Relationship-Specific Identification and Spontaneous Relationship Maintenance Processes

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Abstract

Attractive alternative partners pose one of the greatest potential threats to the stability of a romantic relationship (Kelly & Thibaut, 1978; Simpson, Gangestad & Lerma, 1990). Given that people are often limited in the time and energy they have to manage such relational threats, having the capacity to engage in effortless relationship protective responding is extremely useful. In 6 studies, I explore how people's identity in terms of their romantic relationship - their relationship-specific identity - affects their relationship protective behaviours and relationship survival. I predicted that once a relationship becomes a core part of one's sense of self, individuals are able to exhibit relatively fluid, spontaneous relationship maintenance responses (RMRs). In Study 1, I assessed the convergent and divergent validity of relationship-specific identification by examining its associations with other relationship constructs. In Study 2, I explored whether relationship-specific identification predicted relatively spontaneous pro-relationship responses, and found that high identifiers were more likely to use subtle variations in language to reflect and cultivate a shared reality with their partners. In Studies 3, 4, and 5, I examined the relationship-specific identification to spontaneous RMRs link in the context of an attractive alternative relational threat. Specifically, in Studies 3 and 4, I found that participants less identified with their relationships were less likely to mention their partner or relationship than those high in relationship-specific identification, but only when interacting with an attractive member of their preferred sex. Similarly, in Study 5, using a dot probe visual cueing task, I found that when primed with an attractive member of

their preferred sex, those low in relationship-specific identification gazed longer at attractive preferred-sex others compared to those high in relationship-specific identification. Finally, in Study 6, I found that relationship-specific identification was associated with relationship survival 1-3 years after the initial assessment. The present results demonstrate that relationship-specific identification is one variable that may protect relationships by fostering relatively spontaneous, pro-relationship responses in the face of relational threat.

Résumé

Les individus que l'on considère attirants et qui représentent une alternative intéressante en tant que partenaire romantique constituent l'une des plus grandes menaces potentielles à la stabilité d'une relation amoureuse (Kelly & Thibaut, 1978; Simpson, Gangestad & Lerma, 1990). Étant donné que les gens sont souvent limités dans le temps et l'énergie qu'ils ont pour gérer de telles menaces relationnelles, il est extrêmement utile d'avoir la capacité de pouvoir manifester sans effort une réaction pouvant protéger la relation. Grâce à 6 études, j' explore la façon dont l'identification que les individus possèdent par rapport à leur relation amoureuse – leur identification spécifique à la relation – affecte leurs comportements qui protègent leur relation ainsi que la survie de leur relation. J'ai prédit que, dès qu'une relation devient un élément essentiel du sentiment identitaire, les individus sont en mesure de démontrer des réactions de maintien relationnel (RMRs) relativement fluides et spontanées. Dans l'étude 1, j'ai évalué la validité convergente et divergente de l'identification spécifique à la relation en examinant ses associations avec d'autres concepts relationnels. Dans l'étude 2, j'ai exploré si l'identification spécifique à la relation prédisait des réactions pro-relationnelles relativement spontanées, et j'ai ainsi constaté que les individus s'identifiant plus fortement à leur relation étaient plus susceptibles de recourir à des variantes subtiles du langage pour accepter les raisons qui guident les actions de leur partenaire. Dans les études 3, 4 et 5, j'ai examiné le lien entre l'identification spécifique à la relation et les RMRs spontanées dans le contexte d'une menace relationnelle amenée par un partenaire potentiel intéressant. Plus

précisément, dans les études 3 et 4, j'ai constaté que les participants s'identifiant moins fortement avec leur relation étaient moins susceptibles de mentionner l'existence de leur partenaire ou leur relation comparativement à ceux s'identifiant plus fortement à leur relation, mais ceci seulement lorsqu'ils interagissaient avec un individu intéressant du sexe préféré. De même, dans l'étude 5, grâce à l'utilisation d'une tâche de repérage visuel à point de sonde ('dot probe task') et par la technique de l'amorçage (priming) présentant des individus intéressants du sexe préféré, j'ai constaté que les participants s'identifiant moins fortement avec leur relation regardaient plus longuement des individus intéressants du sexe préféré, comparativement aux participants s'identifiant plus fortement avec leur relation. Enfin, dans l'étude 6, j'ai constaté que l'identification spécifique à la relation était associée à une survie de la relation 1 à 3 ans après l'évaluation initiale. Les résultats présentés ici démontrent que l'identification spécifique à la relation est une variable qui peut protéger les relations en favorisant des réactions protectrices pro-relationnelle de façon relativement spontanée face aux menaces relationnelles.

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Statement of Original Contributions

Relationship maintenance responses (RMRs) are cognitions and behaviours that help to maintain and promote one's relationship. Although RMRs are typically assessed using explicit, self-report measures (e.g., Fincham & Bradbury, 1992; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), relationships researchers are turning to relatively spontaneous, behavioural measures to study relationship-promoting behaviours (e.g., Karremans & Verwijmeren, 2008; Maner, Rouby, & Gonzaga, 2008; Pronk, Karremans, & Wigboldus, 2011). Presumably, one of the main reasons for the interest in more automatic RMRs is the recognition that, with the demands of everyday life, people do not have the ability or opportunity to deliberate about their every behaviour (Bargh & Chartrand, 1999). Moreover, when people are faced with a relational threat, such as a relationship conflict or an attractive alternative partner (hereby referred to as "attractive alternative"), it is often difficult to inhibit responses that may be destructive to their relationships (e.g., Maner, Gailliot, & DeWall, 2007; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Thus, it seems that having accessible, relatively spontaneous, constructive responses to counter such destructive responses would be beneficial to one's relationship. The present research demonstrates that relationship-specific identification, the degree to which individuals incorporate their partners and relationships into their sense of self, is one factor that predicts relatively automatic pro-relationship responding in the face of a relational threat.

In an effort to pinpoint the predictors of relatively spontaneous RMRs, studies have looked at, for example, the influence of cognitive factors (e.g., Pronk, Karremans, & Wigboldus, 2011), personality variables (e.g., Perunovic & Holmes, 2008), and relationship-specific factors, such as self-other integration, as measured by the Inclusion of Other in the Self Scale (IOS Scale; Aron, Aron, & Smollan, 1992; Karremans & Verwijmeren, 2008), as well as love for one's partner (Maner, Rouby, & Gonzaga, 2008). I expand on this research by creating a new construct, relationship-specific identification, which is based on various relational selves perspectives that emphasize the binding of oneself to the relationship (Chen, Boucher, & Tapias, 2006; Cross, Bacon, & Morris, 2000). In Study 1, I demonstrated the convergent and divergent validity of the relationship-specific identification construct by comparing it with other relationship constructs. In Study 2, I showed that it is associated with a relatively spontaneous pro-relationship behaviour; in particular, the degree to which individuals use subtle variations in language to reflect and cultivate a shared reality with their partners. For Studies 3 and 4, I developed a new paradigm to test if the relationship-specific identification to spontaneous RMR link was moderated by relational threat. Results demonstrated that relationship-specific identification predicted relatively spontaneous RMRs when participants interacted with an attractive member of their preferred sex. I pushed this idea further in Study 5 using a well-validated measure of automatic attention to attractive faces, and again found that relationship-specific identification predicted relatively spontaneous RMRs in the face of an attractive alternative relational threat.

Finally, in Study 6, I looked at the association between relationship-specific identification and a clear outcome of RMRs, relationship longevity. Results revealed that the more participants were identified with their relationship, the more likely it was that their relationship survived.

Very few studies have looked at what predicts relatively spontaneous RMRs in an actual interaction with an attractive alternative partner. An exception is a study by Karremans and Verwijmeren (2008), in which individuals higher on self-other integration were less likely to mimic attractive alternatives. Mimicry is thought to serve a pro-social function, as people who are mimicked feel more liked and rate the interaction has having gone more smoothly (see Lakin, Jefferis, Cheng, & Chartrand, 2003, for a review). As argued by Karremans and Verwijmeren (2008), it would seem important to protect one's relationship when actually interacting with an attractive other, as opposed to just describing one's responses to a hypothetical partner transgression or looking at pictures of attractive others. I added to these findings and demonstrated, in Studies 3 and 4, that a relationship-specific factor, particularly relationship-specific identification, predicted relatively automatic pro-relationship responding when interacting with an attractive alternative of one's preferred sex.

Overall, the present studies demonstrate that it is useful to look at the distinct functions and consequences of the different motivational bases of commitment. Whereas the meta-motive of commitment predicts a wide range of relationship maintenance behaviours (e.g., Drigotas, Safstrom, & Gentilia, 1999; Finkel, Rusbult, Kumashiro, & Hannon, 2002; Johnson & Rusbult, 1989;

Menzies-Toman & Lydon, 2005; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), relationship-specific identification is a more precise predictor of relatively spontaneous pro-relationship responding in the face of relational threat. I propose that once a relationship has become a core part of an individual's sense of self, a relational threat activates an "*if* relationship is threatened, *then* protect" contingency (Lydon, Menzies-Toman, Burton, & Bell, 2008) that allows one to exhibit relationship protective behaviours in a relatively fluid and efficient manner. Together, these findings make a significant contribution to our understanding of the processes that underlie relationship maintenance responses.

General Introduction

Relationship Maintenance

Relationships are a ubiquitous part of human life. They are considered by many theorists to be a basic human need (Baumeister & Leary, 1995; Deci & Ryan, 2000) and even necessary for human survival (e.g., Buss, 1994; Shaver, Hazan, & Bradshaw, 1988). Indeed, the development and maintenance of close relationships has been shown to be an important contributor to psychological (Diener, Suh, Lucas, & Smith, 1999) and physical well-being (House, Landis, & Umberson, 1988; Kiecolt-Glaser & Newton, 2001; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). However, maintaining relationships is a difficult task. Divorce rates are high and more people than ever live alone (e.g., Putnam, 2000). Given the vital yet tenuous nature of relationships, it is essential to gain a comprehensive understanding of the mechanisms that promote relationship survival.

People overcome relationship challenges by engaging in a wide range of cognitions and behaviours that promote the development and maintenance of the relationship (e.g., Rusbult, Bissonnette, Arriaga, & Cox, 1998; Rusbult & Buunk, 1993; Van Lange, Rusbult, Drigotas, Arriaga, Witcher, & Cox, 1997). The way people perceive their partners and relationships is one such relationship maintenance process. When people hold an idealized view of their partner, perceiving their partners more positively than the partners see themselves, and perceiving the relationship and the partner as better than average, they experience more satisfaction in their relationships and the relationship is more likely to survive (Murray & Holmes, 1997; Murray, Holmes, & Griffin, 1996). Similarly,

people in committed dating relationships have been found to downplay the severity of their partners' transgressions (Menzies-Toman & Lydon, 2005), and people who are satisfied with their relationships tend to give benevolent attributions for their partners' transgressions (Karney & Bradbury, 2000; see Bradbury & Fincham, 1990, for a review). Seeing partners and their transgressions in a positive light, it seems, is associated with greater relationship satisfaction and commitment, and maybe even relationship survival.

In actual interactions with their partners, people exhibit relationship maintenance behaviours by communicating in a pro-relationship-manner. Securely attached men, for example, offered more supportive comments as their partners displayed greater anxiety in anticipation of a stressful situation, compared to avoidantly attached men (Simpson, Rholes, & Nelligan, 1992). When their partners felt betrayed, participants who offered amends were later more likely to be forgiven by their partners, and both amends and forgiveness contributed to the successful resolution of the betrayal incident as perceived by both partners (Hannon, Rusbult, Finkel, & Kamashiro, 2010). Committed individuals, in particular, have been shown to be more accommodative and constructive when resolving a relationship conflict (e.g., Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991; Tran & Simpson, 2009) and more willing to forgive their partner for their transgression (Finkel, Rusbult, Kumashiro, & Hannon, 2002), especially when they have taken their partner's perspective (McCullough, Worthington, & Rachal, 1997). Additionally, a study by Peetz and Kammrath (2011) demonstrated that participants who felt more positively about

their relationships, and more motivated to respond to their partners' needs, were more likely to make a promise to change their behaviour as a conciliatory gesture.

More subtle behaviours have also been shown to serve a pro-relationship function. Without conscious awareness, people mimic their interaction partners, and as a result their interaction partners report liking them more than when they have not been mimicked (see Lakin, Jefferis, Cheng, & Chartrand, 2003, for a review). Along the same lines, when participants used the pronoun *we* to describe their same-sex friendships, they subsequently perceived the friendship as more close, intimate, and important than participants asked to describe their friendships using their friend's name and *I* (Fitzsimons & Kay, 2004). Moreover, other people who read about a relationship that was described using the pronoun *we* versus *she and I* rated the relationship as being more close and of higher quality (Fitzsimons & Kay, 2004). Indeed, research has shown that participants who use plural pronouns (we, us, our) to describe their romantic relationship are more likely to be committed to that relationship (Agnew, Van Lange, Rusbult, & Langston, 1998).

People have also been shown to use language to embrace or distance themselves from the reasons that guided their partners' actions (Malle, 1999; Malle, Knobe, O'Laughlin, Pearce, & Nelson, 2000). For example, when Tommy responds to the question, "why is Gina watering the plants?", with "because *she thinks* they need watering" (a *marked belief reason*) as opposed to, "because they need watering" (an *unmarked belief reasons*), he may be conveying that he does not share Gina's subjective mental state, thus distancing himself from Gina's

reason for watering the plants. In a study designed to test this distancing effect, when participants read about a scenario in which Jerry endorsed an unmarked belief reason for his girlfriend's actions, perceivers rated Jerry as more happy with his girlfriend, compared to when Jerry used marked belief reasons (Malle, Knobe, O'Laughlin, Pearce, & Nelson, 2000; Study 6). Through subtle variations in language, it seems that individuals are able to manipulate the social distance between themselves and their partners.

Relationship Maintenance in Response to a Relational Threat

Given that one of the greatest potential threats to the stability of a romantic relationship is attractive others of one's preferred sex (Kelly & Thibaut, 1978; Simpson, Gangestad & Lerma, 1990), particularly important relationship maintenance responses (RMRs) are ones that occur in response to potential attractive alternative partners (hereby referred to as "attractive alternatives"). The availability of attractive alternatives is thought to reduce relationship commitment, relationship satisfaction, and dependency, thereby increasing the risk of relationship dissolution (Drigotas & Rusbult, 1992; Kenrick, Neuberg, Zierk, & Krones, 1994; Lydon, 2010). Moreover, research has shown that the availability of attractive alternatives predicts the rate of relationship breakup (Felmlee, Sprecher, & Bassin, 1990; Simpson, 1987), and several epidemiological surveys reveal that one of the most commonly reported causes of divorce, if not the most common, is infidelity (e.g., Amato & Previti, 2003; Ambert, 2009).

Of course, some people are able to resist the temptation of attractive alternatives. As might be expected from a motivated cognition approach to close

relationships (Lydon, Burton, & Menzies-Toman, 2005; Lydon, Meana, Sepinwall, Richards, & Mayman, 1999), individuals in committed romantic relationships will sometimes devalue attractive others. For example, as compared to singles, heterosexual individuals in dating relationships rated attractive opposite-sex others in advertisements as less physically and sexually attractive (Simpson, Gangestad, & Lerma, 1990). Similarly, when the level of threat was calibrated with participants' level of commitment, committed daters not only rated alternatives as less attractive in terms of physical characteristics, but they also spent less time browsing through pictures of them (Miller, 1997), and devalued them in terms of personal qualities (e.g., sense of humour; Johnson & Rusbult, 1989), and desirability as a romantic partner (Lydon, Fitzsimons, & Naidoo, 2003). In fact, committed individuals have been shown to perceive attractive alternatives as less available to them (Jemmott, Ashby, & Lindenfeld, 1989), and are less likely to engage in emotional and physical infidelity (Drigotas, Safstrom, & Gentilia, 1999).

When people are mentally drained, or under time pressure, however, even individuals with the best of intentions have difficulty warding off attractive alternative threats. For example, when self-regulatory resources were low, individuals in dating relationships were just as likely as those not involved in a relationship to rate pictures of attractive preferred-sex others as potential partners (Ritter, Karremans, & van Schie, 2010). Moreover, the "pull" of attractive alternatives seems to be relatively automatic. People shown pictures of faces were able to perceive beauty quickly and outside of conscious awareness (Olson &

Marshuetz, 2005), and once attention had been directed toward an attractive member of the preferred sex, perceivers found it difficult to disengage (e.g., Maner, Gailliot, & DeWall, 2007), a phenomenon called *attentional adhesion*. Indeed, both men and women have been shown to look longer at pictures of attractive preferred-sex faces vs. unattractive preferred-sex faces (Maner et al., 2003; Shimojo, Simion, Shimojo, & Scheier, 2003), and gaze longer into the eyes of an attractive person as opposed to an unattractive person while conversing with them (Van Straaten, Holland, Finkenauer, Hollenstein, & Engels, 2010), possibly because this activates reward-related systems in the brain (Kampe, Frith, Dolan, & Frith, 2001). Additionally, some studies have shown that even individuals who were committed to their relationships were unable to avoid attending to attractive alternatives at early stages of attentional processing (Maner, Gailliot, & DeWall, 2007; Maner, Gailliot, & Miller, 2009).

Given that people are likely to face relational threats, such as attractive alternatives, in their everyday lives, and are often limited in the time and energy they have to manage these threats, it would seem beneficial to be able to engage in RMRs in an efficient, effortless manner. What leads to such behaviour? In the present set of studies, I build on the notion that one's identity can be intimately tied to significant relationships, thereby influencing relationship-relevant cognitions, motives, and behaviours (see Chen, Boucher, & Tapias, 2006; Cross, Hardin, & Gercek-Swing, 2011, for reviews). I hypothesize that when a relationship becomes a well-internalized, core part of the self, a threat to the relationship becomes a threat to the self (Burton & Lydon, 2004; Lydon, Menzies-

Toman, Burton, & Bell, 2008), and relationship protective behaviours are therefore exhibited in a fluid, relatively spontaneous manner.

Relationship Identification

Social psychologists have long explored the many ways in which humans are shaped by their relationships, and how, by being tied to the self, relationships and relationship partners have the ability, and perhaps even "privileged status" (Agnew & Etchevery, 2006, p. 275) to influence affect, cognition, motivation, and behaviour (e.g., Andersen Reznik, & Chen, 1997; Baldwin & Holmes, 1987; Shah, 2003). Moreover, research has shown that the influence of relationships on one's cognitions and behaviours may be relatively automatic, giving self-regulatory direction outside of one's awareness. Both the *relational schema* (Baldwin, 1992) and the *relational self* approach (see Chen, Boucher, & Tapias, 2006, for a review), for example, have demonstrated that priming a significant other causes participants to feel the way they would feel, and behave the way they would behave, when with that significant other, even in the other's absence (e.g., Andersen, Reznik, & Manzella, 1996; Baldwin, Carrell, & Lopez, 1990). Additionally, studies from a self-regulation perspective have shown that when participants are primed with a close relationship, the goals associated with that relationship are activated and pursued nonconsciously (e.g., Fitzsimons & Bargh, 2003; Shah, 2003).

Susan Cross and colleagues have added significantly to the relationship identification domain with their work on the *relational-interdependent self-construal,* hereby called the *relational self-construal* (Cross, Bacon, & Morris,

2000). Persons with a highly relational self-construal tend to think of themselves in terms of their close relationships (Cross, Bacon, & Morris, 2000), and their sense of self includes representations of their significant relationships (e.g., friendships, siblings), in addition to representations of other self-defining characteristics (e.g., studious, easy-going) (Cross & Gore, 2004). Although it has been found that persons with a highly relational self-construal are more committed to a specific close relationship (r = .22; Cross, Bacon, & Morris, 2000), relational self-construal is a more global relationship orientation, thereby influencing relationship-maintaining cognitions and behaviours throughout one's social network.

More specifically, across a variety of situations, individuals with a highly relational self-construal are likely to think and behave in a relationship-promoting manner. Those who score high in relational self-construal experience greater well-being to the extent that they perceive their relationships as close and meaningful (Cross & Morris, 2003), are more likely to consider the needs and wishes of others when making a decision (Cross, Bacon, & Morris, 2000), are more likely to self-disclose, which is associated with their roommates' positive evaluation of the relationship (Gore, Cross, & Morris, 2006), and evaluate conflicts of interest more positively when the outcome benefits a close other as well as the self (Gore & Cross, in press).

Additionally, those who score high in relational self-construal have been shown to automatically process information in ways that support the maintenance of their close relationships (Cross, Morris, & Gore, 2002), suggesting that their

relationship-promoting tendencies may occur without much deliberation. Participants who scored high in relational self-construal were more likely to have positive associations for relationship-oriented terms, have well-organized networks of relationship concepts, showed better attention to and recall of relational information in a surprise recall task, and tended to cluster information in memory in terms of relationships, leading to better recall of this information compared to information not organized in terms of relationships (Cross, Morris & Gore, 2002). In other words, those with a highly relational self-construal seem to be chronically "tuned in" to relationships, perhaps without conscious awareness.

Relational self-construal is an individual difference variable that assesses people's identification with relationships in general. However, working models of the self in relation to others can occur at various levels of specificity, including a global working model at the top tier, relationship-domain models (e.g., models for family and for friends) at the middle tier, and relationship-specific models at the bottom tier (Chen, Boucher, & Tapias, 2006; Collins & Read, 1994; Overall, Fletcher, & Friesen, 2003). Building on Cross and colleague's work, I reasoned that even those without a general disposition to identify with their relationships may nevertheless identify with a specific relationship, because of meaningful experiences within that relationship, and come to internalize its associated expectancies, goals and motives (Baldwin, Lydon, McClure, & Etchison, 2010; Ryan & Deci, 2000; Sheldon & Elliot, 1998). Tommy, for example, may not identify with relationships in general, but after being in a romantic relationship with Gina for two years, his relationship with her becomes an important part of

his identity. Consequently, he readily thinks of Gina when he thinks of himself, and he behaves in a way to promote their relationship. I refer to this construct, the focus of the present research, as *relationship-specific identification.*

Relationship-Specific Identification and Relationship Commitment

Although I share the theoretical perspective of the relational self-construal (Cross, Bacon, & Morris, 2000), my close relationships perspective emphasizes that relationship-specific identification should arise not only from the top-down dispositional tendency to identify with relationships in general, but also as a result of data-driven experiences within the romantic relationship. For example, it is expected that individuals who experience a great deal of intimacy in their relationship will be more identified and satisfied with, as well as committed to, their partners. As such, I expect relationship-specific identification to share some statistical variance with the more global relational self-construal, as well as with other relationship-specific constructs, such as relationship commitment and satisfaction.

Given that relationship commitment has been shown to be a particularly robust predictor of positive relationship behaviours (e.g., Drigotas, Safstrom, & Gentilia, 1999; Finkel, Rusbult, Kumashiro, & Hannon, 2002; Johnson & Rusbult, 1989; Menzies-Toman & Lydon, 2005; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), even when controlling for the variance accounted for by relationship satisfaction (e.g., Johnson & Rusbult, 1989; Rusbult, Martz, & Agnew, 1998), I felt it was especially important to address its association with relationship-specific identification. From a close relationships perspective,

relationship commitment represents a general overarching motivation to think and act in ways to maintain a relationship (Lydon & Zanna, 1990). Borrowing language from self-determination theory (SDT; Deci & Ryan, 2000), people likely commit to their relationships for a variety of reasons, including intrinsic, identified or ought-based, introjected motives. Consistent with this idea, most methods of measuring commitment subscribe to a multiple component view, with some definitions including satisfaction and intrinsic motivation as a basis of commitment (e.g., Rusbult, 1991), and others tapping into more introjected motives (e.g., Frank & Brandstatter, 2002; Johnson, 1991; Lund, 1985). Still other researchers have proposed an identity-based understanding of commitment (e.g., Lydon, 1996), including couple identity and a sense of "we-ness" in their definitions (e.g., Agnew, Van Lange, Rusbult, & Langston, 1998; Johnson, 1991), or have conceptualized commitment as a vehicle for fulfilling one's identity goals (e.g., Brickman, 1987; Burke & Reitzes, 1991; Gollwitzer & Kirchhof, 1998; Kanter, 1972; Wicklund & Gollwitzer, 1982).

It is likely that all three of these motives (intrinsic, identified, introjected) contribute to relationship maintenance via commitment, but each serves distinct functions. In situations of low threat, satisfaction-based commitment may have a larger influence on RMRs, given that the context does not challenge the basis of such commitment. On the other hand, identification-based commitment, which reflects an individual's enduring values and beliefs (Burton, Lydon, D'Alessandro, & Koestner, 2006; Sheldon & Elliot, 1998), may be especially crucial to sustaining relationships in the face of adversity. Moreover, introjection

and ought-based commitments may help keep relationships intact out of a sense of duty and obligation, but have a negative impact on well-being (Ryan & Connell, 1989), possibly by fostering resentment (Strauman & Higgins, 1988).

Similarly, I propose that relationship-specific identification serves a precise function in relationship maintenance; in particular, it fosters relatively spontaneous RMRs in the face of relational threat. First, it is assumed those high in relationship-specific identification have identified, internalized motives when it comes to the maintenance of their relationship. As such, it is likely that they pursue their relationship goals volitionally (Gore & Cross, 2006), and are thus able to efficiently, perhaps even automatically, protect their relationship in the face of threat. Indeed, I have preliminary data suggesting that relationship-specific identification is more highly associated with identified motives ($r = .34$, $p < .001$) than with intrinsic ($r = .14$, $p = .06$) and introjected (e.g., ought-based) motives ($r = .11$, $p = .16$). Second, a person who is highly identified with their relationship should have a highly accessible and elaborated representation of self in relation to other that is activated by relational threat, possibly in the form of an "*if* relational threat, *then* protect" contingency (Lydon, Menzies-Toman, Burton, & Bell, 2008), and that allows for relatively quick, fluid responses. In other words, I conceptualize relationship-specific identification as a self-representation with motivational qualities that are conducive to relatively automatic relationship protective behaviours.

Commitment, on the other hand, is a meta-motive (Karremans & Van Lange, 2008), and in addition to including an identified motivational basis, it also

likely includes other motives (e.g., introjected) that do not directly influence relatively spontaneous RMRs. Relationship-specific identification should therefore outperform commitment in predicting spontaneous relationship maintenance in the face of relational threat. However, given that commitment encompasses a variety of motivations, it should outperform the more specific relationship-specific identification when it comes to a more downstream effect of relationship maintenance processes, namely relationship longevity (Le, Dove, Agnew, Korn, & Mutso, 2010). In essence, commitment has greater bandwidth because it represents multiple motives that all contribute to relationship functioning and so it should outperform individual motivational bases in predicting relationship persistence.

Overview and Hypotheses

I add to the literature on relational identity by examining the motivational, relationship-protective properties of relationship-specific identification. In Study 1, I tested the convergent and divergent validity of relationship-specific identification, by assessing its associations with relational self-construal, relationship commitment (hereby referred to as "commitment"), and relationship satisfaction (hereby referred to as "satisfaction"). I predicted that relationship-specific identification would be correlated, but not redundant, with relational self-construal, as measured by the RISC Scale (Cross, Bacon, & Morris, 2000; Hypothesis 1a), as well as with relationship-specific constructs; specifically, commitment (Hypothesis 1b) and satisfaction (Hypothesis 1c). I also expected

that relationship-specific identification would account for unique variance in commitment, beyond relational self-construal and satisfaction (Hypothesis 1d).

Study 2 was the first test of the relationship-specific identification to spontaneous relationship maintenance link. I examined whether participants high in relationship-specific identification use subtle variations in language to increase social closeness between themselves and their partners. Specifically, I predicted that participants high in relationship-specific identification would be more likely to endorse statements that imply a shared reality with their partners (Hypothesis 2a). I also examined whether priming interdependence would increase low identifiers' tendency to endorse shared reality statements (Hypothesis 2b).

I then conducted three additional studies to explore how individuals who were highly identified with their specific romantic relationship protected their relationship in the face of threat. In Studies 3 and 4, I assessed relatively spontaneous relationship maintenance behaviours in response to subtle advances from an attractive alternative. Based on the assumption that one way to protect a romantic relationship in light of advances from an attractive alternative is to vocalize that one is in a romantic relationship, spontaneous pro-relationship responding was operationalized as whether participants mentioned their partner while conversing with an attractive alternative over a real-time text based chat program, Instant Messenger (IM). I assumed that fairly automatic processes govern one's responses over IM given that the nature of the interaction does not allow for a great deal of deliberation about one's responses.

Study 3 was a preliminary test of the paradigm, and I predicted that participants highly identified with their relationship would mention their partner or relationship more than those less identified when interacting with another person over IM, controlling for the degree to which they identified with their relationships in general, and their level of commitment (Hypothesis 3). I first examined whether participants mentioned their partner at all, reasoning that a mention of one's partner even once communicates that one is unavailable and uninterested in other romantic pursuits (Hypothesis 3a). Second, I examined how many times participants mentioned their partner. Presumably, every additional partner mention further emphasizes one's unavailability and disinterest in the attractive alternative (Hypothesis 3b).

In Study 4, an experimental design was used to test whether the relationship-specific identification to partner mentions effect was specific to interactions with preferred-sex others. I predicted that participants high in relationship-specific identification would be more likely to mention their partner or their relationship when interacting with an attractive member of their preferred sex (relational threat condition), thereby implying their lack of availability, but not when interacting with an attractive member of their non-preferred sex (control condition), controlling for the degree to which they identified with their relationships in general, and their level of commitment (Hypothesis 4).

Although language use is often assumed to represent a relatively spontaneous behaviour (Swann, Stein-Seroussi, & Giesler, 1992), it is arguably not as spontaneous as behaviours that occur at early, lower-order stages of

attentional processing. Recent research has demonstrated that once attention has been directed toward an attractive member of the preferred sex, perceivers find it difficult to disengage (e.g., Maner, Gailliot, & DeWall, 2007), unless recently prompted to think of their love for their partner (Maner, Rouby, & Gonzaga, 2008). In Study 5, I explored whether those high in relationship-specific identification would be less likely to exhibit attentional adhesion compared to those low in relationship-specific identification. I used an experimental manipulation of threat similar to that in Studies 3 and 4 to act as a trigger for an "*if* relationship is threatened, *then* protect relationship" contingency. I predicted that, when faced with a relational threat, participants high in relationship-specific identification would be more likely to decrease attentional adhesion to an attractive member of their preferred sex, controlling for the degree to which they identify with their relationships in general and their level of commitment (Hypothesis 5).

Finally, in Study 6, I sought to examine whether the effects of relationship-specific identification on RMRs would be reflected in relationship longevity. In a longitudinal sample, I predicted that the degree to which individuals incorporated a specific romantic relationship into their sense of self would be associated with relationship survival (still together vs. broken up) 1 – 3 years after the initial assessment (Hypothesis 6a). However, I also predicted that commitment would be a more robust predictor of relationship survival, based on the assumption that commitment encompasses a variety of motivations for staying

in a relationship, such as satisfaction-based reasons and introjected, guilt-based motives (Hypothesis 6b).

Study 1 – Correlates of Relationship-Specific Identification

The present study examines the convergent and divergent validity of relationship-specific identification, and particularly how it relates to similar constructs, such as relational self-construal, commitment, and satisfaction. I predicted that relationship-specific identification would be moderately correlated with relational self-construal (Hypothesis 1a), commitment (Hypothesis 1b), and satisfaction (Hypothesis 1c). I also expected that relationship-specific identification would account for unique variance in commitment, controlling for the variance accounted for by satisfaction and relational self-construal (Hypothesis 1d).

Method

Participants.

Three hundred and thirty-eight (95 males, 243 females) participants from McGill University participated in three different studies across three academic years. They were recruited from introductory-level courses and through newspaper advertisements, online classified advertisements, and campus posters.[1] All participants, except those participating for extra course credit, were paid $10 for their participation. Each study involved deception, so 19 participants were excluded because they were suspicious of the cover story, while 9 were excluded for not following instructions and 20 were excluded for not meeting eligibility criteria (e.g., they were not in a dating relationship). A total of 48 participants were excluded, leaving 290 participants (84 males, 206 females). On average, participants were 20.55 years old (*SD* = 3.13) and had been dating for 19.96

months (*SD* = 22.38). Participants were exclusively dating (*n* = 271), engaged (*n* = 12), or married (*n* = 7).

Materials.

Only measures relevant to the present study are described.

Relational self-construal. Cross, Bacon, and Morris' (2000) Relational-Interdependent Self-Construal (RISC) Scale (Cronbach's alpha = .86) assesses the degree to which people incorporate their relationships in general into their sense of self. On a 7-point Likert scale (endpoints: 1 = *strongly disagree*, 7 = *strongly agree*), participants rated their level of agreement with 11 different statements assessing relational self-construal, such as "My close relationships are an important reflection of who I am," "I think one of the most important parts of who I am can be captured by looking at my close friends and understanding who they are," and "Overall, my close relationships have very little to do with how I feel about myself" (reverse coded).

Relationship-specific identification. I modified the RISC Scale to create a measure of relationship-specific identification (S-RISC Scale; Cronbach's alpha = .90). For example, the question, "My close relationships are an important reflection of who I am" was changed to, "My *current romantic relationship* is an important reflection of who I am." Participants rated their level of agreement with 11 different statements assessing relationship-specific identification on a 7-point Likert scale (endpoints: 1 = *strongly disagree*, 7 = *strongly agree*). This measure can be seen in Appendix A.

Assessment of relationship commitment. The Assessment of Relationship Commitment (ARC) Scale is a 6-item measure assessing commitment (Cronbach's alpha = .90; Gagné & Lydon, 2003; Lydon, Menzies-Toman, Burton, & Bell, 2008). Interspersed among these items are 3 additional items assessing satisfaction (Cronbach's alpha = .87). On a 9-point Likert scale (endpoints: 1 = *not at all*, 9 = *completely*), participants indicated the extent to which each item applied to their relationship. Examples of these items include, "To what extent are you devoted to your relationship?" (commitment item) and "To what extent are you satisfied with your relationship?" (satisfaction item).

***Background information*.** Participants were asked various questions about their background, such as their age, ethnicity, sexual orientation, relationship length, and relationship status.

Procedure.

The measures were included in three different studies across three academic years. Data from the relevant measures were aggregated across surveys. Other measures included varied from survey to survey. Fifty-one percent of participants completed the relationship-specific identification measure first in an online survey, and the other measures approximately fourteen days later in a separate lab session. Forty-nine percent of participants completed relational self-construal, commitment, and satisfaction first in an online survey, but the relationship-specific identification measure approximately eight days later in a separate lab session. Relationship-specific identification and relational self-construal did not differ between these two settings, but commitment was

significantly higher, and satisfaction marginally higher, when administered first, $F(1, 258) = 4.01$, $p = .05$, $R^2 = .02$; $F(1, 258) = 3.39$, $p = .07$, $R^2 = .01$, respectively, although their correlations with relationship-specific identification did not differ by administration.

Results

A set of Pearson's correlation coefficients was first computed to examine the relationship among relationship-specific identification, relational self-construal, commitment, and satisfaction (see Table 1). In support of my hypotheses, relationship-specific identification was significantly correlated with relational self-construal, commitment, and satisfaction, but the correlations were not so high as to suggest that they are completely overlapping constructs.[2]

Given the conceptualization of commitment as a multifaceted construct, with relationship-specific identification as one possible basis of commitment, I examined whether relationship-specific identification could uniquely predict commitment beyond the dispositional measure of relational self-construal, and beyond a traditionally large correlate of commitment, namely satisfaction (see Table 2). Relationship-specific identification, relational self-construal, and satisfaction were entered as predictor variables, with commitment as the criterion. Both satisfaction (ß = 0.69, $p < 0.001$) and relationship-specific identification (ß = 0.30, $p < 0.001$) were positively associated with commitment. Although the association between relational self-construal and commitment had been positive, this association became negative (ß = -0.12, $p = < .01$) when controlling for satisfaction and relationship-specific identification. Presumably, those who are

highly identified with relationships in general and committed to their relationship are also likely highly identified with their specific relationship, leaving a smaller group of high RISC Scale participants who are low on the S-RISC Scale and likely low in commitment.

Discussion

The results of this study establish some degree of convergent and divergent validity for the S-RISC Scale, as relationship-specific identification was correlated, but not redundant, with relational self-construal, commitment, and satisfaction. In addition, relationship-specific identification accounted for unique variance in commitment when controlling for relational self-construal and satisfaction, consistent with the hypothesis that relationship-specific identification is a distinct basis of commitment.

Study 2 – Shared Reality

Bertram Malle and colleagues have examined how language can be used to express and facilitate social closeness in a relationship, particularly the extent to which individuals embrace or distance themselves from the reasons that guided an agent's action (Malle, 1999; Malle, Knobe, O'Laughlin, Pearce, & Nelson, 2000). Malle and colleagues argue that explanations of agent's actions serve an important function in that they convey the explainer's own attitudes toward the reasons that guided the agent's action (Malle et al., 2000), and thus the extent to which the explainer and the agent are experiencing a shared reality. Specifically, their research has shown that when explainers use *unmarked belief reasons* to describe an agent's actions, they are conveying that they believe the agent's reasons are sensible and valid; whereas when they use *marked belief reasons*, they are distancing themselves from the agent's reasons by implying that the agent's reasons are unreasonable and incorrect (Malle et al., 2000; Study 6). For example, in response to the question, "Why is she watering the plants," the unmarked belief reason, "because they need watering," conveys that the plants actually need watering and that is why she is watering them. In this case, the explainer embraces the agent's reason, implying that he believes her belief is true. Alternatively, with the marked belief reason, "because *she thinks* they need watering," the explainer conveys the agent's belief as a subjective mental state that the explainer does not necessarily share, thus distancing himself from the agent's reason.

Study 2 was designed to test the hypothesis that relationship-specific identification is associated with the tendency to reflect and cultivate a shared reality with one's partner, as represented by subtle differences in language use (Hypothesis 2a). I also explored the possibility that priming interdependence would increase shared reality specifically for individuals low in relationship-specific identification (Hypothesis 2b).

Method

Participants.

Three hundred and forty-six participants in exclusive relationships were recruited from among friends and family by students enrolled in a psychology course at McGill University, as part of a research assignment worth 10% of their course mark. Participation was on a voluntary basis. Forty-one participants were excluded: Eleven did not complete the majority of the survey or did not complete it properly, 16 did not complete the prime or did not complete it properly, 8 were not in a relationship, and 6 were not in an exclusive relationship, leaving a total of 305 participants (169 females, 135 males, 1 gender not indicated). One hundred and fifty-four participants were randomly assigned to an experimental prime condition and 151 participants were randomly assigned to the control prime condition. On average, participants were 26.39 years old (SD = 11.06), and had been dating for 52.65 months (SD = 90.96). In addition, 230 participants were exclusively dating, 19 were engaged, and 56 were married.

Materials.

The study consisted of one large survey, created using Survey Monkey, a tool for developing web-based surveys. Only the measures relevant to the present study are listed below.

Background information. Participants were asked various questions about their background, such as their age, ethnicity, sexual orientation, relationship length, and relationship status.

Interdependent self-construal prime. This task was used to prime interdependence (Brewer & Gardner, 1996). In the experimental condition, participants read a paragraph containing first-person plural pronouns (e.g., *we*, *us*, and *our*), and were asked to type these pronouns into a text box as they came across them while reading. In the control condition, participants read a paragraph consisting of the singular pronouns *it* and *its* and were similarly asked to type them into a text box as they came across them while reading.

Scenarios and reasons. I developed a 20-item questionnaire, based on examples from Malle, Knobe, O'Laughlin, Pearce, and Nelson (2000), for the purpose of the present study. I tested it on 2 research assistants, who provided feedback for its improvement. The questionnaire was used to measure the degree to which individuals use language to reflect and cultivate a shared reality with their partners (see Appendix B). Participants were asked to indicate the extent to which they agree with possible reasons for their partners' hypothetical behaviours, on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*). Ten of the reasons were marked (e.g., "Because he/she thinks it is interesting"; $M = 4.90$;

SD = .73) and 10 were unmarked (e.g., "Because it's funny"; *M* = 4.74; *SD* = .73). In this questionnaire, greater agreement with marked scenarios is thought to imply greater social distance and less shared reality, whereas greater agreement with unmarked scenarios is thought to imply less social distance and greater shared reality.

Relationship-specific identification. The 11-item S-RISC Scale used in Study 1 was again used to assess the degree to which people incorporate a specific relationship into their sense of self (endpoints: 1 = *strongly disagree*, 7 = *strongly agree*; *M* = 5.00, *SD* = 1.01).

Assessment of relationship commitment. As in Study 1, the ARC was used to assess relationship commitment (endpoints: 1 = *not at all*, 9 = strongly agree; *M* = 7.93, *SD* = 1.23).

Procedure.

Participants in exclusive relationships were invited, via Facebook and email, to participate in a web-based study called Scenarios and Reasons. They were not told the study examined pro-relationship responding in the context of a romantic relationship. If they agreed to participate, they were given a link to the survey, and were told that they should complete it alone and in one sitting. They completed a battery of individual difference measures and the relevant relationship measures of relationship-specific identification and relationship commitment. The survey took approximately 20 minutes to complete. Approximately one month after the completion of the survey, participants were

emailed a detailed debriefing letter explaining the purpose and predictions of the study.

Preliminary Results

Preliminary analyses revealed that the prime did not affect the relationship measures (relationship-specific identification and commitment), *p*s > .20.

Results

A median split was performed on the S-RISC Scale to create a high and low relationship-specific identification group. My first hypothesis was that those high in relationship-specific identification would use language to reflect and cultivate a shared reality with their partners (Hypothesis 2a). In order to test this, a 2 (relationship-specific identification: high vs. low) x 2 (scenarios: marked vs. unmarked) mixed model ANOVA was conducted, with scenarios as a within-subjects factor. The interaction proved to be significant, $F(1, 303) = 5.76$, $p = 0.02$.[3] To examine this interaction further, mean comparisons were made between those low and high in relationship-specific identification for both unmarked and marked scenarios. Results revealed that high identifiers were more likely to endorse unmarked scenarios (statements implying less social distance) compared to low identifiers, $t(303) = -2.26$, $p = .03$. There was no difference in endorsement of marked scenarios for those low and high in relationship-specific identification, $t < 1$. See Table 3 for means. The Relationship-Specific Identification x Scenarios mixed model ANOVA was repeated with commitment as a covariate. When controlling for the variance accounted for by commitment, the Relationship-Specific Identification x Scenarios interaction effect was no longer significant, *F*

< 1; whereas the Commitment x Scenarios interaction effect was significant, $F(1, 300) = 8.05$, $p = .005$.

Because in the present study I did not have a neutral point against which to compare the potential embracing effect of unmarked reasons and the potential distancing effect of marked reasons, I created an index of social distance by subtracting agreement with the unmarked reasons from agreement with the marked reasons. Higher numbers on the index were representative of greater social distance. A regression analysis was conducted with relationship-specific identification as the predictor variable and the mean of the social distance index as the criterion. A significant effect was found, $B = -.07$, $SE = .03$, $\beta = -.13$, $t = -2.31$, $p = .02$, such that those higher on relationship-specific identification were less likely to agree with statements implying greater social distance. However, this result was again no longer significant when controlling for the variance accounted for by commitment, $B = -.01$, $SE = .04$, $\beta = -.03$, $t = -.38$, $p = .71$. Indeed, commitment was a significant predictor, such that those higher on commitment were less likely to agree with statements implying greater social distance, $B = -.08$, $SE = .03$, $\beta = -.19$, $t = -2.75$, $p = .006$.

My second hypothesis was that priming interdependence would make it more likely that low identifiers would endorse statements implying a shared reality with their partners (Hypothesis 2b). I conducted a 2 (prime: we vs. it) and 2 (relationship-specific identification: high vs. low) x 2 (scenarios: marked vs. unmarked) mixed model ANOVA, with scenarios as a within-subjects factor. There was a main effect of Scenarios, such that participants were more likely to

endorse marked scenarios vs. unmarked scenarios, $F(1, 301) = 30.02$, $p < .001$ (Ms = 4.90 vs. 4.74, respectively). There was no main effect of the prime, $F < 1$, and the prime did not interact with relationship-specific identification to predict differences in endorsement of marked vs. unmarked scenarios, $F < 1$.

Given that, in the previous analysis, commitment was found to be a more robust predictor of the shared reality effect as compared to relationship-specific identification, a second 3-way mixed model ANOVA was conducted, replacing the relationship-specific identification factor with commitment. There was no main effect of commitment, $F < 1$; and the prime did not interact with commitment to predict differences in endorsement of marked vs. unmarked scenarios, $F < 1$.

Discussion

This study demonstrates that relationship-specific identification is associated with the degree to which individuals use subtle variations in language to reflect and cultivate a shared reality with their partners. However, commitment more strongly predicted this pro-relationship behaviour as compared to relationship-specific identification, suggesting that a general orientation to embrace a romantic partner's reasons for action is not uniquely associated with identification, but to commitment more broadly. Perhaps in the present study high identifiers did not feel their relationship was under threat, and would be more likely to use language to express a shared reality if the "*if* relationship is threatened, *then* protect" contingency was activated.

Additionally, the prime may not have exhibited the expected result because, instead of being administered through the commonly used paper and pencil method (e.g., Brewer & Gardner, 1996), individuals were asked to read a paragraph on a computer screen and type out the number of target pronouns they saw. Using this online method may have reduced the impact of the prime, as indicated by the fact that it did not influence responses on the various relationship measures, such as the measure of relationship commitment. Alternatively, activating a general sense of interdependence may not have been sufficient to alter pre-existing behavioural patterns related to social closeness and shared reality.

Study 3 – Spontaneous Expressions of Relationship Status I

Theoretically, I expect the unique effects of relationship-specific identification to be especially powerful in the context of relational threat, undercutting the explanatory power of the meta-motive commitment. So, in the next three studies, I shifted to examine relationship-specific identification as a predictor of relatively spontaneous RMRs in the context of an interaction with an attractive alternative partner. Study 3, the present study, was designed as a preliminary test of a new paradigm used to assess how one uses language to protect their relationship against an attractive alternative threat. I predicted, as compared to those less identified, that those highly identified with their romantic relationship would be more likely to mention their partner or relationship at least once vs. not at all (Hypothesis 3a), as well as a greater number of times in total (Hypothesis 3b), when interacting with an attractive alternative over a real-time chat program. Study 4 extended the test of the paradigm with an added experimental manipulation and more refined dependent variables. Finally, in Study 5, I combined a recently used paradigm with my own experimental manipulation to further test a relationship-specific identification by relational threat interaction predicting spontaneous RMRs.

Method

Participants.

Fifty-six participants (21 males, 35 females) in exclusive relationships were recruited from McGill University to participate in the present study. Participants were recruited from introductory-level courses and through

newspaper advertisements, online classified advertisements, and campus posters. All participants, except those participating for extra course credit, were paid $10 for their participation. The data from 12 participants were excluded because they did not meet eligibility criteria (n = 6), experienced technical difficulties (n = 5), or were suspicious of the cover story (n = 1), leaving a total of 44 participants (16 males, 28 females). On average, participants were 20.88 years old (SD = 3.15) and had been dating for 15.24 months (SD = 15.61). Participants were heterosexual and exclusively dating (n = 41), engaged (n = 1), or married (n = 2).

Materials.

a) *Premeasures.*

Relationship-specific identification. Participants completed the S-RISC Scale (endpoints: *1* = strongly disagree, *7* = strongly agree; M = 4.81, SD = 1.06) via an online survey.

b*) *Lab session.

Instant messaging task. The Instant Messaging (IM) task was designed to assess relatively spontaneous relationship maintenance behaviours in response to subtle advances from an attractive alternative. One way to protect a romantic relationship in light of advances from an attractive alternative is to vocalize that one is in a romantic relationship. Additionally, it is assumed that relatively automatic processes govern one's responses over IM given that the nature of the interaction does not allow for a great deal of deliberation about one's responses. Thus, in the present task, spontaneous pro-relationship responding was

operationalized as the number of times participants mentioned their partner or relationship while conversing with an attractive alternative over IM.

Participants were led to believe that they were participating in a "Getting to Know You" task via MSN Messenger with another participant who ostensibly was in a nearby room. This other participant was in fact a confederate playing the role of an attractive, opposite-sex alternative. Participants were first instructed that they and their interaction partner would be introducing themselves to each other via webcam. For the confederate's introduction, the same pre-recorded clip of either a male or female confederate was shown to all participants. Each confederate was selected by volunteers as the most attractive among a sample of 6 (3 male and 3 female) confederates. During the introduction, the confederate hinted that he or she was single and enjoyed meeting new people.

After the introductions, the webcam was turned off and the conversation over IM commenced. Participants were instructed that there were two conditions: a responder condition, in which one can only answer and not ask any questions; and a questioner condition, in which one can only ask and not answer any questions. The assignment to condition was fixed so that it always appeared that participants were randomly assigned to the responder condition. The confederate asked each participant the same 10 questions for every session, which were designed to elicit pro-relationship responses from the participants, particularly the mention of their relationship and/or partner. Specifically, the questions were designed so that it would presumably be more and more difficult for the participant to avoid mentioning their partner. For example, one of the first

questions was, “What’s your favourite type of movie,” then around the half-way point, “What do you normally do on the weekends?”, and near the end, “On your ideal trip, would you travel alone or is there someone you’d go with?” Descriptive statistics revealed that in response to these questions, participants tended to mention their partner, on average, 0.88 times (*SD* = 1.16).

Background information. At the end of the lab session, participants were asked various questions about their background, such as their age, ethnicity, sexual orientation, relationship length, and relationship status.

c) *Post-measures.*

Relational self-construal. Participants completed the RISC Scale (endpoints: 1 = *strongly disagree*, 7 = *strongly agree; M* = 5.09, *SD* = .80) via an online survey.

Assessment of relationship commitment. Participants also completed the ARC Scale (endpoints: 1 = *not at all*, 9 = *completely*), which assesses commitment (*M* = 7.83, *SD* = 1.02), in the same online post-measure survey.

Procedure.

Participants were invited to take part in a study examining how people interact with each other using various forms of technology. The purpose of the cover story was to ensure that participants did not suspect the study was about romantic relationships, so that they were not primed with their relationships before completing the relationship measures and interacting with the attractive alternative. Approximately seventeen days before the experimental session, participants completed the S-RISC Scale as a premeasure via an online survey. In

order to not make it obvious that the study was about relationships, the S-RISC Scale was embedded among other non-relationship measures and participants were told they could skip this measure if they were not in a relationship. Once at the lab, the research assistant gave participants a brief introduction to the study, obtaining informed consent and ensuring the anonymity of their responses. Participants then took part in the IM task and completed a background information questionnaire as their final questionnaire. At the end of the session, the research assistant explained the purpose of the study, provided a post-study information letter, and answered questions. Approximately nine days later, participants completed a set of post-measures, consisting of the RISC Scale and the ARC Scale, via an online survey.

Preliminary Analyses

Preliminary analyses indicated no main effects or interactions involving gender, and thus I collapsed across gender in subsequent analyses. Relationship length was marginally correlated with relationship-specific identification, $r(38) = .30$, $p = .06$; but not with the number of times participants mentioned their partner or relationship, $r(39) = .08$, $p = .62$.

Results

First, I examined whether relationship-specific identification was associated with whether or not participants mentioned their partner or relationship at least once or not at all. To test this prediction, a logistic regression analysis was conducted with relationship-specific identification as the predictor variable, and whether participants mentioned their partner (0 = no, 1 = yes) as the criterion.

Because 2 participants did not complete the S-RISC Scale, a total of 42 participants were included in the analysis, with 20 participants in the "no" category and 22 participants in the "yes" category. Results revealed that relationship-specific identification did not predict whether participants mentioned their partner at least once or not at all, Wald = .92, Odds Ratio (OR) = 1.36, p = .34; $\chi 2(1, N = 42) = .94$, p = .33, for the model.

Second, I examined whether relationship-specific identification was positively associated with the number of times participants mentioned their partner (hereby referred to as "number of mentions"). A multiple regression analysis was conducted with relationship-specific identification as the predictor variable and number of mentions as the criterion. Results confirmed my hypothesis, revealing that relationship-specific identification was a significant predictor of the number of mentions, B = .39, SE = .15, β = .38, $t(39) = 2.54$, p = .02.

In order to examine if relationship-specific identification predicted number of mentions controlling for the more general relational self-construal, a multiple regression analysis was conducted with relationship-specific identification and relational self-construal as predictor variables and number of mentions as the criterion. Relationship-specific identification was found to be a significant predictor above and beyond relational self-construal, B = .39, SE = .20, β = .37, $t(35) = 2.00$, p = .05. Relational self-construal, on the other hand, was not a significant predictor when controlling for the variance accounted for by relationship-specific identification, B = .04, SE = .19, β = .04, $t(35) = .23$, p = .82.

In a similar regression analysis, I tested whether relationship-specific identification predicted number of mentions controlling for the variance accounted for by commitment. Relationship-specific identification and commitment were simultaneously entered as the predictor variables and number of mentions was entered as the criterion. Although collectively they accounted for 20.3% of the variance, $F(2, 35) = 4.46$, $p = .02$, results revealed that neither relationship-specific identification nor commitment uniquely predicted number of mentions, $B = .28$, $SE = .18$, $\beta = .27$, $t(35) = 1.56$, $p = .13$; $B = .27$, $SE = .18$, $\beta = .26$, $t(35) = 1.51$, $p = .14$, respectively.

Discussion

These results were an encouraging first step. Although not associated with the dichotomous DV (whether participants mentioned their partner at least once or not at all), relationship-specific identification predicted number of mentions, and this result held when controlling for the degree to which they identified with relationships in general, but not when controlling for their level of commitment. The present study, however, had a small sample size and lacked a control group, so Study 4 was conducted to further explore the relationship-specific identification to spontaneous RMR link using the IM paradigm, and to clarify whether those who score high on relationship-specific identification talk more about their relationships in general, or particularly when they interact with an attractive member of their preferred sex.

Study 4 – Spontaneous Expressions of Relationship Status II

This study was designed to test the hypothesis that individuals do not just talk more about their relationship in general, but particularly when interacting with an attractive member of their preferred sex, supporting the idea that this behaviour is a relationship-protective response. I also sought to increase the statistical power in order to more adequately test whether relationship-specific identification predicts pro-relationship responding under threat, when controlling for the variance accounted for by commitment. I predicted that participants high in relationship-specific identification would be more likely to mention their partner or relationship when interacting with an attractive alternative of their preferred sex (Hypothesis 4).

Method

Participants.

One hundred and fifty-nine participants (50 males, 109 females) in exclusive relationships were recruited from McGill University to participate in the present study ostensibly about how people interact with each other using various forms of technology. Data were collected in 2 waves during 2 different academic years. Participants were recruited from introductory-level courses and through newspaper advertisements, online classified advertisements, and campus posters. All participants, except those participating for extra course credit, were paid $10 or $15[4] for their participation. The data from 34 participants were excluded because they experienced technical difficulties (n = 4), did not meet eligibility criteria (e.g., they were not in a relationship; n = 9), or were suspicious of the

cover story or confederate (n = 21)[5], leaving a total of 125 participants (37 males, 88 females). On average, participants were 20.73 years old (SD = 3.24) and had been dating for 22.13 months (SD = 20.13). Participants were heterosexual and exclusively dating (n = 116), engaged (n = 3), or married (n = 6).

Materials.

The materials and procedure were identical to the previous study (Study 3) with two exceptions: participants were randomly assigned to interact with an attractive member of the same sex or an attractive member of the opposite sex and an additional question was asked by the confederate during the IM task.

a) *Premeasures.*

Relationship-specific identification. Participants completed the S-RISC Scale (endpoints: 1 = *strongly disagree*, 7 = *strongly agree*; M = 5.12, SD = .87) via an online survey.

b*) *Lab session.

Instant messaging task. As mentioned above, the IM task was identical to that of Study 3, except that the person (actually a confederate) that the participants saw over webcam and interacted with over IM was either of the same or opposite sex, and participants were asked an additional question in the IM task for the purpose of improving the believability of the cover story (i.e., "Where are you from?"). Descriptive statistics revealed that in response to the IM task questions, participants tended to mention their partner, on average, 1.44 times (SD = 1.27).

Background information. At the end of the lab session, participants were asked various questions about their background, such as their age, ethnicity, sexual orientation, relationship length, and relationship status.

c) *Post-measures.*

Relational self-construal. Participants completed the RISC Scale (endpoints: 1 = *strongly disagree*, 7 = *strongly agree; M* = 4.98, *SD* = .983) via an online survey.

Assessment of relationship commitment. Participants also completed the ARC Scale (endpoints: 1 = *not at all*, 9 = *completely*), which assesses commitment (*M* = 7.97, *SD* = .829), in the same online post-measure survey.

Procedure.

Participants were invited to take part in a study examining how people interact with each other using various forms of technology. The purpose of the cover story was to ensure that participants did not suspect the study was about romantic relationships, so that they were not primed with their relationship before interacting with an attractive alternative. Approximately ten days before the experimental session, participants completed the S-RISC Scale as a premeasure via an online survey. The S-RISC Scale was embedded among other non-relationship measures and participants were told they could skip this measure if they were not in a relationship. Once at the lab, the research assistant gave participants a brief introduction to the study, obtaining informed consent and ensuring the anonymity of their responses, and randomly assigned them to either the relational threat or control condition. Participants then took part in the IM

task, and completed a background information questionnaire as their final task. At the end of the session, the research assistant explained the purpose of the study, provided a post-study information letter, and answered questions. Approximately ten days later, participants completed a set of post-measures consisting of the RISC Scale and the ARC Scale.

Preliminary Results

Preliminary analyses indicated no main effects or interactions involving gender, and thus I collapsed across gender in subsequent analyses. Additionally, relationship length did not correlate with relationship-specific identification or the number of times participants mentioned their partner or relationship.

Results

I hypothesized that participants high in relationship-specific identification would be more likely to mention their partner or their relationship at least once when interacting with an attractive member of their preferred sex over IM. To test this prediction, a logistic regression analysis was conducted with relationship-specific identification, condition, and the condition by relationship-specific identification interaction term simultaneously entered as the predictor variables, and whether participants mentioned their partner (0 = no or 1 = yes) as the criterion. Because 6 participants did not complete the S-RISC Scale, a total of 119 participants were included in the analysis, with 34 participants in the "no" category, and 85 participants in the "yes" category. Relationship-specific identification was a significant predictor, but condition was not, Wald = 8.10, Odds Ratio (OR) = 2.22, p = .004; Wald = .02, OR = 1.04, p = .88; respectively.

Additionally, the Condition x Relationship-Specific Identification interaction effect was significant, Wald = 7.28, OR = 2.13, $p = .007$; $\chi 2(3, N = 119) = 19.21$, $p < .001$, for the model.

A test of simple slopes (Aiken & West, 1991) revealed that participants low in relationship-specific identification were less likely to mention their partner in the relational threat condition vs. the control condition, $B = .72$, $SE = .32$, Wald = 5.15, $p = 0.02$. On the other hand, a marginal effect demonstrated that participants high in relationship-specific identification were more likely to mention their partner in the relational threat condition vs. the control condition, $B = .79$, $SE = .41$, Wald = 3.65, $p = 0.06$. In the relational threat condition, those high in relationship-specific identification were more likely to mention their partner compared to those low in relationship-specific identification, $B = 1.55$, $SE = .47$, Wald = 11.02, $p < 0.001$. In the control condition, those high and low in relationship-specific identification did not differ significantly, $B = -.04$, $SE = .31$, Wald = .02, $p = .89$.

More concretely, when looking at the percentage of participants who mentioned their partner or relationship at least once, we see that, in the control condition, 75% of the high identifiers and 74% of the low identifiers mentioned their partner or relationship. However, in the relational threat condition, 90% of high identifiers and 42% of low identifiers mentioned their partner or relationship.

The simple slopes analyses were repeated controlling for the variance accounted for by relational self-construal, as well as commitment. Because not all participants had completed the measure of commitment and relational self-

construal, 114 participants were included in the present analyses (31 = no mentions, 83 = one or more mentions). The Condition x Relationship-Specific Identification interaction remained significant in both cases, *p*s < .05, as did the test of simple slopes in the relational threat condition, *p*s < .05. The one additional result was that commitment predicted likelihood of mentioning the partner in the control condition, $p < .05$.

I also examined how many times participants referred to their significant other or relationship. A multiple regression analysis was conducted with condition, relationship-specific identification, and the condition by relationship-specific identification interaction term as the predictor variables, and number of mentions as the criterion. Condition was coded as 1 (relational threat condition) and -1 (control condition) and the continuous predictor variable, relationship-specific identification, was standardized. In Step 1 of the analysis, condition and relationship-specific identification were simultaneously entered, revealing no main effect of condition, $B = -.07$, $SE = .09$, $\beta = -.07$, $t(115) = -.73$, $p = .47$, but a main effect of relationship-specific identification, $B = .27$, $SE = .09$, $\beta = .27$, $t(115) = 3.01$, $p = .003$. The Condition x Relationship-Specific Identification interaction effect was entered at Step 2, proving to be significant, $B = .18$, $SE = .09$, $\beta = .18$, $t(115) = 2.02$, $p = .05$.

Simple slope analyses were conducted to examine the interaction more closely. Participants low in relationship-specific identification had fewer relationship mentions in the relational threat condition compared to those high in relationship-specific identification, $B = .45$, $SE = .12$, $t(115) = 3.60$, $p < 0.001$, but

there was no such difference in the control condition, $B = .08$, $SE = .13$, $t(115) = 0.64$, $p = 0.52$ (see Figure 1). Lows mentioned their partner less in the relational threat condition compared to the control condition, $B = -.25$, $SE = .13$, $t(115) = -1.95$, $p = 0.05$, and there was no difference for those high in relationship-specific identification between the relational threat and the control condition, $B = .12$, $SE = .13$, $t(115) = 0.91$, $p = 0.36$.

The test of simple slopes was repeated, first controlling for relational self-construal, and again controlling for commitment. In the relational threat condition, relationship-specific identification predicted number of mentions controlling for the variance accounted for by relational self-construal, $B = .34$, $SE = .16$, $t(109) = 2.15$, $p = 0.03$, whereas relational self-construal was not a significant predictor, $B = .22$, $SE = .15$, $t(109) = 1.49$, $p = 0.14$. Neither relationship-specific identification nor relational self-construal predicted the number of mentions in the control condition, ts < 1. Similarly, in the relational threat condition, relationship-specific identification predicted number of mentions controlling for the variance accounted for by commitment, $B = .38$, $SE = .13$, $t(109) = 2.87$, $p < 0.01$, but was not a significant predictor in the control condition, $t < 1$. Commitment, controlling for the variance accounted for by relationship-specific identification, was not a significant predictor in the relational threat condition ($t < 1$), nor in the control condition, $B = .17$, $SE = .13$, $t(109) = 1.27$, $p = 0.21$.

The assumption is that the mentioning of one's partner or relationship in the present IM paradigm is a relatively spontaneous phenomenon. However, it is

possible that those low in relationship-specific identification, in the relational threat condition, deliberately inhibited mentioning their partner or relationship, which would preclude a more spontaneous response. In order to test for this possibility, I examined the time it took participants to respond to the questions in the IM task.

As mentioned in the method section, the questions in the IM task were designed to make it progressively more difficult for the participant to avoid mentioning their partner or relationship. Internal analyses revealed that if participants were to mention their partner or relationship, it was most likely after Question 4 (97% of mentions occurred after Question 4). Accordingly, the average time it took participants to respond to each question was calculated for Questions 1 – 3 (control time) and Questions 4 – 11 (target time). The mean of Questions 1 – 3 was used as a baseline control variable in the following analyses.

In a multiple regression analysis, condition, relationship-specific identification, control time, and the condition by relationship-specific identification interaction term were simultaneously entered as predictor variables. Target time was entered as the criterion. Results revealed a non-significant Condition x Relationship-Specific Identification interaction effect, $B = 22.14$, $SE = 15.06$, $\beta = .11$, $t(113) = 1.47$, $p = .14$. In fact, the pattern of means revealed that the only hint of a difference in time to respond was in the control condition, such that those low in relationship-specific identification took less time to respond compared to those high in relationship-specific identification. None of the other pairwise comparisons approached significance. Based on these results, it is

unlikely that participants low in relationship-specific identification and in the relational threat condition were more deliberative about their responses than participants in the other three groups.

Discussion

The hypothesized interaction between relationship-specific identification and threat showed that relationship-specific identification was only associated with mentions of one's partner when participants were ostensibly interacting with an attractive, available member of their preferred sex. Moreover, this finding remained significant controlling for the variance accounted for by commitment, suggesting that, under threat, it may be relationship-specific identification in particular that is crucial in motivating spontaneous pro-relationship responding. Whereas the result for mentioning the partner at least once vs. not at all was driven both by an increased probability for high identifiers, and a decreased probability for low identifiers, the frequency of mentioning effect was due primarily to a decrease by low identifiers in the relational threat condition. I addressed the possibility that this reflected a relatively conscious, deliberative response by examining time to respond. Results demonstrated that participants were not likely extensively deliberating about their responses. Nevertheless, this paradigm is limited in its ability to test automatic pro-relationship responding, so Study 5 was conducted to address this issue using a well-validated, social cognitive paradigm.

Study 5 – Attentional Adhesion to Attractive Alternatives

Although the demands of the IM paradigm require rather quick, spontaneous responses, they do not require the extremely fast responses characteristic of social cognitive reaction time measures. Thus, to push the test of relationship-specific identification further, I conducted a study of participants' attention to attractive alternatives. My theoretical assumption, grounded in previous findings (Lydon, Menzies-Toman, Burton, & Bell, 2008), is that a relational threat may automatically motivate pro-relationship cognitions that influence behaviour. In the present study, I used an experimental manipulation of relational threat similar to Study 4, and examined whether relationship-specific identification interacted with relational threat to predict automatic attention to attractive alternatives. I predicted that, when faced with a relational threat, participants high in relationship-specific identification would be more likely to decrease attentional adhesion to an attractive alternative (Hypothesis 5).

Method

Participants.

Ninety participants (18 male, 72 female) in exclusive relationships were recruited from McGill University to participate in the present study ostensibly regarding the cognitive processes involved in social interaction. Participants were recruited via newspaper advertisements, online classified advertisements, and campus posters. They were given $15 in exchange for their participation. Eleven participants were excluded from the data analysis: one was no longer in a relationship, one incorrectly performed an experimental task, two were of the

same couple, and seven were suspicious of the cover story. The final sample consisted of 79 participants (65 female, 14 male). On average, participants were 20.41 years old (*SD* = 2.32), and had been in a relationship for 22.32 months (*SD* = 16.84). All participants were heterosexual and either exclusively dating (*n* = 78) or married (*n* = 1).

Materials.

a) Premeasures.

Relationship-specific identification. Participants completed the S-RISC Scale (endpoints: 1 = *strongly disagree*, 7 = *strongly agree; M* = 4.78, *SD* = 1.02) via an online survey.

b) Lab session.

Relational threat. Seven female volunteers and six male volunteers were recruited as potential attractive alternatives. The volunteers were asked to record videos as if they were introducing themselves to a stranger, but the contents of the introductions were fabricated, as each volunteer was given a script to read. The script was designed by surveying a group of individuals to determine what qualities would be attractive in a romantic partner. The script was held constant within sex, with minor between-sex variations. Independent viewers (*n* = 12; males = 6, females = 6) rated videos of the opposite-sex volunteers on various dimensions of attractiveness using a 10-point scale (1= *very unattractive*, 10 = *very attractive*). The highest rated male video and the highest rated female video in terms of physical attractiveness were chosen as the relational threat stimuli (male: *M* = 7.83, *SD* = 0.98; female: *M* = 8.00, *SD* = 1.55).

Dot probe visual cueing task. The dot probe visual cueing task measures how quickly participants shift their attention away from one stimulus in order to classify another. A four-quadrant dot-probe task adopted from Maner, Gailliot, and DeWall (2007) was used. Four categories of target photos were shown to each participant on a 14" X 11" computer monitor: 1) attractive women, 2) attractive men, 3) average-looking women, and 4) average-looking men. Fifteen exemplars from each target category were shown, such that participants viewed a total of 60 color facial photographs. The photos had been rated on a 9-point scale (1 = *very unattractive* to 9 = *very attractive*) and grouped based on level of attractiveness before being incorporated into the dot-probe task (attractive women: $M = 7.53$, $SD = 1.39$; attractive men: $M = 7.31$, $SD = 1.35$; average women: $M = 4.77$, $SD = 1.61$; average men: $M = 4.64$, $SD = 1.74$).

At the start of each trial, a fixation cross ("x") appeared in the center of the screen for 1000 ms. This was followed by the appearance of a photo in one of the four quadrants for 500 ms. Subsequently, a black object appeared either in the same quadrant as the photo had occupied ("filler trials")[6] or in a different quadrant ("attentional shift trials"). The participant was told to quickly classify this object as either a circle or a square by pressing the "a" or the "k" key on the keyboard, respectively. Therefore, on attentional shift trials (the trials of interest) participants were required to disengage their attention from a target photo and direct it to a different location on the screen. The response latency (in milliseconds) between the appearance of the categorization object and the participant's response was the reaction time measure of attentional adhesion:

larger response latencies suggest that it took the participant longer to disengage attention from the target photo (Maner, Rouby, & Gonzaga, 2008).

Additional measures. At the end of the lab session, participants completed the RISC Scale (endpoints: 1 = *strongly disagree*, 7 = *strongly agree; M* = 4.92, *SD* = .96), the ARC Scale (endpoints: 1 = *not at all*, 9 = *completely*), to assess commitment (*M* = 7.92, *SD* = .91), as well as a background information questionnaire.

Procedure.

Participants were told that the study examined cognitive processes related to social interaction and the effects of social-networking websites on first impressions, and were therefore unaware that the study pertained to romantic relationships. Approximately eight days prior to the lab session, participants completed the S-RISC Scale in an online survey. Once in the lab, participants watched a video of a confederate introducing him- or herself. In the relational threat condition, the video of the attractive confederate of the opposite-sex was shown. The same videos were used for the control condition, but instead participants watched the same sex confederate. Participants were told that the confederate was another participant who was randomly assigned to record an introductory video at the beginning of the experiment. To increase believability, participants were shown a list of questions and told that the other participant was asked to answer these questions while making the video. In the video, the male confederate, for example, introduced himself, described where he was from, what he liked to do in his spare time, and what he was majoring in. He also mentioned

that he had recently transferred to McGill University, was presently single, and was enjoying meeting new people.

Participants were also told that they would later meet the other participant and that the researchers were interested in how gaining knowledge about a person via video would affect impression formation. The anticipation of meeting the attractive confederate was believed to exacerbate the threat level in the relational threat condition. After viewing the video of the confederate, participants completed the dot probe visual cueing task, which was introduced as a measure of cognitive fluency. Participants then completed the RISC Scale and the measure of commitment. At the end of the study, they were debriefed using a funnel debriefing technique (see Footnote 5) and thanked for their time.

Preliminary Results

Initial analyses revealed that, in the relational threat condition, the association between relationship-specific identification and reaction times to the attractive opposite sex photos in the dot visual cueing task was not linear, so relationship-specific identification was split at the median to create two groups: those high on the S-RISC Scale and those low on the S-RISC Scale. There were no main effects or interactions involving gender, and thus I collapsed across gender in subsequent analyses, and relationship length did not correlate with relationship-specific identification or reaction times on the dot probe visual cueing task.

Results

Trials greater than three standard deviations above the sample mean and below 200 ms were deleted (5.9% of data) (Dandeneau, Baldwin, Baccus, Sakellaropoulo, & Pruessner, 2007). Consistent with Maner, Gailliot, and DeWall (2007), all analyses were based on the attentional shift trials (i.e., the trials in which the categorization object appeared in a different quadrant than the preceding photo). The mean reaction times for the three control photo categories (attractive same-sex, average opposite-sex, average same-sex) were averaged to create a baseline measure of attentional adhesion. In order to test the hypothesis that participants high in relationship-specific identification, when faced with a relational threat, would exhibit less attentional adhesion to an attractive alternative, a 2 (relationship-specific identification: high vs. low) x 2 (condition: relational threat vs. control) x 2 (photo: attractive opposite-sex target vs. baseline) mixed model ANOVA was conducted, with photos as the within-subjects factor. The 3-way interaction was marginally significant, $F(1, 73) = 3.00$, $p = 0.09$ ($\eta = 0.20$).[7]

Simple effects tests were performed to examine whether attention to attractive opposite-sex photos versus baseline photos differed for those low and high in relationship-specific identification. For each condition (relational threat and control), the difference between reaction times for attractive opposite sex photos and baseline photos, for those low and high on the S-RISC Scale, were compared. In the relational threat condition, the effect was significant. As seen in Figure 2, those low in relationship-specific identification showed greater

attentional adhesion toward the attractive opposite-sex photos relative to their baseline (mean difference = 15.95 ms), as compared to those high in relationship-specific identification, who showed a decrease in attentional adhesion to the same photos relative to their baseline (mean difference = -16.81 ms), $t(73) = 3.47$, $p < 0.01$, $r = .47$. This difference held when controlling for relational self-construal, $t(72) = 2.85$, $p = .006$, $r = .32$; and relationship commitment, $t(72) = 3.47$, $p < .001$, $r = .38$. Neither relational self-construal nor commitment were significant predictors of attentional adhesion in the relational threat condition, $t < 1$; $t(72) = 1.65$, $p = .10$, $r = .19$, respectively. Additionally, no significant difference was found between those low and high in relationship-specific identification in the control condition, $t < 1$. These results support the hypothesis that if the relationship is threatened, those who are highly identified will decrease attentional adhesion to attractive alternatives relative to those less identified.

Given the non-linear relationship between relationship-specific identification and reaction times for the attractive opposite sex photos in the threat condition, I wanted to confirm that the results were not simply due to an arbitrary median split. First, four higher identifiers, whose S-RISC Scale means were just above the median, were moved to the low identifier group. The simple effects test (comparing the difference between reaction times for attractive opposite sex photos and baseline photos, for those low and high on the S-RISC Scale and in the relational threat condition) was still significant, $p < .01$. Second, I examined the reaction times to the attractive opposite sex photos (threat condition) at each quartile of S-RISC Scale scores. As expected, participants in the lowest quartile of

S-RISC Scale scores showed attentional adhesion to attractive opposite-sex photos, but participants in the second quartile showed even greater attentional adhesion to the target photos. Moreover, the highest quartile (i.e., participants highly identified with their relationship) showed the reverse effect, as hypothesized, but the third quartile showed an even greater reversal of attentional adhesion. As a check, I compared the reaction times of those in the lowest S-RISC Scale quartile to those in the highest 2 quartiles, and compared the highest quartile to those in the lowest two quartiles, and in both cases the results were significant, $ps < .05$.

Discussion

The present results demonstrate that relationship-specific identification is associated with the relatively automatic, lower order attentional process known as attentional adhesion. Although the omnibus 3-way interaction was marginal, focused tests revealed a highly significant 2-way effect in the relational threat condition. Specifically, when faced with a relational threat, those highly identified with their relationship spent less time looking at images of attractive alternatives, whereas those less identified gazed at these photos for a longer amount of time. These findings held when controlling for the more global relational self-construal, as well as when controlling for commitment.

Study 6 – Relationship Survival

The purpose of Study 6 was to examine whether relationship-specific identification was associated with a clear downstream effect of relationship maintenance processes – relationship survival. I predicted that the higher participants were in relationship-specific identification, the greater the chances of their relationship remaining intact over time (Hypothesis 6a). Additionally, based on the idea that commitment encompasses a range of motivations for staying in a relationship, I predicted that it would be a more robust predictor of relationship survival when compared with relationship-specific identification (Hypothesis 6b).

Method

Participants.

Five hundred and fifteen participants who had participated in past studies over a 3-year period and who were eligible to participate (i.e., were in a romantic relationship and had completed the S-RISC Scale) were re-contacted and asked to participate in the present study. They were contacted by email and compensated with a $10 Amazon gift certificate for their participation. At the time of their initial participation (Time 1), they had all been in an exclusive dating relationship, engaged, or married. Of those contacted, 54% agreed to participate and were included in the present analyses (277 total: 53 males, 224 females).

Materials.

Only measures relevant to the present study are described.

Time 1 measures. At the time of their initial assessment, participants completed the S-RISC Scale (n = 277; M = 4.81, SD = 1.05), the RISC Scale (n =

118; $M = 5.04$, $SD = .85$), and the commitment ($M = 7.89$, $SD = 1.06$) sub-scale the ARC Scale ($n = 117$).

Time 2 measures.

Relationship status. Participants' relationship status was assessed with the following question, "Are you still in the romantic relationship you were in when you initially participated in a study/survey for the Lydon lab?" As a response, participants were given three options: "Yes – I am in the same romantic relationship," "No – I am no longer in the romantic relationship I was in when I initially participated in a study/survey for the Lydon lab," and "I was not in a romantic relationship when I initially participated in a study/survey for the Lydon lab." Four participants did not respond to this question, and 8 indicated that they were not in a relationship when they initially participated in a study/survey for the Lydon lab.

Background information questionnaire. Participants were asked various questions about their background, such as their age, ethnicity, sexual orientation, as well as relationship length and relationship status if in a relationship.

Procedure.

Individuals who had participated in a study 1 to 3 years earlier were contacted via email and asked to complete a follow-up survey. At the initial Time 1 assessment, they had completed the S-RISC Scale, the RISC Scale, and the ARC Scale, or some subset of these. If they agreed to participate in the Time 2, follow-up study, they were asked to fill out an online survey at their convenience and in a quiet place, free of distractions. The first section of the survey was filled

out by all participants, and included measures irrelevant to the present analyses, such as a measure of neuroticism. At the end of this section, they were asked whether they were in the same relationship they had been in at the time of their initial participation or if they had broken up with their partner. Based on their response, they subsequently completed questionnaires either about their relationship or about their break-up. The last section of the survey consisted of demographic and background information questions. Once participants submitted an answer, they were not able to go back and change their answers.

Results

In order to examine if relationship-specific identification predicted relationship survival, a logistic regression analysis was conducted with relationship-specific identification as the predictor variable and relationship survival as the criterion (0 = broken up, 1 = intact). Results revealed that relationship-specific identification predicted relationship survival, such that participants higher in relationship-specific identification were less likely to have broken up with their partner 1 – 3 years later, Wald = 9.69, Odds Ratio (OR) = 1.50, $p = 0.002$; $\chi 2(1, N = 265) = 10.04$, $p = .002$, for the model (179 = intact, 86 = broken up).

Additional analyses were conducted to examine if the present results held controlling for relational self-construal and commitment. Because not all participants had completed the measure of relational self-construal and commitment at Time 1, 110 participants were included in these analyses (69 = intact, 41 = broken up). In a logistic regression, relationship-specific identification

and relational self-construal were simultaneously entered as predictor variables, and relationship survival was entered as the criterion. Relationship-specific identification accounted for significant variance beyond what was accounted for by relational self-construal, Wald = 6.17, OR = 2.00, $p = .01$; $\chi 2(2, N = 110) = 7.31$, $p = .03$, for the model. Relational self-construal was not a significant predictor, $p = .32$. When relationship-specific identification and commitment were simultaneously entered as predictors, relationship-specific identification did not predict relationship survival (Wald = 1.45, OR = 1.33, $p = .23$), whereas commitment did, Wald = 6.85, OR = 1.85, $p = .009$); $\chi 2(2, N = 110) = 13.97$, $p = .001$, for the model.

Given that commitment outperformed relationship-specific identification in predicting relationship survival, and identification is possibly one basis of commitment, a Sobel test (Sobel, 1982) was performed to examine whether the relationship-specific identification to relationship survival link was mediated by commitment. Indeed, commitment was a significant mediator of the relationship between S-RISC Scale scores and relationship survival, $Z = 2.26$, $p = 0.02$.

Discussion

In sum, these results demonstrate that the degree to which individuals identify with their relationship is associated with the survival of their relationship up to 3 years after the initial assessment, such that those higher in relationship-specific identification were less likely to have broken up with their partner. Additionally, relationship-specific identification predicted relationship survival controlling for the variance accounted for by relational self-construal.

Commitment, which has proven to be a robust predictor of relationship survival (e.g., Le, Dove, Agnew, Korn, & Mutso, 2010), accounted for significant variance beyond what was accounted for by relationship-specific identification. In fact, commitment was found to mediate the relationship-specific identification to relationship survival link.

General Discussion

Summary of Results

The present set of studies provide convergent support for the idea that relationship-specific identification is associated with relationship maintenance behaviours, particularly those that are relatively spontaneous and occur in the face of relational threat, as well as relationship survival. In Study 1, it was demonstrated that relationship-specific identification was not statistically equivalent to other constructs that have been shown to predict relationship maintenance behaviours (i.e., relational self-construal, commitment, and satisfaction), and represents an aspect of commitment that is not simply positivity towards the relationship or the tendency to identity with relationships more generally. In Study 2, I found that relationship-specific identification was associated with participants' tendency to reflect and cultivate a shared reality with their partner, although this result did not hold when controlling for the variance accounted for by commitment, suggesting that this pro-relationship behaviour is not uniquely associated with identification, but to commitment more broadly. In Studies 3 and 4, it was demonstrated that participants who were not strongly identified with their romantic relationships mentioned their relationship less than those high in relationship-specific identification, but only when interacting with an attractive member of their preferred sex. Moreover, in Study 4, when controlling for the variance accounted for by relational self-construal and commitment, the results remained significant. In Study 5, in order to more stringently test the hypothesis that relationship-specific identification is associated

with relatively spontaneous RMRs in the face of relational threat, a dot probe visual cueing task demonstrated that when threatened, those low in relationship-specific identification showed greater attentional adhesion toward an attractive member of their preferred sex, whereas those high in relationship-specific identification showed less attentional adhesion. This result held when controlling for the variance accounted for by relational self-construal and commitment. Finally, in Study 6, it was demonstrated that those high in relationship-specific identification were more likely to still be in a relationship 1 - 3 years after the initial assessment, compared to those less identified, controlling for the variance accounted for by relational self-construal, but not commitment. Commitment, in fact, mediated the link between relationship-specific identification and relationship survival.

Relationship-Specific Identification and Related Constructs

I am not the first to examine how the self is tied to a specific other (e.g., Agnew, Van Lange, Rusbult, & Langston, 1998; Aron, Aron, Tudor, & Nelson, 1991; Baldwin, 1992; Chen, Boucher, Tapias, 2006; Cross, Bacon, & Morris, 2000). Aron and colleagues, for example, have developed a comprehensive body of work on self-other integration (see Aron et al., 2004, for a review), as measured by the IOS Scale. Individuals who score high on the IOS Scale are thought to incorporate their partner's traits, perspectives, and resources into their self-concepts, treating them as their own (Aron & Aron, 1986, 1996). If Tommy is a carefree person, his girlfriend Gina may also come to think of herself as a carefree person. Research has demonstrated that individuals who score high on the IOS

Scale process information for others much like they process information for themselves (Aron, Aron, Tudor, & Nelson, 1991; Mashek, Aron, & Boncimino 2003). For example, participants high on the IOS Scale were found to literally confuse their own traits with their partners' traits (Aron, Aron, Tudor, & Nelson, 1991). Additionally, self-other integration has been shown to be associated with relationship commitment (Aron, Aron, & Smolan, 1992), relationship persistence (Agnew, Loving, & Drigotas, 2001), and the inclination to forgive a close other (Karremans & Aarts, 2006), suggesting that it plays a role in relationship maintenance.

Whereas Aron and colleagues have emphasized how the acquisition of specific traits, perspectives, and resources from a partner lead to the altering of one's self-representation, the relationship-specific identification approach is closer to the various relational selves perspectives emphasizing the binding of oneself to the relationship, such that the change in self-representation is more about how the self is in relation to the partner (Chen, Boucher, & Tapias, 2006; Cross, Bacon, & Morris, 2000). Tommy may think of himself as being patient and helpful in relation to Gina, not necessarily because he has assimilated patience and altruism from Gina, but because of relational experiences that motivate and elicit such patterns of behaviour from him. Consistent with this theoretical distinction, I found that relationship-specific identification was more strongly linked to relational self-construal and commitment than to the IOS Scale (see Footnote 2).

In the relationships domain, my work is likely most closely related to cognitive interdependence, which is defined as the mental representation of the self in a relationship (e.g., Agnew, Van Lange, Rusbult, & Langston, 1998). Agnew and colleagues' have demonstrated that the more committed participants are to their romantic relationships, the higher they score on cognitive independence, as indicated by various indices; including, the IOS Scale, ratings of the relationship as being a central, important part of one's life, and the spontaneous use of plural pronouns (e.g., we, us, and our) to describe one's relationships. Thus, in addition to being more committed to their relationship, people high in cognitive interdependence also endorsed their relationship as a valuable part of their lives, and spoke in a manner implying that they implicitly thought of themselves and their partner as a collective. I extend the work on cognitive interdependence by examining how a self-other self-representation is associated with RMRs, and particularly relatively spontaneous, maybe even automatic ones.

As mentioned in the Introduction, relationship-specific identification is thought to be associated with identified motives as defined by self-determination theory. In particular, consistent with preliminary data suggesting that relationship-specific identification is more highly associated with identified motives than with intrinsic and introjected motives (Lydon & Linardatos, in press), I believe that relationship-specific identification reflects personally valued goals as opposed to goals pursued for pleasure or out of feelings of obligation. Presumably, if individuals highly identified with their relationship are acting on personally

endorsed beliefs, they will be more motivated to protect their relationships when faced with a relational threat. Alternatively, satisfaction-based commitment may not buffer relationships in situations of threat, in that threat will increase the costs of one's relationship relative to its rewards. Similarly, guilt-based, introjected motives may likewise be challenged by relational threats, as these more external, controlled motives has been found to be less stable (Koestner, Losier, Vallerand, & Carducci, 1996), and less conducive to goal pursuit (Koestner, Otis, Powers, Pelletier, & Gagnon, 2008), compared to identified, autonomous motives. In fact, a study by DeWall, Maner, Deckman, and Rouby (2011) demonstrated that if attention to attractive alternatives is externally motivated (by subtly limiting dating participants' attention to attractive alternatives), participants exhibited *more* attentional adhesion to images of their preferred sex compared to people in the control (non attention-limiting) condition.

Relationship-Specific Identification and Commitment

The present studies demonstrate that it is useful to look at the distinct functions and consequences of the different motivational bases of commitment. For example, relationship-specific identification outperformed commitment at capturing relatively spontaneous RMRs in the face of relational threat. On the other hand, commitment was shown to be a more robust predictor of relationship survival than relationship-specific identification, consistent with a recent meta-analysis demonstrating that commitment outperformed a wide range of relationship factors in predicting relationship survival (Le, Dove, Agnew, Korn, & Mutso, 2010). It seems that the specific relationship motive tied to a particular

function will surpass the meta-motive of commitment in predicting that precise function. However, even though each motive (e.g., intrinsic, identified and introjected) and their associated functions contribute to relationship survival, commitment will outperform each of them as predictors of relationship survival given it represents an additive effect across motives.

In Study 2, commitment was also found to be a better predictor of the extent to which participants cultivated a shared reality with their partners. I had not initially predicted this finding, but it is consistent with my theorizing that relationship-specific identification predicts relatively spontaneous RMRs in the face of relational threat. Although some of the scenarios in the questionnaire involved threat (e.g., "Why did your partner criticize you?"), more than half of them were relatively benign (e.g., "Why did your partner water the plants?"; see Appendix B). Additionally, the scenarios were hypothetical, and likely not as impactful as the ostensibly real attractive alternative threats in Studies 3 - 5. Thus, perhaps the level of relational threat was not strong enough in this study to elicit an "*if* relationship is threatened, *then* protect contingency" for high identifiers.

Strengths

Explicit, self-report measures of RMRs have proven to be extremely useful in helping relationship researchers understand the nature of positive relationship behaviours (e.g., Karney & Bradbury, 2000; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). However, the self-reported intention to exhibit pro-relationship behaviours does not always translate into real behaviour. In a set studies by Peetz and Kammrath (2011), for example, it was demonstrated that

although participants with the most positive relationship feelings (commitment, intimacy, and satisfaction) and motives (to be responsive to their partners' needs) made the biggest promises to change their behaviour when their partner felt betrayed, it was participants who were high on trait conscientiousness that actually kept their promises. In the present set of studies, I measured not the self-reported intention to ward off attractive alternative threats, but actual relationship protective behaviour in the face of attractive alternatives.

It would be impossible to navigate everyday life if individuals had to effortfully perceive their environment and thoughtfully consider their every response (e.g., Bargh & Chartrand, 1999). Additionally, in situations where the default response might be one that is detrimental to one's long-term goals, such as when tempted by an attractive alternative (e.g., Maner, Gailliot, & DeWall, 2007), it would be useful to be armed with accessible, relationship protective responses. Like other researchers (e.g., Karremans & Verwijmeren, 2008), I have recognized the importance of measuring more spontaneous, "on-the-spot" behaviour, and in the present set of studies, demonstrated that relationship-specific identification is an important predictor of relatively automatic RMRs when one is faced with a relational threat.

In addition to being more representative of everyday behaviour, doing research on spontaneous RMRs is advantageous because such measures are potentially less susceptible to social desirability concerns (Fazio & Olson, 2003). Just as in a face-to-face conversation, when using a real-time chat program, the norm is to respond relatively quickly, presumably making it fairly difficult for

individuals to take the time to think about their responses. However, one might wonder, for example, if participants interacting with the attractive preferred-sex other over IM were preoccupied with social desirability concerns. Assuming that this would result in participants in the relational threat condition taking longer to respond during the IM task, social desirability did not seem to be a factor in Study 4 as there were no differences in the average response time among the 4 conditions (low vs. high identifiers, relational threat vs. control condition). Additionally, the responses measured during the dot probe visual cueing task are likely even less susceptible to social desirability concerns, as they represent quick, lower-order stages of attentional processing. Indeed, the average response latency on attentional shift trials was 549.25 ms.

Limitations

These findings were based on the assumption that relationship-specific identification motivates the warding off of an attractive alternative threat. However, I was not able to definitively determine the direction of causality of the relationship-specific identification to relationship maintenance link, although relationship-specific identification was measured before the experimental manipulations and assessments of RMRs. I expect that protecting a relationship against an attractive alternative will bolster one's relationship-specific identification, increasing its accessibility, although maybe not its extremity (Fazio, 1986), but future research is needed to explore this possibility. To more definitively determine the direction of causality, it would be helpful to delineate a few factors that promote relationship-specific identification (see *Development*

subsection). Also, perhaps experience sampling methods could be used to track relationship-specific identification and its correlates over time, starting with newly formed relationships.

Given that the studies were either conducted online (Study 2 and 6) or in the lab (Studies 1, 3, 4 and 5) their ecological validity is in question. Although in Studies 3 and 4 I carefully attempted to simulate a real interaction with an attractive alternative, it is highly doubtful that these experiments were as impactful as participants' everyday interactions with attractive others. For example, in real life, people may interact with attractive alternatives face-to-face (not just over a real-time chat program), they may have a history with the attractive alternative, or they may be intoxicated and the attractive alternative may be extremely flirty. Future research is needed to explore how the relationship-specific identification to relatively spontaneous RMRs link plays out in these more "true to life" scenarios.

In Studies 1, 3, 4 and 5, some participants were excluded based on suspicion. Although experimenters used a thorough funnel debriefing technique to exclude suspicious participants (see Footnote 5), it is possible that some participants did not, for example, believe the attractive other was a real participant in Studies 3 and 4, or guessed the purpose of the dot probe visual cueing task and manipulated their responses accordingly (Study 5), rendering these methods invalid. Although it is presumably difficult to manipulate one's responses on tasks that measure relatively spontaneous responses, it is not unheard of. A study by Fiedler and Bluemke (2005), for example, demonstrated that participants are able

to manipulate their responses on a reaction-time measure of attitudes, the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998).

Similarly, because the participant samples consisted solely of undergraduate students, the generalizability of these results is limited. It is possible that the relational threats presented in these studies are meaningful for undergraduate students, but not for individuals in longer term, married relationships. Maybe people in more committed relationships are able to gaze at attractive others without incurring negative costs for their relationship, for example. Indeed, according to the commitment calibration hypothesis (Lydon, Meana, Sepinwall, Richards, & Mayman, 1999), if the level of adversity is lower than the level of commitment, the relationship is not challenged. Moreover, research has demonstrated that what is threatening in a dating relationship may not be threatening in a marriage, and vice versa. For example, in a dating relationship, people are more committed to a partner who views them positively; while in a marriage, people are more committed to partners who view them as they view themselves (Swann, De La Ronde, & Hixon, 1994).

Future Directions

Development of relationship-specific identification.

Given that relationship-specific identification is an important predictor of RMRs, it would be worthwhile to understand how it is cultivated. The present findings suggest that it is dispositional and relational in nature, but one might assess what sorts of relational experiences lead to relationship-specific identification. Interdependence, the extent to which couples interact with each

other and influence each other's goals, decisions, and behaviours, is one possible precursor of relationship-specific identification. It is assumed that through such shared experiences and connectedness, the relationship and partner become an important part of one's self-space. Consistent with this idea, interdependence has been shown to be associated with subjective feelings of relationship closeness and survival (e.g., Berscheid, Snyder, & Omoto, 1989).

The extent to which shared experiences are *intimate* is also likely to be an important factor in the development of relationship-specific identification. Individuals experience intimacy when they reveal their true selves to their partners, and feel understood, accepted, and cared for by their partners (Reis & Shaver, 1988). Additionally, past research has shown that people feel more positively about a relationship to the extent that it involves self-disclosure and perceived partner responsiveness (e.g., Aron, Melinat, Aron, Vallone, & Bator, 1997; Gore, Cross, & Morris, 2006; Laurenceau, Barrett, & Rovine, 2005). Presumably, such intimate experiences will lead people to value their partner and relationship more, which should in turn foster identification with the relationship.

Empathy and partner perspective-taking may also cultivate a sense of mutuality and blur the line between self and partner. Indeed, empathy has been found to be associated with a sense of "we-ness," as measured by the IOS Scale (Cialdini, Brown, Lewis, Luce, & Neuberg, 1997), and partner perspective-taking was found to be associated with constructive responding during a relationship conflict (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), including forgiving the transgressor (McCullough, Worthington, & Rachal, 1997). Additionally,

people who are able to accurately infer a partner's thoughts and feelings, especially regarding mundane, non-threatening events, experienced increases in relationship closeness pre-to-postdiscussion (Simpson, Orina, & Ickes, 2003). Given that highly identified partners are motivated to protect their relationships, it is also likely that relationship-specific identification influences partner-perspective taking, and thus it would be important to consider the reciprocal relationship between relationship-specific identification and partner perspective-taking. Future research clarifying the mechanisms leading to the development of relationship-specific identification would be useful in its own right, and also to potentially facilitate the development of experimental manipulations of relationship-specific identification.

Influence of related constructs.

As indicated by the present findings, a significant dispositional contributor to relationship-specific identification is the more general relational self-construal. An avenue for future research could be to explore how these two related constructs influence each other. It is possible that identification with relationships in general guides behaviour in new relationships in a top-down fashion, facilitating the development of relationship-specific identification. However, we also know from attachment research that mental representations of self in relation to a specific other can predict change in more global mental models over time, in a more bottom-up fashion (Pierce & Lydon, 2001). Alternatively, some individuals may keep these two levels of relationship identity compartmentalized within the self-structure (Roccas & Brewer, 2002). For example, Tommy may be

highly identified with his relationship with Gina, but in general relationships are not an important part of how he defines himself. It may be worthwhile to look at changes in relationship-specific identification and relational self-construal over time to tease apart how these two constructs influence each other.

Similarly, it may also be worthwhile to explore how relationship-specific identification and commitment influence each other. It is assumed, as described in the introduction, that data-driven experiences within the relationship may cultivate identification and commitment. I also conceptualize relationship-specific identification as one possible basis of commitment; however, I do not know, and was not able to test in this set of studies, if relationship-specific identification actually leads to commitment. Although the results of the mediational analysis in Study 6 would suggest that relationship-specific identification is an antecedent of commitment, future studies, perhaps longitudinal in nature, or using a relationship-specific identification manipulation, are needed to answer this question. Moreover, it would be important to test the reciprocal relationship between relationship-specific identification and commitment. One could imagine, for example, that satisfying experiences early in a relationship could lead to a preliminary, tentative commitment that might in turn promote identification-building experiences that further fortify commitment.

Multiple identities.

Although researchers have proposed that the self can expand to include multiple important identities (Amiot, de la Sablonnière, Terry, & Smith, 2007; Roccas & Brewer, 2002), one might wonder if there is a limit to the amount of

people and groups that can be incorporated into one's identity. Given that identification with people or groups likely results from having a variety of intimate interactions with other individuals, people simply may not have the time to have many relational identities. Moreover, to the extent that being identified with a relationship fulfills people's belongingness needs (Baumeister & Leary, 1995), individuals may be less inclined to identify with additional people or groups. In other words, if Tommy is getting his affiliation needs met through his intimate connection with Gina, he may be less motivated to get to know the new people at work. From an evolutionary standpoint, having a limited amount of identification capacity may have advantages by, for example, facilitating long-term mating and reproduction.

Relationship-specific identification and other types of RMRs.

Although in the present study I focused exclusively on relatively spontaneous RMRs in the face of an attractive alternative threat; theoretically, relationship-specific identification should also predict relatively spontaneous RMRs in the face of other types of relational threats, as any threat to the relationship should be a threat to the self for high identifiers. Perhaps even more common than attractive alternatives, relationship conflict is a threat that many, if not all, couples experience. How individuals react to relationship conflict will influence the quality of the relationship (Rusbult, Johnson, & Morrow, 1986), as the more destructively a partner reacts, the less satisfied and committed the partners will be (Holmes & Murray, 1996). Reacting in an accommodative, constructive fashion, on the other hand, has been shown to curb the spiral of

negativity that often results from the "tit for tat" behaviour that characterizes couple conflict, and is predicted by commitment (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991) and self-regulatory strength (Finkel & Campbell, 2001).

Accommodative behaviour during couple conflict is thought to result from a "transformation of motivation" - when individuals put aside their self-interested instincts to react to hurtful partner behaviour in kind and instead prioritize the broader interests and long-term goals associated with their relationships (Kelley & Thibault, 1978; Yovetich & Rusbult, 1994). Perhaps for individuals high in relationship-specific identification, a transformation of motivation is not necessary for pro-relationship responding during couple conflict. In other words, for high identifiers, maybe there is no self vs. partner interests; instead, what is good for the partner and the relationship is also good for the self, and the individualistic responses that often occur during interpersonal conflict are either non-existent or less accessible. This blurring of self and partner interests would facilitate the quick, pro-relationship responding that is often difficult to engage in when intense negative emotions have been aroused (e.g., Yovetich & Rusbult, 1994).

Finally, to the extent that relationship-specific identification fosters feelings of connectedness and "oneness" between partners, high identifiers may benefit from a sense of reciprocal strength between themselves and their partners. In other words, high identifiers may feel like they are part of a "team," a unit characterized by mutual responsiveness, and thus may be more willing to sacrifice for their partners and non-contingently respond to their needs, behaviours that are

positively associated with relationship quality (Van Lange et al., 1997; Clark & Grote, 1998; respectively). This is consistent with research demonstrating that individuals who feel a strong personal connection with members of their group are more likely to exhibit pro-group behaviour (e.g., Swann, Gómez, Dovidio, Hart, & Jetten, 2010). Additionally, a partnership characterized by feelings of reciprocal strength and connectedness may have advantages not just for the relationship, but for the self specifically. For example, if individuals feel like they are part of a team, they may be more willing to depend on their partner, which has been shown to be associated with greater autonomy and success in pursuing one's goals (Feeney, 2007), and they may feel more supported, which has been associated with greater physical and psychological well-being (e.g., Sandler & Barrera, 1984).

Mechanisms.

Consistent with the theorizing of Lydon and colleagues, relationship-specific identification is conceptualized as a powerful, upstream predictor of relationship protective responses to relational threats, in the form of an "*if* relationship is threatened, *then* protect" relationship contingency (Lydon, Menzies-Toman, Burton, & Bell, 2008). It is also conceivable that high identifiers are inhibiting destructive responses, perhaps in the form of an "*if* attractive person, *then* approach" contingency. Indeed, past research that has shown that accommodative behaviours, which are associated with commitment, involve inhibiting normative destructive responses (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991).

In addition to having more accessible "*if* relationship is threatened, *then* protect relationship" contingencies, high identifiers may be more sensitive to relational threats and therefore better at detecting them (Lydon, Menzies-Toman, Burton, & Bell, 2008). There is some evidence to suggest that what individuals attend to in their environment is shaped by their sense of self. For example, Dandeneau and Baldwin (2004) demonstrated, using a reaction-time task, that low self-esteem individuals exhibited greater attentional vigilance to rejection-related words relative to acceptance-related words. In the context of the dot-probe visual cueing task, this might mean that high identifiers are not only quicker to disengage their attention from the attractive face, but they also notice the attractive face sooner.

Self-views and relationship-specific identification.

Based on the present conceptualization of relationship-specific identification, it is assumed that when a relationship or partner becomes incorporated into one's sense of self, her "self" identity is relatively indistinguishable from her "relational" identity. To push our understanding of relationship-specific identification further, this assumption could be tested in at least two ways. First, if the partner and relationship are truly part of one's identity, then presumably activating a high identifier's self-views should activate her relationship-specific identity and vice versa. Various social cognitive methods could be used to test this, such as a semantic priming paradigm (e.g., Collins & Loftus, 1975) or the IAT. Second, activating a high identifiers self-views should also activate pro-relationship behaviour. Research by Gómez et al. (2011) on

identity fusion, the extent to which individuals' self-identities becomes fused with their group identities, has shown that when the self-views of highly fused participants are challenged, they are more likely to endorse extreme group behaviour. They argued that because challenging the personal self-views of fused persons resulted in similar outcomes as when their group identities were challenged, their personal and group identities were functionally equivalent. In the present context, future research could explore whether, for high identifiers, a threat to the self would lead to similar, relatively spontaneous RMRs as a relational threat.

The dark side of identification.

All this is not to say that relationship-specific identification comes without costs. Past research has shown that taking a rosy view of one's partner is associated with declines in satisfaction over time (McNulty, O'Mara, & Karney, 2008), and some people may internalize relationships that do not meet their needs (Slotter & Finkel, 2009), or "over-identify" and become subsumed by a relationship (Swann, Gómez, Huici, Morales, & Hixon, 2010). Moreover, there is a risk that one will endure maltreatment or even death for the sake of the relationship or group. For example, at least one study has shown that highly committed partners experience more intimate partner violence (Arriaga, 2002), and those who described their personal identity as "fused with" their group were more willing to sacrifice their lives to save other group members (Swann, Gómez, Dovidio, Hart, & Jetten, 2010). Future research should explore the potential

downside of relationship maintenance and how being highly identified with one's romantic relationship can sustain a harmful relationship.

Lingering identification.

Another potential downside of relationship-specific identification is that, in many cases, the relationship that an individual is identified with will end. Research on self-other integration, as measured by the IOS Scale, has demonstrated that if a relationship ends, people experience self-content change and reduced self-concept clarity (Slotter, Gardner, & Finkel, 2010). Additionally, I have preliminary data suggesting that at post-breakup, those who had been highly identified with their relationship experience "lingering" identification, in addition to more negative feelings and rumination about the relationship. Given that relationship dissolution is a significant predictor of personal distress (Davis, Shaver, & Vernon, 2003; Sbarra, 2006) and mental health issues (Monroe, Rohde, Seeley, & Lewinsohn, 1999), it would be worthwhile to further understand the effects of continuing to be identified with a former relationship, and how one can lessen the impact of an outdated relational identity.

In contrast, several researchers (e.g., Davis, Shaver, & Vernon, 2003) have proposed that the continued identification with a deceased attachment figure may serve adaptive functions, in that it provides comfort and support, and protects the continuity of one's identity, as one attempts to deal with the loss of a partner. They suggest that instead of detachment, the healthy resolution of bereavement my involve a reorganization of the attachment bond, such that the thoughts and feelings associated with the relationship are integrated into the self-concept as one

transitions into a new life. Whether or not a lingering identity has negative implications for the self may thus depend on if one can integrate the pre-dissolution identity with a new identity.

Conclusion

Perhaps best stated by Horberg and Chen (2010), "who we are – our values, feelings, goals, behaviours, self-evaluations, and related attributes – depends in part on our significant others" (p. 77). In the present study, I examined what happens when a particularly important significant other, one's romantic partner, is linked to the self. What is the effect on the relationship? How is the relationship and one's behaviour in it changed by the transformed self? I demonstrated that the degree to which individuals incorporate their relationship and partner into their sense of self predicts how they will protect their relationship, in the form of relatively spontaneous pro-relationship behaviours, when faced with a relational threat. That is, when the relationship becomes a well-internalized, core part of the self, such threats become threats to the self, and motivated cognition is triggered in the service of relationship maintenance. By thinking in terms of "we," relationship regulation becomes self-regulation.

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Appendix A

S-RISC Scale

Please use the following scale to rate the extent to which you agree with the statements below:

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

___ 1. My current romantic relationship is an important reflection of who I am.

___ 2. When I feel very close to my romantic partner, it often feels to me like he/she is an important part of who I am.

___ 3. I usually feel a strong sense of pride when my partner has an important accomplishment.

___ 4. I think one of the most important parts of who I am can be captured by looking at my partner and understanding who he/she is.

___ 5. When I think of myself, I often think of my partner also.

___ 6. If a person hurts my partner, I feel personally hurt as well.

___ 7. In general, my current romantic relationship is an important part of my self-image.

___ 8. Overall, my current romantic relationship has very little to do with how I feel about myself.

___ 9. My current romantic relationship is unimportant to my sense of what kind of person I am.

___ 10. My sense of pride comes from knowing who I have as a partner.

___ 11. When I establish a romantic relationship with someone, I usually develop a strong sense of identification with that person.

Appendix B

Scenarios and Reasons

In the following questionnaire, we present questions that refer to scenarios that could happen to you and your dating partner. You may never have encountered some of these situations in your relationship, but please try to imagine them the best you can.

After each scenario, we then present a possible reason for your partner's behaviour. Please indicate to what extent you agree with this reason, using the scale below, by circling the appropriate number beside each reason.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

1 2 3 4 5 6 7 1. Why did your partner forget to call you?
Reason: Because it wasn't that important.

1 2 3 4 5 6 7 2. Why did your partner not pay attention to what you were saying?
Reason: Because it's not important.

1 2 3 4 5 6 7 3. Why did your partner criticize you?
Reason: Because he/she thinks I did something wrong.

1 2 3 4 5 6 7 4. Why did your partner stay up late to study?
Reason: Because he/she needs to study more.

1 2 3 4 5 6 7 5. Why did your partner buy those pair of shoes?
Reason: Because they are practical.

1 2 3 4 5 6 7 6. Why did your partner rush out of the house?
Reason: Because he/she is going be late.

1 2 3 4 5 6 7 7. Why did your partner decide to take that course?
Reason: Because it is interesting.

1 2 3 4 5 6 7 8. Why did your partner laugh at the movie?
Reason: Because he/she thinks it's funny.

1 2 3 4 5 6 7 9. Why did your partner plan a vacation with his/her friends?
Reason: Because he/she needs a vacation.

1 2 3 4 5 6 7 10. Why did your girlfriend water the plants?
Reason: Because they need watering.

We present additional scenarios and reasons below. Some may be the same as the previous ones; some may be slightly different. Please take the time to read each carefully.

1	2	3	4	5	6	7
Strongly Disagree						Strongly Agree

11. Why did your partner criticize you?
1 2 3 4 5 6 7 *Reason:* Because I did something wrong.

12. Why did your partner not pay attention to what you were saying?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks it's not important.

13. Why did your partner laugh at the movie?
1 2 3 4 5 6 7 *Reason:* Because it's funny.

14. Why did your partner buy those pair of shoes?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks they are practical.

15. Why did your partner forget to call you?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks it wasn't that important.

16. Why did your partner water the plants?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks they need watering.

17. Why did your partner rush out of the house?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks he/she is going be late.

18. Why did your partner plan a vacation with his/her friends?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks that he/she needs a vacation.

19. Why did your partner stay up late to study?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks he needs to study more.

20. Why did your partner decide to take that course?
1 2 3 4 5 6 7 *Reason:* Because he/she thinks it is interesting.

Footnotes

[1]Participants in Study 1 did not participate in Studies 2, 3, 4, or 5.

[2]In a similar study, relationship-specific identification was found to be significantly correlated with the IOS Scale (Aron, Aron, & Smollan, 1992), $r(150) = .35$, $p < .001$, but not so highly as to suggest these are completely overlapping constructs.

[3]Similarly, a repeated measures ANCOVA, with relationship-specific identification as a covariate (thereby keeping it as a continuous variable), and Scenarios as the within-subjects factor, revealed a significant interaction, $F(1, 303) = 5.33$, $p = 0.022$.

[4]The second wave of the study included more measures and thus participants were given more money as compensation.

[5]A funnel debriefing technique was used (similar to that used in Chartrand & Bargh, 1996), to assess the degree to which participants believed the cover story for the study in general and for the specific tasks. Participants were asked general suspicion probes (e.g. "First, do you have any questions about the experiment?"), followed by more focused suspicion probes (e.g., "How did you find the interaction with the other participant?"). If participants indicated that they suspected their IM partner was a confederate ($n = 18$), they were excluded. Only one participant expressed suspicion that we were interested in whether participants mentioned their partner.

[6]Filler trials, in which the object to categorize appeared in the same quadrant as the preceding photo, were also included to encourage participants to

keep their attention focused on the photos until they disappeared (Fox, Russo, Bowles, & Dutton, 2001). Response times did not differ depending on condition or on photo type, suggesting that neither the prime nor the photo type influenced processing fluency (Maner, Gailliot, Rouby, & Miller, 2007).

[7]We also conducted a 2 (relationship-specific identification: high vs. low) x 2 (condition: relational threat vs. control) x 3 (photo: attractive same-sex, average opposite-sex, average same-sex) mixed model ANOVA to ensure that there were no differences among the three types of control photos. No effects proved to be significant, including the three-way interaction effect, $F(2, 146) = .86$, $p = .43$.

Table 1

Means and Standard Deviations of, and Correlations Among, Variables Assessed in Study 1

Variable	*Mean*	*SD*	1.	2.	3.	4.
1. S-RISC	4.91	.96	-----			
2. RISC	5.10	.87	.57**	-----		
3. Commitment	7.93	1.1	.47**	.20**	-----	
4. Satisfaction	7.52	1.3	.35**	.23**	.76**	-----

Note. S-RISC = Specific Relational-Interdependent Self-Construal and RISC = Relational-Interdependent Self-Construal. *df* = 250 – 258.

** $p < .01$.

Table 2

Regressing Commitment onto S-RISC, RISC, and Satisfaction

Predictor	*B*	*SE*	ß	*t*	*p*	R^2
						.64
S-RISC	.34	.06	.30	6.14	.000	
RISC	-.15	.06	-.12	-2.64	.009	
Satisfaction	.54	.03	.69	16.82	.000	

Note. S-RISC = Specific Relational-Interdependent Self-Construal and RISC = Relational-Interdependent Self-Construal. *df* = 246.

Table 3

Means (Standard Deviations) for Agreement with Unmarked and Marked Reasons as a Function of Relationship-Specific Identification Level.

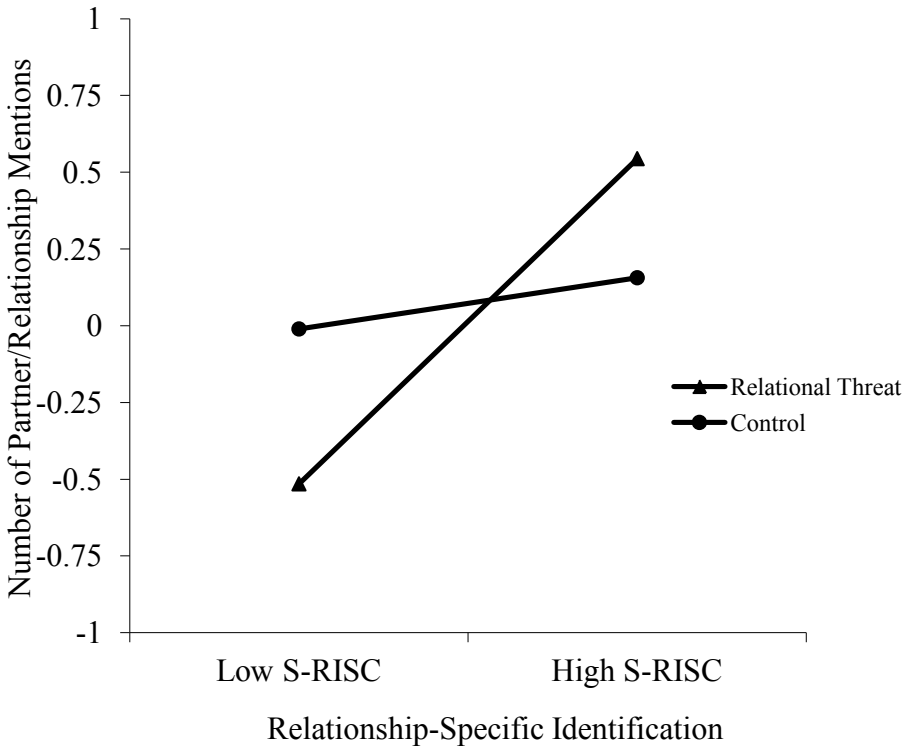
	Reasons	
S-RISC	Unmarked	Marked
Low S-RISC (*n* = 146)	4.64_{a} (.69)	4.87_{c} (.70)
High S-RISC (*n* = 159)	4.83_{b} (.76)	4.92_{c} (.76)

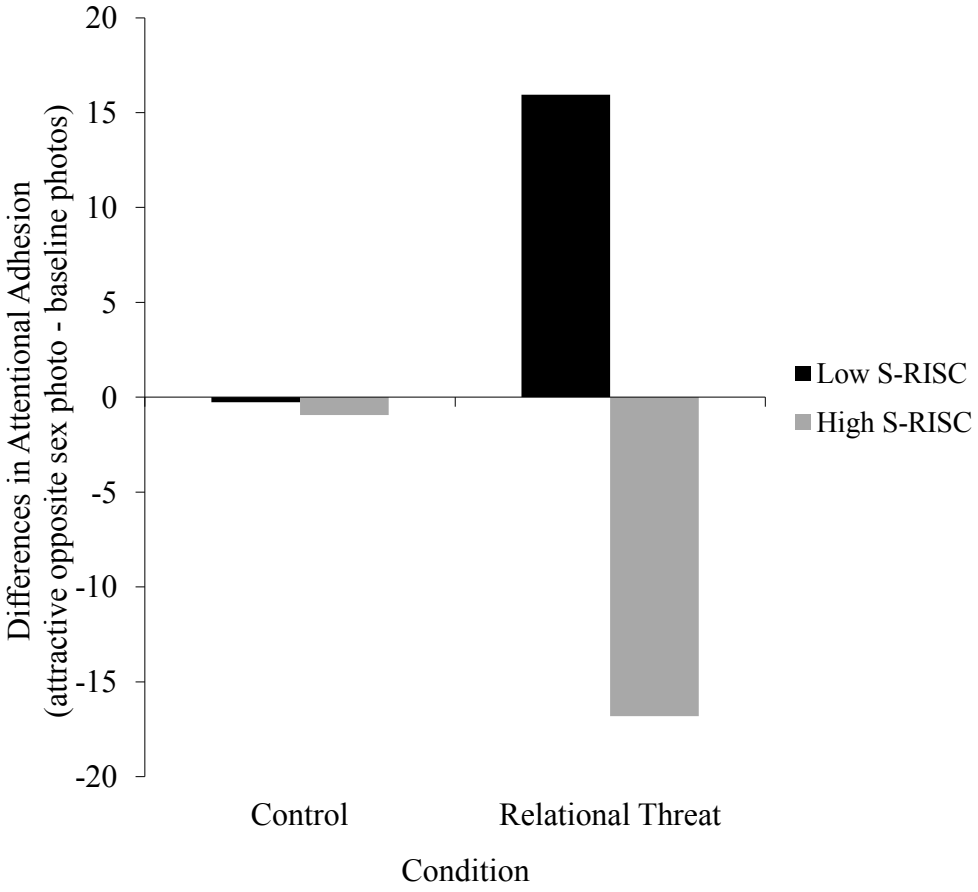
Note. Means with differing subscripts significantly differ ($p < .05$). For within-subject analyses (comparing Unmarked vs. Marked for each level of S-RISC), analyses are corrected for dependencies between means. S-RISC = Specific Relational-Interdependent Self-Construal.

Figure Caption

Figure 1. Interaction of condition (relational threat vs. control) and relationship-specific identification (low vs. high) on number of partner/relationship mentions. ** $p < .001$.

Figure 2. Mean attentional adhesion difference score (attractive opposite-sex photos – baseline photos) for participants low and high in relationship-specific identification in the control and relational threat conditions.


1
0.75
0.5
0.25
0
-0.25
-0.5
-0.75
-1
Number of Partner/Relationship Mentions
Relational Threat
Control
Low S-RISC
High S-RISC
Relationship-Specific Identification


20
15
10
5
0
-5
-10
-15
-20
Differences in Attentional Adhesion
(attractive opposite sex photo - baseline photos)
Low S-RISC
High S-RISC
Control
Relational Threat
Condition