy when they perceive their behaviour to be volitional rather than driven by external controls. Previous research has studied autonomy in relationships at a general level, focusing on people's motivations to maintain their romantic relationships, as measured by the Couple Motivation Questionnaire (CMQ; Blais et al., *J Personal Soc Psychol* 59:1021–1031, 1990). To supplement the CMQ, we developed the Motivations for Relational Activities (MRA) scale, which assesses the extent to which people feel autonomous and controlled in a variety of specific relational activities. The purpose of this study is to examine the unique contributions of general motivations to maintain a relationship (CMQ) and motivations toward specific relational activities (MRA) in the prediction of relationship well-being. Results showed that the MRA and CMQ both independently and significantly contributed to the prediction of relationship well-being (i.e., commitment, intimacy, satisfaction, and vitality within the relationship) and were differentiated by their associations to dimensions of personality and attachment.

Keywords Self-determination theory · Romantic relationships · Motivation · Emotion · Relative autonomy · Autonomy · Relationship satisfaction · Intrinsic motivation · Extrinsic motivation · Self-regulation · Attachment · Personality

Introduction

Across varied perspectives, motivation for behaviour has typically been conceptualized and measured as a dispositional tendency or as a context-specific orientation. Self-determination theory (SDT; Deci and Ryan 2000) organizes these motivational dispositions or orientations by the extent to which behaviour is characterized as being relatively autonomous or volitional versus controlled. When autonomy and control have been assessed as general personality orientations toward self-regulation or as general motivational orientations to engage within specific life domains (e.g., education, close relationships, health behaviour), the more that people feel autonomous, the greater their well-being and the more positively they function in a given domain, while the more controlled they feel in their behaviour, the lower their well-being and the poorer their functioning within a domain (see Deci and Ryan 2000 for review).

While dispositional and domain-specific orientations provide useful information in the prediction of well-being and personal functioning, it is possible that motivations within a given domain may be further differentiated and this information may add to the prediction of functioning. Specifically, in the domain of romantic relationships, people's overall motivation to maintain a relationship may be different than their motivations to engage in activities of the relationship. Also, people may willingly stay in their romantic relationships but they may be differentially motivated toward distinct activities within their romantic relationships, willingly engaging in some relational activities yet engaging in other activities only because they are pressured or obligated to do so. Importantly, how people are motivated toward specific relational activities may be vital both to functioning within that activity and to overall

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relationship well-being (Feeney and Collins 2003), and as such, distinguishing motivations for different activities may be vital to understanding functioning uniquely within a given activity as well as the relationship as a whole. Thus, the purpose of this study is to model motivations to maintain the relationship and motivations to engage in specific relational activities as related but distinct predictors of relationship functioning and well-being. We turn now to the SDT perspective on motivation and specifically examine the supporting literature in the domain of romantic relationships.

Autonomy: A self-determination theory perspective

Self-determination theory proposes that people possess an innate psychological need for autonomy—i.e., they have a need to perceive themselves as the origin or source of their own behaviour (deCharms 1968; Deci 1975). The need for autonomy is satisfied when people experience their behaviour as volitional or willingly engaged, rather than driven by rewards or pressures. Research has shown that the more autonomous people are, the greater their personal well-being, as marked by greater life satisfaction, vitality, higher and more secure self-esteem, as well as lower risk for depression, anxiety, and physical symptoms (Deci and Ryan 2002; Ryan and Deci 2001; Kernis and Paradise 2002). Greater autonomy has also been linked to positive interpersonal functioning, such as less defensiveness and more positive and honest social interactions (Hodgins et al. 1996). Specifically, in the context of romantic relationships, research has shown that greater relative autonomy is associated with more open communication, greater facility in conflict resolution, as well as greater couple happiness (Blais et al. 1990; Knee et al. 2005, 2002).

SDT defines a person's motivational orientation toward behaviours along a continuum of autonomy (see Deci and Ryan 2000 for illustration of this continuum). There are three general categories of motivation, including intrinsic, extrinsic, and amotivation (Ryan and Connell 1989). *Intrinsic motivation* is considered to evidence the greatest degree of autonomy as it is activity pursued because of interest or pleasure in the activity itself. In the context of romantic relationships, an example of intrinsic motivation is when individuals spend time with their partner because they find their interactions with their partner to be stimulating and exciting.

Extrinsic motivation reflects instrumental behaviour, in which action is aimed at producing some desired outcome that is separable from the activity itself. While early conceptualizations of extrinsic motivation portrayed it as invariably controlled (deCharms 1968), SDT distinguishes several different forms of extrinsic motivation that are conceptualized to differ in the extent to which they are

experienced as pressured versus volitional (Deci and Ryan 2000). The four forms of extrinsic motivation outlined by SDT are external regulation, introjected regulation, identified regulation, and integrated regulation. *External regulation* involves behaving to obtain external rewards or to avoid punishments; thus, behaviour is elicited by direct external contingencies. For example, people who are externally regulated to spend time with their partner might only do so to gain favours from their partner or to avoid the nagging or anger of their partner. *Introjected regulation* refers to behaviour that serves an internalized value that has not been personally endorsed by the individual. The behaviour is internally regulated by intrapsychic pressures to maintain self-worth or to avoid guilt. Since the value is not personally endorsed or “owned”, the behaviour is experienced as controlled. An example of introjected regulation is when individuals spend time with their partner because they feel it is their obligation to do so and they would feel guilty if they did not fulfill their role of being a “good” relationship partner. That is, in such cases individuals spend time with their partner because they feel that they “should”. *Identified regulation* refers to behaviour that serves a personally endorsed value or goal. In identified regulation, individuals take “ownership” for their behaviour and act with a sense of willingness or choice. While the behaviour is extrinsically motivated (i.e., it serves a particular value or goal), it is experienced as autonomous since the perceived locus of causality is the individual's own endorsed value. An example of identified regulation is when individuals spend time with their partner because the interactions serve some personally endorsed value, such as increasing intimacy or sharing experiences. Finally, *integrated regulation* refers to when the value served by a particular behaviour is integrated with other values and goals of the self. That is, the behaviour fits coherently with other important aspects of the self, which is not necessarily the case with identified regulation. Integrated regulation is regarded as the most autonomous form of extrinsic motivation because it involves the experience of acting from an integrated set of personal values and goals.

The third general category of motivation is *amotivation*. When amotivated, a person perceives a desired outcome as not being contingent on his or her behaviour or the person lacks the ability to produce the behaviour. An example of amotivation is when individuals disengage from their partner because emotionally sharing with their partner yields no response or engagement by their partner.

Because each person potentially has many different reasons for engaging in any behaviour, motivation is indexed by a combination of these regulatory orientations. These combinations have been achieved in different ways, with some studies (e.g., Deci and Ryan 1985) indexing motivation by broad orientations (e.g., autonomous,

controlled, and amotivation), whereas other studies use a weighted combination of all regulatory styles into a relative autonomy index (RAI; e.g., Ryan and Connell 1989). We turn to the literature on romantic relationships to illustrate how these indices have been used to predict personal and relational functioning.

First, motivation has been assessed as a general personality disposition to self-regulate and seek opportunities for self-regulation across different domains. In the SDT tradition, the General Causality Orientation Scale (GCOS; Deci and Ryan 1985) is used to measure people's general tendencies toward autonomous, controlled, and impersonal behaviour regulation in a variety of life-domains. The autonomous orientation involves regulating behaviour on the basis of interests and self-endorsed values (i.e., intrinsic, identified, integrated regulation), the controlled orientation involves regulating behaviour on the basis of external pressures and directives to behave (i.e., external, introjected regulation), and the impersonal orientation reflects feelings of ineffectance in behaviour (i.e., amotivation). Research has shown that the autonomous orientation is associated with less self-derogation, greater ego development, and higher self-esteem, while the controlled orientation is associated with an external locus of control (i.e., the belief that one cannot control outcomes), Type-A personality pattern, and greater public self-consciousness (Deci and Ryan 1985). The impersonal orientation is associated with an external locus of control as well as greater self-derogation, public self-consciousness, depression, social anxiety, and lower self-esteem (Deci and Ryan 1985).

Motivation has also been measured in specific domains (e.g., education, interpersonal relationships, health behaviour) by assessing people's perceived motivations to engage in specific behaviours and activities within the domain. In these specific domains, relative autonomy is typically measured by assessing people's perceived reasons for engaging in a behaviour or activity using the Self-Regulation Questionnaire (SRQ; adapted by domain). Reasons consistent with each regulatory style (amotivation, external, introjected, identified, and integrated regulation, and intrinsic motivation) are rated and averaged within each regulation style, and then a RAI is calculated by weighting each regulation score by its degree of autonomy (3 intrinsic motivation + 2 integrated regulation + 1 identified regulation – 1 introjected regulation – 2 external regulation – 3 amotivation). Research using the SRQ suggests that greater relative autonomy for engaging in specific activities is generally associated with improved performance, greater persistence, engagement, and well-being in the activity domain (e.g., Ryan and Connell 1989). With regard to romantic relationships, the Couple Motivation Questionnaire (CMQ; Blais et al. 1990) was

developed to assess the degree to which people are involved in their romantic relationships for relatively autonomous reasons. In a sample of married couples, results showed that the greater people's relative autonomy to maintain their relationship, the more positive their relationship functioned, as indicated by greater agreement and affection between partners, as well as greater couple happiness (Blais et al. 1990).

Notably, hierarchical models of motivation (see Valleraud 1997) suggest that people's behavior in a particular domain is a consequence of both their general motivational dispositions as well as specific contextual motivations. Several recent studies have together addressed this proposition. First, Knee et al. (2002) investigated whether trait autonomy (as measured by the GCOS) influences how couples cope with and respond to conflict within the partnership. Results showed that the more people are autonomous overall the more they show active coping, openness and attempts to understand their partner, as well as less avoidance of their problems within their romantic relationship, while the more people felt controlled overall, the more they denied problems in their relationship and expressed emotions through venting. Additionally, when observing partners while they discussed discrepant viewpoints, the autonomy orientation was related to more positive interaction behaviours, such as approach, clarification, and attempts to understand the partner, whereas the control orientation was associated with displaying fewer of these positive interaction behaviours. In sum, it seems that feeling greater autonomy overall is associated with greater openness and flexibility in romantic relationships, whereas feeling more controlled overall is related to a more closed, avoidant, and less positive approach to conflict. Knee et al. (2005) then tested whether people's motivations to maintain their relationships (as measured by the CMQ) mediated the association between trait autonomy and relationship functioning. Knee et al. demonstrated partial mediation such that trait autonomy (i.e., general autonomy orientation) allows one to have more open and less defensive responses to conflict in part because trait autonomy promotes autonomous reasons for maintaining the relationship. In sum, this finding provides evidence that relational functioning is best predicted by understanding both dispositional as well as contextually specific motivations.

Measuring motivation toward relational activities

Both Blais et al. (1990) and Knee et al. (2005) measured relative autonomy toward the relationship using the CMQ, which assesses the willingness with which people maintain involvement in their relationship as a whole, or in other words, estimates a general disposition towards willingly

maintaining the relationship. This general orientation however potentially does not capture whether people approach the various tasks of the relationship with the same degree of autonomy as they do the relationship as a whole. Moreover, it would seem that people can potentially be differentially motivated toward distinct activities within their romantic relationships. For example, a person may willingly engage in physical intimacy, yet provide social support only because of pressure from his or her partner to do so. Thus, in line with a hierarchical conceptualization of motivation (Vallerand 1997), a broader definition of motivation in relationships might consider both global motivations (i.e., reasons for involvement) as well as specific motivations (i.e., reasons for engaging in activities of the relationship), with motivation toward the relationship as a whole and toward specific activities both possibly carrying unique implications for effective functioning within the relationship (Feeney and Collins 2003).

The present study

The purpose of the current study is to assess the potentially unique contributions of general motivations to maintain a relationship and motivations toward specific relational activities in the prediction of relationship well-being. To do this, we first developed a scale that assesses romantic partners' motivations to engage in a variety of important relational activities. The Motivations for Relational Activities (MRA) scale assesses motivations toward relational activities within romantic relationships, including sexual intimacy, physical intimacy, self-disclosure, social support, instrumental support, niceties, and support for the life aspirations of one's partner.

The relational activities of the MRA were selected to provide a relatively comprehensive set of the activities essential to most romantic relationships. Physical intimacy is a central and perhaps defining activity in romantic relationships. We included separate subscales for sexual intimacy and physical intimacy (i.e., hugging, kissing, cuddling) as these two activities are related but distinct and have each been related to closeness and relationship well-being (Andersen 1985; Birchler and Webb 1977; Cupach and Comstock 1990; Emmers and Dindia 1995; Guerrero and Andersen 1991; Haavio-Mannila and Kontula 1997; Lawrance and Byers 1995). We included self-disclosure as it has been shown to be essential for the development of closeness in relationships (Finkenauer and Hazam 2000; Hendrick 1981; Laurenceau et al. 1998; Meeks et al. 1998). We also included various forms of support that have been shown to be important to personal and relationship functioning, including social support (i.e., emotional support; Uchino et al. 1996) and instrumental support (Wills et al.

1974), support for the partner's life aspirations or goals (Kasser 2002; Kasser and Ryan 1996; Sheldon et al. 2004), and niceties (i.e., doing special things for partner; Belk and Coon 1993; Huang and Yu 2000).

Using structural equation modeling, we examine the associations between the CMQ and indices of the MRA and then test the relative contributions of the MRA and the CMQ to relationship well-being. We expected that the CMQ and MRA represent related but distinct measures of relationship motivations, and that motivations to maintain a relationship (CMQ) and motivations to engage in relational activities (MRA) will each independently predict relationship well-being (including measures of commitment, satisfaction, intimacy, and vitality within the relationship).

Finally, we assume that the CMQ and MRA measures will reflect unique constructs. If this assumption is supported by the models proposed, we wanted to further explore how these two measures might differ by examining their correlations to dimensions of personality and attachment. Research has shown that greater trait autonomy (as measured by the GCOS) is associated with lower Neuroticism, and higher Extraversion, Openness, Agreeableness, and Conscientiousness (Hmel and Pincus 2002), and further, when autonomy is supported within a relationship, greater attachment security in that relationship is in evidence (La Guardia et al. 2000). Given this research, we expect that greater autonomy in the relationship will be associated with a more adaptive personality pattern (i.e., lower Neuroticism and higher Extraversion, Openness, Agreeableness, and Conscientiousness) as well as lower attachment anxiety and avoidance, yet how the two measures of relationship motivation (CMQ, MRA) each uniquely relate to these dimensions remains an empirical question that will be further explored.

Methods

Participants and procedure

Two hundred and forty-six undergraduate students (112 men, 134 women) who were currently involved in romantic relationships completed questionnaires online in exchange for either course credit or a free movie pass. The average age of the participants was 19.5 years (range 17–43 years, $SD = 3.05$). The participants were predominantly White and Asian (58% White, 24% Asian, 5% East Indian, 3% Middle Eastern, 10% other) and most (96%) were in heterosexual romantic relationships. The majority of participants (81%) were in exclusive dating relationships (i.e., a committed dating relationship with one partner), while the remaining participants were dating casually (8%), engaged (7%), married (2%), dating more than one partner (1%), or

did not specify their relationship status (1%). Eleven percent of the participants were currently living with their partner and 49% reported that their relationship was “long-distance”. Participants reported that they had been romantically involved with their partner for a mean of 1.54 years (SD = 1.65 years, range 1 month to 15.2 years).

Measures

Couple Motivation Questionnaire

The CMQ (Blais et al. 1990) assesses people’s reasons for maintaining involvement in their current romantic relationships. It contains six subscales: amotivation, external regulation, introjected regulation, identified regulation, integrated regulation, and intrinsic motivation. The CMQ begins with the stem, “Why do you presently stay in your relationship with your partner?” and 21 items provide reasons for generally maintaining the partnership. Participants indicate the extent to which each item corresponds to their reasons for relationship involvement using a Likert-type scale, ranging from “not at all true” (1) to “very true” (7). Sample items include “There is nothing to motivate me in maintaining my relationship with my partner” (amotivation), “Because my partner insists that we stay together” (external regulation), “Because I would feel guilty if I separated from my partner” (introjected regulation), “Because life with my partner offers me the opportunity to learn how to better communicate my ideas” (identified regulation), “Because I value the way my relationship with my partner allows me to improve myself as a person” (integrated regulation), and “Because I love the many fun and crazy times I share with my partner” (intrinsic motivation). Subscale scores are calculated by taking the average rating of the reasons belonging to each regulatory style. Then the RAI is computed by weighting each of the regulatory styles (3 intrinsic motivation + 2 integrated regulation + 1 identified regulation – 1 introjected regulation – 2 external regulation – 3 amotivation), such that higher scores indicate greater relative autonomy for maintaining the relationship. The internal reliability of the RAI in the current sample was .82, which was computed using the formula for the reliability of a weighted composite [$\text{composite reliability} = 1 - [(\sum b_i^2 \text{variance}_i (1 - r_{ii})) / \text{variance}_c]$ where b = weighting of regulatory style (i.e., –2, –1, 0, 1, 2), i = regulatory style (e.g., external regulation), r_{ii} = reliability of each regulatory style, and c = RAI].

Motivations for Relational Activities scale

For this study we developed the MRA to assess external regulation, introjected regulation, identified regulation, and intrinsic motivation for eight relational activities, including

sexual intimacy, physical intimacy, self-disclosure, social support, instrumental support, niceties, and support for partner’s life aspirations (see the “Appendix” for scale items).¹ The *sexual intimacy* subscale assesses people’s motivations to engage in sexual activities such as petting, oral sex, and intercourse. The *physical intimacy* subscale assesses people’s motivations to hug, kiss, and cuddle with their partner. The *self-disclosure* subscales separately assess people’s motivations to disclose their feelings and to disclose their thoughts and concerns to their partner. The *social support* subscale assesses people’s motivations to listen to their partner’s problems (i.e., emotional support). The *instrumental support* subscales separately assess people’s motivations to help solve their partner’s problems and to do things that might reduce stress in their partner’s life. The *niceties* subscale assesses people’s motivation to do special things for their partner, including giving gifts, calling their partner, and taking their partner out. Finally, the support for partner’s *life aspirations* subscale assesses people’s motivations to support their partner’s life goals, such as education, career, hobbies, family, and/or lifestyle choices. Each activity subscale begins with a stem that describes a targeted activity (e.g., physical intimacy) and then presents a series of different reasons for engaging in the activity. Participants rate the extent to which each reason corresponds to why they engage in the target activity, using a 7-point Likert-type scale, ranging from “not at all true” (1) to “very true” (7). The range of reliabilities for each regulatory style across activities ranged from .58 to .77 (external regulation), .58 to .76 (introjected regulation), .66 to .85 (identified regulation), and .71 to .84 (intrinsic motivation). The derivation of the final scale scores is discussed further in the “Results”.

Relationship well-being

Several constructs representing relationship well-being were assessed, including intimacy, commitment, satisfaction, and vitality within the relationship. *Intimacy* within the relationship was measured by the Personal Assessment

¹ Amotivation toward relational activities is excluded from the MRA since it uniquely reflects disengagement from behaviour, whereas the other regulatory styles involve intentional and regulated behaviour. We also excluded integrated regulation toward relational activities from the MRA because we judged that integration might not be adequately assessed through self-report measures since the construct would require individuals to consider how specific relational activity motivations fit within their larger self-system, including aspects of themselves in domains other than relationships. Notably, the MRA measures motivations to engage in relational activities but does not measure motivations to *not* engage in those activities. It is possible for someone to have autonomous or controlled reasons to not engage in a particular behaviour. However, we chose to assess only reasons to engage in activities to make the MRA comparable to the CMQ in orientation.

of Intimacy in Relationships (PAIR; Schaefer and Olson 1981). The scale contains 24 items rated on a 7-point Likert-type scale. Sample items include, “This person listens to me when I need someone to talk to”, “This person helps me clarify my thoughts”, “We have an endless number of things to talk about”. The average of the 24 items serves as the intimacy score. *Commitment* to the relationship was measured by Rusbult’s (1980) commitment measure, which contains five items rated on a 7-point Likert-type scale. Sample items include, “To what extent are you committed to your relationship?”, “To what extent are you “attached” to your partner?”, and “For what length of time would you like your relationship to last?” The average of the five items provides the commitment score. *Satisfaction* in the relationship was measured by the State-Relationship Questionnaire, Trait Form (O’Connor et al. 1999). The scale provides 24 positive and negative adjectives that participants rate on a 7-point Likert-type scale according to either how they usually feel toward their partner (e.g., “Connected”, “Interested”, “Irritated”, “Distant”) or how their partner usually makes them feel (“Understood”, “Content”, “Rejected”, “Unappreciated”). The satisfaction score is the difference between the average ratings of the positive adjectives and the negative adjectives. *Vitality* within the relationship was measured by Ryan and Frederick’s (1997) vitality measure, adapted for relationships. The scale contains five items, rated on a 7-point Likert-type scale, concerning how participants feel when they are with their partner. Sample items include, “When I am with my partner, I feel alive and vital”, “When I am with my partner, I feel energized”, and “When I am with my partner, I look forward to each new day”. The average of the five items indicates the level of vitality for the relationship. Reliabilities for these scales in the current sample were .86, .82, .95, and .89, respectively.

Attachment

Adult romantic attachment was measured by the Experiences in Close Relationships scale (ECR; Brennan et al. 1998). The scale consists of 36 items that assess individual differences in the dimensions of attachment anxiety (i.e., the extent to which people are insecure versus secure about the extent of their partner’s availability and responsiveness) and attachment avoidance (i.e., the extent to which people are uncomfortable being close to others versus secure depending on others). The items are rated on a 7-point Likert-type scale according to how participants generally experience romantic relationships, not just with their current partner. Sample items assessing attachment anxiety include, “I worry about being abandoned”, “I worry that romantic partners won’t care about me as much as I care about them”, and “I worry about being alone”.

Table 1 Means and SD of Couple Motivation Questionnaire indexes, relationship well-being indexes, attachment anxiety and avoidance dimensions, and Big Five personality traits (*N* = 246)

	<i>M</i>	<i>SD</i>
Couple Motivation Questionnaire		
Amotivation	1.73	1.01
External regulation	3.38	.96
Introjected regulation	2.93	1.14
Identified regulation	4.62	1.26
Integrated regulation	3.57	1.19
Intrinsic motivation	5.68	1.03
Relative autonomy index	13.92	7.44
Relationship well-being		
Intimacy	5.41	.77
Commitment	6.02	1.07
Satisfaction	3.80	1.66
Vitality for relationship	5.58	1.07
Attachment		
Anxiety	3.46	1.07
Avoidance	2.61	1.08
Big Five traits		
Neuroticism	3.83	1.07
Extraversion	4.68	.87
Openness	4.56	.80
Agreeableness	4.86	.84
Conscientiousness	4.71	.90

Sample items assessing attachment avoidance include, “I prefer not to show a partner how I feel deep down”, “I get uncomfortable when a romantic partner wants to be very close”, and “I want to get close to my partner, but I keep pulling back”. The anxiety and avoidance dimensions are computed by taking the average of the relevant scale items (see Table 1 for the means and SD of scores). The internal reliabilities of these scores in the current sample were .90 (anxiety) and .94 (avoidance).

Big Five personality dimensions

Personality was measured by the NEO Five-Factor Inventory (NEO-FFI; Costa and McCrae 1992). The scale contains 60 items that measure five personality dimensions: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. The Neuroticism dimension reflects the tendency to experience negative emotions and is defined by facets of anxiety, hostility, depression, self-consciousness, impulsiveness, and vulnerability, and contrasts that with relative adjustment and emotional positivity. The Extraversion dimension contrasts the tendencies to be sociable, outgoing, and excitement-seeking with the tendencies to be reserved and independent. The Openness dimension

contrasts the tendencies to be curious and unconventional with the tendencies to be closed to new experiences, conventional, and conservative. The Agreeableness dimension contrasts the tendencies to be altruistic and sympathetic with the tendencies to be disagreeable, antagonistic, skeptical, and competitive. The Conscientiousness dimension contrasts the tendencies to be purposeful, strong-willed, and determined with the tendencies to be lackadaisical and disorganized (Costa and McCrae 1992). The scores for each personality dimension were computed by taking the average of the relevant items for each subscale (see Table 1 for the means and SD). The internal reliabilities of each personality dimension in the current sample were .85 (Neuroticism), .81 (Extraversion), .69 (Openness), .77 (Agreeableness), and .83 (Conscientiousness).

Results

Preliminary analyses

A preliminary step was to explore the factor structure of the MRA subscales to derive the appropriate indices of motivation. First, for each relational activity, we entered the regulatory style subscales pertaining to that activity into a principal components factor analysis with a varimax rotation (see Table 2 for the factor loadings). Within each activity, the data suggested that the regulatory styles were clustered into two factors, reflecting *autonomous activity motivation* (identified regulation and intrinsic motivation were highly positively correlated and loaded on one factor) and *controlled activity motivation* (external and introjected regulation were highly positively correlated and loaded on another factor). Given these factor loadings, within each activity we computed a score for autonomous activity motivation (created by taking the mean of identified regulation and intrinsic motivation ratings) and a score for controlled activity motivation (created by taking the mean of the external and introjected regulation ratings). Table 3 shows the means and SD of scores for autonomous and controlled motivation within each activity.

Next, we examined the intercorrelations among autonomous activity motivation scores across all activities and the intercorrelations among controlled activity motivation scores across all activities. Intercorrelations of autonomous activity motivation were moderate and positive, suggesting that the more people feel autonomously engaged in one activity, the more they also report feeling autonomous in other relational activities (above the diagonal in Table 4).²

² The exception to this pattern was autonomous activity motivation toward sexual intimacy, which was less clearly associated with autonomous motivation toward the other activities. However, when

Table 2 Factor loadings of regulatory styles on factors of controlled activity motivation and autonomous activity motivation for each relational activity ($N = 246$)

	Controlled activity motivation		Autonomous activity motivation	
	External regulation	Introjected regulation	Identified regulation	Intrinsic motivation
Sexual intimacy	.94	.83 ^a	.84	.91
Physical intimacy	.82	.86 ^a	.86	.85
Disclosure (feelings)	.89	.89	.93	.93
Disclosure (thoughts)	.88	.90	.95	.94
Social support	.83	.87 ^a	.92	.92
Instrumental support (problems)	.86	.86	.89	.80
Instrumental support (stress)	.92	.77 ^a	.89	.88
Niceties	.93	.87 ^a	.90	.90
Life aspirations	.90	.93	.92	.88

^a Introjected regulation also loaded on autonomous activity motivation factor at .37 (sexual intimacy), .29 (physical intimacy), .24 (social support), .45 (instrumental support-stress), and .29 (niceties). Given that these loadings were below .60, we retained the factors as illustrated above

Table 3 Means and SD of MRA autonomous and controlled motivation scores by relational activity ($N = 246$)

Relational activity	Autonomous motivation <i>M</i> (SD)	Controlled motivation <i>M</i> (SD)
Sexual intimacy	5.19 (1.09)	2.35 (1.00)
Physical intimacy	5.84 (.96)	2.45 (1.00)
Disclosure of feelings	5.69 (1.12)	3.24 (1.18)
Disclosure of thoughts	5.62 (1.09)	2.37 (1.12)
Social support	6.21 (.83)	3.47 (1.14)
Instrumental support (problems)	4.89 (1.09)	3.55 (1.15)
Instrumental support (stress)	5.63 (.99)	3.36 (1.17)
Niceties	5.76 (1.05)	3.33 (1.12)
Support of life aspirations	5.58 (.99)	3.48 (1.36)

Footnote 2 continued

we tested the SEM models presented later in the paper and allowed autonomous motivation for sexual intimacy to contribute uniquely to relationship well-being outcomes rather than load on the autonomous motivation latent factor, the model fit was poor. Thus, in the final analyses, it was included as an indicator of the autonomous motivation latent factor along with the other activity scales.

Table 4 Intercorrelations among autonomous motivation scores (above diagonal) and intercorrelations among controlled motivation scores (below diagonal) across relational activities ($N = 246$)

	1	2	3	4	5	6	7	8	9
1. Sexual intimacy		.42	.17 ¹	.24	.19	.15 ¹	.33	.22	.24
2. Physical intimacy	.72		.42	.35	.48	.33	.45	.36	.40
3. Disclosure (feelings)	.53	.62		.78	.67	.44	.56	.47	.53
4. Disclosure (thoughts)	.51	.57	.74		.68	.57	.63	.50	.63
5. Social support	.51	.57	.66	.62		.54	.64	.50	.62
6. Instrumental (problems)	.55	.57	.61	.62	.74		.64	.36	.60
7. Instrumental (stress)	.48	.61	.62	.60	.70	.73		.63	.64
8. Niceties	.51	.58	.64	.59	.67	.69	.70		.62
9. Life aspirations	.40	.50	.55	.43	.56	.61	.60	.67	

All correlations significant at the $p < .01$ level, except values superscripted with “1” which are significant at $P < .05$ level

A similar pattern of intercorrelations emerged for controlled activity motivation (below the diagonal in Table 4), suggesting that the more people feel pressured or coerced in one activity, the more they also report feeling pressured or coerced to engage in other relational activities. Notably, for both of the matrices described, people’s motivations across activities were moderately correlated overall, which suggests that their motivations toward different activities are not completely redundant and thus should be modeled as separate indicators.

CMQ and MRA in the prediction of relationship well-being

Both the CMQ and the MRA measure people’s relationship motivations. A central question, then, is whether these scales provide unique or overlapping information for the prediction of relationship well-being. To examine the comparability of the CMQ and the MRA in the prediction of relationship well-being, we modeled the CMQ and MRA as latent variables predicting a latent variable representing relationship well-being (Figs. 1, 2). The CMQ latent variable represents the relative autonomy score (see Table 1 for the means and SD of the CMQ subscales and relative autonomy score). Given that the MRA factor structure was consistent with two relatively independent factors of autonomous activity motivation and controlled activity motivation, we modeled the autonomous and controlled scores separately, such that the autonomous activity motivation scores were modeled as indicators of an autonomous activity motivation latent variable and the controlled activity motivation scores were modeled as indicators of a controlled activity motivation latent variable.³ The

relationship well-being latent variable represents the common factor that explains people’s scores on commitment, satisfaction, intimacy, and vitality within the relationship (see Table 1 for means and SD of these variables).

Multiple-group analysis in AMOS 16.0 (Arbuckle 2007) was used to analyze data from men and women simultaneously. The model was evaluated for its goodness of fit using indices including the Generalized Likelihood Ratio (CMIN), the Comparative Fit Index (CFI), and the Root Mean Square Error of Approximation (RMSEA), with criteria for a reasonably well-fitting model of $CMIN/df < 2.5$, $CFI > .90$, and $RMSEA < .08$.

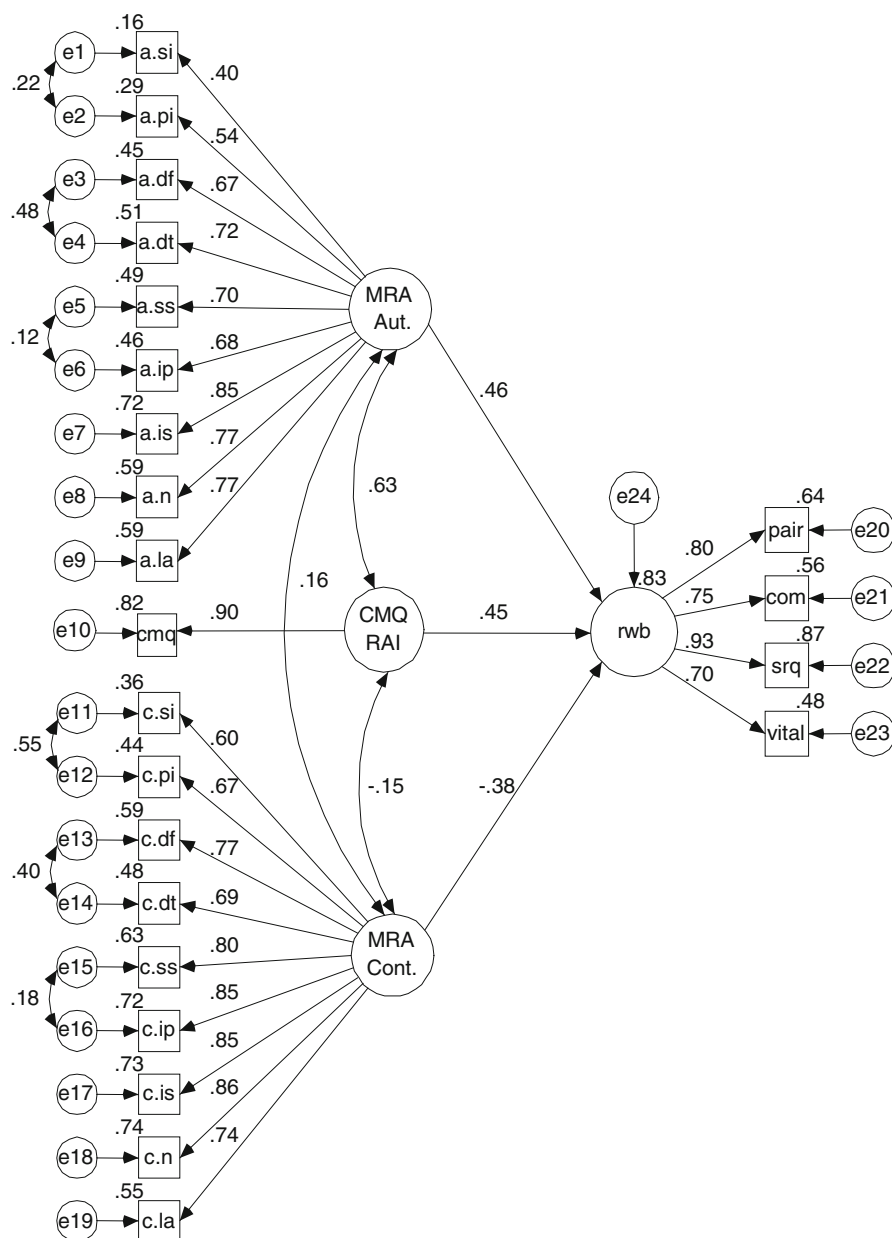
Examination of these fit indices suggested that the postulated model did not closely fit the observed correlations ($CMIN = 1,092.99$, $df = 450$, $p < .001$, $CMIN/df = 2.43$, $CFI = .83$, $RMSEA = .077$). We speculated that the lack of fit was due to certain activities of the MRA being highly related to each other (e.g., sexual and physical intimacy), resulting in highly correlated motivations toward these activities. We therefore allowed correlated errors between three pairs of activities in order to explain commonalities between these activities that were not captured by the autonomous activity motivation and controlled activity motivation latent factors. The chosen pairs were sexual intimacy and physical intimacy (both involve physical closeness), disclosure of feelings and disclosure of thoughts (both involve self-disclosure), and social support and instrumental support of problems (both activities emphasize helping one’s partner cope with problems). The

Footnote 3 continued

motivation scores loaded negatively. When we tested this model in AMOS, the autonomous activity motivation scores loaded positively but the controlled activity motivation scores loaded poorly on the factor. Further, the model fit was very poor ($CMIN = 3,247.91$, $df = 456$ $CMIN/df = 7.12$, $CFI = .47$, $RMSEA = .132$), suggesting that a one-factor model of the MRA is inappropriate.

³ We also modeled the MRA as a one-factor model in which autonomous activity motivation scores and controlled activity motivation scores were indicators of a single latent factor. This factor would represent “relative autonomy” if the autonomous activity motivation scores loaded positively and the controlled activity

Fig. 1 Motivation to maintain the relationship and motivation toward relational activities predicting relationship well-being for men



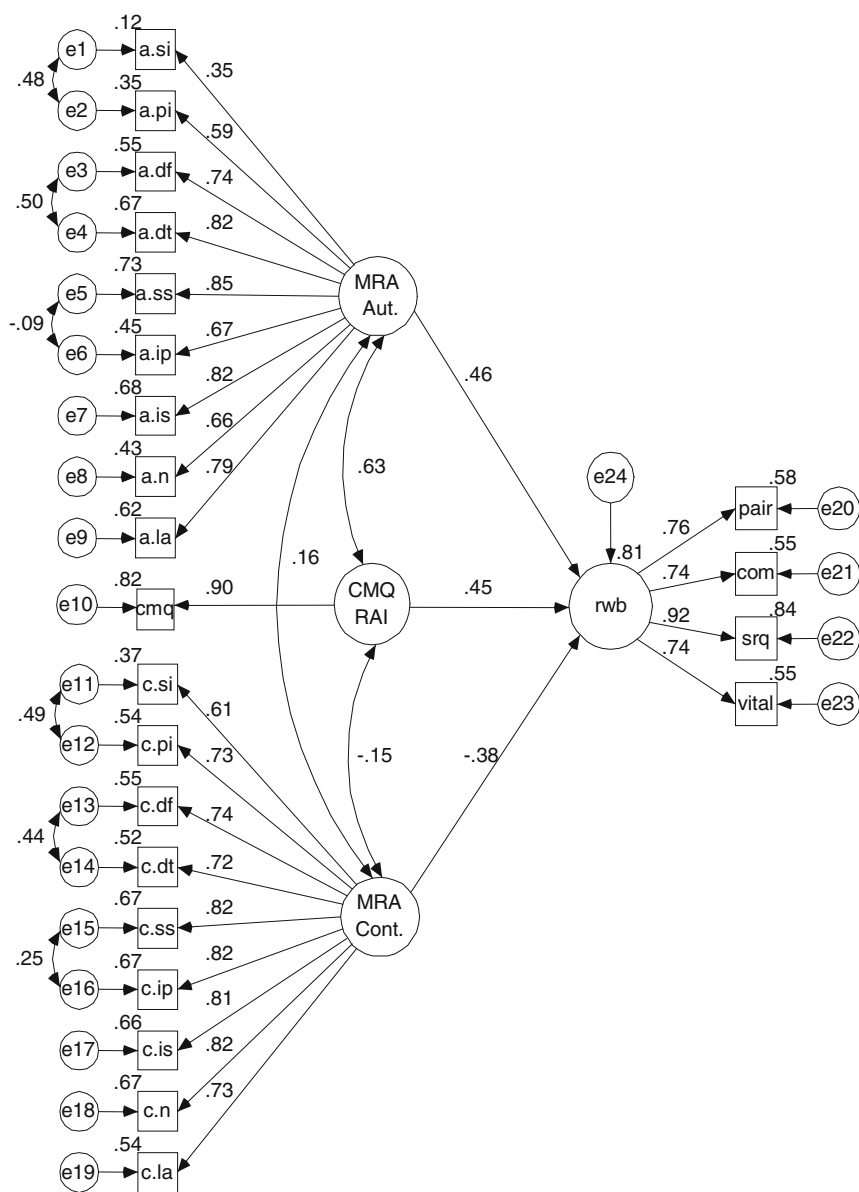
MRA Aut. = Autonomous activity motivation; *MRA Cont.* = Controlled activity motivation; *CMQ RAI* = *CMQ* Relative Autonomy Index; *rwb* = relationship well-being; *pair* = Personal Assessment of Intimacy in Relationships; *com* = Commitment; *srq* = State-Trait Relationship Questionnaire; *vital* = Vitality; *a.* = autonomous motivation subscale; *c.* = controlled motivation subscale; *si* = Sexual Intimacy; *pi* = Physical Intimacy; *df* = Disclosure of Feelings; *dt* = Disclosure of Thoughts; *ss* = Social Support; *ip* = Instrumental Support (Problems); *is* = Instrumental Support (Stress); *n* = Niceties; *la* = Support of Partner's Life Aspirations

inclusion of these correlated errors substantially improved model fit, as evidenced by the change in CMIN [1,092.99 (450) – 908.94 (438) = 185.05, *df* = 12, *p* < .001], and resulted in acceptable fit with the observed correlations

(CMIN = 908.94, *df* = 438, *p* < .001, CMIN/*df* = 2.08, CFI = .88, RMSEA = .066).

To assess whether there were differences between men and women on parameter estimates we set some parameters

Fig. 2 Motivation to maintain the relationship and motivation toward relational activities predicting relationship well-being for women



MRA Aut. = Autonomous activity motivation; *MRA Cont.* = Controlled activity motivation; *CMQ RAI* = *CMQ* Relative Autonomy Index; *rwb* = relationship well-being; *pair* = Personal Assessment of Intimacy in Relationships; *com* = Commitment; *srq* = State-Trait Relationship Questionnaire; *vital* = Vitality; *a.* = autonomous motivation subscale; *c.* = controlled motivation subscale; *si* = Sexual Intimacy; *pi* = Physical Intimacy; *df* = Disclosure of Feelings; *dt* = Disclosure of Thoughts; *ss* = Social Support; *ip* = Instrumental Support (Problems); *is* = Instrumental Support (Stress); *n* = Niceties; *la* = Support of Partner’s Life Aspirations

to be equal across gender and examined whether these restrictions significantly decreased model fit. Specifically, to ensure that the autonomous activity motivation factor, controlled activity motivation factor, and the relationship well-being factor represented the same constructs across gender (i.e., metric equivalence), we held the factor loadings constant across gender for the autonomous and

controlled activity motivation scores and the relationship well-being indices. These restrictions did not result in a significant decrease in model fit, suggesting that the latent factors of the MRA and relationship well-being are metrically equivalent across gender.

We then tested for gender differences among the latent variables (i.e., the structural model) by holding constant the

variances of, and covariances between, latent variables. These restrictions also did not result in a significant decrease in model fit, suggesting that the relations among the latent variables are equivalent across gender.

However, when we tested for equivalence in error variances and covariances between men and women, there was a significant decrease in the model fit, suggesting that the data is more accurately depicted by separate models by gender. Thus, for the final models all parameters were set to be equal across gender, except for error variances and covariances, which were allowed to vary by gender.

The standardized estimates for the model are displayed in Fig. 1 (men) and Fig. 2 (women). First, examining the relation of autonomous to controlled activity motivation, results show that for both men and women, autonomous activity motivation and controlled activity motivation were modestly positively correlated ($r = .16$, $p < .05$ for men and women), suggesting that these two activity motivation factors are relatively independent of each other. Next, examining the relation of the CMQ to the MRA autonomous activity motivation, results show that for both men and women, CMQ relative autonomy and the MRA autonomous activity motivation were significantly correlated, ($r = .63$, $p < .001$ for men and women), such that greater autonomy toward maintaining a relationship was associated with greater autonomy in engaging in the activities of the relationship. Examining the relation of the CMQ to the MRA controlled activity motivation, results show that CMQ relative autonomy and MRA controlled activity motivation were modestly negatively correlated ($r = -.15$, $p < .05$ for men and women), such that greater autonomy toward maintaining a relationship was associated with less controlled motivation to engage in the activities of the relationship. In sum, these results indicate that relative autonomy as measured by the CMQ is positively related to but not completely overlapping with MRA autonomous activity motivation and appears to be only modestly related to MRA controlled activity motivation.

Finally, assessing the contribution of the CMQ and MRA scales in the prediction of relationship well-being, results show that the CMQ factor as well as both of the MRA activity motivation factors contribute uniquely to the prediction of relationship well-being. The more autonomous people were toward maintaining their relationship overall (CMQ), the greater their relationship well-being ($\beta = .45$, $p < .001$ among men and women). Also, the more people were willingly engaged in the activities of their relationship (MRA autonomous activity motivation), the greater their relationship well-being ($\beta = .46$, $p < .001$ among men and women). Finally, the more people felt pressured or coerced to engage in the activities of their relationship (MRA controlled activity motivation) the lower their relationship well-being ($\beta = -.38$, $p < .001$

among men and women). Notably, when both the CMQ and MRA simultaneously predicted relationship well-being, these two measures of relationship motivation powerfully predicted the relationship well-being general factor ($R^2 = .83$ for men, $R^2 = .81$ for women).

Relations of the CMQ and MRA to attachment security and personality

Given that the CMQ and MRA seem to be measuring distinct constructs, we wanted to explore how these two measures might differ by examining their correlations to dimensions of personality and attachment. To provide a more direct comparison with the RAI of the CMQ, we calculated an overall autonomous activity motivation score by averaging across the MRA autonomous activity motivation scores ($M = 5.82$, $SD = .75$) and an overall controlled activity motivation score by averaging across the MRA controlled activity motivation scores ($M = 3.08$, $SD = .92$).

First, examining associations to attachment, we computed correlations between the motivation measures and dimensions of attachment anxiety (i.e., fear of rejection) and attachment avoidance (i.e., fear of closeness). Relative autonomy to maintain the relationship (CMQ) was negatively associated with attachment avoidance in both men ($r = -.41$, $p < .001$) and women ($r = -.23$, $p < .01$), but it was unrelated to attachment anxiety ($r = -.14$, *n.s.* for men; $r = -.11$, *n.s.* for women). Thus, the greater relative autonomy that people feel about maintaining their romantic relationship, the less they fear closeness in their relationship. When examining autonomous and controlled activity motivation separately, it appears that each relates to a different dimension of attachment. Specifically, attachment avoidance was negatively associated with autonomous activity motivation ($r = -.59$, $p < .001$ among men; $r = -.37$, $p < .001$ among women) but was unrelated to controlled activity motivation among women ($r = .05$, *n.s.*) and was only modestly positively correlated among men ($r = .20$, $p < .05$). In contrast, attachment anxiety was positively associated with controlled activity motivation ($r = .51$, $p < .001$ among men; $r = .39$, $p < .001$ among women) but was unrelated to autonomous activity motivation ($r = -.05$, *n.s.* among men; $r = -.06$, *n.s.* among women). Thus, the more people willingly engage their partners in a variety of relational activities, the less fearful they are of closeness in the relationship, while the more pressured and obligated they feel to engage in activities of the relationship, the more they fear rejection and abandonment by their partner.

Finally, we tested the associations of relative autonomy toward maintaining the relationship (CMQ) and motivations toward relational activities (MRA) to the Big Five personality traits (Table 5). In both men and women,

Table 5 Correlations of CMQ relative autonomy and autonomous and controlled activity motivation with NEO-FFI personality domains

	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness
Men (<i>n</i> = 112)					
CMQ relative autonomy	−.03	.10	−.04	.08	−.04
Mean autonomous activity motivation	.10	.37**	.05	.04	.18
Mean controlled activity motivation	.36**	−.01	−.13	−.39**	−.10
Women (<i>n</i> = 134)					
CMQ relative autonomy	−.14	.13	.02	.06	.13
Mean autonomous activity motivation	−.23**	.15	.10	.19*	.21*
Mean controlled activity motivation	.16	−.05	−.31**	−.17	.03

* $p < .05$, ** $p < .01$

relative autonomy toward maintaining the relationship (CMQ) was not significantly related to any of the personality dimensions. In contrast, both autonomous and controlled activity motivations showed associations to many of the Big Five dimensions. Among men, autonomous activity motivation was positively associated with Extraversion, while controlled activity motivation was positively correlated with Neuroticism and negatively correlated with Agreeableness. Thus, men who were more disagreeable and experience more negative affect were likely to feel more controlled in their relational activities, while those who were more outgoing and experience more positive affect were more likely to be willingly engaged in their relational activities. Among women, autonomous activity motivation was negatively correlated with Neuroticism and positively correlated with Agreeableness and Conscientiousness, while controlled activity motivation was negatively associated with Openness. Thus, women who were more closed to experience and rigid were more likely to feel pressured to engage in their relational activities, while those who were friendlier, more conscientious, and less emotionally negative were likely to be more willingly engaged in their relational activities.

Discussion

In this study, we sought to assess the potentially unique contributions of general motivations to maintain a relationship and motivations toward specific relational activities in the prediction of relationship well-being. We expected that motivations to maintain a relationship (CMQ) and motivations to engage in relational activities (MRA) would each independently carry significant implications for relational functioning (including commitment, satisfaction, intimacy, and vitality within the relationship), and results clearly showed support for this model. Indeed, the CMQ and MRA both independently predicted

relationship well-being and together they powerfully predicted relationship functioning, explaining roughly 80% of the variance in a general relationship well-being factor.

Notably, prior to this work, research on motivation toward engaging in a romantic relationship centered on a global estimate of reasons for maintaining the relationship but did not examine whether this motivation could be further differentiated by assessing motivation toward specific relational activities. Consistent with hierarchical models of motivation (see Vallerand 1997), we found that the prediction of functioning within romantic relationships is enhanced when relationship motivations are measured both globally and more proximally. Clearly, the results of this study suggest that including activity motivations in the assessment of relationship motivations provides additional information about the functioning and wellness of a romantic partnership. In particular, the more willingly people engage in various tasks of their relationship, the greater their commitment, satisfaction, intimacy, and vitality within the relationship. In contrast, the more pressured or coerced they feel about engaging in their relational activities, the more poorly their relationship functions.

Beyond showing a unique and significant contribution to relationship well-being, our results show further that relational activity motivation factors may provide stronger links to context-specific manifestations of important personality traits and relationship processes. Specifically, greater autonomous activity motivation (MRA) was associated with less attachment avoidance (i.e., fears of closeness) and greater controlled activity motivation was associated with greater attachment anxiety (i.e., fears of rejection and abandonment). Notably, the distinctions of autonomy and control in the MRA may help to understand the unique patterns found in relation to the attachment dimensions of anxiety and avoidance. That is, as attachment avoidance reflects discomfort in being close to and depending on others, autonomous motivation—reflecting value for, interest in, and willingly engagement in the

activities with the partner—is expectedly negatively associated. Further, as attachment anxiety reflects worries that the self is unlovable and will be rejected, those higher on this dimension would likely view engagement in relational activities as more pressured and controlled—not something they “want to” or “enjoy” doing, but rather as something they “have to” or “must” do in order to preserve their sense of self.

With respect to personality, autonomous and controlled activity motivation were related to separate dimensions of the Big Five dimensions according to a gender-specific pattern. Specifically, women who were more closed to experience and rigid were more likely to feel pressured to engage in their relational activities, while those who were friendlier, more conscientious, and less emotionally negative were likely to be more willingly engaged in their relational activities. Men who were more disagreeable and experience more negative affect were likely to feel more controlled in their relational activities, while those who were more outgoing and experience more positive affect were more likely to be willingly engaged in their relational activities. While these analyses were exploratory, they suggest that distinguishing between the two motivational factors may be useful in understanding the contextual manifestations of personality within romantic relationships and the consequences of personality for behaviour regulation.

Notably, the CMQ, while an important predictor of relationship well-being, showed a negative association to attachment avoidance but was unrelated to attachment anxiety or to any of the Big Five personality dimensions. What this seems to suggest is that the CMQ may be identifying a global orientation toward approaching connection and being willingly committed to the relationship but may not be able to capture a more nuanced picture of relational engagement. The important distinction that the CMQ highlights is that why people are committed to their relationship matters. That is, it is not enough that partners simply stay in their relationship; they must be willingly committed to their relationship in order for the relationship to function well. Given that constructs in the relationships literature do not typically make this distinction (see La Guardia and Patrick 2008 for review), the CMQ continues to add vital information to our understanding of what makes relationships function optimally.

Limitations and future directions

There are several limitations to the current study. First, the data are correlational and do not permit inferences about causality between variables. Future studies are required to model relationship motivations longitudinally in order to

better assess their antecedents and consequences in the relationship. For example, future research could evaluate couples’ motivations for specific activities using daily diaries and examine the immediate impact of motivations on daily relational behaviours as well as the cumulative impact on relationship well-being and functioning.

A second limitation is that we employed only self-report measures from one partner, rather than reports from both partners of the dyad. Research using the CMQ suggests that the relative autonomy of each partner to maintain their relationship influences their own relationship well-being as well as their partner’s relationship well-being, such that the greater an individual’s relative autonomy to maintain the relationship the greater their own and their partner’s relationship well-being (Blais et al. 1990; Knee et al. 2005). Further, in friendship dyads, research has shown that autonomy supportive behaviour towards a partner promotes both one’s own functioning and the partner’s functioning within the relationship (Deci et al. 2006). Future research should evaluate the importance of mutuality of autonomy between partners in both motivations to maintain the relationship as well as to engage in specific relational activities, and use these estimates to predict self-reported relationship outcomes. Further, examining partners’ reports of each other’s behaviour will clarify the behavioural consequences of these self-reported motivational orientations (i.e., do what partners say about their own motivations get translated into their behaviour within the relationship?).

Another set of limitations involve the construction of the MRA. The first issue is that items assessing autonomous activity motivation (i.e., intrinsic motivation and identified regulation) and those assessing controlled activity motivation (i.e., introjected regulation and external regulation) are imbalanced in terms of their valence and in terms of how they embody approach versus avoidance motivation. These differences are partly due to the conceptual definitions of each regulatory style. In particular, intrinsic motivation is a positive form of behaviour regulation as it involves willing engagement in an activity and clearly represents approach motivation (i.e., the activity is pursued because of interest or pleasure inherent in the activity). Identified regulation is also a positive form of behaviour regulation as it involves willing engagement in an activity, but it can be characterized by both approach and avoidance motivation. For example, individuals who personally value intimacy in relationships could spend time with their partners either to increase the intimacy between them or to avoid having an increase in distance in their relationship. Notably, the identified regulation items of the MRA involve only approach motivation, which is a limitation of the scale. Finally, introjected regulation encompasses behaviours driven by perceived internal rewards or

pressures and external regulation encompasses behaviours driven by external rewards or pressures. That is, introjected and external regulations can involve both approach motives (i.e., pursuit of desired outcomes) and avoidance motives (i.e., prevention of undesired outcomes or escape from aversive events). An examination of the item content of the MRA reveals that while some positively valenced approach motivations are represented in introjected and external regulation items (e.g., life goals: “Because there are personal benefits to having a successful partner”), negatively valenced avoidance motivations are more frequently represented (e.g., self-disclosure: “Because my partner withdraws and becomes cold with me if I don’t share my feelings with him/her”).

The imbalances in item valence and approach and avoidance motivation could provide alternative explanations for our results. If it was the case that the autonomy and control dimensions simply reflect differences in valence or approach/avoidance motivation, then items in the introjected or external regulation dimensions that represent positively valenced approach motivations should load positively with intrinsic and identified items within the activity. They, however, do not. Thus, it would seem that associations between activity motivation and relationship well-being are not simply due to the valence of item content nor simply to being oriented toward approach or avoidance. Nonetheless, future revisions of the MRA should seek a greater balance between positively valenced and negatively valenced approach and avoidance motives within the identified, introjected and external regulatory styles.

A second issue is whether the MRA’s factor structure will also hold for married couples. In the current sample, which is composed of mostly non-married individuals, people’s activity motivations were explained by two factors of autonomous and controlled activity motivation. Although there may be mean level differences between married and dating couples in how autonomous and controlled they are in different relational activities, we expect that the factor structure demonstrated in this sample, and the relations of autonomy and control to relationship well-being, will be similar across dating and married couples. Notably, in this sample, relationship length did not moderate any of the study results. Thus, whether in a short-term or long-term relationship, being willingly engaged, in contrast to being compelled or coerced to engage, is expected to result in greater relationship well-being. Longevity is not the key factor, but rather, autonomy is.

The current construction of the MRA allows us to understand the relative role of autonomous and controlled motivations for relationship well-being. However, as it is currently constructed, it does not allow us to examine whether individuals vary in their motivations across their

different relational activities and whether this variation in itself has important consequences for relational functioning. In the current version of the MRA we chose to use activity-specific wording for each activity to capture the distinct manifestations of each regulatory style (intrinsic, identified, introjected, external) within each activity. A consequence of this choice is that observed differences between activity scales could be due to differences in item content rather than differences in motivation *per se*.⁴ Thus, if the aim is to assess variability across relational activities, the MRA activity subscales should be revised to create greater uniformity in items across each subscale while not losing the unique flavour of each relational activity. When items are more closely matched in content, error variance attributable to the item content is reduced. If we proffered some predictions regarding variability, we suspect that in undergraduate dating relationships, which are relatively satisfied relationships in which major problems have not yet arisen, individuals may show less variation in autonomy and control across different relational activities. In contrast, we suspect that in married couples, longer-term interdependence in their relationship may have provided more opportunities to experience both greater highs and lows within their partnership, and thus yield a more nuanced picture of partners’ motivations toward different activities in the relationship. Further, distressed couples might show unique profiles in which motivation is deeply affected in certain sets of activities but not others.

Finally, one potential benefit of measuring motivations toward relational activities is that functioning and outcomes within specific activities might be predicted more fully. For example, knowing people’s motivations toward sexual intimacy will probably bear greater relevance to their sexual behaviour and satisfaction with their sex life than would their motivations to maintain the relationship as a whole or to engage in some other relational activity. Future studies should evaluate whether the activity subscales of the MRA provide improved prediction of specific behaviour within those activities. Indeed, we expect that the activity subscales will improve the prediction of behaviours, cognitions, and emotions within each activity, allowing for the study of autonomy and control within highly specific relational contexts.

⁴ That said, we observed considerable regularity across relational activity scales in terms of each scale’s factor structure and covariance with the other activity scales. This regularity reflects the robustness of the constructs of autonomous and controlled activity motivation, and likely overshadows issues of item comparability.

Conclusions

In summary, this study highlights the importance of measuring willingness to both maintain a relationship and engage in specific relational activities in order to optimally understand relational functioning. The more people willingly engage in their romantic relationships, and specifically in the numerous activities that comprise the partnership, the more positively their relationship functions. This initial exploration of motivation in particular relational activities shows that this level of inquiry has promise of providing a fuller understanding of how autonomy enhances, and feeling pressured or controlled detracts from, functioning and well-being within the various activities of a romantic partnership.

Appendix: Motivations for relational activities

Sexual intimacy (14 items)

Why do you engage in sexual activity (petting, oral sex, or intercourse) with your partner?

Intrinsic:

1. Because I expect it to be interesting and exciting.
2. Because I get pleasure from sharing a special and intimate experience with my partner.
3. Because I find it very arousing and enjoyable to give my partner physical pleasure.

Identified:

1. Because I value sexual activity as a part of a full life.
2. Because sexual activity is an important part of my relationship.
3. Because it allows us to grow closer and more intimate.

Introjected:

1. Because sexual activity makes me feel better about myself.
2. Because that is what couples are supposed to do.
3. Because I'd feel anxious or guilty if I denied my partner of sexual activity.
4. Because my partner wants it, and it's my role to satisfy my partner's sexual needs.

External:

1. Because my partner gets moody and irritable if I deny him/her of sexual activity.
2. Because I fear my partner may become discontented with our relationship if I don't fulfill his/her sexual needs.
3. Because my partner is in a better mood and is nicer to me after we engage in sexual activity.

4. Because my partner will do things for me that he/she wouldn't do if I didn't engage in sexual activity with him/her.

Physical intimacy (14 items)

Why do you engage in physical intimacy (i.e., hug, kiss, cuddle) with your partner?

Intrinsic:

1. Because I enjoy being in contact with him/her.
2. Because I love the way I feel when I am in contact with him/her.
3. Because I am very attracted to my partner and desire to be in physical contact with him/her.

Identified:

1. Because it increases the intimacy and closeness in our relationship.
2. Because physical intimacy helps us stay connected and fosters emotional closeness between us.
3. Because I believe it is a healthy aspect of a good relationship.
4. Because it symbolizes our togetherness, which is something I value and strive for in our relationship.

Introjected:

1. Because romantic couples are supposed to show their affection for one another through physical intimacy.
2. Because I want others to know that we are a happy and intimate couple.
3. Because I feel anxious about our relationship unless there is a show of physical affection between us.
4. Because it pleases my partner, and I need to please him/her to feel important and wanted.

External:

1. Because my partner insists that we be physically affectionate.
2. Because my partner seems cold and rejecting if I don't give him/her physical affection.
3. Because my partner wants to be touched. So I do it to avoid a hassle from him/her.

Self-disclosure of feelings (13 items)

Why do you share your feelings with your partner?

Intrinsic:

1. Because I find it exciting to explore my innermost feelings with my partner.

2. Because it feels good to talk about my feelings with my partner.
3. Because I find it interesting to talk about my feelings with my partner.

Identified:

1. Because it is important to me that I can share my feelings with my partner.
2. Because I value being open about my feelings in my relationship.
3. Because being in-tune with each other's feelings helps our relationship stay on track.

Introjected:

1. Because when my partner shares his/her feelings, I feel obligated to share some of mine.
2. Because that's what my partner expects me to do.
3. Because people are supposed to share their feelings in relationships.

External:

1. Because my partner nags me until I tell him/her what I'm feeling.
2. Because my partner shows that he/she approves of me when I share my feelings.
3. Because my partner treats me better when I've expressed my feelings.
4. Because my partner withdraws and becomes cold with me if I don't share my feelings with him/her.

Self-disclosure of thoughts (13 items)

Why do you share your thoughts and concerns with your partner?

Intrinsic:

1. Because I get excited to tell my partner my thoughts.
2. Because it is interesting and thought-provoking to talk about my ideas with my partner.
3. Because I enjoy sharing deep and meaningful conversations with my partner.

Identified:

1. Because I value openness in our relationship.
2. Because I want my partner to know and understand me.
3. Because I value what I learn about myself when I discuss my thoughts with my partner.
4. Because talking to my partner gives me a new perspective on my problems and helps me deal with them.

Introjected:

1. Because I sometimes feel guilty if I keep my thoughts private.
2. Because I worry my partner will think I'm dumb or boring if I don't share my thoughts.
3. Because when my partner shares his/her thoughts, I feel like I have to share mine.

External:

1. Because my partner won't stop asking me questions unless I tell him/her what I'm thinking.
2. Because my partner is friendlier and nicer when I tell him/her what I'm thinking.
3. Because my partner demands that I be open about what I'm thinking, and he/she will get angry and resentful if I don't go along.

Social support (13 items)

Why do you listen to your partner's problems?

Intrinsic:

1. Because I am interested in whatever my partner is going through.
2. Because I enjoy the process of listening to and learning about my partner.
3. Because I am curious to know what my partner is feeling and thinking.

Identified:

1. Because I want my partner to be able to count on me when he/she is having problems.
2. Because I feel we become closer when I understand what my partner is going through.
3. Because it is important to me that my partner feels supported.

Introjected:

1. Because it is my responsibility to be there for my partner, and I'd feel bad if I wasn't there for him/her.
2. Because I'd feel guilty if I wasn't there for my partner when he/she is feeling down.
3. Because I need to do it to feel like I am a dependable partner.
4. Because I have to do it to be a good partner.

External:

1. Because my partner will get angry and resentful if I don't make time to listen to his/her problems and concerns.

2. Because if I just listen, my partner will stop bringing me down.
3. Because I expect that things will get worse between us if I don't make him/her feel better.

Instrumental support of partner's problems (12 items)

Why do you try to help your partner solve his/her problems?

Intrinsic:

1. Because I find it exciting and challenging to help my partner solve his/her problems.
2. Because I enjoy the challenge of helping my partner work through his/her tough issues.
3. Because I can't help but get caught-up in the thrill of tackling my partner's problems.

Identified:

1. Because I believe my partner's challenges are mine too.
2. Because it is important for us to tackle problems together.
3. Because I find it very satisfying to help my partner overcome a difficulty.

Introjected:

1. Because I'd feel like a bad person if I didn't try to help my partner solve his/her problems.
2. Because I worry that I will look like a neglectful partner if I don't help my partner solve his/her problems.
3. Because I feel valuable when I help my partner work through his/her issues.

External:

1. Because my partner can't cope with his/her problems without me.
2. Because if I help my partner get over his/her problems, we can get back to having fun and enjoying ourselves.
3. Because I have to help my partner for him/her to help me with my problems.

Instrumental support to make partner's life less stressful (12 items)

Why do you invest time and effort in trying to do things that make your partner's life easier or less stressful?

Intrinsic:

1. Because I get a lot of pleasure out of making things easier for my partner.

2. Because it excites me to make my partner feel good.
3. Because I enjoy taking care of my partner.

Identified:

1. Because I value a giving relationship.
2. Because I believe we need to work together and be unselfish for our relationship to stay strong.
3. Because I want to see my partner prosper and be content. So, I'll do whatever I can to assist him/her in that.

Introjected:

1. Because I feel that helping my partner out is a way to fulfill my role in my relationship.
2. Because taking care of your partner is what it means to be in a romantic relationship.
3. Because I get anxious if I don't feel like I'm useful in my partner's life.

External:

1. Because I fear my partner will become unhappy with our relationship if I don't do things for him/her.
2. Because then we avoid arguing about who should do what.
3. Because my partner is easier to live with if he/she gets what he/she wants.

Niceties (14 items)

Why do you do special things for your partner (e.g., give gifts, call him/her, take him/her out)?

Intrinsic:

1. Because I get really excited at the anticipation of knowing my partner will enjoy what I've done or plan to do.
2. Because I enjoy the process of planning something that will bring my partner pleasure.
3. Because it delights me to see my partner happy.

Identified:

1. Because I want to show my partner how much I love and cherish him/her.
2. Because I want to express my gratitude for everything my partner does for me.
3. Because my partner deserves to be cared for and attended to.

Introjected:

1. Because I know it is the nice thing to do.
2. Because being in a romantic relationship means you've got to do things like that for your partner.

3. Because doing such things makes me feel like a good person and a good partner.
4. Because my partner sometimes expects that I do special things for him/her, and I'd feel guilty or anxious if I didn't follow through.

External:

1. Because I expect my partner will reciprocate and do special things for me.
2. Because it is a way to keep my partner interested and contented in our relationship.
3. Because things like that put my partner in a good mood and he/she treats me better.
4. Because my partner seems distant and unpleasant if I don't do special things for him/her.

Support for partner's life goals (13 items)

Why do you do things to support your partner's life aspirations and goals (e.g., education, career, hobbies, family, lifestyle)?

Intrinsic:

1. Because I find it exciting to talk with my partner about his/her dreams and to help make them a reality.
2. Because I enjoy the process of helping my partner stay motivated and overcoming obstacles to his/her goals.
3. Because helping my partner successfully pursue his/her goals is a very challenging and interesting task.

Identified:

1. Because I value the opportunity to contribute to something that is very meaningful in my partner's life.
2. Because my partner's goals are very important to me, and I want to be a part of achieving those goals.
3. Because I want to see my partner reach his/her potential or what he/she wants to be.

Introjected:

1. Because my partner might fail without my support, and I would feel guilty if I let that happen.
2. Because my partner's achievements will reflect good things about me.
3. Because my partner's achievements will make me look good to others as well.
4. Because helping my partner pursue his/her goals makes me feel useful.

External:

1. Because my partner will be easier to live with when he/she achieves his/her goals.

2. Because there are personal benefits to having a successful partner.
3. Because supporting him/her is an investment in my future too, since a successful partner makes life easier.

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Figure 1. A Self-Determination Theory Taxonomy of Motivation (adapted from Deci & Ryan, 2000)

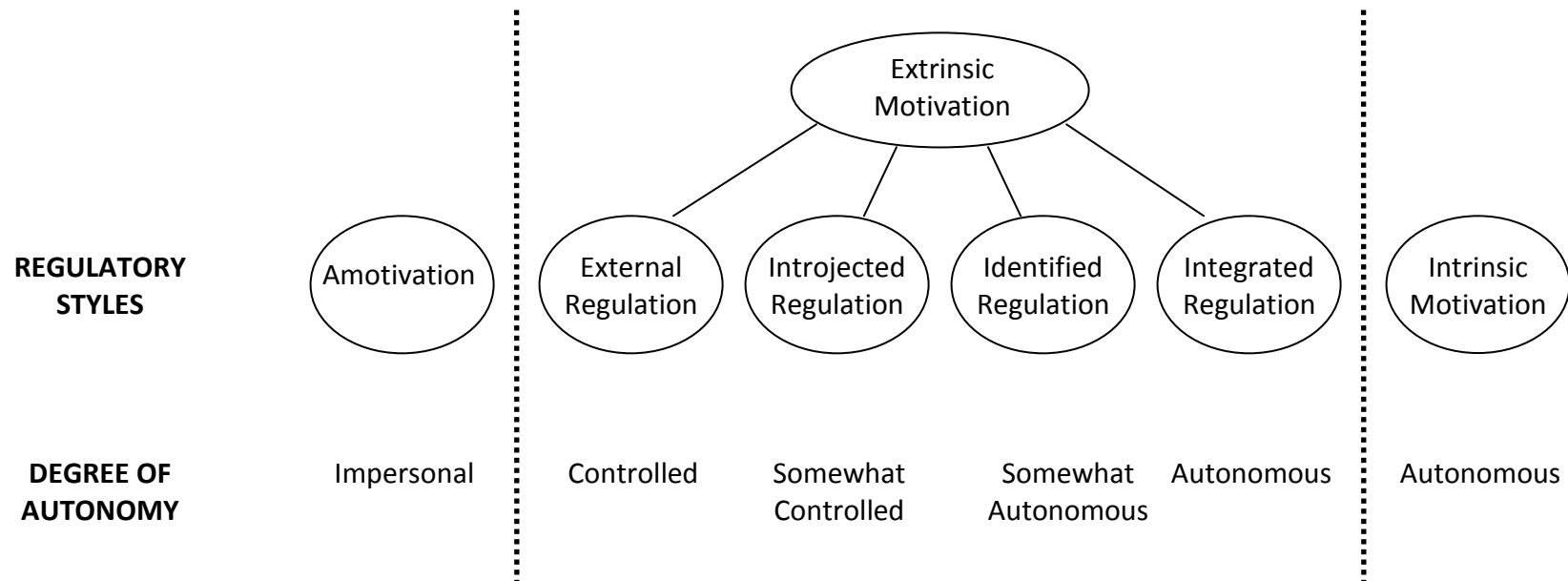
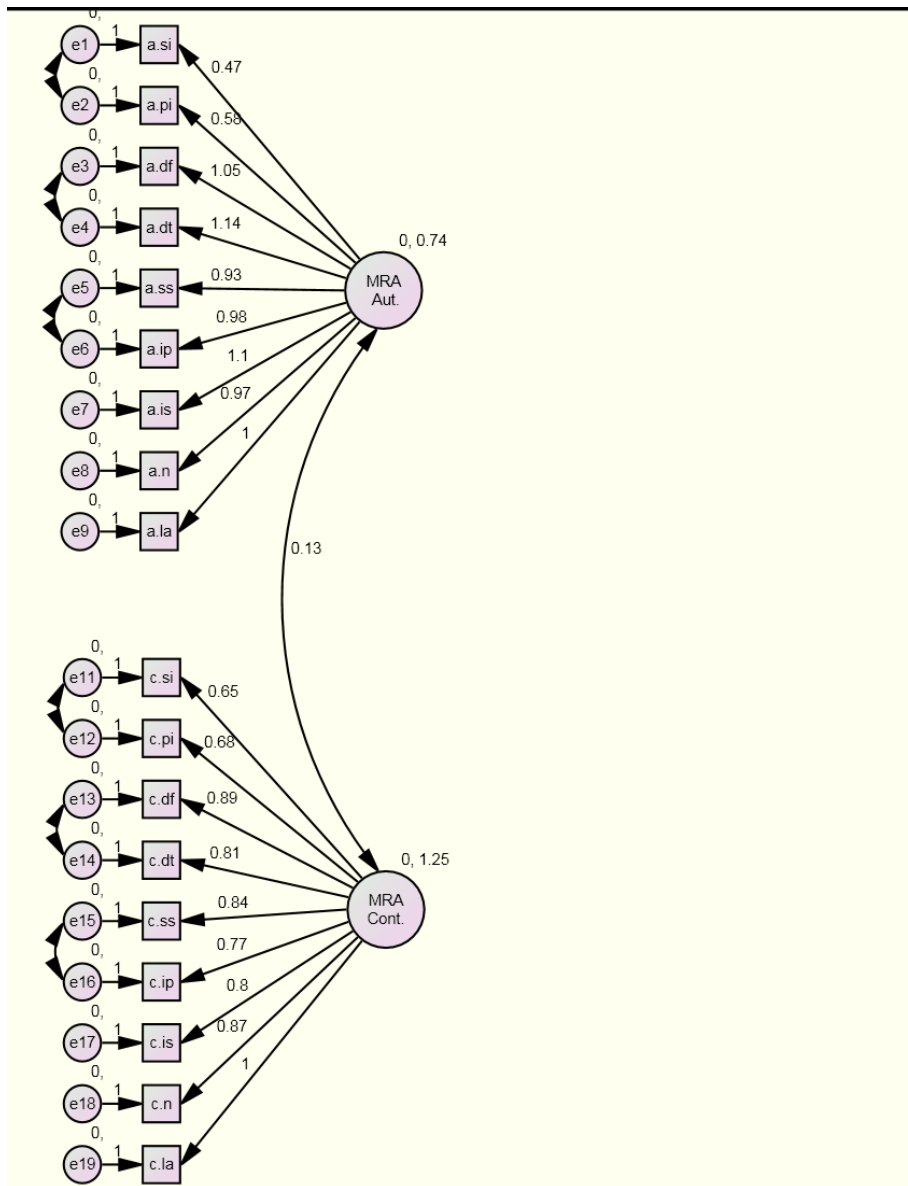
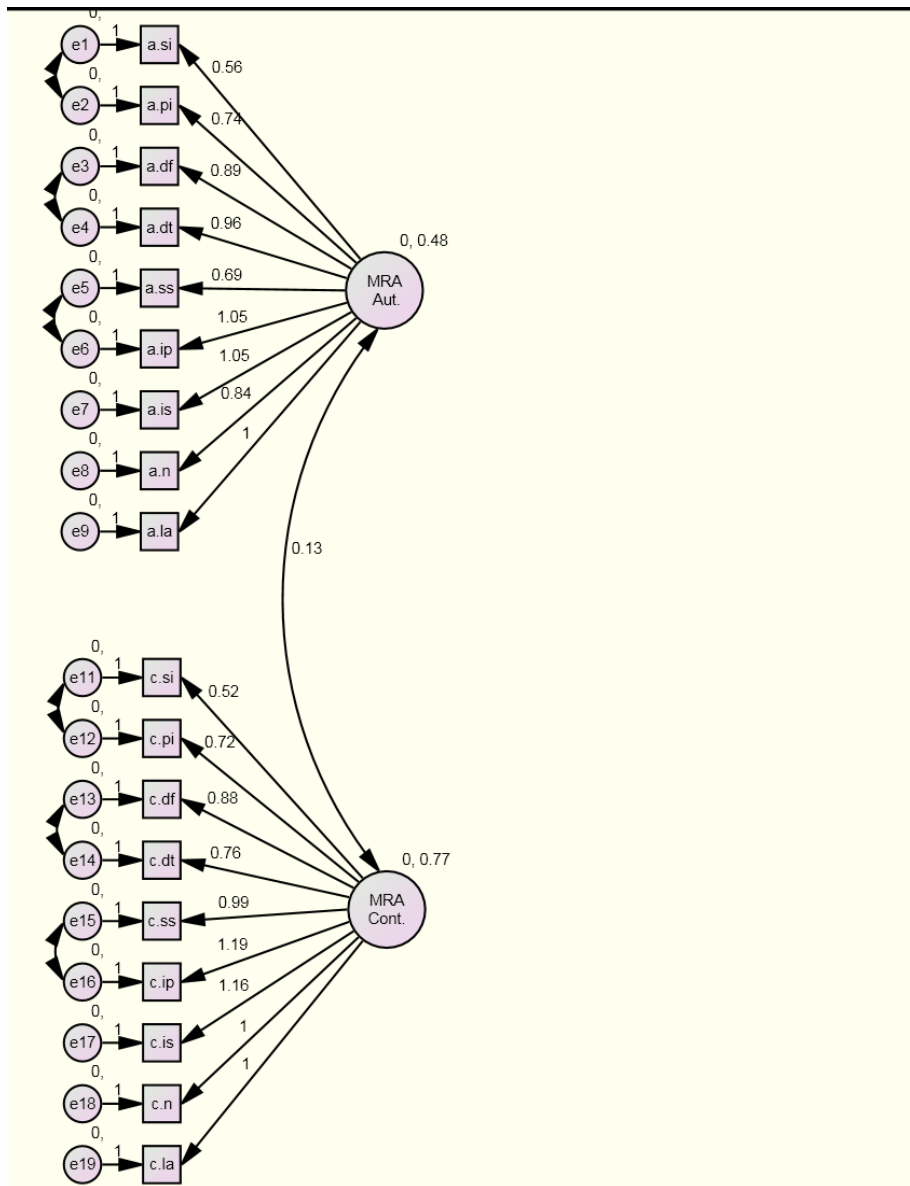


Figure 2. Two Factor Model of MRA with Factor Loadings Restricted to Estimates from Men in Gaine and La Guardia (2009) Dating Sample



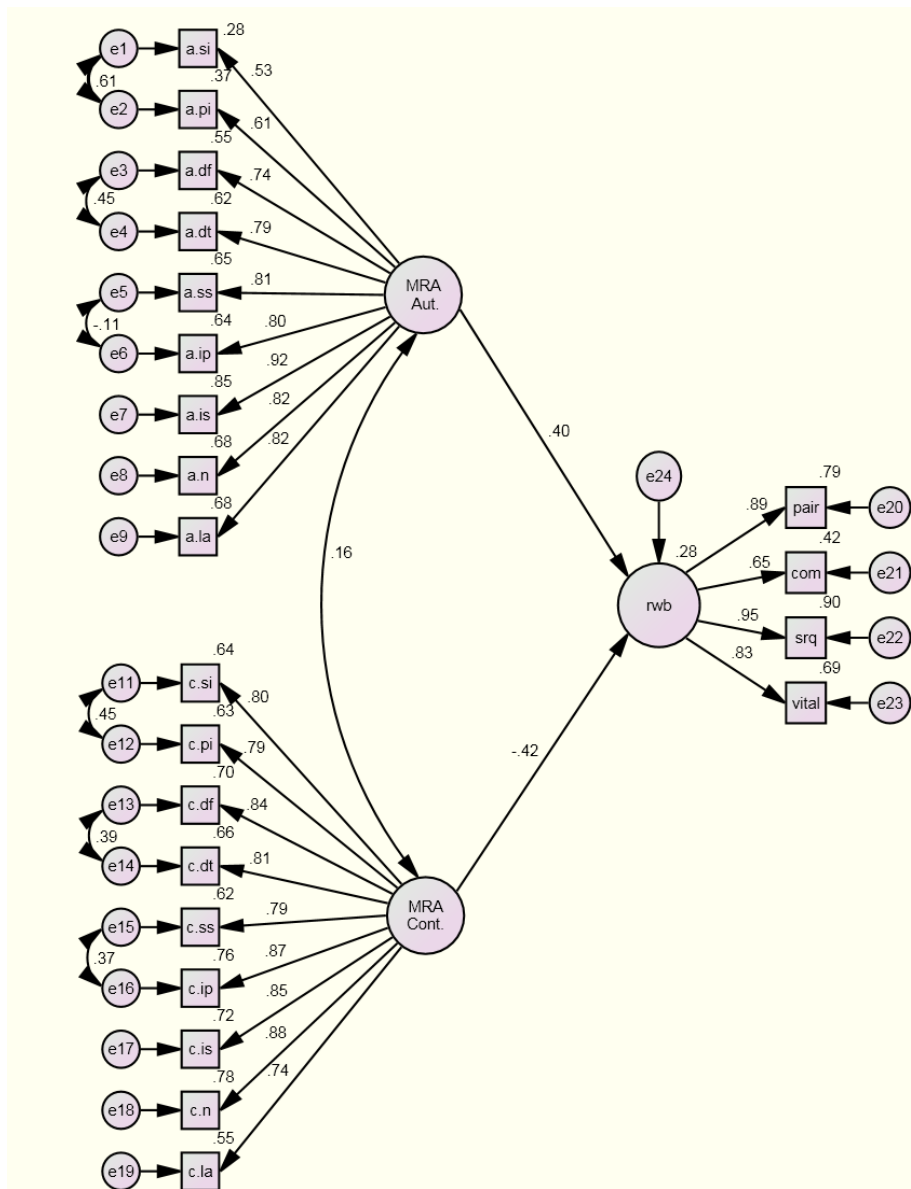
MRA Aut. = Autonomous activity motivation; *MRA Cont.* = Controlled activity motivation;
a. = autonomous motivation subscale; *c.* = controlled motivation subscale
si = Sexual Intimacy; *pi* = Physical Intimacy; *df* = Disclosure of Feelings; *dt* = Disclosure of Thoughts; *ss* = Social Support; *ip* = Instrumental Support (Problems); *is* = Instrumental Support (Stress); *n* = Niceties; *la* = Support of Partner's Life Aspirations

Figure 3. Two Factor Model of MRA with Factor Loadings Restricted to Estimates from Women in Gaine and La Guardia (2009) Dating Sample



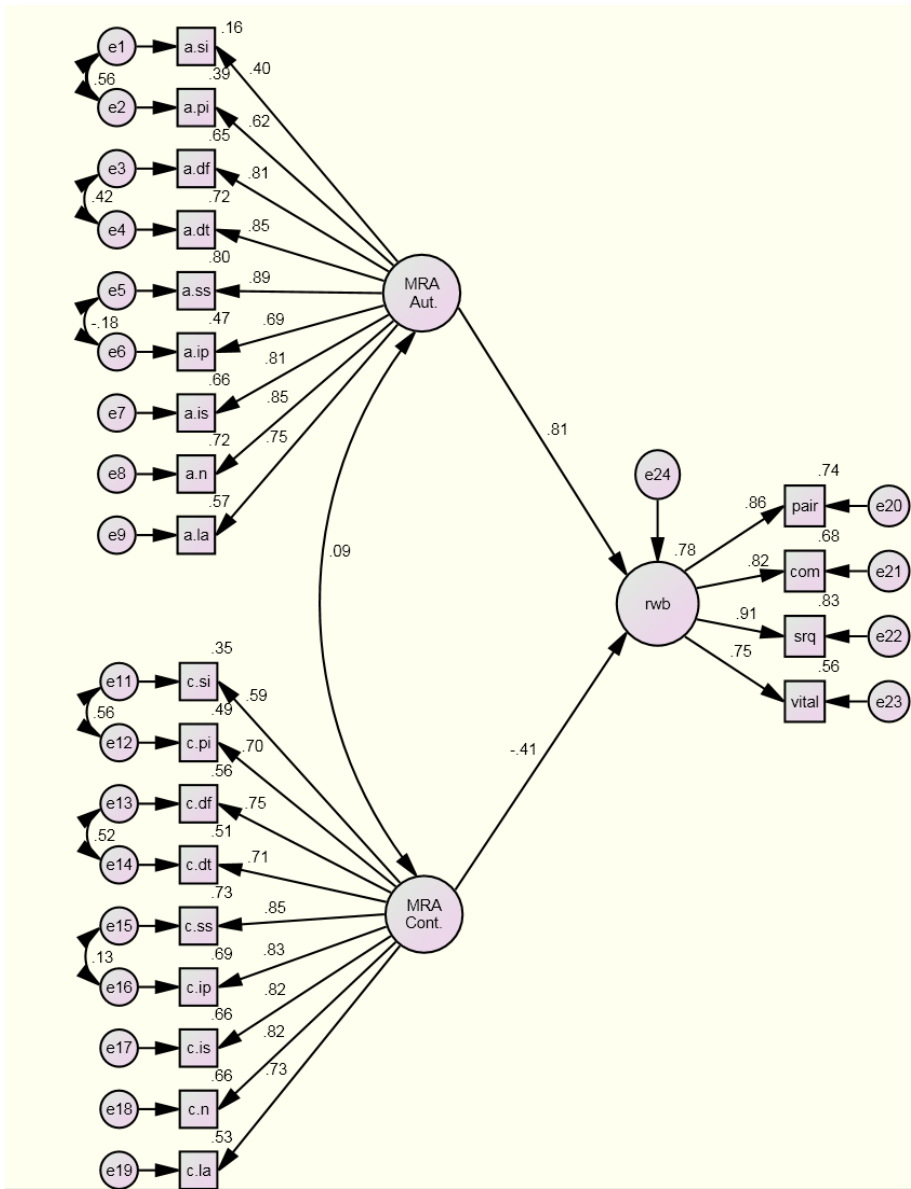
MRA Aut. = Autonomous activity motivation; *MRA Cont.* = Controlled activity motivation;
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Figure 4. Motivation Toward Relational Activities Predicting Relationship Well-Being for Men.



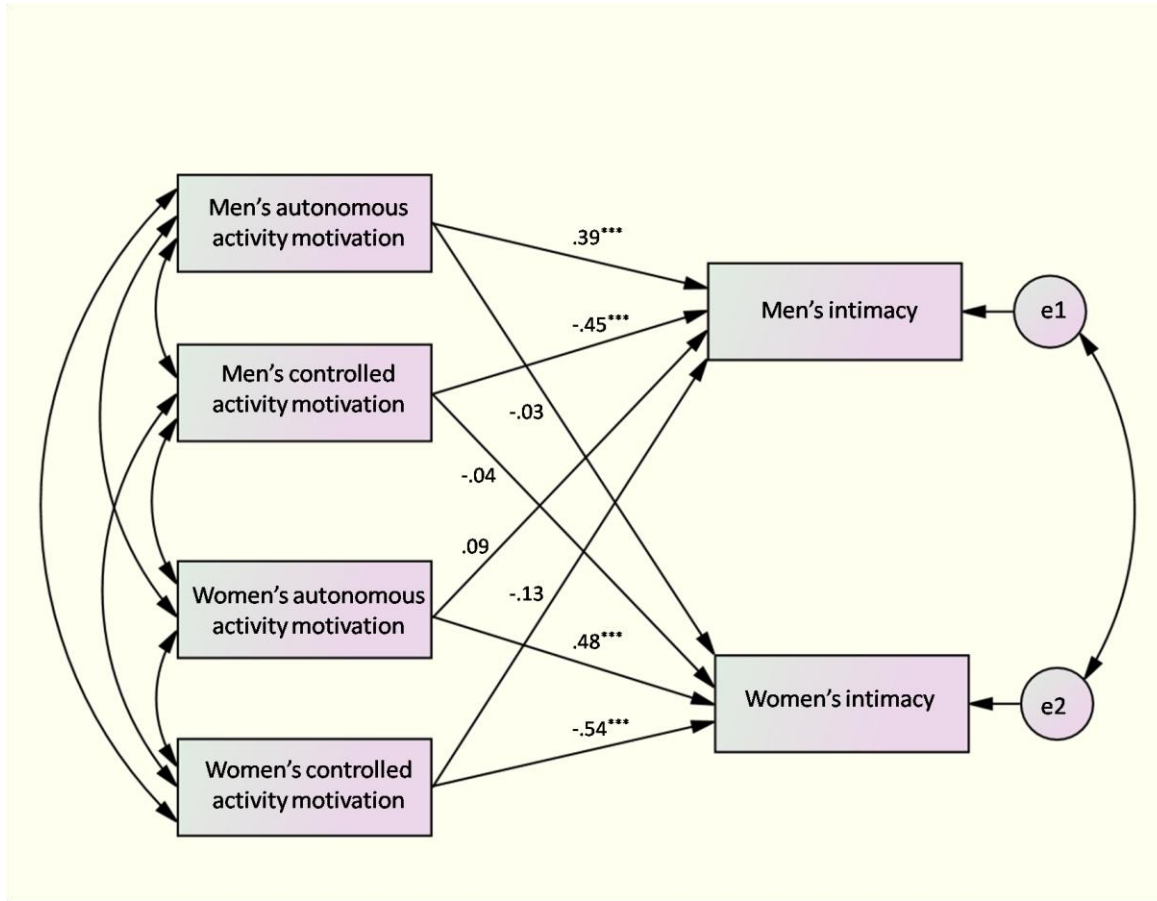
MRA Aut. = Autonomous activity motivation; *MRA Cont.* = Controlled activity motivation;
rwb = relationship well-being
pair = Personal Assessment of Intimacy in Relationships; *com* = Commitment; *srq* = State-Trait Relationship Questionnaire; *vital* = Vitality
a. = autonomous motivation subscale; *c.* = controlled motivation subscale
si = Sexual Intimacy; *pi* = Physical Intimacy; *df* = Disclosure of Feelings; *dt* = Disclosure of Thoughts; *ss* = Social Support; *ip* = Instrumental Support (Problems); *is* = Instrumental Support (Stress); *n* = Niceties; *la* = Support of Partner's Life Aspirations

Figure 5. Motivation Toward Relational Activities Predicting Relationship Well-Being for Women.



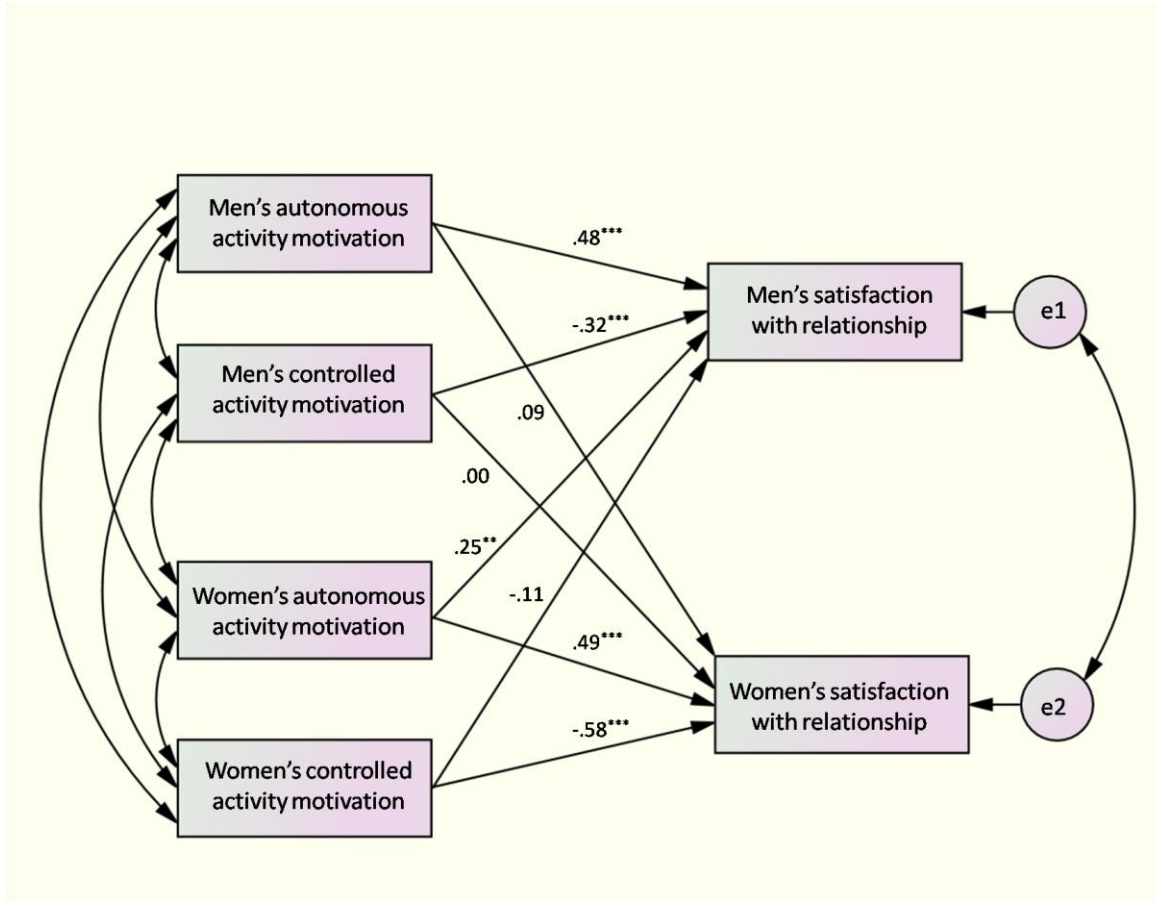
MRA Aut. = Autonomous activity motivation; *MRA Cont.* = Controlled activity motivation; *rwb* = relationship well-being
pair = Personal Assessment of Intimacy in Relationships; *com* = Commitment; *srq* = State-Trait Relationship Questionnaire; *vital* = Vitality
a. = autonomous motivation subscale; *c.* = controlled motivation subscale
si = Sexual Intimacy; *pi* = Physical Intimacy; *df* = Disclosure of Feelings; *dt* = Disclosure of Thoughts; *ss* = Social Support; *ip* = Instrumental Support (Problems); *is* = Instrumental Support (Stress); *n* = Niceties; *la* = Support of Partner's Life Aspirations

Figure 6 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's intimacy in the relationship



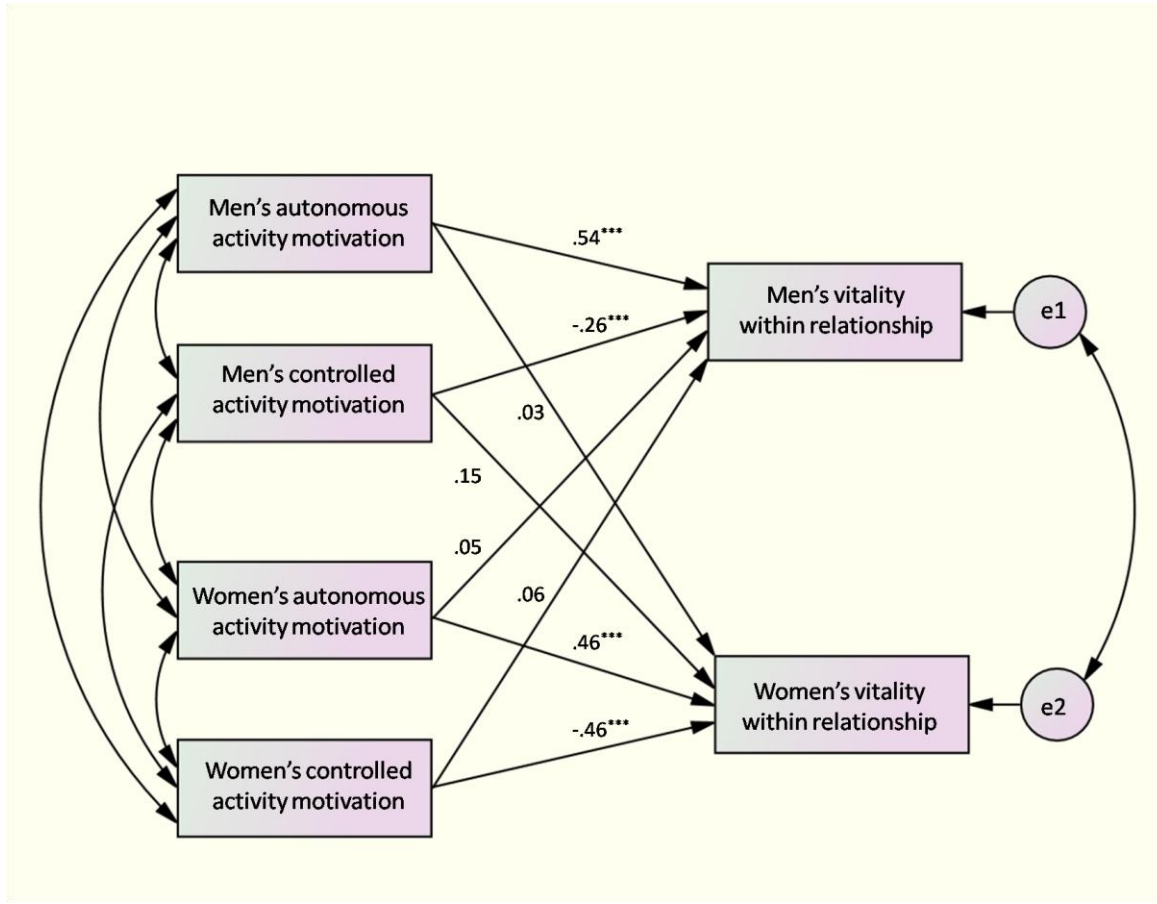
† $p < .08$
 $*p < .05$
 $**p < .01$
 $***p < .001$

Figure 7 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's satisfaction with the relationship



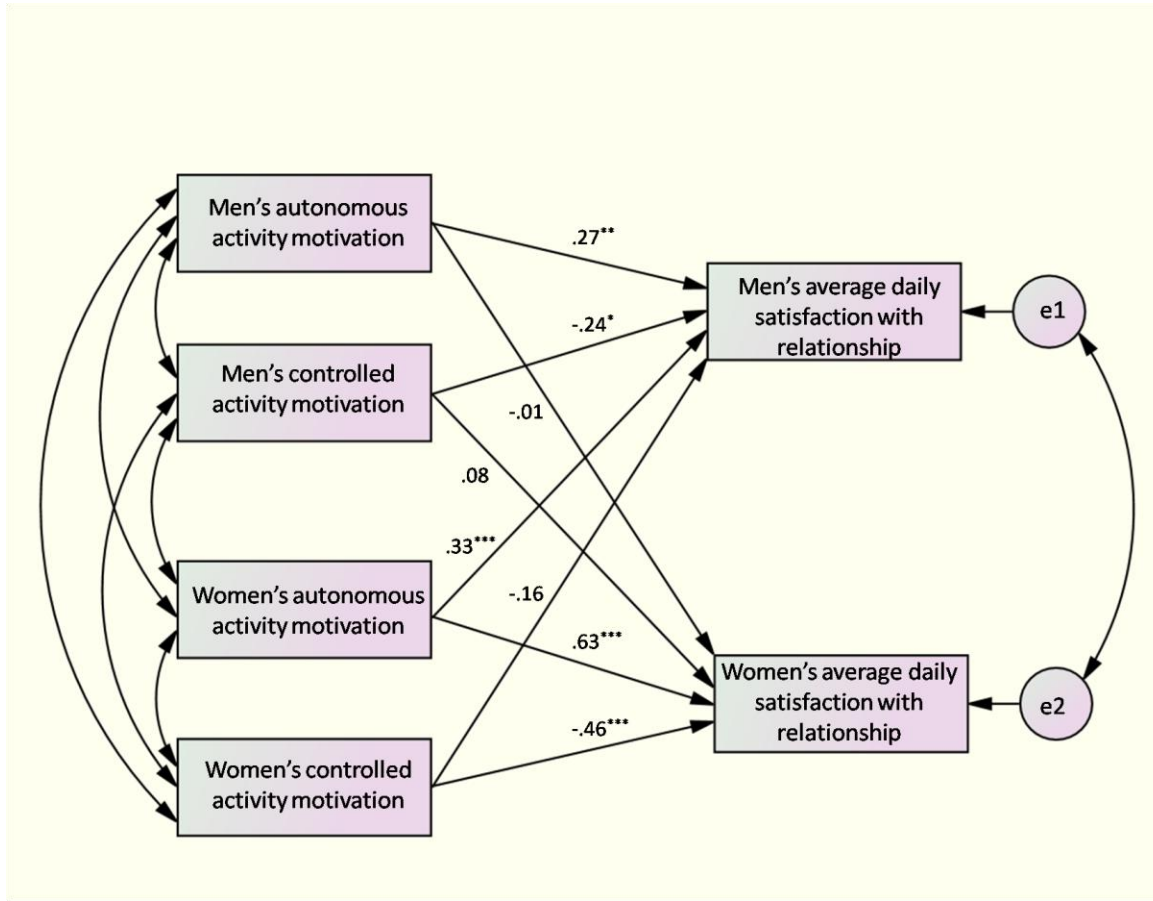
† $p < .08$
 $*p < .05$
 $**p < .01$
 $***p < .001$

Figure 8 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's vitality within the relationship



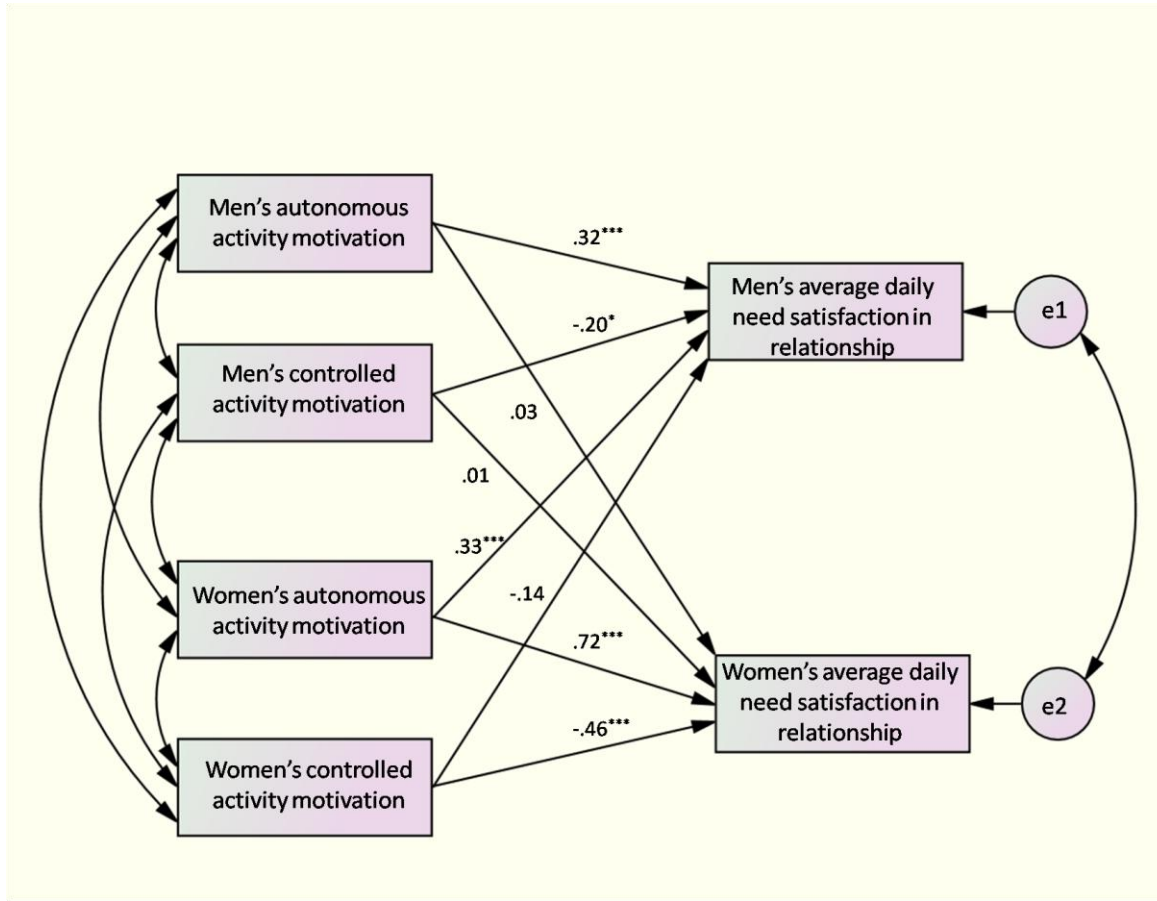
† $p < .08$
 $*p < .05$
 $**p < .01$
 $***p < .001$

Figure 9 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's average daily satisfaction with the relationship



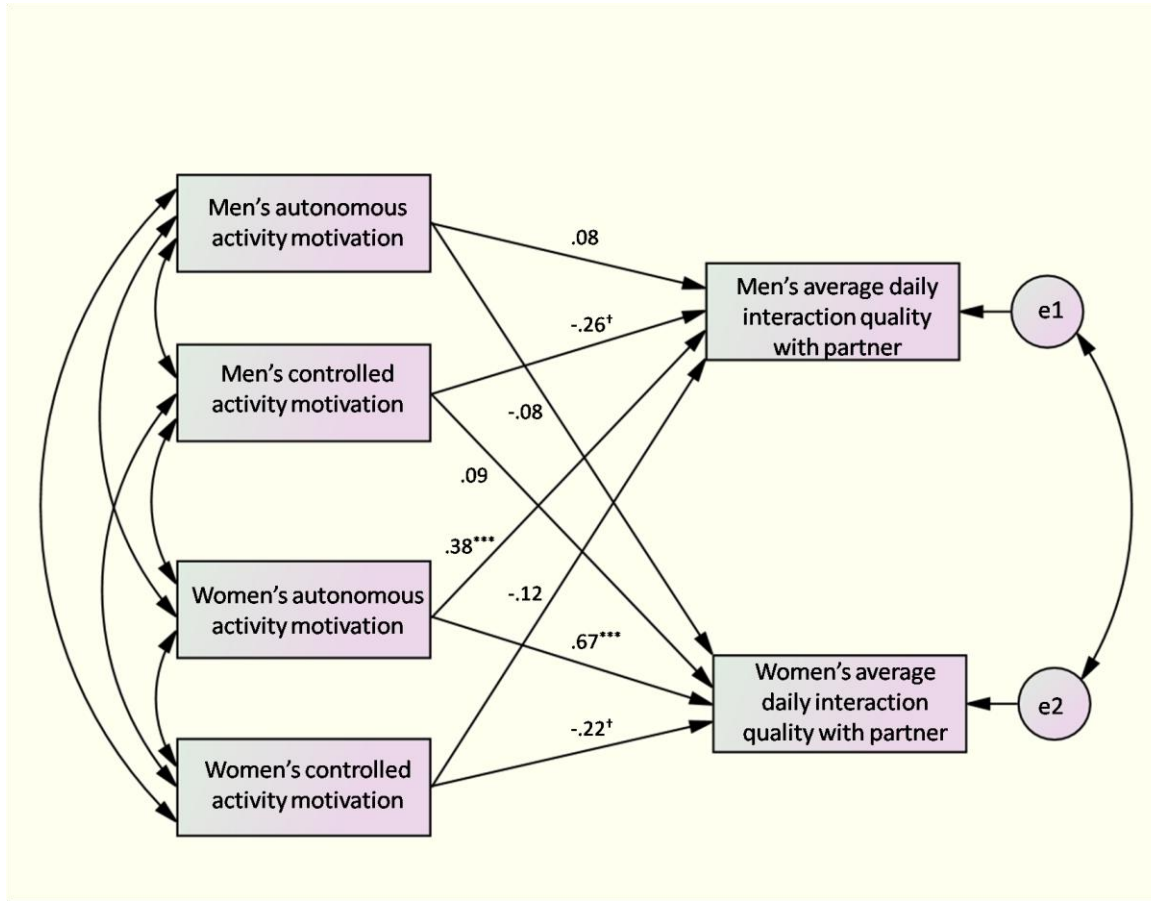
† $p < .08$
 $*p < .05$
 $**p < .01$
 $***p < .001$

Figure 10 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's average daily psychological need satisfaction within the relationship



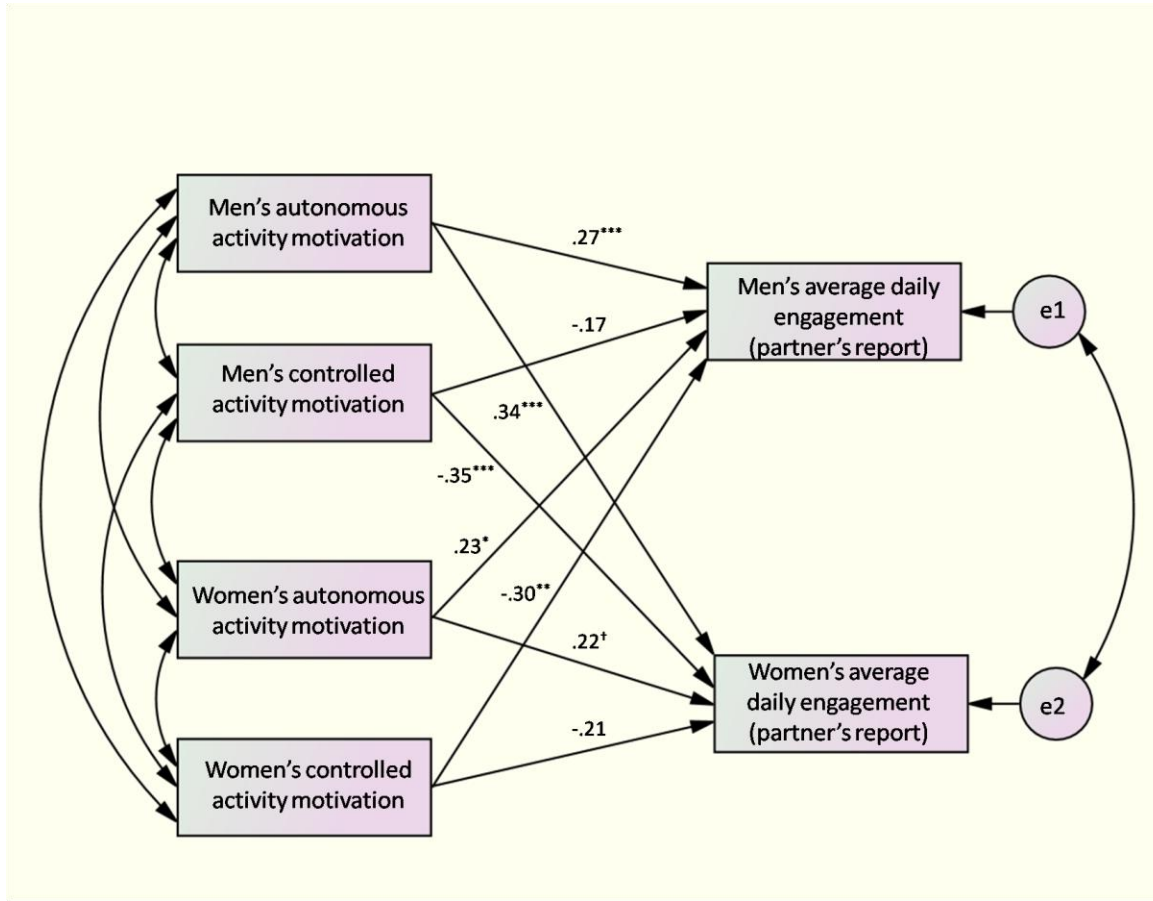
† $p < .08$
 $*p < .05$
 $**p < .01$
 $***p < .001$

Figure 11 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's average ratings of daily interaction quality with partner



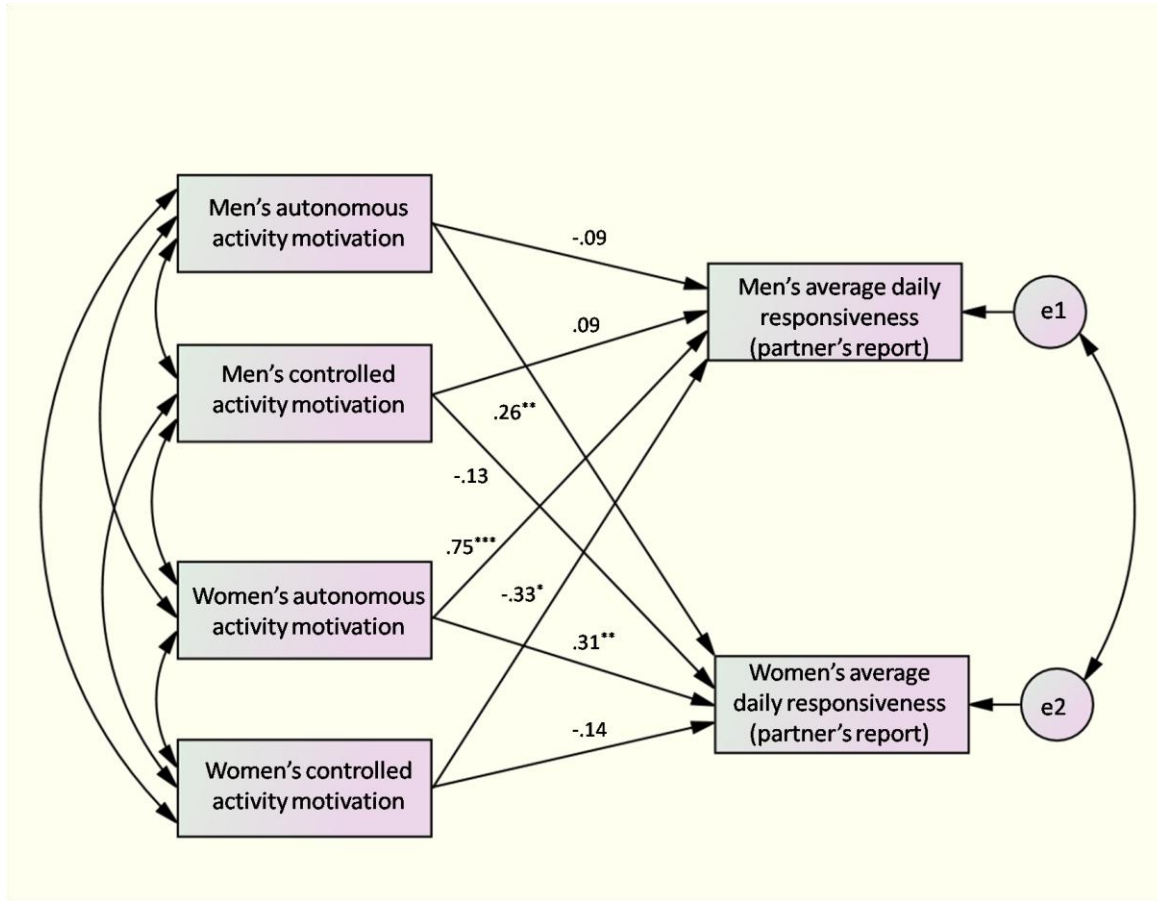
† $p < .08$
 $p < .05$
 $p < .01$
 $p < .001$

Figure 12 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's average daily engagement in activities with partner



† $p < .08$
 * $p < .05$
 ** $p < .01$
 *** $p < .001$

Figure 13 Actor and partner effects of men and women's autonomous and controlled activity motivation on each partner's average daily responsiveness to the partner



† $p < .08$
 $p < .05$
 $p < .01$
 $p < .001$

Table 1. Factor Loadings of Regulatory Styles on Factors of Controlled Activity Motivation and Autonomous Activity Motivation for Each Relational Activity (N= 185)

	Controlled Activity Motivation		Autonomous Activity Motivation	
	External Regulation	Introjected Regulation	Identified Regulation	Intrinsic Motivation
Sexual Intimacy	.90	.89*	.92	.93
Physical Intimacy	.86	.89*	.92	.91
Disclosure (Feelings)	.90	.91	.94	.94
Disclosure (Thoughts)	.92	.93	.96	.96
Social Support	.85	.87*	.94	.95
Instrumental Support (Problems)	.90	.83*	.90	.81
Instrumental Support (Stress)	.93	.75*	.92	.92
Niceties	.92	.87*	.91	.92
Life Aspirations	.89	.91	.93	.89

*Indicates that introjected regulation also loaded on autonomous motivation factor at .21 (Sexual Intimacy), .25 (Physical Intimacy), .22 (Social Support), .25 (Instrumental Support - Problems), .49 (Instrumental Support - Stress), and .23 (Niceties). Given that these loadings are below .60, we retained the factors as illustrated above.

Table 2. Means and Standard Deviations of MRA Autonomous and Controlled Motivation Scores by Relational Activity ($N = 185$)

Relational Activity	Autonomous Motivation		Controlled Motivation	
	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)
Sexual Intimacy ($N = 173$)	5.62	(1.07)	2.90	(1.13)
Physical Intimacy	5.90	(1.16)	2.63	(1.18)
Disclosure of Feelings	5.66	(1.25)	3.03	(1.23)
Disclosure of Thoughts	5.85	(1.16)	2.21	(1.17)
Social Support	6.17	(1.04)	3.44	(1.29)
Instrumental Support (problems)	5.18	(1.15)	3.40	(1.20)
Instrumental Support (stress)	5.71	(1.13)	3.57	(1.26)
Niceties	5.90	(1.08)	3.50	(1.15)
Support of Life Aspirations	5.75	(1.10)	3.97	(1.38)

Table 3. Intercorrelations among Autonomous Motivation Scores (above diagonal) and Intercorrelations among Controlled Motivation Scores (below diagonal) across Relational Activities ($N = 185$).

	1	2	3	4	5	6	7	8	9
1. Sexual intimacy ($N = 173$)		.61	.24	.22	.27	.27	.32	.26	.22
2. Physical intimacy	.75		.50	.55	.55	.39	.53	.50	.43
3. Disclosure (feelings)	.59	.70		.80	.72	.54	.66	.62	.60
4. Disclosure (thoughts)	.56	.67	.81		.75	.57	.64	.67	.65
5. Social Support	.55	.61	.73	.67		.55	.70	.71	.67
6. Instrumental (problems)	.56	.63	.67	.65	.78		.67	.54	.66
7. Instrumental (stress)	.56	.60	.66	.69	.72	.72		.71	.66
8. Niceties	.57	.67	.67	.64	.67	.71	.70		.68
9. Life Aspirations	.45	.48	.53	.48	.61	.68	.58	.68	

Note. All correlations significant at the $p < .01$ level

Table 4. Means and Standard Deviations of Relationship Well-Being Indexes, Attachment Anxiety and Avoidance Dimensions, Big-Five Personality Traits, Behavioural Inhibition and Activation Systems, and Relational Behaviour.

	<i>M</i>	<i>SD</i>
<u>Relationship Well-Being (<i>N</i> = 181)</u>		
Intimacy	5.54	.83
Commitment	6.43	.97
Satisfaction	3.67	2.04
Vitality within relationship	5.35	1.27
<u>Attachment (<i>N</i> = 178)</u>		
Anxiety	2.96	1.14
Avoidance	2.32	1.00
<u>Big-Five Traits (<i>N</i> = 177)</u>		
Neuroticism	3.31	.85
Extraversion	4.18	.60
Openness	4.62	.59
Agreeableness	5.13	.67
Conscientiousness	4.58	.63
<u>BIS/BAS Scales (<i>N</i> = 102)</u>		
Behavioural Inhibition	2.83	.64
Behavioural Activation	3.09	.47
<u>Relational Behaviour (<i>N</i> = 182)</u>		
Positive Approach	5.01	.75
Negative Approach	2.23	.93
Withdrawal/Avoidance	2.07	.97

Table 5. Intercorrelations among Relationship Well-Being Indices ($N = 180$).

	1	2	3	4
1. Intimacy		.81	.68	.65
2. Relationship Satisfaction	.81		.75	.69
3. Vitality in Relationship	.68	.75		.52
4. Commitment	.65	.69	.52	

Note. All correlations significant at the $p < .01$ level

Table 6. Intercorrelations among Attachment, Personality, and BIS/BAS dimensions ($N = 177$).

	1	2	3	4	5	6	7	8	9
1. Attachment Anxiety		.39**	.63**	-.21**	-.18**	-.30**	-.33**	-.05	.38**
2. Attachment Avoidance	.39**		.29**	-.42**	-.20**	-.37**	-.34**	-.37**	.04
3. Neuroticism	.63**	.29**		-.45**	-.05	-.27**	-.45**	-.15	-.53**
4. Extraversion	-.21**	-.42**	-.45**		.09	.46**	.31**	.44**	-.13
5. Openness	-.18**	-.20**	-.05	.09		.14	.03	.17	-.14
6. Agreeableness	-.30**	-.37**	-.27**	.46**	.14		.26**	.05	.08
7. Conscientiousness	-.33**	-.34**	-.45**	.31**	.03	.26**		.40**	-.05
8. BAS ($N = 101$)	-.05	-.37**	-.15	.44**	.17	.05	.40**		.21*
9. BIS ($N = 101$)	.38**	.04	-.53**	-.13	-.14	.08	-.05	.21*	

* $p < .05$

** $p < .01$

Table 7. Correlations of Autonomous and Controlled Activity Motivation with NEO-FFI Personality Domains

Men (<i>n</i> = 72) Conscientiousness	Neuroticism	Extraversion	Openness	Agreeableness	
Mean Autonomous Activity Motivation	-.21	.33**	.19	.10	.27*
Mean Controlled Activity Motivation	.39**	-.21	-.38**	-.41**	-.20
<hr/>					
Women (<i>n</i> = 106) Conscientiousness	Neuroticism	Extraversion	Openness	Agreeableness	
Mean Autonomous Activity Motivation	-.06	.32**	.18	.26*	.18
Mean Controlled Activity Motivation	.26**	-.04	-.14	-.37**	-.21*

* $p < .05$

** $p < .01$

Table 8. Correlations of Autonomous and Controlled Activity Motivation with Self-Reported Relational Behaviour

Men (<i>n</i> = 74)	Positive-Approach	Negative-Approach	Withdrawal/Avoidance
Mean Autonomous Activity Motivation	.73**	-.29*	-.38**
Mean Controlled Activity Motivation	.03	.49**	.46**

Women (<i>n</i> = 108)	Positive-Approach	Negative-Approach	Withdrawal/Avoidance
Mean Autonomous Activity Motivation	.73**	-.27**	-.35**
Mean Controlled Activity Motivation	-.12	.72**	.65**

* $p < .05$

** $p < .01$

Table 9. Intercorrelations among Women (above diagonal) and Intercorrelations among Men (below diagonal) across Relational Outcome Variables.

	1	2	3	4	5	6	7	8
1. Intimacy in Relationship		.78	.64	.68	.65	.56	.25*	.35
2. Relationship Satisfaction	.76		.63	.67	.69	.58	.34	.39
3. Vitality within Relationship	.62	.70		.58	.59	.49	.12*	.30
4. Average Daily Satisfaction	.55	.69	.47		.94	.84	.32	.43
5. Average Daily Need Satisfaction	.57	.68	.54	.85		.82	.32	.44
6. Average Daily Interaction Quality	.45	.49	.28	.83	.73		.25*	.47
7. Average Daily Engagement	.47	.54	.38	.45	.52	.42		.69
8. Average Daily Responsiveness	.22*	.36	.22*	.48	.42	.51	.56	

Note. All correlations significant at the $p < .05$ level except those marked with “*”

Table 10. Means and Standard Deviations of Relationship Well-Being and Average Daily Relationship Well-Being and Relational Behaviour

	<i>M</i>	<i>SD</i>
<u>Relationship Well-Being</u>		
Intimacy	5.32	.79
Satisfaction	5.09	1.98
Vitality within Relationship	5.19	.92
<u>Average Daily Relationship Well-Being</u>		
Daily Relationship Satisfaction	4.94	1.93
Daily Need Satisfaction in Relationship	7.58	1.37
Daily Interaction Quality	7.36	1.01
<u>Average Daily Relational Behaviour</u>		
Daily Engagement	3.45	.84
Daily Responsiveness	7.04	1.49

Table 11. Actor and Partner Effects of Autonomous and Controlled Activity Motivation on Relationship Well-Being Indices

Outcomes:	Actor effects			Partner effects		
	Men's intimacy	Men's relationship satisfaction	Men's vitality within relationship	Women's intimacy	Women's relationship satisfaction	Women's vitality within relationship
Predictors:						
Men's Autonomous activity motivation	.39 ^{***}	.48 ^{***}	.54 ^{***}	-.03	.09	.03
Men's controlled activity motivation	-.45 ^{***}	-.32 ^{**}	-.26 [*]	-.04	.00	.15
Outcomes:	Women's intimacy	Women's relationship satisfaction	Women's vitality within relationship	Men's intimacy	Men's relationship satisfaction	Men's vitality within relationship
Women's autonomous activity motivation	.48 ^{***}	.49 ^{***}	.46 ^{***}	.09	.25 ^{**}	.05
Women's controlled activity motivation	-.54 ^{***}	-.58 ^{***}	-.46 ^{***}	-.13	-.11	.06

† p<.08, * p<.05, **p<.01, ***p<.001

Table 12. Actor and Partner Effects of Autonomous and Controlled Activity Motivation on Daily Relationship Well-Being Indices

	Actor effects			Partner effects		
Outcomes:	Men's average daily relationship satisfaction	Men's average daily need satisfaction	Men's average daily interaction quality	Women's average daily relationship satisfaction	Women's average daily need satisfaction	Women's average daily interaction quality
Predictors:						
Men's Autonomous activity motivation	.27**	.32***	.08	-.01	.03	-.08
Men's controlled activity motivation	-.24*	-.20*	-.26†	.08	.01	.09
Outcomes:	Women's average daily relationship satisfaction	Women's average daily need satisfaction	Women's average daily interaction quality	Men's average daily relationship satisfaction	Men's average daily need satisfaction	Men's average daily interaction quality
Women's autonomous activity motivation	.63***	.72***	.67***	.33***	.33***	.38**
Women's controlled activity motivation	-.46***	-.46***	-.22†	-.16	-.14	-.12

† p<.08, * p<.05, **p<.01, ***p<.001

Table 13. Actor and Partner Effects of Autonomous and Controlled Activity Motivation on Daily Relational Behaviour

		Actor effects		Partner effects	
	Outcomes:	Men's average daily engagement	Men's average daily responsiveness	Women's average daily engagement	Women's average daily responsiveness
Predictors:					
Men's Autonomous activity motivation		.27 ^{***}	-.09	.34 ^{***}	.26 ^{**}
Men's controlled activity motivation		-.17	.09	-.35 ^{**}	-.13
	Outcomes:	Women's average daily engagement	Women's average daily responsiveness	Men's average daily engagement	Men's average daily responsiveness
Women's autonomous activity motivation		.22 [†]	.31 ^{**}	.23 [*]	.75 ^{***}
Women's controlled activity motivation		-.21	-.14	-.30 ^{**}	-.33 [*]

† p<.08, * p<.05, **p<.01, ***p<.001