Relational Boredom: Conceptualization, Development, and Validation of a Measurement Instrument

by

Cheryl Harasymchuk

A Thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

in partial fulfilment of the requirements of the degree of

Doctor of Philosophy

Department of Psychology

University of Manitoba

Winnipeg

THE UNIVERSITY OF MANITOBA

FACULTY OF GRADUATE STUDIES

*****

COPYRIGHT PERMISSION

Relational Boredom: Conceptualization, Development, and Validation of a Measurement Instrument

BY

Cheryl Harasymchuk

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirement of the degree

Of

Doctor of Philosophy

Table of Contents

Acknowledgements

I would like to express my deepest gratitude to my mentor and advisor, Dr. Beverley Fehr. She has been with me every step of the way throughout my graduate career with constant support, care and encouragement. She is an ideal role model that I have looked up to in terms of the way she tackles research questions, her superb writing and research skills, and the manner she carries herself when dealing with others (always with patience and a smile). She has provided me countless forms of assistance including feedback on manuscripts, research direction, and career advice. I am indebted to her for my growth as a researcher and writer.

I would also like to thank the other members of my committee including Dr. Jacquie Vorauer, Dr. Marian Morry, Dr. Raymond Lee, and Dr. Dan Bailis for providing useful feedback and shaping my research program. Finally, I would like to thank Dr. Arthur Aron from Stony Brook University for serving as my external committee member. I am grateful to have him be a part of my doctoral thesis as it was his creative research on the self-expansion model that prompted me to study relational boredom.

A special thanks goes to Dr. Doug Williams whose advice and belief in my potential when I was an undergraduate student led me to consider a graduate career in psychology. I consider his guidance and words of encouragement to be instrumental in setting my graduate career in motion and for leading me to work with Dr. Beverley Fehr.

I must also acknowledge Dr. Katherine Starzyk, Dr. Paul Trapnell, and Dr. David Kenny for providing me with very helpful statistical advice. Their time and expertise were greatly appreciated.

I would also like to thank my parents, sister and friends for the support they have provided me throughout my graduate career.

I recognize that this research would not be possible without the financial assistance of SSHRC (through a doctoral fellowship and a stipend from Dr. Fehr), the University of Manitoba (graduate fellowship), and the departments of psychology at the University of Winnipeg and University of Manitoba (teaching opportunities). I am thankful for their support.

Abstract

Couples face a variety of challenges in maintaining a satisfying relationship. Within the burgeoning relational maintenance literature, researchers have examined the difficulties couples must navigate to maintain relationships including: hurt feelings, betrayal, broken promises, conflict, jealousy, and selfishness. Some scholars have begun to consider challenges which may not fit that particular mold. For instance, it is possible that couple members may not be fighting or breaking rules but instead may feel tired of each other and bored. The general goals of this research were to: a) elucidate the meaning of an understudied relationship challenge, namely relational boredom by assessing layconceptions, b) create a self-report measure of relational boredom using a prototype approach, and c) to assess the reliability and validity of the newly developed scale. The Gable and Reis (2001) appetitive-aversive framework was used to conceptualize and understand the relation between boredom and other relationship processes such as conflict. Studies 1 and 2 focused on the conceptualization of relational boredom held by laypeople (dating and married samples). A measure of relational boredom, referred to as the Relational Boredom Scale was developed based on the most central or prototypical items (i.e., most frequently listed features from Study 1 and most centrally related in Study 2). The scale was judged to have satisfactory psychometric properties with a dating sample (Study 3) and married sample (Study 4a). There was overall support for the conceptualization of boredom as a process that is low in positive affect, approach motivation and growth (i.e., appetitive characterization). Furthermore, it was shown to be independent of general dissatisfaction, low arousal emotional states, and individual differences in boredom proneness. Importantly, boredom was related to decreased satisfaction above and beyond a host of relationship and individual difference variables using both concurrent and daily diary methodologies. Couple-level analyses revealed that marital partners score similarly on relational boredom and that one partner´s boredom is linked with decreases in the other partner´s satisfaction. These results suggest that relational boredom is a dyadic challenge that impacts relational quality.

List of Tables

Relational Boredom: Conceptualization, Development, and Validation of a Measurement Instrument

Couples face a variety of challenges in maintaining a satisfactory relationship. Within the burgeoning relational maintenance literature, researchers have examined the difficulties couples must navigate to maintain relationships including: hurt feelings, betrayal, broken promises, conflict, jealousy, and selfishness (e.g., Harvey & Wenzel, 2001; Kowalski, Walker, Wilinson, Queen, & Sharpe, 2003; Rusbult, Johnson, & Morrow, 1986b; Christensen & Heavey, 1990). The prevailing idea is to remove the negative processes and the relationship will be repaired (Bradbury, Cohan & Karney, 1998; Gottman, 1993; Noller, Feeney, Bonnell, & Callan, 1994). Not all researchers agree, however (Aron & Aron, 1996; Caughlin & Huston, 2006; Gable & Reis, 2001; Reis & Gable, 2003). Some scholars have begun to consider challenges that may not lend themselves well to traditional repair strategies or fit that mold. For instance, it is possible that couple members may not be fighting, not breaking rules, not being selfish, but instead may feel tired of each other, are not laughing together, not motivated to initiate shared activities, and are just plain bored.

Gable and Reis (2001) provide a useful framework for conceptualizing relationship processes that can be used to distinguish between the conflict and boredom kinds of maintenance challenges. They are among a growing number of scholars who believe that positive and negative qualities should be viewed as distinct entities in the conceptualization of relationship processes and quality (e.g., Caughlin & Huston, 2006; Fincham & Linfield, 1997). In their model, positive and negative relationship experiences are conceptualized as two *independent* motivational and affective systems:

an *appetitive* system concerned with the approach of incentives and an *aversive* system concerned with the avoidance of threats. According to Gable and Reis (2001), the appetitive dimension ranges from stagnant (low) to flourishing (high); the aversive dimension ranges from sanctuary (low) to insecurity (high). Thus, boredom and conflict are hypothesized to represent different affective and motivational dimensions. Whereas boredom is part of a dimension concerned with the motivation to approach rewards, the occurrence of positive affect, couple togetherness, and growth in the relationship (appetitive dimension), conflict is part of a dimension concerned with the motivation to avoid pain, the presence of negative affect, and insecurity (aversive dimension). The ideal relationship is one that is high in appetitiveness and low in aversiveness. Inevitably, there are challenges to maintaining those ideal levels. While the challenge of high aversiveness has received considerable research consideration (e.g., Rusbult & Verette, 1991; Noller, Feeney, Bonnell, & Callan, 1994; Kowalski, 2001), the low end of appetitiveness has been given little empirical attention. I targeted a phenomenon situated at the low end of the appetitive dimension, namely relational boredom.

Researchers have acknowledged the effects of boredom on relationships. For instance, boredom has been cited as a reason for separation in breakup accounts (Cupach & Metts, 1986, Gigy & Kelly, 1992), is associated with decreased marital satisfaction (Aron, Norman, McKenna, & Heyman, 2000; Reissman, Aron, & Bergen, 1993), and has been identified by clinicians as an underlying source of marital discord (Jacobson & Margolin, 1979; Venditti, 1980, Huesmann, 1980). Indeed, Aron and Aron (1986) state that, "boredom may be the major underrated, under-treated obstacle to

lasting love" (p. 91). Oddly, very little empirical attention has been given to the experience of relational boredom in the decades since that strong statement was made.

The general goals of the present investigation were to offer a conceptualization of relational boredom using laypeople's beliefs, develop a measure of the construct and assess its psychometric properties. Below, I begin with an overview of the research that has investigated the concept of boredom, in general. I follow with an examination of how boredom is not accounted for in major theories of relationships and lead into a discussion of a group of theories that account for boredom indirectly, namely growth motivation theories. Next, I describe the limited research that has explored relational boredom. Finally, I provide a rationale for the present investigation and outline a set of studies intended to assess and elucidate the construct of relational boredom.

The Study of Boredom in a Non-Relationship Context

In the following section, I provide an overview of research exploring the construct of boredom in general. I discuss how boredom has been defined as a state and a trait.

Boredom as a State

Boredom, as a state, has been described in a variety of ways in the literature. The more common definitions and characterizations of boredom include: habituation, a low arousal, dissatisfying state, the subjective experience of monotony, low external stimulation, lack of intrinsic motivation, constraint, and lack of action.

Habituation. The most basic and universal explanation for boredom is habituation (e.g., Zajonc, 1968; Klorman, 1974; Bradley, Lang, & Cuthbert, 1993) . Habituation is a form of learning that represents a decrease in response to a stimulus

after repeated exposure. This learning is a basic biological process and does not require conscious motivation or awareness to occur. If the stimulus is neither rewarding nor harmful, the organism will reduce responsiveness. Habituation has the adaptive purpose of helping people sort through the many stimuli they are faced with, alerting individuals to new information and experiences (i.e., stimuli) and reducing a potentially overwhelming amount of stimuli to process.

Boredom as a low-arousal, dissatisfying state. Most, if not all, researchers agree that boredom is a low arousal, dissatisfying state (Mikulas &Vodanovich, 1993). This is consistent with dimensional models of emotion, wherein boredom is classified as a low-arousal, low-pleasure state (e.g., Russell, 1980). Within dimensional models of emotion, boredom is most similar to affective states such as loneliness, depression, gloominess, whereas emotions such as excitement and enthusiasm are viewed as polar opposites. Despite boredom's association with low arousal, low pleasure states, researchers have suggested that boredom also has unique qualities. For instance, Farmer and Sundberg (1986) suggest that boredom and depression be seen as differing in quality and intensity of mood. They comment that "depression is characterized by feelings of sadness or personal loss, whereas boredom is characterized by a lack of interest" (p. 15).

Subjective experience of boredom as monotonous. Early conceptualizations of boredom viewed monotony (or more specifically, repetitive external stimulation) as an antecedent of boredom (Hebb, 1955; Berlyne, 1960). Some theorists even viewed monotony as a necessary and defining feature of boredom (London, Schubert, & Washburn, 1972, Thackray, Jones, & Touchstone, 1974; Bailey, Thackray, Pearl, &

Parish, 1976). Researchers have since shifted from this type of definition to one that incorporates individuals' *subjective* experiences of monotony (e.g., Fiske & Maddi, 1961; Perkins & Hill, 1985; Mikulas & Vodanovich, 1993; Vodanovich, Wallace, & Kass, 2005). In other words, it is not the situation (i.e., objective repetition) itself that creates feelings of boredom, but rather the perception of a situation as lacking variety.

Boredom and external stimulation. Other researchers have emphasized that boredom is the result of a lack of external stimulation that may or may not result from the perception of repetition (Farmer & Sundberg, 1986).

Boredom and lack of intrinsic motivation. A common thread across boredom theories is that people who experience boredom lack intrinsic motivation (i.e., a pure and authentic drive to engage in a particular behaviour). Ryan and Deci (2000) propose that the conditions that foster intrinsic motivation involve the satisfaction of basic psychological needs (i.e., relatedness, autonomy and competence). Intrinsic motivation is associated with interest, excitement, enhanced performance, creativity and general well-being (Ryan & Deci, 2000). The idea that boredom is the opposite of intrinsic motivation has emerged in various boredom definitions. For instance, according to Leary, Rogers, Canfield, and Coe (1986), "boredom occurs only as a result of attending to stimuli that are not intrinsically captivating"(p. 968). Csikszentmihalyi (1975) states that the opposite of the boredom experience is "flow", a feeling of complete involvement with an intrinsically rewarding activity in which individuals "perceive opportunities for action as being evenly matched by their capabilities" (p. 56). Hamilton, Haier, and Buchsbaum (1984) suggest that boredom is the extreme end of a continuum where the opposing end is intrinsic enjoyment. Thus, these definitions and

theories maintain that boredom involves a lack of intrinsic motivation. Whether that is the defining feature or one component remains to be determined.

Boredom and constraint. Several researchers associate boredom with feelings of restraint. For instance, Leary et al. (1986) suggest that the level of boredom experienced "should be a direct function of the cognitive effort required to sustain focused attention on the stimulus" (p.968). In other words, Leary's definition involves an element of obligation to devote one's attention to a particular stimulus, such as the amount of cognitive effort required to pay attention to a conversation, lecture or theatre production. The more cognitive effort required to stay focused, the greater the boredom. Fenichel (1951) proposes that boredom "arises when we must not do what we want to do, or must do what we do not want to do" (p. 359).

Lack of action. Within the emotion literature, the experience of boredom is associated with the amotivational goal of not wanting to do anything--inaction. Boredom has been associated with the action readiness tendency of hypoactivation, which includes apathy, giving up and shutting off (Frijda, 1987b). This behavioural tendency to give up has also been found in the achievement domain (Pekrun, 1992).

Boredom as a Trait

Although boredom is considered to be a momentary state, some individuals are bored in a variety of situations, over an extended period of time (Vodanovich, Verner, & Gilbride, 1991). There are two main individual difference variables associated with boredom, boredom proneness and boredom susceptibility.

Boredom proneness. According to Farmer and Sundberg (1986), individuals who are prone to boredom lack connection with their environment and the ability to

access resources to adapt. Farmer and Sundberg (1986) found that individuals who are prone to boredom tend to experience negative affective states (e.g., depression and loneliness) and display lower functioning in tasks and work, due to low motivation, distractability and inability to do things alone. Proneness to boredom also has been linked with impaired academic and job performance (Kass, Vodanovich, Stanny, & Taylor, 2001), pathological gambling (Blaszczynski, McConaghy, & Frankova, 1990), poorly developed interpersonal relationships (Watt and Vodanovich, 1999), and decreased sexual satisfaction (Watt & Ewing, 1996). Similarly, other researchers have found that boredom proneness is correlated with negative emotions such as anxiety, hostility, depression, dysphoria, and anger (Vodanovich et al., 1991; Sommers & Vodanovich, 2000; Dahlen, Martin, Ragan, & Kuhlman, 2004; Rupp & Vodanovich, 1997). Boredom is also negatively correlated with positive affect (Vodanovich et al., 1991).

Boredom susceptibility. Other scholars believe that boredom is due to a lack of cognitive arousal, or rather a lack of an optimal level of arousal, and that individuals vary in the level of arousal that they find most psychologically comfortable (Zuckerman, 1971). Zuckerman created a measure of the construct of optimal level of stimulation that had earlier been introduced by Wundt (1873) and subsequently elaborated on by researchers such as Berlyne (1960), Fiske and Maddi (1961), and Hebb (1955), to name a few. When the optimal level is not reached, this serves as a strong motivational force to achieve that state. Individuals who have high levels of optimal arousal "have an aversion for repetitive experience of any kind, routine work, or dull and boring people and extreme restlessness under conditions when escape from

constancy is impossible" (Zuckerman, 1979a, p. 103). Boredom susceptibility is but one of four components of optimal arousal (referred to as sensation seeking in Zuckerman's work). Boredom susceptibility is also associated with a host of negative behaviors including: impulsivity (Zuckerman, 1974), drug use (Beauducel, Brocke, Strobel & Strobel, 1999), gambling (Kuley & Jacobs, 1988), and deviant behavior in school (Wasson, 1981).

Thus, researchers have conceptualized boredom as an adaptive solution for distinguishing between, and sorting through, old and new stimuli. In its most basic sense, it occurs as the result of increased exposure to a stimulus. In terms of how it feels, researchers have characterized boredom as a low-arousal, dissatisfying state that results from a perception that the situation lacks variety, external stimulation and/or intrinsic meaning. Boredom has been linked with a range of emotional states from feelings of constraint and agitation to feelings of apathy. Although boredom has the advantage of alerting individuals to new stimuli, the consequences and behavioural signature of boredom is not taking action and diverting attention to a new task. Furthermore, there is substantial evidence that individuals vary in their propensity to experience boredom in general.

Boredom and Relationship Maintenance Theories

Several grand theories of relationships have been articulated, including evolutionary, attachment, and social exchange theories (Reis & Rusbult, 2002). In this section, I discuss how each of these major theories does not incorporate boredom in its predictions. Then I present a relatively newer approach to relationship maintenance, namely growth motivation, that fits with the appetitive dimension in Gable and Reis'

(2001) framework. Finally, the limited, yet inspirational, research that has been done on boredom in the context of romantic relationships will be presented.

Evolutionary Theory

According to evolutionary theory, human behaviour, including love, has a genetic basis to the extent that the behaviour increases the probability of successful reproduction. To date, the evolutionary theory perspective has focused on mate selection criteria and the care of offspring (e.g., Buss & Schmitt, 1993; Kenrick & Trost, 1987). To a lesser extent, evolutionary psychologists have considered relational maintenance behaviours. When maintenance in relationships has been considered (see Buss & Schmitt, 1993), the focus has been on what keeps an individual in a relationship, particularly in the context of offspring care. The evolutionary view is that relational maintenance variables may be viewed as indicators of commitment. Buss and his colleagues acknowledge that "very limited research has been done on the cues of commitment and the degree to which they are valued in long-term mates" (Buss & Schmitt, 1993, p. 228). This lack of research on the evolutionary perspective of relational maintenance was highlighted in a recent review of evolutionary approaches to relationships (Kenrick & Trost, 2004).

Attachment Theory

Attachment theory is comprehensive in that it incorporates emotion, motivation, social cognition, evolutionary and developmental perspectives, and characterizes human relational behaviour throughout an individual's lifespan (Bowlby, 1969). At the core of attachment theory is the attachment system that infants develop through repeated interactions with their primary caregiver. The system is hypothesized

to carry through to adult relationships in the form of internal working models (Hazan & Shaver, 1987). Attachment has the adaptive purpose of keeping infants in close proximity to caregivers. It serves as "a safe haven" for adults in romantic relationships to turn to in times of distress and as a "secure base" from which individuals may comfortably explore the environment, knowing that the partner will be there upon their return (Crowell, Treboux, Gao, Fyffe, Pan, & Waters, 2002; Waters & Cummings, 2000). Much of the research on attachment behaviour in close adult relationships has focused on times when the attachment system is activated due to anxiety and conflict (i.e., safe haven focus). There has been a great deal of research demonstrating that there are patterns of individual differences in terms of attachment behaviour, especially in the face of conflict, distress, separation and anxiety (e.g., Simpson, Rholes, & Phillips, 1996; Simpson, Rholes, Orina, & Grich, 2002; Simpson, Rholes, & Nelligan, 1992; Feeney & Noller, 1992; Mikulincer & Florian, & Weller, 1993; see Hazan & Shaver, 2004 for a review). Less research has focused on how the attachment system serves as secure base support from which individuals may engage in novel play and exploration. The exception is Feeney (2004) who has examined individuals' perceptions of the provision of a secure base in their romantic relationships. She found that greater perceived home base security was associated with a greater likelihood of perceiving opportunities for exploration (e.g., developing a new hobby, switching jobs) and a greater willingness to engage in exploratory behaviours. Although not addressed directly in her research, one might predict that perceptions of relationship security would facilitate the exploration of new and exciting activities which could counteract the onset of boredom. In short, the focus of attachment theory research is on the

presence or absence of aversiveness (e.g., whether or not conflict, security, or distress are present), with little attention on appetitive processes. Furthermore, it is not clear how or whether the attachment system is activated by low appetitiveness.

Social Exchange

Boredom is given little attention in the relational domain and this is especially apparent in the dominant social exchange theories used to explain relationship satisfaction and stability. Social exchange theories are based on an economic model wherein relationships that provide greater rewards than costs are predicted to be more satisfying and persist longer. A prevailing notion in the social exchange tradition is that by reducing negative aspects in the relationship (e.g., by accommodating or sacrificing one's own needs for the sake of one's partner), satisfaction will ultimately increase (or return to baseline levels; Arriaga & Rusbult, 1998; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991). Thus, pro-relationship motives are construed in terms of how couples respond to conflict, such as how well they sacrifice their own self-interests and reduce instinctive negative responses for the sake of the relationship. Below I present a brief review of the social exchange theories, namely interdependence theory, the investment model, and equity theory, with the goal of highlighting how the challenge of boredom is absent.

Interdependence theory. According to interdependence theory, dependence is the fundamental property of relationships (Kelley & Thibault, 1978). Dependence refers to the "degree to which each actor's well-being is influenced by the behaviour of the partner" (Rusbult, Arriaga, & Agnew, 2001, p. 336). The focus of this theory is on the interactions between partners. The outcomes of those interactions are conceptualized by

Thibault and Kelley (1959) in terms of rewards and costs. Rewards and costs are defined in terms of comparison level (i.e., does the outcome exceed the individual's expectations?) and comparison level for alternatives (i.e., could better rewards and fewer costs be incurred in another relationship or if alone?). The more the outcomes exceed the comparison level, the greater the satisfaction experienced. People maintain their relationships when their comparison level is met and more attractive alternatives are not available.

Investment model. The investment model is an offshoot of interdependence theory (Rusbult, 1980). The investment model proposes that the three primary bases for dependence are: satisfaction level (rewards minus costs), level of alternatives, and amount of investments (Rusbult, 1980). The psychological experience of these three bases of dependence is commitment. As individuals become dependent on their relationship, they develop increasingly strong commitment (intent to persist, psychological attachment, and long-term orientation; Rusbult, Olsen, Davis & Hannon, 2001). Individuals will persist in their relationship, (i.e., stay committed), if satisfaction is high, alternatives are low, and investments are high. Consistent with the social exchange framework, partners will report greater satisfaction if rewards outweigh the costs.

Research has also been done on specific relationship maintenance activities engaged in to preserve satisfaction and commitment. Rusbult and colleagues have found that high levels of commitment promote behavioural and cognitive relationship maintenance mechanisms, including accommodative behaviour, willing to sacrifice, and forgiveness of betrayal (Rusbult, Olsen, Davis, & Hannon, 2001). The identified cognitive

mechanisms include a collective representation of self, positive illusions, and derogation of tempting alternatives. Research in this area (e.g., Rusbult & Verette, 1991; Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991) demonstrates that the greater the level of commitment, the greater the number of relationship maintenance behaviours, which, in turn, results in greater perceptions of commitment and trust.

Equity. Another social exchange theory focuses more on whether partners perceive their reward/cost ratio as fair. According to equity theorists, people are most satisfied when the rewards and costs they are experiencing are roughly equal to the rewards and costs of their partners (Walster [Hatfield], Walster & Berscheid, 1978). If a partner is over-or under-benefited in the relationship, this results in decreased satisfaction and a desire to restore the inequity (Walster [Hatfield], Walster, & Traupmann, 1978). Several researchers have explored maintenance strategies, such as sharing household duties, for promoting equity (Canary & Stafford, 2001).

In sum, social exchange theories of relationships do not address the experience of boredom in relationships. This is not to suggest that they are incomplete or inadequate theories. In theory, the experience of boredom is likely to be a low reward experience, as is conflict. It is only meant to highlight that these theories may benefit from a consideration for how boredom processes may play a role in shaping the key constructs in these models, as well as whether the theory can be generalized to qualitatively different low reward experiences (in this case a low positive affect experience rather than a high negative affect experience). These theories address specific cognitive and behavioural maintenance mechanisms, but the focus is on steering the couple away from negativity and reducing conflict. Underlying these theories is the homeostatic idea

that there is an equilibrium of satisfaction. In other words, if negative processes are accounted for (e.g., through accommodation, forgiveness), the couple will return to its equilibrium of satisfaction. However, none of these theories address what can be done for couples who are not experiencing conflict, are feeling equally benefited, but nonetheless, are bored.

Growth Motivation Theories

One type of relational maintenance theory that moves beyond a homeostatic view of satisfaction is growth motivation theory. Growth motivation theorists believe that positive aspects of the relationship must be maintained and that appetitive-related aspects, such as excitement, novelty and spontaneity, are important components of relationship functioning (e.g., Aron & Aron, 1986; Gable, Reis, Impett, & Asher, 2004; Gable & Reis, 2001; Blais, Sabourin, Boucher, & Vallerand, 1990, Deci & Ryan, 1985, Knee, Patrick, Vietor, Nanayakkara, & Neighbors, 2002). Here, there is no assumption that there is an equilibrium of satisfaction. Instead, positive feelings may wane independent of conflict and negativity. Therefore, according to the growth motivation perspective, individuals must enhance relationship satisfaction, rather than just restoring or repairing it by removing negativity.

One important growth motivation theory that is beginning to be applied to the relationship domain is self determination theory. According to self determination theorists, the "adaptive design of the human organism [is] to engage [in] interesting activities, to exercise capacities, to pursue social connectedness in social groups and to integrate intrapsychic and interpersonal experiences" (Ryan & Deci, 1985, p. 47). Ryan and Deci (1985) conceptualize motivation as a continuum, ranging from behaviour that

is governed by external pressures and extrinsic motivation (controlled behaviours) to behaviour that is self-governed and characterized by choice, authenticity, and autonomy (autonomous behaviours). Research has linked an autonomous motivational orientation with behaviours involving greater positive affect, interest, spontaneity, cognitive flexibility, creativity and longer persistence.

Researchers who have applied self determination theory to the context of relationships propose that an autonomous motivational orientation (trait or state) and its associated behaviours facilitate relationship functioning and lead to greater relationship quality (Blais, Sabourin, Boucher, & Vallerand, 1990; Knee, Patrick, Vietor, Nanayakkara, & Neighbors, 2002; Knee, Lonsbary, Canevello, & Patrick, 2005). For instance, Blais et al. (1990) found that the more romantic partners' motivational orientation involved autonomy, choice, and authenticity, the greater the couple's happiness. This relation was mediated by the perception of more adaptive relationship functioning (i.e., consensus, cohesion, and affectional expression, as assessed by the Dyadic Assessment Scale). Similarly, Knee et al. (2002) found that individuals characterized as having relationship beliefs that are growth-oriented (which include self determination, improvement, using challenges as opportunities) vs. destiny-oriented (relationships are meant to be, challenges are a sign that this is not the partner for them) used more active and integrative coping strategies in semi-structured interviews focusing on conflict situations. This same pattern of results was found for the state-oriented autonomous motivational orientation (Knee et al., 2005).

Thus, relationship maintenance also can be thought of in terms of how individuals approach their relationship in a growth-oriented fashion. Despite the focus

of these theories on appetitive motivation, the adaptive skills and beliefs associated with growth beliefs have been predominantly examined in the context of conflict resolution. Thus, although these theories address the potential for enhancing satisfaction by engaging in autonomous, positive behaviours, researchers have centered their attention on aversive, conflict-oriented challenges.[1] Couples may face other challenges, involved with appetitive, positive behaviours, such as boredom.

Research on Boredom in Romantic Relationships

In this section, I discuss the limited research on boredom that has been done in the area of close relationships. There is one well-known growth motivation model associated with the experience of boredom, namely the self-expansion model. In addition to the self-expansion model, there are also several stage models of relationships that use boredom-related states to characterize the status of the relationship.

Self-expansion model. A growth motivation theory that addresses relational boredom is Aron and Aron's (1986, 1996) self-expansion model. According to this model, boredom is the result of a halting of relationship growth, an arrest in the merger between the concepts of self and partner. At the heart of the self-expansion model is the idea that people have a basic drive or desire to grow and acquire resources. Accordingly, people are motivated to enter a relationship with the perceived opportunity to expand the self by gaining access to additional perspectives (e.g., new viewpoints, new friends, vacations). In other words, relationships offer individuals the chance to learn new information and gain new experiences with their romantic partners.

When the initial rush due to self expansion slows down, feelings of tiredness of each other or boredom may set in.

One unique aspect of Aron and his colleagues' research is that they have devised a means of combating the halting of self expansion by drawing on social learning theory. Increased exposure to a stimulus (i.e., one's partner in a long term relationship) does not necessarily lead to boredom if couples proactively maintain their relationship with self-expanding activities. Thus, they have emphasized that there is variability between couples in terms of boredom; it is not inevitable that increased exposure to a partner (in the form of time spent together and years in the relationship) will necessarily lead to boredom. Aron and colleagues have conducted a series of studies to explore whether performing novel and exciting activities increases relationship satisfaction among couples. They have found that activities that are novel (e.g., attending musical concerts, plays, bird watching) and arousing (e.g., bicycling, dancing, riding horses) lead to increased excitement and enhanced relationship quality (Aron et al., 2000), above and beyond shared activities that are mundane (Reissman, Aron, & Bergen, 1993).[2] For instance, Reismann, Aron, and Bergen (1993) assigned couples to one of three conditions: 1) exciting activities for 1.5 hours per week, 2) pleasant activities for 1.5 hours per week, and 3) a control condition. They found that only the exciting activities group demonstrated an increase in satisfaction when compared to the other groups (over a 10-week period). Similarly, in Aron et al.'s (2000) experiment, individuals in the novel-arousing condition experienced greater relationship quality than those in the mundane condition and those in a no activity condition. This

increased excitement and relationship quality is taken as evidence for self-expansion and decreased boredom.

Stage model view of the boredom experience. In addition to being considered an everyday maintenance challenge in relationships, several researchers have used boredom-related terms to describe the deterioration of relationships. In Knapp and Vangelisti's (1992) model of relationship growth and decay, boredom is viewed as part of the Stagnation stage (the eighth out of ten stages). At this stage, the relationship is "put on hold" and partners feel that they have nothing left to say to each other. There are few communication exchanges. The relationship may decay for some time before the relationship is terminated. Although the boredom experience is described in this model, the purpose is not to explain boredom but rather to depict various stages of relationships.

Similarly, other researchers have described a state that seems to represent boredom (e.g., Kelvin, 1977; Schwartz, 2002; Caughlin & Huston, 2006). For instance, Kelvin (1977) draws upon adaptation-level theory and describes a state of relational atrophy, wherein maximized predictability has potential disadvantages for relational quality. According to Kelvin (1997), although predictability is important for relational functioning, it can lead to increased adaptation which creates a condition of low arousal or no arousal. Atrophy in relationships may be prevented if there are "repeated new inputs which prevent the establishment of a static adaptation level" (p. 377). Caughlin and Huston (2006) describe the "empty shell" or bland marriage, wherein the emotional climate of the marriage is characterized as low in affection (i.e., positive affect) and low in antagonism (i.e., negative affect). Other researchers have described states in

relationships where there is a decline in positive affect (e.g., deromanticization; Cunningham, Shamblen, Barbee, & Ault, 2005; deeroticization; Schwartz, 2002). For instance, Cunningham et al. (2005) describe a state in a relationship wherein the partner's positive impression management efforts lessen along with increased exposure to the partner.

Summary of Introduction

Part of the difficulty in using basic learning theory terminology (i.e., habituation) to define boredom is that perceptions of increased exposure are more important in predicting whether an individual will experience boredom than the actual amount of exposure (Mikulas & Vodanovich, 1993). Although researchers have not reached consensus on the meaning of boredom, a common characterization is that boredom is a low arousal, dissatisfying state that results from a perception that the situation lacks variety, external stimulation and/or does not have intrinsic meaning. Aside from the consensus of boredom being a dissatisfying state, boredom has been described as both a low arousal, apathetic, deactivating state, as well as a high arousal, agitated state involving perceptions of restraint. Although boredom has the potential to alert the individual to a previously viewed stimulus and to subsequently take action and change the stimuli, boredom is often associated with inaction and decreased persistence at a task. In research on boredom in general, individual differences have received the most attention.

Within the context of relationships, boredom has received even less attention, despite the fact that relationships involve a high degree of exposure to the same stimulus (i.e., the partner). Researchers (e.g., Aron & Aron, 1986; Aron & Aron, 2000)

have commented that by definition, relationships involve continued interaction with the same partner for an extended period of time, thereby making partners ripe for the experience of habituation. Despite the potential pervasiveness of boredom in relationships, research on relational boredom is limited. The major relationship theories do not directly account for boredom. Social exchange models address the issue of negativity in the relationship. (The assumption is that the absence of negativity is satisfaction). In contrast to this repair-oriented tradition, other theorists have stressed the importance of positive, growth-oriented related experiences. Although self-determination theory seems suitable to account for a reduction of appetitive processes, such as boredom, it is another growth motivation theory, namely the self-expansion model, that provides a direct account of relational boredom.

Rationale and Outline for Thesis

More so than any other researchers, Arthur Aron, Elaine Aron, and their colleagues have created the interest in studying relational boredom. They have drawn attention to the importance of studying the habituation process in close relationships, have provided a useful metaphor for understanding the experience of boredom, and propose a mechanism for the almost inevitable decline in marital satisfaction over time. They have concentrated on ways for couples to reach the intrinsic ideal; they are emphasizing the *how*--the means to having a happy outlook through self-expansion. Less attention has been given to the actual experience of boredom in relationships in the self-expansion model. Similarly, researchers who have studied boredom as a stage in a relationship have not studied the boredom experience itself, nor how it relates to

satisfaction. Thus, there are areas that remain to be explored, including further conceptualizing and empirically examining everyday boredom in close relationships.

Meaning and Measurement of Relational Boredom

One of the main goals of my thesis was to further elucidate the meaning of relational boredom. Despite the far-reaching effects of boredom on performance, relationship stability and quality, consensus about its meaning has not been established. Indeed, Vodanovich (2003) noted that with regard to the construct of boredom there is an "absence of a coherent universally accepted definition" (p. 570). This lack of consensus of meaning (e.g., apathetic vs. agitated, repetition vs. intrinsic interest in stimulus) has also limited the measurement of the construct, particularly as a state. Within the relational domain boredom has been measured with a single (e.g., Aron, & Henkemeyer, 1995; How bored are you with your current relationship?) or a two item measure (Aron et al, 2000; "How bored are you with your current relationship?"; and "How exciting is your current relationship?" (reverse scored)). The two item measure of relational boredom was used in the context of assessing the state of the relationship after qualities of couple activities were manipulated. I wanted to build on the measurement of relational boredom and believed it would be valuable to have a multi-item measure, particularly one that could capture boredom as a more long-term characterization of a relationship.

There are several reasons why the development of a measure of relational boredom may be useful. A clear conceptualization of the meaning of relational boredom and a measure of the construct would allow researchers to further explore this understudied challenge. Researchers may incorporate this construct in their studies that

typically focus on aversive processes to examine how it interacts and shapes those processes. Furthermore, the development of a state measure of relational boredom may serve as a useful tool for counsellors to use to identify this challenge in couples who seek counselling.

But what should be included in the scale of relational boredom? There are several approaches to answering this question. One option is to develop items using a top-down method, drawing on models and theories of boredom, such as the self-expansion model. However, as reviewed earlier, there are differing perspectives and definitions of boredom, many of which are not included in the self-expansion model. Given this diversity, it would be difficult to establish clear criteria for selecting items. An alternative to the top down approach is a bottom up approach that does not rely on a set of pre-existing criteria to develop a measure. One such bottom-up method is the prototype approach.

Prototype approach. Boredom, as with other relationship constructs, is perhaps best conceptualized as having fuzzy borders rather than set boundaries (Fehr, 1988; Fehr & Baldwin, 1996; Frei & Shaver, 2002; Hassebrauck, 1997; Helgeson, Shaver, & Dyer, 1987; Shaver, Schwartz, Kirson, & O'Connor, 1987). In other words, there is not a set of necessary and sufficient features that defines the concept of boredom. Instead boredom may be thought of as comprising a variety of features, wherein some are considered more central than others. This approach has been used to understand relational concepts (e.g., love and commitment; Fehr, 1988; Fitness & Fletcher, 1993; emotion knowledge; Fehr & Russell, 1984; Shaver, Schwartz, Kirson, & O'Connor, 1987; anger; Fehr & Baldwin, 1996; jealousy, hate; Fitness & Fletcher, 1993

forgiveness; Friesen & Fletcher, 2007). For instance, Fehr (1988) elucidated the meaning of love using a prototype approach and found that while passion and companionate features were part of people's general knowledge of the construct of love, it was the companionate features that people thought best exemplified the construct. Thus, this approach was useful in further clarifying the meaning of love. This logic has also been used to create measures (e.g., respect; Frei & Shaver, 2002). When applied to relational behaviour, the prototype approach is based on the assumption that relational knowledge is founded on actual, repeated experiences of those situations (e.g., Baldwin, 1992). Tapping the collective knowledge that people presumably rely on to make decisions and guide the smooth functioning of behaviour is an important source of information. Presumably, these perceptions lead to a more complete conceptualization of boredom, and, ultimately inform the measurement of it. The added advantage of using this approach is that it illuminates the meaning of everyday boredom in romantic relationships, something that top-down theories of boredom have not yet explored.

Outline of Present Investigation

The general goal of this research was to conceptualize relational boredom based on laypeople's views, create a self-report measure of relational boredom, and to assess its reliability and validity. The Gable and Reis (2001) framework was the inspiration for conceptualizing and understanding the relation between boredom and other relationship processes. In Study 1, relational boredom was conceptualized based on laypeople's beliefs using a sample of Introductory Psychology students who were currently in a dating relationship and a community sample of married participants. In Study 2a, the

features of boredom generated in Study 1 were rated for centrality. I also calculated the similarity of the prototypes for two samples (i.e., dating and married) by correlating the prototypicality ratings. The next step was to develop a measure based on the features that were most central to laypeople's conceptions of relational boredom (Study 2b). Following the development of the Relational Boredom Scale, I conducted an initial assessment of its psychometric properties, including basic scale data (i.e., item means, standard deviation, skewness, kurtosis), factor structure, internal consistency, as well as convergent, discriminant, and criterion validity, using a sample of students in dating relationships (Study 3). This was the first test of how boredom relates to other relational, affective, and individual difference variables (that can be classified as appetitive and aversive). As well, researchers have not assessed the power of relational boredom in predicting satisfaction, relative to other predictors. Thus, I investigated whether relational boredom uniquely predicted satisfaction when other individual, relationship, and affective variables were taken into account. In Study 4a, the psychometric properties were further assessed and replicated with a married sample. As well, in Study 4b, a daily diary study was conducted to examine boredom over a two week period and to examine the relation between scores on the Relational Boredom Scale and daily relationship experiences, including satisfaction. Finally, a married couple sample was used to assess the validity of the scale, using both partners' responses over two time points (Study 5). As well, the effects of one partner's boredom experience on the other's satisfaction were examined.

Study 1: Item Generation

The goal of this study was to examine how laypeople define boredom in romantic relationships using a prototype approach. There are two steps in item development using prototype methodology: 1) having laypeople generate features of the construct (Study 1), and 2) having another set of participants provide centrality ratings for the free-listed characteristics (Study 2; Fehr, 1988; Fehr & Russell, 1991).

Hypotheses

The core idea of the bottom-up, prototype approach is that people have knowledge of relationship experiences, such as boredom, based on personal experiences or through observation of others (Baldwin, 1992). Thus, it was assumed that individuals would be able to draw upon their experiences and generate features of the concept of relational boredom. More specifically, based on the literature within and outside the relational domain, it was predicted that the relational boredom prototype would contain a variety of responses including: repetition and lack of novelty (Aron et al., 2000, O'Hanlon, 1981); lack of high arousal positive states (Aron et al. 2001); lack of relationship growth (Aron & Aron, 1986); inadequately capturing people's attention (Csikszentmihalyi, 1975); constraint (Leary et al., 1985; Thackray et al., 1984; Farmer & Sundberg, 1986); apathy (Caughlin & Huston, 2006); and lack of action (Frijda, 1987b; Pekrun, 1992b). While a range of features was expected, the dominant theme that was expected to emerge was low appetitiveness.

Method

Participants

Two sets of participants generated the relational boredom prototype, namely Introductory Psychology students in dating relationships and married individuals from the community.

Dating sample. Introductory Psychology students ($N = 99$; 67 women, 31 men, 1 participant did not report gender) at the University of Manitoba participated in this research for course credit. The mean age of participants was 20.00, with a range of 18 to 36 years. In terms of relationship status, 12.1% were casually dating, 69.7% were seriously involved, 7.1% were engaged, and 11.1% were cohabiting. Thus, most of the participants were involved in an exclusive romantic relationship. The average relationship length was 22.60 months. English was the first language for the majority of participants (77.80%). The 22 participants for whom English was a second language spoke English for an average of 8.48 years (range of *1-19* years). This was judged to be sufficient to comprehend the questions. Therefore, their data were retained.

Married sample from the community. Married individuals ($N= 77$; 46 women, 30 men and 1 participant who did not report his or her gender) were enlisted from the community through Introductory Psychology students who served as recruiters for course credit. The Introductory Psychology students were asked to solicit participation from a male or female married adult from the community, someone whom they felt comfortable approaching (e.g., parent, aunt, uncle, family friend), who ranged in age in age from 25-60 years. Married individuals who agreed to participate were given a study package (from the student recruiter) that contained instructions for the study, an informed consent form, questionnaire package, and an entry form for draws for gift certificates for movie theatres and coffee shops, as compensation. They also received a

stamped, addressed envelope for returning their materials to the researcher. Of the 76 married participants who returned the questionnaire package, 72 completed the meaning of boredom questionnaire. Two participants were judged to be outliers and were dropped from further consideration due to being married for less than a year and for being below the average age of the married sample (18 and 19 years of age). The average age of the final sample of 70 participants was 44.40 years, and ranged from 21 to 60 years. Fifty-five participants indicated that this was their first marriage, nine reported that it was not their first marriage, and six did not respond to this question. The average length of marriage was 18.92 years, with a range of 1.5 years to 36 years. English was the first language of the majority of participants (81.40%). The 13 participants for whom English was a second language reported speaking English for an average 32.31 years (range of 6 to 53 years). Thus, their data were retained.

Materials and Procedure

Qualitative experience of boredom questionnaire. Both sets of participants completed a qualitative experience of boredom questionnaire. The dating sample completed the questionnaire with reference to a current romantic partner and the community sample with reference to a marital partner. I followed the format developed by Harris (2000) to assess qualitative experiences of boredom in general, but modified the focus to the experience of boredom in romantic relationships. In the instructions, participants were asked to direct their attention to times when they felt bored in a romantic/marital relationship. They were then instructed to imagine that they were explaining boredom in romantic/marital relationships to a foreigner or to someone who has never experienced it, and, therefore, to include the obvious. Participants were asked

several open-ended questions including; "What does it mean to be bored in a romantic/marital relationship?" Participants also were asked to rate on a 7-point scale the frequency with which they experience boredom in their romantic/marital relationship, on a scale from 1=not at all to 7=all the time.

Demographic information. Participants were asked to report on demographic variables such as: gender, age, average household income (married sample only), ethnicity, if English was their first language, current relationship status, length of relationship, whether they had children (for the married sample), and whether this was their first marriage (married sample only).

Results and Discussion

The open-ended responses were coded following the procedure outlined by Fehr (1988) in which the intent is to capture the essential elements of a prototype using a bottom-up approach. With this approach, highly synonymous and identical terms are combined. Only items that are listed by at least two participants are retained.

Two independent raters who were blind to the hypotheses followed the coding procedure (i.e., combining identical and highly synonymous responses; Fehr, 1988). The Introductory Psychology student sample generated a total of 377 responses. Of these, 76 (20.16%) were idiosyncratic (i.e., only listed by one participant), and, therefore were eliminated.[3] The final set of coded features included 60 characteristics of boredom for the dating sample (see Table 1a). The few disagreements between coders were resolved through discussion. Married participants from the community generated a total of 252 responses. Of these, 89 (35.32%) were idiosyncratic and therefore

discarded. Coding of the remaining responses resulted in a final set of 35 features (see Table 1b).

Themes of Generated Items

The 60 features from the dating sample and the 35 from the married sample were combined to form 69 unique features between both samples. The features generated were coded according to the main themes outlined in the literature namely, repetition and lack of novelty; lack of high arousal positive states, lack of relationship growth; inadequately capturing people's attention; constraint; apathy; and lack of action. This was done to provide a summary of what laypeople's conceptions and how that maps onto models and theories of boredom.

Repetition and lack of novelty. A common theme was the idea that the relationship lacks novelty. Aron and colleagues have emphasized that self expanding activities are not only high in arousal, but also high in novelty. Items listed that fit the lack of novelty theme include: "nothing new", "routine", "doing the same thing", and "repetitive". In total, 40.40% of the dating sample listed items related to a lack of novelty one or more times; 32.84% of the community listed items related to lack of novelty theme.

Lack of high arousal, positive affective states. Approximately half of the participants in the dating sample listed features that contained an absence of high arousal positive states (e.g., "lack of excitement", "no spark", "less passion", "no thrill", "no more butterflies in stomach"; 58.6% for the dating sample, 39% of the married sample listed these kinds of features). The most frequently listed high arousal feature was the lack of a high-arousal, high pleasure emotion, namely, excitement.

Specifically, 28.28% of the dating sample and 22.39% for the married sample listed "lack of excitement" as a feature of boredom. Aron and his colleagues have suggested that excitement represents the ordinary language term for self-expanding activities. Consistent with their model, a lack of self-expanding activities (or lack of excitement in layperson's terms) was linked with the experience of boredom. This is also in line with dimensional models of emotion that view excitement as the polar opposite of boredom.

Lack of relationship growth. According to the self expansion model, boredom is the result of a halting of growth, the arrest of the self-other merger. Items that fit that criterion are "relationship is not moving forward", and "know everything about partner". The latter is based on the idea that there is nothing left to incorporate in the self concept. A total of 15.15% of the dating participants listed features related to lack of self-other growth; the community sample did not list these features.

Inadequately capturing people's attention. There may be additional instances in which a relationship state is not adequately stimulating that do not relate to repetition or high arousal states. For instance, a situation may not capture a person's attention. This theme relates to boredom's link with intrinsic motivation and external stimulation in general. One of the more frequently listed features was "lack of interest in partner". Other features that fit this category include; "dull", "decrease in sexual interest", "doing things that interest your partner but not yourself". This theme accounted for 25.25% of the participant's responses in the dating sample and 22.85% in the married sample.

Apathy. A common characterization of boredom is a complete lack of affect and motivation. This has appeared in emotion models outside of the relational domain (Frijda, 1987b) and as part of stage models of relationships (Knapp & Vangelisti, 1995;

Caughlin & Huston, 2006). Items that fit that characterization were: "lack of motivation", "lack of energy", "feel nothing", "loss of feelings" (10.10% of the dating sample listed these features; 2.94% of the married sample did so).

Constraint. The role that constraint and agitation would play in people's perceptions of the meaning of boredom was less clear. This theme is evident in several writings outside of the relational domain, but has not been emphasized in the relational accounts of boredom. Items that fit this idea were: "feel trapped", "restless", "stuck in a rut and can't pull away". Only 11.11% of the dating sample listed this theme; 10.20% of the community sample listed items related to constraint and agitation.

Lack of action. This category was difficult to code. A few of the more readily coded features were "not going out", "nothing to do". These features suggest that participants associate boredom with not doing anything.

Additional themes. There were additional themes that did not readily fit in the above mentioned categories. One theme was labelled *lack of togetherness* (e.g., "lack of connection", "lack of intimacy"). This category addresses an appetitive quality of the relationship, namely intimacy (Gable & Reis, 2001). Another category was *not talking*. Approximately 20% of the dating and the married sample mentioned not talking ("nothing to talk about", "lack of communication", "lack of conversation"). Finally, participants indicated that boredom signifies *not wanting to be with partner*. In a sense, people associate boredom with avoiding spending time with their partners and not addressing the issue. Items that fit this description include: "not wanting to spend time with partner", "rather spend time with other friends", "not wanting to be with partner",

"avoid partner" (16.16% of the dating population listed items related to this feature vs. 7.3% of the community).

Appetitiveness and Aversiveness

There is disagreement as to whether boredom constitutes an appetitive or aversive process. Gable and Reis (2001) conceptualize boredom as an appetitive process and I wanted to confirm this conceptualization using laypeople conceptions. Two independent coders, who were blind to the research hypotheses, classified the features listed by both samples as appetitive or aversive. They were provided with a diagram of Gable and Reis's (2001) framework with the anchors of flourishing (high) and stagnant (low) for the appetitive dimension, and sanctuary (low) and insecurity (high) for the aversive dimension. Appetitiveness was described as characterized by positive affect, or positive affect states, growth and change, and approach of rewards. Aversiveness was defined as negative affect, or negative affective states, security, and avoidance of pain. Each feature was coded as either appetitive or aversive and whether it fell on the high or low end of each dimension. Features that did not fit that classification were classified as uncodable. There was satisfactory intercoder agreement (77.9%) for the appetitive and aversive classifications. Disagreements were resolved through discussion.

No features were considered high in appetitiveness—all that were identified as appetitive were classified as low. Importantly almost three quarters of the features (71%) were classified as low appetitive and many of these were among the most frequently listed (e.g., "no longer exciting"; "loss of romance"; "no spark"; "no more surprises"; "lack of fun"; "lack of intimacy"). In contrast, relatively few of the listed

features suggested the presence of aversiveness (14%). Aversive features included "annoyed", "want to end the relationship", "feel trapped", "feels like a chore", and "stuck in a rut and can't pull away". Thus, there was support for the idea that for laypeople, boredom represents a lack of appetitiveness rather than the presence of negativity or aversiveness.[4]

Summary of prototype findings

Consistent with studies of prototypes of other relationship constructs, participants listed a variety of features that characterize the boredom experience in romantic relationships (e.g., affect, behaviours, relationship states, partner characteristics). Furthermore, many of the characteristics identified in the literature were represented in the prototype, at least to some degree. Of more importance for the prototype conceptualization, was highlighting the characteristics that frequently came to mind to the participants. The results suggest that boredom is perceived as a relationship state that entails low appetitiveness (as defined in terms of positive affect, growth and approach motivation). For instance, people frequently indicated that boredom represents a lack of novelty, lack of high arousal positive states, lack of togetherness, and not capturing the full attention of an individual. To a much lesser extent, the prototype involved aversiveness (e.g., "annoyed", "feel stuck in a rut and can't pull away", "want to end the relationship") and apathy (e.g., "feeling nothing", "lack of motivation"). While some of the most frequently-listed features represent themes that are central to the self-expansion model, there were also additional features that have not directly been accounted for in this model, such as not capturing the individual's full attention, not talking, not wanting to spend time with partner, and not feeling "togetherness".

Comparison of the Dating and Married Samples

It was important to examine whether the boredom features I identified using an Introductory Psychology pool of dating individuals would be replicated by a community sample of married participants. Fehr (2004) found few age differences in intimacy interaction patterns generated by Introductory Psychology students and an older, community sample. The items listed were very similar and their frequencies were highly correlated. Fehr (2004) stated, "Age related nuances generally were confined to the examples that participants provided to illustrate patterns of relating" (p. 272). Thus, in the present study, the two samples were not expected to differ in terms of features generated for relational boredom. However, given that the measure of relational boredom was intended to assess boredom in long-term marital relationships, it was important to examine whether the features and the frequencies with which they were generated were similar.

The dating sample generated 60 features of boredom and the married community sample generated 35 (see Table 1c for a comparison). I conducted a Spearman's rho correlation (a nonparametric, rank order correlation) between the two samples, $\rho = .27$, $p = .02$. For this analysis, I included the 69 features that overlapped between the two samples. In some instances, an idiosyncratic response in one sample was a feature (i.e., listed by two or more participants) in the other sample. Although idiosyncratic responses were not included in the tables, they were part of the calculations if they were a coded feature in the other sample. Although there was a positive, significant relationship, suggesting that the two samples rank the features of relational boredom similarly, the correlation was weak. Of greater consequence for

scale construction, the items listed with the greatest frequency were highly similar across the two samples. (A prototype-based scale construction entails selecting the most prototypical items.) When a rank order correlation was performed with the top 30 items listed by both samples, the rank order correlation increased, $\rho = .68$, $p < .001$, and increased further when the top 15 items were assessed, $\rho = .79$, $p < .001$. Agreement on the prototypical items was judged to be more important than whether the entire prototype matched up.

Thus, Introductory Psychology students in dating relationships and married individuals from the community generated features of boredom that were more similar than not, especially the most frequently listed features. I further explored the similarity of the prototypes for both samples in the next step of the prototype process, namely rating the centrality of the features.

Study 2a: Centrality Ratings of the Relational Boredom Features

The goal of Study 2a was to obtain centrality ratings of the features of boredom identified in Study 1 with a university sample of dating individuals and a married sample. Centrality ratings, otherwise known as prototypicality ratings, involve a new sample of participants rating each of the features (generated in Study 1) for how characteristic it is of the construct in question, in this case relational boredom. Just as some features were listed more frequently than others, it was expected that certain features would be rated as more central than others (with the hope that the more frequently listed would also be rated as more central). In Study 1, the low appetitive features, particularly lack of high arousal positive states, low novelty, were rated most frequently and, so, too were expected to be rated as more central. As well, the aversive

and apathy features were expected to be more peripheral. The centrality ratings of features generated by the two samples (an Introductory Psychology sample as well as a community sample of married individuals) were compared to assess whether there was agreement on the core elements of boredom.

In addition to assessing the centrality ratings for the dating and married samples, I wanted to measure whether both samples were similar in terms of the level of positive and negative affect in the relationship, the level of satisfaction, and individual differences in the tendency to experience boredom. These variables were expected to be important variables in the experience of boredom and if there were significant differences between the two samples I wanted to be able to explore possible reasons for the differences.

Method

Participants

As with Study 1, there were two sets of participants, dating and married individuals. They will be described separately.

Dating sample. Individuals in dating relationships ($N = 108$; 63 women, 45 men) were recruited to participate in a study on "Judgments of Relationship Words" conducted at the University of Manitoba and the University of Winnipeg. In terms of relationship status, 73 participants reported they were seriously dating, 30 were casually dating, four were cohabitating, and one was married. Given that boredom is most likely to be an issue in long-term relationships, I excluded all individuals who were not seriously dating.[5] Data from the one married participant and the four cohabitors were excluded because the questionnaire focused on dating relationships, leaving a final

sample of 73 participants. The average age of the final sample was 20.47 years, ranging from 18 to 42 years of age. Mean relationship duration was 2.18 years (ranging from 1 month to 6 years).[6] English was the first language of the majority for the participants (98.6%). The one participant who did not report English as a first language had spoken English for 14 years. It was judged that this was a sufficient amount of time to become fluent in English. Therefore, this participant's data were retained.

Married participants. Married individuals were enlisted from Continuing Education classes at the University of Manitoba for a study on "Judgments of Relationship Words". Potential participants were recruited during a class break and were informed that they would be entered in a draw for coffee and movie gift certificates in exchange for their participation. A total of 107 participants completed the questionnaire. All but seven participants indicated being in a marital relationship. The seven participants who did not indicate being in a marital relationship were excluded from analysis because the instructions centered on marital relationships. This left a final sample of 100 individuals. The average age of the participants was 45.99 years, ranging from 26 to 60 years. The participants reported being married an average of 19.78 years, ranging from 5 months to 37 years. (Only 3 participants reported being married for less than a year). The majority reported having at least one child (95.9%), with an average of 2.55 children (range 1 to 5 children). The average age of the children was 20.2 years, with a range of 3 to 36 years. Most participants reported that English was their first language (87%). The 13 participants who indicated speaking English as a second language reported speaking English for an average of 32.54 years (ranging from 15 to 50 years). Thus, their data were retained.

Procedure

The 69 features (generated by the dating and married samples in Study 1), were randomly divided into two groups (in order to reduce response fatigue). Thus, each participant rated either 34 or 35 features of boredom. The participants were provided with the instructions:

> This study has to do with features of boredom in marital (dating) relationships. We are interested in which experiences, feelings, features are characteristic of boredom in marital (dating) relationships. On the following page, is a list of things that you may feel or experience when you are bored in a marital (dating) relationship. If you are not currently in or have never been in a marital (dating) relationship, just imagine how it would feel if you were bored in your marital (dating) relationship. We would like you to rate how characteristic each item is of boredom in marital relationships. Don't worry about why you think something is or isn't characteristic of boredom in marital (dating) relationships, just give us your opinion. Rate each item on a scale of 1 - 8, where 1= not at all characteristic of boredom in marital (dating) relationships and 8= extremely characteristic of boredom in marital (dating) relationships.

As well, participants completed measures of boredom frequency (one-item measure designed for this study), relationship satisfaction (Hendrick, 1988), boredom proneness (Farmer & Sundberg, 1986), and positive and negative affect in the relationship (PANAS, Watson, Clark & Tellegen, 1988).

Results and Discussion

Dating Sample

Means were calculated for the total set of 69 features of relational boredom. The sample of dating participants had a mean score of 5.36 (SD = .72), on the 8- point scale, with ratings ranging from 2.59 to 6.44 (see Table 2a). This was judged to be a sufficient range of ratings to conclude that some features were regarded as more prototypical than others. The 10 most central features of boredom for this sample were: "lack of interest in partner", "no longer exciting", "no spark", "feels like a chore", "sick and tired of partner", "lack of fun", "loss of romance", "want to end the relationship", "don't want to spend time with partner", and "dull". The least central features (rated below the midpoint of the scale) were: "too similar to each other", "know everything about partner", and "things feel too comfortable". In general, the top half of the features were predominantly low appetitive features.

Gender differences. A univariate analysis with the mean of the 69 boredom features was conducted with gender as the fixed factor. The gender difference was not significant, $F(1, 73) = 1.57, p = 22$. Thus, men and women in dating relationships did not differ significantly in terms of their centrality ratings.

Correlation between frequency and prototypicality. Rosch (1973) suggested that prototypical cases are most likely to come to mind. Therefore, researchers routinely correlate frequency of listing with prototypicality. These correlations are typically low, most likely because prototype generation taps recall, whereas centrality ratings taps recognition. An additional reason the correlations are low is that one measure contains the percentage of individuals who listed the item and the other measure consists of the mean rating of individuals. There was a significant, positive rank correlation between the frequency of generation in Study 1 and the prototype ratings of Study 2 ($\rho = .26, p =$

.04). Thus, there was some consistency between the two studies, whether the features were recalled (Study 1) or recognized (Study 2).

Married Sample

The sample of married participants had a mean score of 4.89 (SD = .69), with ratings that were comparable in range to that of the dating sample, from 3.13 to 6.24 (see Table 2b). The 10 most central features were: "lack of interest in partner", "no spark", "feels like you want change", "not sharing feelings with partner", "loss of romance", "feels like a chore", "sick and tired of partner", "feeling unfulfilled", "no longer exciting" and "lack of conversation". As with the dating sample, the top rated features represent low appetitiveness. The least central items (rated below the midpoint of the scale) were: "too similar to each other", "spend too much time together", "know everything about partner", "things feel too comfortable", "partner different than you thought he or she was", "forget important dates", and "lack motivation". Importantly, an almost identical pattern of low appetitive features was found in the top half of the features in the dating sample.

Gender differences. A univariate analysis with the mean of the 69 boredom features was conducted with gender as the fixed factor. The gender difference was not significant, $F < 1$. Thus, married men and women did not differ significantly in terms of the prototypicality ratings of the features of relational boredom.

Correlation between frequency and prototypicality. There was a positive, significant relationship between the frequency with which the features were generated in Study 1 and the prototype ratings in Study 2 ($\rho = .26$, $p = .03$). Thus, there was some

evidence that the prototype structure identified with one form (i.e., recall in Study 1) also was identified using another method (i.e., recognition in Study 2).

Comparison of the Dating and Married Samples

It was important to assess whether Introductory Psychology students in dating relationships held the same prototype of relational boredom as married people in the community. Although it might be possible to create a measure of relational boredom that applies to all romantic relationships, my goal was to target married people. Therefore, it was essential that the content of the scale measuring relational boredom be applicable to married individuals, first and foremost, and, if possible, to dating individuals. If the prototypes held by these two samples were dissimilar, then scale development would proceed with only married samples. If the prototypes were judged to be similar, there would be justification for developing the measure and assessing its validity with both dating and married individuals.

Feature centrality. A univariate analysis of variance was performed with relational boredom centrality ratings as the dependent variable and with sample type and gender as the independent variables. There was a significant difference between the two samples in terms of centrality ratings. Daters rated the boredom features, overall, significantly higher ($M = 5.36$, ranging from 2.59 to 6.44) than the married individuals ($M = 4.89$, ranging from 3.13 to 6.24; $F(1, 172) = 6.03$, $p = .02$). There were no significant gender differences, $F < 1$, nor a Gender X Sample Type interaction, $Fs < 1$. The grand mean was 5.09 on a scale of 1-8, indicating that, on average, individuals tended to rate the features as more characteristic of boredom than not (see Table 2c for a side by side comparison of both samples). This is not surprising, given that

participants in Study 1 were asked to list features that they thought were characteristic of boredom.

In order to assess similarity between the samples' prototypes, I conducted rank order correlations. Even if one group rates the features higher than another group, if both the groups agree in their rank ordering of the features, it can be argued there is some agreement on the prototype. If, however, there are mean differences in centrality ratings and the groups do not agree on the rank order of the features (e.g., features that are rated as high in typicality by one group are rated low by the other), then one would have to conclude that the prototypes are dissimilar. A Spearman's rho rank order correlation between the two samples revealed a strong, positive relationship ($\rho = .75$, $p < .001$). Thus, although the two samples differed in terms of the level of centrality ratings, with student daters rating the features higher than married individuals, the samples showed high agreement in terms of the rank ordering of the features of relational boredom.

Analyses of Sample and Gender Differences in Other Study Variables

I assessed whether there were any differences between the two samples in terms of frequency of boredom, satisfaction, boredom proneness, and positive and negative affect.

Frequency of boredom. A univariate test with sample type (dating vs. married people) and gender as independent variables, and frequency of boredom as the dependent variable, was performed. The overall score was 2.55 on a scale of 1 to7, where 1=never bored and 7= frequently bored. Thus, the average frequency of boredom reported fell below the mid-point of the scale, suggesting that boredom may be a low

frequency experience. Alternatively people may feel that they have to report low levels of boredom for social desirability reasons, given the face valid question. There were no significant Sample ($F(1, 170) = 1.09$, $p = .30$), Gender ($F < 1$), nor Sample X Gender interaction ($F < 1$).

Satisfaction level. There were no significant differences in satisfaction scores across samples (Dating: $M = 4.15$; Married: $M = 4.25$; $F < 1$), Gender (Women: $M = 4.26$, Men: $M = 4.13$; $F(1, 170) = 1.72$, $p = .19$), nor a Sample X Gender interaction (F < 1). The mean satisfaction level was 4.21 on a scale of 1 to 5, indicating that, overall, both samples were very satisfied.

Boredom proneness. The mean boredom proneness score was 89.30 on a scale ranging from 28 to196, indicating that, on average, the samples tended to be less, rather than more, prone to boredom (midpoint is 98). A univariate analysis was performed with boredom proneness as the dependent variable and sample and gender as the independent variables. There was a significant difference in boredom proneness for sample (Dating: $M = 95.60$; Married: $M = 85.08$; F (1, 145) =.10.47, $p = .002$), Gender (Women: $M = 85.98$; Men: $M = 94.70$; $F(1, 145) = 7.18$, $p = .008$), but the Sample X Gender interaction was not significant $F< 1$. Individuals in dating relationships reported greater boredom proneness than did married individuals. It is important to note that the mean levels for both samples fell below the midpoint of the scale, suggesting that neither sample was particularly boredom prone. Furthermore, consistent with gender differences reported in the literature (e.g., Farmer & Sundberg, 1986), men reported being more prone to boredom than did women. Thus, even though men tended to report

being more prone to boredom in general, they did not report greater frequency of boredom in their relationship than did women.[7]

Positive and negative affect. A univariate analysis was performed with positive affect as the dependent variable and sample and gender as the independent variables. There were no significant differences in positive affect for Sample (Dating: $M = 3.39$; Married: $M = 3.43$, $F<1$), Gender (Women: M = 3.37; Men: $M = 3.45$, $F<1$), nor was there a Sample X Gender interaction ($F(1, 152) = 1.14$, $p = .29$). A univariate analysis was also performed with negative affect as the dependent variable and sample and gender as the independent variables. Once again, there were no significant differences in negative affect for sample (Dating: $M = 1.78$; Married: $M = 1.59$, $F(1, 154) = 2.71$, $p = .10$), Gender (Women: $M = 1.61$; Men: $M = 1.76$, $F(1, 154) = 1.67$, $p = .20$), nor was the Sample X Gender significant, $F<1$.

Summary of Studies 1 and 2

There did not appear to be differences between samples on variables that might be associated with relational boredom. Of greater importance, a core meaning or essence of relational boredom emerged and this meaning did not differ depending on whether an individual was in a dating or marital relationship. The core theme that emerged in Study 1 and was replicated in large part in Study 2 was that relational boredom represents an absence of appetitiveness. This took the form of lack of novelty, lack of high arousal positive states, not having one's attention captured by the relationship or partner, and lack of "togetherness". There were two other central categories that appeared to be blends of the themes identified in the literature (i.e., not talking and not wanting to spend time with partner). Their sole appetitive

characterization was less clear as they could also be construed as low aversiveness. Less characteristic were the themes of aversiveness and a total lack of all affect and motivation. To understand a construct it is also important to understand what is not central to it. For the relational boredom prototype, the personality of the partners (e.g., "too similar", "nothing in common", "incompatible interests"), time (e.g., the "amount of time spent together"), feeling at ease (e.g., "feeling too comfortable"), predictability (e.g., "predictable") or, familiarity with partner (e.g., "know too much about partner") were rated as peripheral to the meaning of boredom. Importantly, there was little evidence in either Study 1 or Study 2 that boredom is conceptualized as an aversive process.

Study 2b: Scale Development

In Study 1, the prototype for relational boredom was generated by having samples of university daters and married individuals from the community list features of relational boredom. In Study 2a, participants rated how characteristic those features were of relational boredom. The goal in Study 2b was to construct a relational boredom scale based on the findings from Studies 1 and 2a.

Item Selection

The first step in scale development was to select items from the prototype (69 features in total) to be included in the scale. There are various ways to construct a scale (e.g., factor analytic, top-down, empirical; see Broughton, 1984, for a discussion). I selected a bottom-up, prototype approach. In this approach, the most central or prototypical features are included in a measure. In other words, scale construction is based on the features that people think are most representative of the construct in

question.[8] Thirty items were selected to represent the top ranked features for both samples, with an emphasis on those rated highest by the married sample. Fortunately, there was nearly perfect overlap in the top 25 items between both samples. Three items that were not in the top 25 for the dating sample but were for the married sample were: "lack of connection between partners", "full of surprises", and "not sharing feelings with partner". An additional five items were drawn from the features ranked 26 to 30 in the married sample (i.e., "routine", "not stimulating", "feelings are not intense as they used to be", "not spending enough quality time together", and "lack of variety"; see Table 3).[9] This scale was intended for use with married individuals. Therefore, it was important that features that received high prototypicality ratings in the married sample, but may not have been in the dating sample, would be given priority. There were several other considerations in selecting features to be included in the scale. I wanted to include a manageable number of items to avoid response fatigue (69 features--the full prototype-- was judged to be too many ratings for participants). However, in order to ensure that the prototype was adequately sampled, it was also important to not exclude too many items. Thus, the 30 items selected represent the top ranked features for both samples, with an emphasis on those rated highest by the married sample. Consequently, a 30 item scale was developed, hereafter referred to as the Relational Boredom Scale (RBS).

Scale Format

I did not want to contextualize the features in a way that might inadvertently change their meaning. Therefore, the features were taken verbatim from the Study 1 responses in order to accurately reflect laypeople's conceptions. It was assumed that

relational boredom is best represented as an ongoing experience, rather than a discrete, momentary state. Therefore, I created a response scale in which participants would rate the 30 features in terms of "how true" rather than "how frequent". At this early stage of scale construction I wanted to retain the exact wording used by participants. Participants were provided with the following instructions: [10]

> Please respond to the following statements in terms of how well each characterizes your relationship with your dating partner/marital partner. Write the number in the space provided using the following scale, where 1= not at all true and 7 = completely true.

Participants were then prompted with the question: "How well does each statement characterize your relationship with your dating/ marital partner?" Below this question, the 30 features were presented in random order.

Reversal of items. In order to avoid response bias, half of the items were worded in the reverse (Frei & Shaver, 2002; see Table 4). Items were not chosen for reversal if doing so altered their meaning. For instance, the features "sick and tired of your partner" and "feel nothing" could not be easily reversed. Items that would be double negatives also were not selected for reversal. On the other hand, items such as "full of variety" ("lacks variety"), "lots of fun" ("no fun"), "exciting" ("not exciting") seemed to lend themselves to reversal. In order to ensure that the reversed items did not differ from the non-reversed items, a sample of participants also rated the non-reversed items, so that the two sets of ratings, and their underlying structure, could be compared. With the development of the scale complete, the next step was to examine its psychometric properties, including the reliability and validity.

Study 3: Assessment of Psychometric Properties of the Relational Boredom Scale

The purpose of Study 3 was to examine the psychometric properties of the Relational Boredom Scale, including the factor structure, reliability, as well as convergent, discriminant, and criterion validity. In addition, individual differences in the experience of relational boredom were explored. There was evidence in Study 2a that the prototype of boredom held by dating and married individuals was similar. Thus, it seemed justifiable to use a sample of Introductory Psychology students who were romantically involved to initially assess the properties of the scale.

Hypotheses

Factor Structure

RQ1: Relational boredom was not expected to be unidimensional. Although an exploratory factor analysis was conducted, I expected that the factors would reflect the common themes identified in the boredom prototype, including: lack of novelty, lack of high arousal, positive affective states, inadequate attention captured by relationship or partner, lack of togetherness, not talking, and not wanting to spend time with partner.

Validity Hypotheses Overview

In terms of assessing the validity of the relational boredom measure, it was important to situate it in a meaningful nomological net. Support for the validity of the Relational Boredom Scale was obtained by examining its links with variables that share similar characteristics including: a face valid measure (boredom frequency), low appetitiveness (i.e., low positive affect and low autonomous motivation), low arousal

level, dissatisfying states, and low interest in partner and the relationship. Positive correlations with these variables would constitute evidence of convergent validity.

According to Campbell and Fiske (1959), in order to demonstrate construct validity, one must not only establish that the scale correlates with other theoretically relevant variables (i.e., convergent validity), but also that it does not correlate with measures from which it should differ. It was important to demonstrate that relational boredom was not simply a function of socially desirable responding. Another way to demonstrate discriminant validity is to examine the predictive power of the target construct relative to other related constructs. A construct related to boredom is the level of conflict in the relationship. In fact, boredom is often swept into the general category of relational conflict and challenges. One of the purposes of the present study was to demonstrate that boredom is different from general conflict—it is an appetitive processes that is independent from aversive processes in a relationship. As well, I intended to demonstrate that boredom is unique from other low arousal, low pleasure affective states by demonstrating a stronger pattern of relations with appetitive variables.

Finally, part of validating the scale involves examining the unique power of boredom in predicting relationship quality (criterion or predictive validity). As an initial test of criterion validity, I measured how well relational boredom predicted relational satisfaction. I also assessed whether boredom uniquely predicted satisfaction after controlling for other relationship and individual difference variables.

Convergent Validity: Face Validity

H1: Higher scores on the Relational Boredom scale would be associated with a greater frequency of reported boredom in the relationship.

Convergent Validity: Appetitive Variables

The main appetitive variables of interest were state and trait appetitive motivation, positive affect, and passionate love. These variables covered divergent aspects of low appetitiveness, including intrinsic motivation, positive affect states, and interest in partner.

H2: Given the conceptualization of relational boredom as a low appetitive state, negative relations were expected between boredom and appetitive, motivational qualities of relationships as well as individual differences in motivational orientation. More specifically, it was predicted that being in a relationship for less intrinsic and autonomous reasons would be linked with greater boredom (Hypothesis 2a). Furthermore, individuals who have a predisposition to view relationship maintenance as an appetitive process were expected to have lower scores on the Relational Boredom Scale (Hypothesis 2b). Previous research has found that individuals with greater growth beliefs are more likely to use constructive coping techniques in the face of relationship challenges (compared to individuals with greater destiny beliefs; Knee et al., 2002). This tendency was expected to be associated with reduced boredom.[11]

H3: Central to my conceptualization of boredom as a low appetitive state, a strong, negative correlation between relational boredom and positive affect was predicted. As will be discussed shortly, I expected this relation to be stronger for positive affect than negative affect.

H4: I predicted that boredom would be negatively correlated with passionate love. Passionate love is defined as "a state of high arousal filled with the ecstasy of being loved by the partner and the agony of being rejected" (Brehm, 1992, p. 98). I did not expect bored individuals to be passionately in love because boredom has been defined by several researchers as a low-arousal state (see Mikulas & Vodanovich, 1993, for a review). It has also been associated with a lack of interest in the partner (Farmer & Sundberg, 1986).

Convergent Validity: Predictions for Aversive Relationship Variables

It was expected that boredom also would be positively related to negative relationship states (as identified in the boredom literature; see Mikulas & Vodanovich, 1993). More specifically, it was predicted that boredom would be correlated with general dissatisfying states in the relationship in the form of conflict, negative relationship affect, and jealousy. As well, given the expected low arousal nature of boredom, it was predicted that other low arousal, dissatisfying states, such as depression and loneliness, would also be related to boredom. Importantly, the correlations between boredom and the aversive variables were expected to be of lower magnitude than those between boredom and the appetitive variables.

H5 and H6: Increased relational boredom was expected to be moderately associated with increased negative affect in the relationship (H5) and conflict (H6).

H7: I expected a moderate, positive correlation between relational boredom and other low arousal, low pleasure emotions, namely loneliness and depression.

H8: I predicted that jealousy, a high arousal, negative state characterized by a preoccupation with one's partner, would be negatively related to relational boredom (given that boredom is characterized as a low arousal state).

Discriminant Validity Hypotheses

H9: I expected that scores on the Relational Boredom Scale would not be a function of tendencies to present oneself in a favourable light. In other words, scores on a social desirability scale should be unrelated to scores on the Relational Boredom Scale.

H10: I predicted that relational boredom would show a unique pattern of correlations—different than conflict--particularly with the appetitive variables, and reports of boredom frequency. If correlations with the predicted variables were more robust for relational boredom than conflict, a stronger case could be made that relational boredom is a unique challenge, and should not be considered synonymous with general aversive processes. This hypothesis was assessed by comparing the strength of the correlations with the appetitive and aversive variables listed in the convergent validity section. As well, analyses were conducted controlling for conflict to determine whether boredom uniquely predicted the hypothesized associations with appetitive variables.

H11: In addition to distinguishing boredom from a low pleasure, aversive state, namely conflict, I predicted that boredom would differ from other low arousal, low pleasure emotion states. In Russell's (1980) affect grid, boredom, loneliness, and depression are classified as low arousal, low pleasure emotions. This broad classification ignores the potential differences between those emotions. Specifically, I

hypothesized that boredom would be more strongly related than depression and loneliness to low appetitiveness. This hypothesis was assessed by comparing correlations with the appetitive and aversive variables listed in the convergent validity section for boredom and loneliness, as well as boredom and depression.[12]

Criterion Validity

H12 a. It was hypothesized that individuals who reported being more bored in their relationship would report being less satisfied.

H12 b. I expected this relation to hold even when controlling for a host of individual difference, relationship, and affective variables.

Individual Differences

RQ2: Gender differences in relational boredom were explored. The literature suggests rather conflicting predictions regarding gender differences in the experience of boredom in relationships. For instance, several researchers have found that women engage in greater relationship monitoring (Acitelli, 1992; Cate, Koval, Lloyd , & Wilson, 1995) and, therefore, it could be argued that women may be more likely to notice the onset of boredom. It has also been suggested that women may have "an advantage over men in meeting their partner's relational standards" due to increased communication skills, thereby creating a "relational context in which men's standards are more likely to be met than women's" (Vangelisti & Daly, 1997, p. 214). In other words, women may be more vulnerable to feeling disappointed or "let down" in a relationship. On the other hand, there are also reasons why one might predict that men would be more likely to experience relationship boredom. For example, men generally score higher on individual difference measures of boredom proneness (Vodanovich,

Wallace, & Kass, 2005). Furthermore, according to evolutionary theory, men are motivated to seek out multiple partners to ensure the survival of their genes, whereas women are more likely to invest in a long-term mate (Buss & Schmitt, 1993). Men's greater proclivity to "play the field" might result in greater boredom with a current romantic partner. To further complicate matters, Aron and Henkemeyer (1995) did not find any gender differences when they assessed relational boredom (using a single item). In short, it was unclear whether there would be gender differences in the experience of boredom. Thus, gender differences were examined on an exploratory basis

H13: It was hypothesized that trait boredom (i.e., boredom proneness scores) would be positively and moderately related to scores on the Relational Boredom Scale. Given that boredom proneness has been found to permeate numerous facets of an individual's life, including academic and work performance (Kass, Vodanovich, Stanny, & Taylor, 2001) and interpersonal relationships (Watt & Vodanovich, 1999; Watt & Ewing, 1996), it was expected that individuals with a predisposition for boredom would also feel bored in their romantic relationships.

H14: Avoidant attachment has been associated with a tendency to restrict emotionality (Bartholomew & Horowitz, 1991). In addition, researchers have found that individuals low in comfort with closeness (related to avoidant attachment) are more likely to suppress negative emotions (Feeney, 1995; Simpson et al., 1992). Presumably, this emotional control is based on the avoidant individual's belief that his or her partner will not be responsive (Hazan & Shaver, 1994). Generally, attachment style differences are examined under conditions in which attachment systems are most likely to be

activated, such as times of conflict. However, it is well established that avoidant individuals have a tendency to repress emotions outside of the conflict domain. For instance, Carvallo and Gabriel (2006) found that dismissive avoidant individuals reported "less positive affect and state self-esteem after learning that other participants accepted them" (p. 697). Mikulincer and Elka (2000) found that avoidant individuals reacted similarly to positive and neutral affect. Hence, avoidant individuals may be more prone to boredom because they are not open to experiencing emotions and engaging in couple activities that combat boredom.

In contrast, a weak or absent relation was predicted between boredom and the anxiety dimension of attachment behaviour because individuals who are more anxiously attached might be more concerned with the security in their relationship than with the experience of boredom. Consistent with researchers who conceptualize appetitive and aversive processes as independent dimensions, I predicted that an individual who has a tendency to focus on the presence of aversiveness would be less concerned with appetitive processes. Alternatively, given that individuals with more insecure attachment tend to experience more negative relationship states in general in their relationships, it was possible that the anxiety dimension would be positively related to boredom (Simpson et al., 1996, Mikulas & Florian, 1992).[13] Thus, this variable was also examined on an exploratory basis

Method

Participants

Introductory Psychology students ($N = 297$; 216 females, 72 males, 9 undisclosed) at the University of Manitoba and University of Winnipeg[14], who were

currently in a dating relationship, were recruited for a "Relationship Experiences Study" in exchange for course credit. The original sample consisted of 297 participants. I excluded participants who were not dating ($N = 3$), who were casually dating ($N = 37$), and other ($N = 7$), leaving a sample of $N = 245$ (180 women, 62 men, 3 undisclosed). The mean age of participants was $M = 20.88$ years, ranging from 18 to 62 years. In terms of relationship status, the majority of participants were "seriously dating" ($N = 200$). The remaining participants were engaged ($N = 7$), cohabitating ($N = 26$), and married ($N = 12$). The average duration of these relationships was of 28.47 months, ranging from 1 to 462 months. The majority of participants spoke English as a first language (88.10 %). The remaining 29 participants reported speaking English for a sufficient amount of time to ensure comprehension and fluency ($M = 10.74$ years, range 2 to 33 years). The majority of participants were in a heterosexual relationship ($N = 233$); eight participants indicated being in a same-sex relationship. Four participants did not report their partner's gender.

Materials and Procedures

Participants were asked to fill out a battery of questionnaires. The scales were presented in the following order: Part 1: Relationship properties, Part 2: Individual differences, and, then, Part 3: Demographic variables.[15]

Boredom. Participants filled out the 30-item Relational Boredom Scale. The frequency of boredom was assessed with a one-item measure created for this research ("How frequently do you feel bored in your relationship?"; on a scale of 1 = never to 7 = all the time).

Appetitive variables: Convergent validity. Participants completed a measure of state autonomous relational motivation (Romantic Self-Regulation Questionnaire; Ryan & Connell, 1989). The Romantic Self-Regulation scale is designed to assess a person's primary and predominant motivation for being in a particular relationship (in the present case, a serious dating relationship). It is based on self-determination theory (Deci & Ryan, 1985), an appetitive-type theory. Individuals who have more choice or autonomy in their life are considered more self-determined. There are four different points along a continuum, ranging from controlled to self-determined/autonomous: external regulation, introjected regulation, identified regulation, and integrated regulation (as well as an overall Relative Autonomy Index, RAI). As well, participants completed a measure of trait autonomous motivation (Destiny-Growth Beliefs, Knee; 1998) which is an extension of self-determination theory in the context of relationships. Positive affect (PANAS; Watson, Clark, & Tellegen, 1988) and passionate love (Passionate Love Scale; Hatfield & Rapson, 1987) also were assessed.

Aversive variables: Convergent Validity. The measures to assess aversiveness consisted of negative affect (PANAS; Watson, Clark, & Tellegen, 1988); relational conflict (Braiker & Kelley, 1979); loneliness (UCLA Loneliness Scale; Russell, Peplau, & Cutrona, 1980); depression (Beck Depression Inventory; Beck & Beamesderfer, 1974) and jealousy (cognitive component of Multidimensional Jealousy Scale, Pfeiffer & Wong, 1989).[16]

Discriminant validity measures. In order to assess discriminant validity, participants completed a measure of social desirability (Balanced Inventory of Desirable Responding; Pauhlus, 1991).

Criterion Validity. The Relationship Assessment Scale (Hendrick, 1988) was selected as a measure of relational satisfaction. It is a global measure of satisfaction not tied to specific satisfaction of needs.

Individual Differences. Measures of individual differences in boredom (Boredom Proneness scale; Farmer & Sundberg, 1986) and attachment style (Experiences in Close Relationships, Revised; Brennan, Clark & Shaver, 1998) also were administered.

Finally, participants completed a brief demographic questionnaire, which assessed gender, age, relationship status, relationship length, gender of romantic partner, ethnicity, English as a first language, and length of time English was spoken (if English was not their first language). [17]

Results and Discussion

First, I present the basic scale data, including the overall mean, descriptive statistics for individual items, and assessment of multivariate normality. In the remaining sections, the factor structure, internal consistency, validity, and individual differences are discussed.

Basic Scale Data

The mean of the Relational Boredom Scale was $M = 2.52$ ($SD = .87$) on a scale where 1 = not at all true and 7 = completely true (range = 1.07 to 5.27). Thus, people were not reporting high levels of boredom (the mean fell below the mid-point of scale).[18] There were, however, participants who reported moderate levels of boredom (i.e., who scored above the midpoint of the scale. The means and standard deviations for the individual items are reported in Table 5a.[19] I screened the Relational Boredom

Scale items for normality using the following statistical methods; skewness (i.e., symmetry of the distribution) and kurtosis (i.e., peakedness of the distribution). The skewness ranged from .04 to 4.62 (standard error of skewness = .16; see Table 5a). I tested whether the skewness values differed significantly from zero using the z distribution (Tabachnick & Fidell, 2001). The majority of items were positively skewed and differed significantly from zero (with the exception of, "full of surprises", "always something new happening", "things are not repetitive"; see Table 5a). In general, the reverse-worded items were less skewed than the non reverse-worded items. The kurtosis ranged from .32 to 23.46 (standard error of kurtosis = .31; see Table 5a).[20] The results indicated that the distributions were too peaked for the majority of items, and differed significantly from zero suggesting a non-normal distribution (with the exception of "spark"; see Table 5a). Again, the non-reversed items had higher kurtosis coefficients than the reversed ones (see Table 5a). In order to address the issue of positive skewness, kurtosis, and outliers, transformations on the individual items were made to improve the normality of data. Following the recommendations of Tabachnick and Fidell (2007), square root and log10 transformations were made for the positively skewed variables. I selected the transformation that resulted in the greatest improvement on multivariate normality. I assessed the basic scale data with both the transformed and non-transformed items to make certain that the skewness and kurtosis of the items did not have an impact on the analyses.

Factor Structure

The content of the Relational Boredom Scale was further explicated by examining its factor structure. A principal components analysis using varimax rotation

was used to assess the latent structure.[21] My intention with this exploratory factor analysis was to provide a summary of the items, in which case Tabachnick and Fidell (1988) recommend principal components analysis. In accordance with general practise, a number of decision rules were used to select the factors including: 1) parallel analysis, 2) analysis of the scree plot and, 3) eigenvalue greater than one.

A parallel analysis was conducted to examine the upper factor limit. Parallel analysis involves generating eigenvalues for a specified number of random data sets (in this case, 1000) containing the same number of items (i.e., 30) and participants (i.e., 245). Two factors exceeded the eigenvalues from the random data suggesting a two-factor solution. An examination of the scree plot suggested a two- to three-factor solution. Five factors were identified using the eigenvalue greater than one criteria; 11.94, 2.64, 1.44, 1.20, 1.05. Thus, a number of factors were selected ranging from two to five. As discussed next, item selection criteria helped to determine the final number of factors.

Item Selection Criteria

Following Tabachnik and Fidell's (1988) recommendations, I did not interpret variables with loadings below .32. I selected items for inclusion that Comrey and Lee (1992) classify as good, namely items with loadings above .55.[22] An additional aspect of selecting items involves a consideration of cross loadings. Items that had cross-loadings above .32 were excluded, even if they met the .55 inclusion criterion. Thus, an item had to meet the inclusion criterion (i.e., above .55) and could not have cross loadings above .32.[23]

As suggested by Tabachnick and Fidell (2001), a number of different factors (two vs. three) and rotation methods (varimax and oblique) were used to determine the most meaningful and consistent solution. A five factor model and a succession of descending number of factors from the maximum number were examined. The fourth and fifth components did not have a sufficient number of items and thus were not considered further. The two and three factor solutions are presented next.

Two-Factor Solution

Using principle components analysis with varimax rotation, a two factor solution (based on the parallel analysis) accounted for 47.61 % of the variance. The first factor had an eigenvalue of 11.94, and the second factor had an eigenvalue of 2.64 (see Table 6a). The first factor was labelled *disengagement from the relationship*. The items that met the criteria included: "not satisfied", "sick and tired of partner", "lack of connection", "feels like you want change", "dull", "feels like a chore", "feel unfulfilled", "feels like you don't want to spend time with your partner", "feel nothing", "not sharing feelings", "lack of intimacy", and "lack of conversation". The second factor reflected a *lack of self-expansion*. The items were "exciting" (R), "always something new happening" (R), "full of variety" (R), "thrilling" (R), "full of romance" (R), "full of passion" (R), "full of surprise" (R), and "sex is exciting" (R).[24]

Three-Factor Solution

Using Principle Components analysis with a varimax rotation method, a three factor solution accounted for 52.26 % of the variance. The first factor had an eigenvalue of 11.94, the second of 2.64, and the third of 1.44 (see Table 6b). The first factor represented a *lack of self-expansion*. The items were: "always something new

happening" (R), "exciting" (R), "full of romance" (R), "full of variety", "thrilling" (R), (R), "full of surprises" (R), and "sex is exciting" (R). The second factor was a *lack of emotional connection*. The items included: "not sharing feelings with each other", "lack of connection between each other", "lack of conversation", and "lack of intimacy". The third factor was labelled *disengagement from the relationship*. The items that met the criteria included: "sick and tired of partner", "rather spend time with others", "feels like you don't want to spend time with your partner", "dull", and "feel nothing".[25]

Factor Analysis with Non Reverse-Worded Boredom Items

I also conducted a factor analysis that contained all 30 of the original items using a two factor model that accounted for 53.27% of the variance. Comparing the factor analyses containing the reversed or non reverse-worded items allowed me to determine whether it was the content of the items that was driving the factors or method error (i.e., reversed worded vs. non reverse-worded items). The first factor had an eigenvalue of 14.21 and the second of 1.77. Similar factors emerged. The items that met the criteria for the first factor, which represented a *lack of self-expansion*, were: "nothing new", "lack of variety", "not stimulating", "no surprises", "no thrill", "not exciting", "repetitive", "little passion", "feelings not intense as they used to be", "loss of romance", and "sex is not exciting". The second factor manifested *disengagement from the relationship*, albeit a more emotionally-focused disengagement than when you include the reversed items. The items included: "feels like a chore", "dull", "sick and tired of your partner", "feel nothing", "lack connection between each other", and "take each other for granted". Thus, regardless of whether the items were reverse-worded, similar factors surfaced for the two-factor solution.

I also conducted a factor analysis that contained all 30 of the original (i.e., non reverse-worded) items using a three factor model that accounted for 58.32% of the variance. The first factor had an eigenvalue of 14.21, the second of 1.77, and the third of 1.51. Again, similar factors emerged. The items that met the criteria for the first factor again displayed a *lack of self expansion*; "nothing new", "lack of variety", "not stimulating", "no surprises", "no thrill", "not exciting", "repetitive", "little passion", "feelings not intense as they used to be", "loss of romance", "sex is not exciting", "feels routine", and "lack of interest in partner". The second factor reflected *disengagement* from the relationship (a more emotional type); the items included: "feels like a chore", "sick and tired of your partner", "feel nothing", and "take each other for granted". The third factor referred to a *lack of emotional connection.* The items included "not sharing feelings with each other", "lack of conversation", "lack connection between each other", and "lack of intimacy".[26]

Summary of Exploratory Factor Structure Analysis

A similar factor structure was obtained whether the original or the reversed items were used and whether the items were adjusted for skewness and kurtosis. In terms of the number of factors, several different solutions were examined. The most meaningful solutions were those that contained two or three factors. The three factors that best summarized the Relational Boredom Scale were *lack of self-expansion*, *lack of emotional connection*, and *disengagement from the relationship*. In the two factor solution, the *lack of emotional connection* and *disengagement from the relationship* factors were blended together. A more parsimonious structure, a two factor solution, was favoured at this point (namely *lack of self-expansion* and *disengagement from the*

relationship). The moderate correlation between the two factors suggests that this is not an unreasonable proposition. The *lack of self expansion* factor contained the reverse-worded items: "always something new happening", "exciting", "full of variety", "full of surprises", "full of romance", and "sex is exciting". These items display the lack of high arousal and novelty that Aron and his colleagues have focused on in the self-expansion model. It is interesting that the features were not simply all of the positively-valenced words in the scale--instead they were the positively valenced items that referred to novelty and "newness" in the relationship as well as the arousal level. These are two key properties for the self-expansion model. The second factor represented *disengagement from the relationship* and contained items such as: "lack of connection", "feels like you don't want to spend time together", "feel nothing", and "lack of conversation". These features represent a blend of the themes identified in the prototype namely, not having one's attention adequately captured by the relationship and partner, lack of togetherness, not talking, and not wanting to spend time with partner. Physically distancing oneself from the partner, not sharing emotionally or communicating, or not feeling togetherness all represent a retreat from the relationship, psychologically and physically. These two factors seem to be tapping two distinct properties of boredom, namely missing something positive and exciting in the relationship versus feeling so tired of the partner and the relationship that one emotionally and physically disengages from the relationship.

Although there was evidence that the Relational Boredom Scale is multifactorial (two to three factors), replication in other samples is required before definitive conclusions can be drawn. Thus, the remaining analyses were conducted with total

scale scores. (Correlations between the two factors and key variables in this study are presented for interested readers).

Reliability

The reliability of the Relational Boredom Scale was assessed with Cronbach's alpha. A satisfactory level was obtained, $\alpha = .94$. The item-total correlations ranged from .27 to .77 (see Table 7). The one item below .30, "spend enough quality time together" was an item specifically added from the married sample prototype. At this point of scale development, I wanted to err on the side of caution and not remove this item.[27, 28]

Initial Assessment of Validity

Correlational and multiple regression analyses were used to assess the construct validity of the scale. In Tables 8a and 8b, the descriptives for each of the variables included in this study are shown.[29] In order to describe the strength of the correlations between constructs, I adopted this standard: strong correlations > .50; moderate correlations .50 to .30; and low/weak correlations < .30 (Cohen, 1988, 1992).

Convergent Validity

Consistent with predictions, scores on the Relational Boredom Scale were positively and significantly related to a face valid measure of relational boredom, namely frequency of reported boredom (Hypothesis 1; see Table 9a). My main prediction was that relational boredom would be strongly related to appetitive variables. As expected, the scores on the Relative Autonomy Index were strongly and negatively related to boredom (Hypothesis 2a; see Table 9a). Therefore, consistent with the idea that boredom was more closely linked with the appetitive dimension of relationship

processes, relational boredom was strongly negatively related to state appetitive motivation (more autonomous-oriented motivation). In terms of trait differences, contrary to predictions, there was a weak negative correlation between growth beliefs (i.e., trait appetitive motivation) and relational boredom (Hypothesis 2b; see Table 9a). This will be addressed in the General Discussion.

Consistent with predictions, there was a strong negative correlation between boredom and positive affect (Hypothesis 3; see Table 9a). A comparison of the correlations for positive and negative affect revealed that the negative association between positive affect and relational boredom was significantly stronger than the positive association between negative affect and relational boredom; $r = .43$ vs. $-.64$, $t = 14.96$, $p < .001$.[30]

As well, boredom was negatively, moderately related to passionate love (a high arousal, positive affect state; Hypothesis 4; see Table 9a). This suggests that despite passionate love being viewed as the antithesis of relational boredom, it certainly was not the conceptual opposite. Aron and Henkemeyer (1995) found that their single item assessment of boredom had a comparable, moderate negative correlation with passionate love.

Thus, there was support for the prediction that boredom would be strongly linked with appetitive variables, although these results held only for state appetitive motivation and positive affect. Passionate love was only moderately (negatively) associated with relational boredom, and growth beliefs were weakly negatively related.

In terms of aversive variables, relational boredom was positively and moderately related to negative affect (Hypotheses 5), as well as to depression and

loneliness (Hypothesis 7; see Table 9a). While all of the above correlations were significant for these aversive variables, it must be noted that the strength of the correlations was low to moderate. As well, although there was a significant correlation between relational boredom and the cognitive component of jealousy (Hypothesis 8), it was weak. Boredom and conflict were related (Hypothesis 6) but unlike the other aversive variables it was classified as a strong relation, albeit at the low end of the strong classification (r = .55). As well, as will be discussed in the discriminant validity section, boredom and conflict predicted different patterns of variables further emphasizing that they are capturing two unique constructs. Thus, while relational boredom is linked with negative states, and low arousal negative affective states, they are not synonymous with relational boredom. This issue will be addressed further in the discriminant validity section.

Assessment of Discriminant Validity

Although there was a significant correlation between relational boredom and social desirability (Hypothesis 9), it was weak.[31] I was also interested in demonstrating that boredom explains unique variance not accounted for by general conflict. As seen in Table 9b, relations with many of the individual difference and relationship variables were similar for boredom and conflict. However, there were some notable differences that further reinforced the conceptualization of boredom as an appetitive process (unlike conflict which is conceptualized as an aversive process).[32] For instance, boredom was more strongly negatively linked with state appetitive motivational orientation than was conflict. There also was a stronger negative relation with positive affect, whereas conflict was more strongly (positively) related to negative affect than was boredom.

Similarly, passionate love showed a moderate, negative correlation with boredom but no relationship with conflict. Moreover, boredom frequency was more strongly related to boredom than was conflict.[33]

As the next step, the correlations were re-computed, controlling for conflict. As can be seen in Table 9a (column 3), many of the correlations remained significant, suggesting that conflict is not the underlying source of the relation between boredom and the other variables.

I also conducted multiple regression analyses with boredom as the dependent variable and the other variables as independent variables (see Table 9c). I conducted the same regression analyses with conflict as the dependent variable, so the two sets of results could be compared. State appetitive motivation (i.e., Relative Autonomy Index), passionate love, jealousy, positive affect, boredom frequency and conflict predicted relational boredom. In contrast, trait appetitive motivation (i.e., growth beliefs), boredom proneness, negative affect, jealousy, and boredom predicted conflict.[34] Thus, with the exception of trait appetitive motivation, decreased positive affect, passionate love, and state appetitive motivation predicted boredom, but not conflict. Conversely, negative affect predicted conflict, but not boredom. Jealousy predicted both boredom and conflict but in very different ways--jealousy predicted decreased boredom but increased conflict. The high arousal nature of jealousy is consistent with the high arousal properties of conflict, whereas boredom is generally thought of as a low arousal state.

There were a few unexpected findings. First, growth beliefs predicted increased conflict but was not significantly related to boredom. However, in the correlational

analysis, boredom was more strongly associated with growth beliefs than was conflict. Thus, controlling for all of the variables simultaneously revealed a different relationship.[35] As well, boredom proneness predicted increased conflict, but not increased boredom. Thus, boredom proneness may be linked to aversive, rather than appetitive relationship processes. Indeed in the boredom proneness literature, boredom proneness has been linked with a host of negative variables (e.g., Kass, Vodanovich, Stanny, & Taylor, 2001; Blaszczynski, McConaghy, & Frankova, 1990; Sommers & Vodanovich, 2000). Thus, being dispositionally prone to boredom does not appear to be the same as feeling bored in a relationship.

I also compared the correlations obtained for relational boredom as well as those obtained for loneliness and depression. As can be seen in Table 9b, relational boredom had a stronger relation than loneliness or depression with appetitive variables including state appetitive motivation, growth beliefs, positive affect, and passionate love.[36] Loneliness and depression exhibited higher correlations than relational boredom for: anxious attachment, jealousy, boredom proneness, and depression (the latter correlation could only be conducted for loneliness). I also ran a regression analysis with all of the validity variables as predictors and the low arousal, negative states of loneliness and depression as criterion variables (see Table 9d). Unlike boredom, loneliness was predicted by increased depression, anxious attachment, and boredom proneness.[37] Also unlike boredom, depression was predicted by anxious attachment, boredom proneness, loneliness, and negative affect.[38] Thus, relational boredom appears to be distinct from other low arousal, negative affective states in that it is linked with relationship outcomes, and, more importantly, is linked with low appetitiveness (Hypothesis 11).

In order to address the issue of whether the Relational Boredom Scale is an individual difference measure, the correlations were assessed again, controlling for boredom proneness (see Table 9a, Column 4). The correlations remained significant. This provides further evidence that the relation between relational boredom and various individual and relationship variables is not solely a function of individual differences in the level of boredom proneness. This was important, as the goal of creating this scale was to assess a state level of boredom in relationships rather than a trait measure.

Criterion Validity

Satisfaction was selected to establish the criterion validity of the scale. Feeling bored in a relationship was not expected to be a trivial experience. Instead, it was expected that the magnitude of this challenge would be reflected in decreased feelings of global satisfaction in the relationship. Consistent with predictions, there was a strong, negative relation between relational boredom and satisfaction (r = -.74; Hypothesis 12a). I also wanted to assess whether boredom uniquely predicted satisfaction when other demographic, individual difference, and relationship variables (appetitive and aversive) were taken into account. As can be seen in Table 10, relational boredom significantly predicted satisfaction, even when a host of individual difference and positive and negative relationship variables were included in the model. Relational boredom was not the only significant predictor of satisfaction, but it did have the strongest beta weight (β = -.30). Thus, there is evidence that even when controlling for a myriad of demographic, individual, and relationship variables, relationship boredom not only measures up with conflict, trust, and avoidant attachment in predicting satisfaction but also exceeds them in predictive power (Hypothesis 12b).

I assessed the relation between relational boredom and the other variables, controlling for satisfaction (see Table 9a, column 5). In this analysis, there were decreases in the strength of the relations for all of the variables. This decrease in magnitude was especially apparent (i.e., the correlation became nonsignificant) for: negative affect, anxious attachment, conflict, and depression. Thus, the relation between boredom and those variables was dependent on the satisfaction level of the relationship. It is interesting to note the variables that were not altered by controlling for satisfaction (i.e., they remained significant); state appetitive motivation, positive affect, passionate love, boredom proneness, and boredom frequency. Thus, these variables continue to predict relational boredom, even when controlling for satisfaction.[39] This suggests that boredom is not synonymous with dissatisfaction in a relationship.

Individual Differences

I examined the individual differences in the experience of relational boredom. The three individual difference variables were: gender, boredom proneness and attachment style. In terms of gender differences, men reported greater relational boredom (M = 2.80, SD = .80) than did women (M = 2.42, SD = .88; $t(240) = -2.93$, p = .004; RQ2). One issue with creating a relational boredom scale is whether this is simply an experience that people who are prone to boredom encounter. While it was expected that people who tend to be bored, in general, would also be more bored in a relationship context, it was anticipated that boredom proneness would not be synonymous with the experience of relational boredom. Consistent with this idea, boredom proneness was only moderately related to relational boredom (Hypothesis 13; see Table 9a).

Next, I assessed whether there was a relation between the experience of relational boredom and the avoidance and anxiety attachment dimensions. As hypothesized, avoidant attachment was strongly and positively correlated with boredom (r = .55; Hypothesis 14). Avoidant attachment has been previously linked to suppression of affect and distancing strategies (Carvallo & Gabriel, 2006; Mikulicer & Elka, 2000). This may make avoidant individuals prone to boredom because they may also restrain the experience of positive affect (in terms of not experiencing high arousal positive affect). Relational boredom was positively related to the anxiety dimension (r = .35), although the magnitude of this correlation was significantly lower for that obtained for avoidance ($t = 3.23$, $p < .001$). This fits with the conceptualization of the anxiety dimension as more closely related to the aversive dimension-- the presence of security or not--rather than the presence or absence of appetitiveness.

Summary of Study 3

In summary, Study 3 provided initial evidence for the factor structure, reliability, and validity of the Relational Boredom Scale using a sample of people in dating relationships. There was evidence for two to three underlying factors, namely *lack of self-expansion*, *lack of emotional connection*, and *disengagement*. The full scale had satisfactory reliability. The scale was related in predictable ways with theoretically similar variables (i.e., in terms of valence, arousal level, motivational properties, and behaviours). Most notably, there was evidence that relational boredom is more strongly linked with an absence of positive affect, positive relationship qualities, and autonomous, appetitive motivation than with heightened negative affect and relationship qualities. This pattern did not emerge for other dissatisfying states, namely

conflict, loneliness and depression. Boredom was linked with decreased relationship satisfaction, above and beyond a host of individual, relationship, and affective variables.

Study 4a: Assessment of the Psychometric Properties of the Relational Boredom Scale With a Sample of Married Individuals

An important next step was to examine the Relational Boredom Scale's properties, reliability, and validity with a more experienced sample, one that involves relationships of greater duration. Married individuals from the community were judged a suitable target.

Hypotheses

The general goal of Study 4a was to replicate the findings from Study 3, including the key result, namely that relational boredom is a low appetitive state, rather than an aversive one, and that this is a unique pattern that is not shared with conflict, loneliness, or depression. I also wanted to test whether the relation between boredom and satisfaction would replicate in a married sample. In addition to replicating the hypotheses in Study 4a with a married sample, there were several additional hypotheses[40, 41]

H1: I predicted that increased relational boredom would be associated with fewer exciting activities. Furthermore, I expected a stronger, negative relation between exciting activities and boredom than between exciting activities and conflict. This would be viewed as a behavioural marker of appetitiveness. (A significant relation would also be interpreted as further evidence for appetitive convergent validity).

RQ1: I also explored the relation between relational boredom and demographic variables relevant to a married sample including, having children, income, and length of marriage.

Given the smaller sample size in the present study, factor analyses were not conducted. (For the interested reader, I created subscales based on the criteria from the exploratory factor analysis with the dating sample and correlated each factor with the variables in the study).[42]

Method

Participants

Married individuals were recruited through flyers on community billboards around the city of Winnipeg for a "Relationship Experiences Study". The flyers advertised that I was looking for married individuals to participate in a two-part online study about relationship experiences in exchange for a monetary compensation and a chance to be entered in a draw for a dinner gift certificate. The flyer outlined some of the initial restrictions: 1) currently married for at least 3 years (currently not accepting common-law marriage)[43]; 2) speak English as a first language; and 3) have a home computer with access to the internet. Potential participants were provided contact information for the researcher. There were approximately 80 participants who contacted me to participate in the study. It was explained that the study consisted of a 45-minute questionnaire about relationship experiences and a second part that involved a two-week, daily five-minute questionnaire. After learning of the details of the study, 67 people agreed to participate. A total of 67 participants completed Part 1 of the study (this part contained the 30-item Relational Boredom Scale).[44] Although individuals

were recruited for the study, there were several couples who were interested in participating. Given the lower number of male participants who volunteered, both members of the couple were allowed to participate with the idea that this would draw in male participants. Only one couple member was included in the analysis to avoid issues of dependency (Kenny, Kashy, & Cook, 2006). In all cases, the female member of the couple was excluded from the analysis to increase the number of male participants. This left a total of 56 participants, 38 women, and 18 men.

All participants reported being in a marital relationship. The average age of the participants was 38.30 years (ranging from 25-58). They were married for an average of 12.75 years, ranging from 2 to 37 years. Only two participants were married for less than three years (M = 2 years for these two individuals). Participants reported knowing their marital partners (i.e., marriage plus time before marriage) for an average of 16.28 years, ranging from 5 to 41 years. The majority of the participants had at least one child living at home (78.2%), with an average of 1.71 children (range 0 to 6 children). Four participants did not disclose this information. The average age of the children was 9.74 years, ranging from 1 to 34 years. The majority of the participants spoke English as a first language (92.9%). The average household income of participants was $85,950, ranging from $35,000 to $300,000 ($SD$ = $44,299). Seven participants did not report their income. The majority of participants reported the current marriage as their first marriage (89.3%). The remaining six participants reported this as their second marriage.

Materials and Procedure

Battery of Questionnaires. Participants completed the same battery of questionnaires as did the dating sample in Study 3, replacing the term marital partner

for dating partner where applicable in the scales.[45] In addition, they completed an open-ended question about the experience of shared exciting activities with the partner during the last several weeks.

Demographics. Participants were asked about the length of their marriage, how long they had known their partner, whether this was their first marriage, whether they had children, how many children, household income, ethnicity, and current occupation.

Results and Discussion

The results and discussion are divided into three sections: a) basic scale data, b) internal consistency, and c) assessment of convergent, discriminant, and criterion validity.

Basic Scale Data

I first reverse scored the reverse-worded items before computing the mean of the Relational Boredom Scale. The mean on the Relational Boredom Scale was M = 3.29 (SD= 1.11), (ranging from 1.37 to 6.03) on a scale where 1 = not at all true and 7 = completely true.[46] Unlike the dating sample, the mean was close to the midpoint of the scale. The range was judged to be adequate with evidence that I was sampling people who were moderately to highly bored in their relationship (40% of the participants were above the mid point of the scale vs. 15% of the dating sample that was above the midpoint).

I screened the Relational Boredom Scale items for normality, again examining skewness and kurtosis. Skewness ranged from -.01 to 2.26 (standard error of skewness = .32; see Table 12). As in Study 3, I tested whether the skewness values differed significantly from zero using the z distribution (Tabachnick & Fidell, 2007). In general,

the items were less positively skewed than in Study 3 (10 of the 30 items displayed significant positive skewness). Kurtosis ranged from -.11 – 4.10 (6 of the 30 items displayed significant kurtosis; standard error of kurtosis = .63; see Table 12). Although the items tended to be positively skewed, the Relational Boredom Scale did not display significant skewness nor kurtosis.

Reliability

The reliability of the scale was assessed with Cronbach's alpha. A satisfactory level was obtained, $\alpha = .96$. The corrected item-total correlations ranged from .34 to .82 (see Table 13). Thus, given that none of the items had corrected item-total correlations below .30 and that the majority were moderate to strong in strength, it was judged that none of the items needed to be excluded on this basis.

Initial Assessment of Validity

Correlational and multiple regressions analyses were used to assess the construct validity of the scale (see Tables 14a and 14b for descriptive statistics for each variable). Most measures were significantly correlated with scores on the Relational Boredom Scale.[47]

Convergent Validity

Consistent with predictions, boredom was negatively and strongly related to state appetitive motivation, positive affect, and passionate love (see Table 15a). Contrary to predictions, but consistent with the findings from Study 3, the growth beliefs variable was not associated with relational boredom (see Table 15a). An analysis (using the Bernoulli option for dichotomous outcome measures) was conducted to examine the relation between boredom and the occurrence of exciting activities in the

relationship in the last couple of weeks (coded as yes or no). As predicted, individuals who reported greater boredom, also reported fewer exciting activities, β = -.61, (SE = .26), p = .02. The relation between conflict and the occurrence of exciting activities was weaker and only marginally significant, β = -.33 (SE = .18) p = .06.

In terms of aversive variables, loneliness, depression, conflict, and negative affect were positively and moderately to strongly related to relational boredom. Importantly, the correlation between boredom and negative affect was significantly smaller than the positive association between boredom and positive affect. Thus, similar to Study 3, although relational boredom is related to aversive processes, these relations are weaker than the link with appetitive variables.

Assessment of Discriminant Validity

As in Study 3, socially desirable responding was weakly correlated with relational boredom (see Table 15a). With this sample, the correlation did not reach significance.

I was also interested in replicating the unique pattern of findings from Study 3 for boredom (that were not mirrored when conflict was the dependent variable). As seen in Table 15b, boredom and conflict were similarly related to many of the individual difference and relationship variables. However, there were some notable differences that further support the conceptualization of boredom as representing the appetitive dimension. As in Study 3, relational boredom was more strongly linked, than was conflict, with appetitive variables (i.e., state appetitive motivation, positive affect, and passionate love). Additionally, boredom was more strongly linked with relationship satisfaction, time spent with partner, alternatives, loneliness and avoidance than was

conflict.[48] As well, consistent with Study 3, conflict was more strongly associated than boredom was with negative affect.[49]

As can be seen in Table 15a, column 3, many of the boredom correlations remained significant after controlling for conflict, suggesting that conflict is not the underlying source of those relations. As with Study 3, there were more substantial decreases in the magnitude of the correlations for negative affect and depression and less of a decline for positive affect.

I also compared the correlations between relational boredom with those obtained when the correlations were computed for loneliness and depression. As can be seen in Table 15b, as with the dating sample in Study 3 relational boredom had a stronger relation than loneliness and depression with the appetitive variables (state appetitive motivation, positive affect, passionate love). As well, boredom was more strongly related to, negative affect, conflict, satisfaction, time spent with partners, and avoidance.[50] As with Study 3, loneliness and depression had higher correlations than did relational boredom with: anxious attachment, boredom proneness, and depression (see Table 15b).[51]

Criterion Validity

I predicted that boredom would be negatively related to relationship satisfaction. As in Study 3, there was a strong, negative relation between relational boredom and satisfaction (r = -.78). I also wanted to assess the unique power of relational boredom to predict relationship satisfaction over and above other individual and relationship difference variables.[52] Given the smaller sample size in relation to variables, none of the variables, including boredom, significantly predicted satisfaction (see Table 16).

However, as in Study 3, relational boredom had the strongest beta weight, β = -.35, p = .11.

I decided to test my main criterion prediction, namely that boredom is a strong predictor of satisfaction, with a limited number of variables, given the small sample size. This reduced selection of variables represented one of my main validity hypotheses, which was that boredom represents an absence of appetitiveness rather than the presence of aversiveness, and that it was a distinct predictor of satisfaction above and beyond conflict, low arousal, low pleasure states, and individual differences in the tendency to experience boredom. I wanted to include variables that assessed both aversiveness and appetitiveness. I entered relational boredom, positive affect, intrinsic self-regulation (a subscale of the state appetitive motivation measure that measure more autonomous reasons for being in a relationship), passionate love, conflict, negative affect, extrinsic self-regulation (a subscale of the state appetitive motivation measure that represents less autonomous reasons for being in a relationship), depression and boredom proneness. Consistent with the regression containing all of the variables, relational boredom had the strongest beta weight, and in this analysis, was the only significant predictor (β = -.37, p = .03).[53]

I also assessed the relation between relational boredom and other variables while controlling for satisfaction to confirm the Study 3 finding that the Relational Boredom scale is not simply a measure of satisfaction. In the present study, this finding was replicated. Satisfaction reduced the magnitude of the correlations for most of the variables (see Table 15a, column 2). However, controlling for satisfaction had more of an impact on the aversive variables (i.e., conflict, depression, and anxious attachment),

as well as boredom proneness.[54] The fact that appetitive variables, such as state and trait appetitive motivation, positive affect, and passionate love remained significant, suggest that the link with those appetitive variables is robust and is not dependent on satisfaction.

Additional Variables

Individual Differences

In Study 3, I found that men in dating relationships were more likely to report greater relational boredom. However, in this study, married women reported greater relational boredom than did men, $M = 3.54$ ($SD = 1.18$) versus $M = 3.07$ ($SD = 1.02$), $t(56) = 1.98$, $p = .05$.

Consistent with predictions and the findings of Study 3, scores on the Relational Boredom Scale were positively and moderately related to boredom proneness (see Table 15a).[55]

A similar pattern of results occurred for attachment style differences. Relational boredom was positively related to avoidant attachment, as in Study 3 (see Table 15a). Consistent with predictions, a weak positive correlation was found between relational boredom and anxious attachment (see Table 15a).

Demographic Variables

Correlations were assessed between the Relational Boredom Scale and demographic variables. Three of the correlations were not significant: age, $r(55) = .07$, $p = .66$; income, $r(50) = .14$, $p = .34$, and length of relationship, $r(56) = .07$, $p = .64$. However, the percent of weekly time with partner was negatively related to boredom, $r(56) = -.44$, $p = .001$.[56]

Summary of Study 4a

In sum, in Studies 3 and 4a, there was further evidence that the Relational Boredom Scale is reliable and that it fits within a distinct niche in a nomological net of related constructs. One clear finding, that echoes that of Study 3, was that boredom represents low appetitivess rather than aversiveness. It was more strongly negatively associated with a decrease in state appetitive motivation and positive affect than it was positively associated with negative affect. As well, it was more strongly linked with passionate love than it was with conflict, loneliness, and depression. Another major finding that was replicated from Study 3 was that boredom was linked to decreased satisfaction. In fact, boredom was one of the strongest predictors of relationship satisfaction when controlling for a host of relationship and individual difference variables (even though this analysis did not reach statistical significance). Thus, a consistent pattern emerged with regard to what it means to be bored in a relationship. In the remaining studies, I hoped to extend some of those major findings by examining the relations over time (Study 4b) and between couple members (Study 5).

Study 4b: Daily Diary Study with Married Sample

In Study 4b, the analysis of validity was extended to within-person relations using daily diary methodology over a two–week period. I also was interested in further assessing the emotional climate of relationships that contained boredom and how appetitive processes, in the form of engaging in exciting activities, and aversive processes, in the form of conflict, were linked to boredom over time. The specific goals of this study were to assess: 1) whether scores on the Relational Boredom Scale predicted daily reports of boredom, satisfaction, positive and negative affect,

occurrence of exciting activities, conflict and time spent with partner; 2) daily within-person relations between boredom and satisfaction, conflict, positive affect, negative affect, time spent with partner, and occurrence of exciting activities; and 3) the stability of the boredom experience (over a two week period).

As outlined by Laurenceau and Bolger (2005), there are several advantages of diary methods. They allow the researcher to examine: 1) variables in a natural setting; 2) day to day behaviours and emotions in closer proximity to the time they occur; and 3) data over time. Finally, the diary method, in conjunction with other methods, such as self-report and observational, offers a more comprehensive approach to studying relationships (Laurenceau & Bolger, 2005).

Hypotheses

Relation Between Daily Experiences and the Global Measure of Relational Boredom

Consistent with the hypotheses from Studies 3 and 4a, I predicted that Relational Boredom Scale scores would be correlated with: a) increased daily boredom; b) decreased daily satisfaction; c) less positive affect; d) increased negative affect; e) increased conflict; and f) fewer exciting activities. Furthermore, I predicted that the strength of associations between scores on the Relational Boredom Scale and positive affect and exciting activities would be greater than the relation between boredom and negative affect and conflict.

Relation Between Daily Experiences and Daily Boredom

Similar predictions were made for daily experiences of boredom, namely that daily boredom would be associated with: a) decreases in daily satisfaction; b) less

positive affect; c) increased negative affect; d) increased conflict; and e) decreased occurrence of exciting activities.

Stability of the Boredom Experience

RQ1: How stable is the boredom experience? I assessed the stability of the boredom experience, as measured by the Relational Boredom Scale, by having the scale administered twice, spaced two weeks apart.

Method

Participants

Of the 56 participants in Part 1 (i.e., Study 4a), a total of 46 individuals participated in the diary portion of the study (N = 29 women, N = 17 men). Their average age was 39.13 (SD = 8.05) years, ranging from 25 to 58 years. The participants were married an average of 13.10 years, ranging from 2 to 37 years. Only two participants were married for less than three years. Participants reported knowing their marital partner (i.e., marriage plus time before marriage) for an average of 16.63 years, ranging from 5 to 41 years. The majority of participants had at least one child living at home (76.10%), with an average of 1.59 (SD = 1.26) children (range 0 - 6 children). One participant did not disclose this information. The average age of the children was 10.12 years, with a range of 1 to 34 years. The majority of the participants spoke English as a first language (91.50%). The four participants for whom English was not a first language reported speaking English for an average of 34.75 years (ranging from 15 to 45 years). Thus, their data were retained. The average household income of participants was $80,306, with a range of $35,000 to $180,000 ($SD$ = $31,459). Seven participants did not indicate their income. The majority of participants reported the

current marriage as their first marriage (89.40%). The remaining five participants described this as their second marriage.

Procedure

Following the completion of Study 4a (i.e., a 45 minute questionnaire about relationship experiences and personal preferences), participants were instructed that they would receive an email within 24 hours with a personal link to begin the second part of the study, a 14-day online questionnaire about their marital relationship.

Part 1. As part of Study 4a, participants completed a battery of questionnaires.

Part 2. Daily questionnaire. The daily questionnaire consisted of a set of questions that was emailed to participants each day between 7:00 p.m. and 8:00 p.m. for 14 consecutive days. Participants were asked to reply each night by 3:00 a.m. The entries contained date and time stamps, thus allowing me to assess compliance. Of the 658 possible diary entries (47 participants X 14 days), 632 were returned on time. On the final daily questionnaire, there were additional measures, including the Relational Boredom Scale and Relationship Assessment Scale (to measure relationship satisfaction).[57] Participants were sent a feedback sheet and an email message requesting that they submit their mailing address for the monetary compensation and draw for the dinner certificate.

Materials

Part 1. Participants completed the battery of questionnaires outlined in Study 4a. Of particular interest were the Relational Boredom Scale and the Relationship Assessment Scale (to assess satisfaction).

Part 2. Daily diary affect ratings. The 30-item Positive and Negative Affect Scale (Watson, Clark & Tellegen, 1988) was used to measure daily boredom and excitement as well as other affective experiences (e.g., anger, loneliness, depression, sadness, contentment, relaxation) that can be classified as high or low in arousal and high or low in pleasure. Participants were instructed to think back through the course of the day and rate the extent to which they experienced emotion-related states with their marital partner (where 1 = very slightly or not at all and 5 = very much). Boredom and excitement items were contained within the 30-item questionnaire to avoid alerting participants to the purpose of the study. The 30 items included in the scale were divided into four affect quadrants based on their underlying arousal and pleasure: high arousal-low pleasure (e.g., anger), low arousal-low pleasure (e.g., depression), high arousal-high pleasure (e.g., excitement) and low arousal-high pleasure (e.g., contentment; Russell, 1980).

Daily diary experiences. Participants made single-item ratings of satisfaction with their partner and their relationship ("How satisfied are you with your marital relationship today?", on a scale where 1 = not at all to 5 = completely), conflict, which was operationalized as anger and arguing ("How often did you feel angry toward your spouse today?" and "How often did you and your spouse argue with each other?" on a 9-point scale, where 1= not very often to 9 = very often), time spent with partner ("What percentage of time (waking hours) did you spend with your spouse today?"), and occurrence of novel activities with partner ("Please list any novel, interesting, unusual or exciting activities (or discussions) you and your spouse experienced today. If

not, leave the space blank. Keep in mind, we are interested in what you think is novel, interesting, unusual, or exciting, and not some objective level of those qualities").

Results and Discussion

The data were analyzed using hierarchical linear/multi-level modeling (HLM Student Version 6.04, Raudenbush, Bryk, & Congdon, 2004) which is the standard for analyzing diary data (Campbell, Simpson, Boldry, & Kashy, 2005). This data set yielded two levels of analysis: Level 1 daily diary data (i.e., daily boredom, positive and negative affect, satisfaction, conflict, time spent with partner, occurrence of exciting activities) were nested within person variables (e.g., relational boredom) at Level 2. Multi-level modeling allows the simultaneous analysis of within-person (Level 1) and between-person (Level 2) variation (Bryk & Raudenbush, 1992). More specifically, multilevel modeling may be considered a two-stage regression process. In the first stage, the intercepts and slopes are estimated for the relations between Level 1 daily variables (within-person variation), and in the second stage, those estimates are used as outcomes that treat the participant as the unit of analysis (between-person variation). The advantage of MLM over traditional linear models is that the traditional models aggregate across within-person data which leads to a loss of information and incorrect tests of significance (Downey, Freitas, Michaelis, & Khouri, 1998).

As recommended by multilevel modeling experts (e.g., Hofmann & Gavin, 1998; Nezlek, 2003), I centered all of the within-person daily variables around each person's mean for that variable and all of the between–person variables (i.e., independent variables) around the grand means. Centering serves to aid in the interpretation of the results by allowing the researcher to observe how much each

variable deviates from the mean. This is especially useful for variables that do not have a natural and meaningful zero point, as with the independent variables in the present study. The daily coefficients represent how the daily variable on the *i*th day deviates from the person's average rating for that particular variable.

Descriptive Statistics

To obtain descriptive statistics for the daily measures, I conducted unconditional models (one-way random effects ANOVAs) for each of the daily variables (i.e., daily boredom, satisfaction, conflict, positive and negative affect, time spent with partner, occurrence of exciting activities). Unconditional (or empty) models refer to the fact that only intercepts are included at any level. These intercepts are the "random coefficients representing the mean of y (i.e., daily variable) for person j (across the i days for which each person provided data" (Nezlek & Plesko, 2003, p. 588). The unconditional models also provide information about whether there is enough variability to be modeled by Level 1 predictors. The mean levels of each daily variable (i.e., intercepts) and other descriptive statistics for the unconditional models are presented in Table 17. These analyses revealed that: 1) Participants' daily boredom scores fell well below the midpoint of the scale. Thus, they did not report high daily levels of boredom in their relationship; 2) daily satisfaction was high--above the midpoint of the scale; 3) participants did not report much conflict, on average; and 4) participants reported spending just over half of their time with their partner. Despite the low mean daily boredom score and high satisfaction, the intercepts (otherwise referred to as means) for each variable were significant, indicating there was a significant amount of variability to be modeled by the Level 1 predictors.

Within-Person Covariation Between the Relational Boredom Scale and Daily Experiences

One of the main goals of Study 4b was to further assess the validity of the Relational Boredom Scale (Level 2 person variable) by examining its link with daily relationship variables (including the single item measure of boredom) at Level 1 (Means as Outcomes model; Raudenbush & Bryk, 2002). The relation between the variables was assessed by the significance of the slope (β). Consistent with predictions, scores on the Relational Boredom Scale were associated with increased daily boredom (β = .15). As well, the Relational Boredom Scale was linked with decreased: positive affect (β = -.50); including decreased excitement (β = -.61), percentage of time spent with partner (β = -.71), satisfaction (β = -.60), and occurrence of novel and arousing activities (β = -.07). In contrast, the Relational Boredom Scale was associated with increased: negative affect (β = .08); and conflict (anger (β = .31 and arguing β = .12; See Table 18). Thus, similar to the pattern found in Study 3 and 4a, and consistent with predictions, relational boredom was strongly, negatively related to positive affect, whereas, it was positively related to increased negative affect and conflict, but only weakly so. The predicted negative relation between boredom and the occurrence of exciting activities was significant, but weak. This may be a reflection of the way exciting activities were measured (i.e., occurrence or not of an exciting activity rather than a Likert rating of various activities).

In addition to reporting the slopes, I was also interested in how much variance was explained when the Relational Boredom Scale was added to the unconditional models. The variance component representing daily satisfaction decreased greatly from

.97, $df = 48$, $X^2(48) = 2099.49$ to .42, $df = 47$, $X^2 = 924.3$ when including relational boredom as a Level 2 predictor. Thus, relational boredom explained 56.7% of the variation in daily satisfaction. In comparison, the variance in conflict decreased to .71, $df = 44$, $X^2 = 1390.36$. Thus, conflict only explained 26.8% of the variance of daily satisfaction. I also assessed how well relational boredom and conflict predicted the daily emotional climate. The variance representing daily positive affect was .67, $X^2 = 1720.7$, $p < .001$, which declined to .23 when including the Level 2 predictor relational boredom ($X^2 = 635.0$, $p < .001$). The variance in conflict did not decrease as dramatically, .52 ($X^2 = 1325.4$, $p = .001$). Thus, once again relational boredom explained a larger portion of the variance (65.7%) than did conflict (22.4%) for positive affect. For negative affect, the variance was .08, $X^2 = 391.4$, $p = .001$, and neither relational boredom nor conflict predicted a significant decrease in variance when added to the unconditional model Fs<1. Thus, the boredom an individual reported at time 1 predicted a decrease in positive emotional climate over a two week period. The level of conflict reported was not as strongly predictive. Consistent with the idea that boredom represents low appetitiveness (which is independent of aversiveness), boredom did not predict the negative emotional climate over the two week period. It should be noted that although scores on the Relational Boredom Scale accounted for a significant portion of the variance in daily satisfaction and positive affect, the daily satisfaction scores still varied significantly (i.e., the chi-squares were significant). However, the point of these analyses was to observe the decreases in variance, rather than to account for all of the variance in daily satisfaction and positive affect.

I also assessed larger models in which I predicted daily satisfaction from boredom, conflict, positive affect, and negative affect. In these analyses, boredom was the strongest predictor of daily satisfaction (β = -.40 (SE = .15) = -2.49, p = .02); the others were not significant (negative affect, β = -.27 (SE = .16) = -1.69, p = .10; positive affect, β = .10 (SE = .22) = .49, p = .63; conflict, β = -.01 (SE = .08) = -.14, p = .89). The mean for daily satisfaction (or the intercept) was 4.01 on a 5 point scale. Thus, for every standard deviation increase in boredom, satisfaction decreased .40 below the mean of 4.01.

Within-Person Covariation Between Daily Experiences and Daily Boredom

Next, I examined the day-to-day relations between boredom and the relationship variables. The single-item boredom measure from the PANAS scale was used to assess daily boredom. The within-person relations between daily boredom experienced in the relationship and daily measures of satisfaction, conflict, affect, time spent with partner, and occurrence of novel activities were analyzed again using HLM (see Table 19). The intercept for daily boredom was 1.29 (*SE* = .05). Consistent with predictions, daily relationship boredom was associated with a decrease in satisfaction, an increase in negative affect (high and low arousal types, especially high arousal negative affect), a decrease in positive affect (high and low arousal types), and an increase in conflict (anger and arguing). Contrary to findings using the Relational Boredom Scale, percentage of time spent with partner, occurrence of novel activities, and excitement were not related to daily boredom. It should be noted that the slopes for the conflict items were weak which is consistent with the idea that boredom is not just a function of conflict, but that it occurs independent of conflict. However, contrary to the findings for

global boredom (as assessed by the Relational Boredom Scale), daily boredom was strongly, positively associated with negative affect (whereas global boredom was weakly related) and weakly, negatively related to positive affect (whereas global boredom showed a strong negative relation with positive affect). Thus, the Relational Boredom Scale seems to be tapping into a different emotional climate because it is assessing global feelings of boredom rather than the daily experience of boredom in a relationship.

Relation Between Time 1 and Time 2 Relational Boredom

Scores on the Relational Boredom Scale at Time 1 were correlated strongly and positively with the scores on Relational Boredom Scale two weeks later, $r = .88$, $p < .001$. Thus, the experience of relational boredom as measured by my scale was stable, at least over a two-week period. The intent was to construct a measure reflecting a characterization of the relationship, rather than a temporary mood.

In sum, the present study extended several of the key findings in Study 3 and 4a using diary methodology. More specifically, it was found that relational boredom (as assessed by the Relational Boredom Scale) was related to decreased positive affect over a two week period and increased negative affect and conflict. Importantly, the negative relation between boredom and positive affect ($\beta = -.52$) was stronger than the positive relation with negative daily affect ($\beta = .09$). Furthermore, relational boredom was related to decreased daily satisfaction above and beyond positive and negative affect, and conflict.

Study 5: Link Between Boredom and Satisfaction: Couples Study

In Studies 1 to 4b, evidence was found for a reliable and valid measure of relational boredom that is applicable to individuals in dating and marital relationships. Given the dyadic nature of relational boredom, an important next step in further understanding the boredom experience was to examine the similarity between couple members in terms of scores on the Relational Boredom Scale. Furthermore, I wanted to extend the validity of the Relational Boredom Scale. If one partner's assessment of boredom in the relationship is corroborated by the other, this can be taken as evidence of external validity of the relational boredom measure. Another goal of this study was to examine the interplay of boredom within couples and the links with satisfaction and conflict using the Actor-Partner Interdependence model (Kashy & Kenny, 2000; Kenny, Kashy, & Cook, 2006). The advantage of the Actor-Partner Interdependence model (Kashy & Kenny, 2000) and couple-level analyses, in general (Kenny, Kashy & Cook, 2006), is that a researcher can not only assess the relations between variables for each respondent (e.g., respondent's boredom with respondent's satisfaction, as was done in Studies 3, 4a, and 4b), but also the relations between the partner's ratings of a variable and the respondent's ratings (e.g., partner's boredom linked with respondent's satisfaction). Put another way, this study enabled me to assess whether boredom in a relationship was mostly an individual effect, or a couple effect.

Hypotheses

Hypothesis 1: Couple members would report similar levels of boredom. Given the interdependent nature of shared positive experiences, it was predicted that one couple member's boredom would reflect the emotional energy of the relationship, and, therefore, the other partner was expected to feel bored as well.

Hypothesis 2: An actor's boredom score would predict decreases in the actor's satisfaction. The actor refers to the participant who serves as the reference point. Either couple member may be designated as the actor. However, for purpose of interpreting results, one couple member is arbitrarily designed as the actor. This hypothesis was also tested in Study 3 and 4a, but with individuals as participants, rather than couples.

Hypothesis 3: A partner's relational boredom would predict decreases in an actor's satisfaction. Just as one couple member was designated as an actor, the other was labelled the partner. Put in different terms, this hypothesis was that one couple member's boredom would predict decreases in the other couple member's satisfaction.

Hypothesis 4: The partner effect would be enhanced, the greater the actor's boredom (i.e., a significant interaction). Thus, the greater the actor's boredom the greater the link would be between the partner's boredom and decreased satisfaction. This prediction is based on the interdependent nature of the boredom experience in the relationship.

Hypothesis 5: Boredom at Time 1 for couples would be linked with boredom at Time 2 for couples. This would serve to replicate the findings from Study 4b at the couple level.

Method

Participants. Married individuals were recruited through flyers on community billboards around the city of Winnipeg for a "Relationship Experiences Couple Study". The flyers advertised that I was looking for married couples to participate in a two-part, online study about relationship experiences in exchange for a monetary compensation ($25.00) and a chance to be entered in a draw for a dinner gift certificate. The flyer

outlined some of the initial restrictions: 1) currently married for at least 3 years (currently not accepting common-law marriage); 2) must live together; 3) must speak English as a first language (or be fluent); 4) both members of the couple must be willing and available to participate; and 5) must have a home computer with access to the internet. Potential participants were provided with information to contact the researcher for further information. There were approximately 30 couples who contacted me to participate in the study. The details in the follow-up email outlined that the study consisted of a 45-minute questionnaire about relationship experiences and personal tendencies and a second part that involved a 10- minute online questionnaire about relationship experiences two weeks later. After reading the further details of the study, 27 couples agreed to participate.[58] Two couples were excluded from analyses because one member did not complete the survey. A total of 50 participants completed Part 1 of the study (25 couples), and 25 couples for Part 2. The average age of the participants was 37.03 years, ranging from 21 to 60 years (SD = 10.21). Participants were married an average of 10.23 years, ranging from 1 to 34 years (SD = 8.07). Only one couple indicated being married for less than 3 years.[59] Participants specified knowing their marital partner (i.e., marriage plus time before marriage) for an average of 13.41 years, ranging from 4 to 41 years (SD= 8.17). For the majority of participants, this was their first marriage (96.0%). The remaining two participants reported this as their second marriage. Forty-two percent of participants had at least one child living at home, with an average of 1.25 children (range 0 to 4 children); the remaining participants (N = 28) did not have children living at home (one participant did not disclose this information). The majority of the participants spoke English as a first language (90.0%). The average

household income of participants was $68,000.00, ranging from $15,000 to $150,000 (SD = $29,105). Twelve participants did not report their income.

Procedure

Participants were asked to complete a two-part online study on relationship experiences and personal preferences. They were emailed a personal link to Part 1 of the online study. As part of the instructions, participants were asked to complete the questionnaire in private, away from their partner or other family members, and to complete it on the same night as their partner. After reading the instructions and giving informed consent, participants began the 45-minute questionnaire on relationship experiences and personal preferences (online site, Survey Monkey). Following the completion of the first part of the study, participants were instructed that they would receive a second email two weeks later with a personal link to complete the second part of the study (a 10 minute online questionnaire about their marital relationship).

Part 1. Participants completed a 45 minute battery of questionnaires (see Study 4a for a description of materials). Of greatest importance for the present study were the relational boredom (Relational Boredom Scale) and satisfaction (Relationship Assessment Scale, Hendrick, 1988) measures.

Part 2. This section consisted of a 10-minute questionnaire that was collected two weeks later. It contained the Relational Boredom Scale, Relationship Assessment Scale (to measure satisfaction; Hendrick, 1988). Participants made single-item ratings of satisfaction with their partner and their relationship ("How satisfied are you with your marital relationship today?", on a 5-point scale from 1 = not at all to 5 = completely), conflict ("How often did you feel angry toward your spouse today?" and

"How often did you and your spouse argue with each other?" on a 9-point scale from 1= not very often to 9 = very often), time spent with partner ("What percentage of time (waking hours) did you spend with your spouse during the last 24 hours?"), and occurrence of novel activities with partner ("Please list any novel, interesting, unusual, or exciting activities (or discussions) you and your spouse experienced today. If not, leave the space blank. Keep in mind, we are interested in what you think is novel, interesting, unusual, or exciting, and not some objective level of those qualities").

Following the completion of Part 2, participants were sent a feedback sheet and an email requesting that they send their mailing address in order to receive their monetary compensation. Participants were informed that they would receive a summary of the findings.

Results and Discussion

With couple-level analyses, it is important to take into consideration the dependency between partners (Kenny, et al., 2006). Before beginning the analyses, I converted the individual-level data file to a pairwise data file (Kenny, Kashy & Cook, 2006). Drawing on the Actor-Partner Interdependence model, I used mixed-level model analyses in SPSS to analyze the data. These analyses allowed for the assessment of dyadic effects. To ease interpretation, I followed the practice of designating one couple member the actor and the other a partner. (Given the structure of the pairwise data file, the results are identical if the roles are reversed within the couple). Actor effects refer to an individual's characteristics (e.g., boredom) affecting his or her own outcome measures (e.g., satisfaction). Partner effects refer to characteristics of the partner (e.g., partner's level of boredom) that affect the *actor's* outcome measure (e.g., satisfaction).

Analysis of partner effects allows the researcher to assess relational phenomena in a truly relational way (i.e., interdependence between couple members). The relative strength of the actor and partner main effects provides information as to whether the model may be considered couple-oriented or not. Actor and partner effects that are similar in strength suggest that it is a couple-oriented model. The product interaction of the actor and partner effects assesses whether the partner effect increases/decreases (i.e., the effects of a partner characteristic on the actor's outcome) as the actor's characteristic increases/decreases.

Intra-Class Correlation

Hypothesis 1 was that couple members would score similarly on boredom. There was a positive, moderate, intra-class correlation, $r = .47$, $p = .001$. Actors who were bored also had partners who reported being bored.

Relational Boredom and Satisfaction: Couple-Level Analyses

In Studies 3 and 4a, I assessed the relation between an individual's level of boredom and the level of relationship satisfaction. In the present study, I was interested in the relation between the partner's boredom experience and the actor's satisfaction. I conducted a mixed model analysis with actor's satisfaction as the dependent variable with actor's and partner's boredom scores, as well as gender, as the fixed variables.

This model had seven fixed effects (three main effects: actor's boredom, partner's boredom, gender; the two-way interactions between actor's boredom and partner's boredom, actor's boredom and gender, partner's boredom and gender; and the three-way interaction between actor's boredom, partner's boredom and gender), and

one repeated effect (partner number)). I used the compound symmetry heterogeneous structure as recommended by Kenny et al. (2006) for distinguishable dyads.

Main Effects

There were three main effects to examine: gender, the actor's boredom and partner's boredom. In addition, I assessed the relative strength of the actor and partner main effects.

Gender. There were no significant gender effects, $F < 1$.

Actor effect of boredom. For the test of fixed effects, the actor's boredom significantly predicted decreases in the actor's relational satisfaction, $F(1, 34.87) = 42.35$, $p < .000$, intercept = 3.35, $\beta = -.25$ ($SE = .04$). This is consistent with the findings from Studies 3 and 4a wherein increases in boredom were associated with decreases in satisfaction at the individual level.

Partner effect for boredom. Of greater interest for the present study, there was a significant partner effect, $F(1, 33.69) = 8.30$, $p = .007$, $\beta = -.11$ ($SE = .04$). Thus, the partner's level of boredom significantly predicted decreases in the actor's relationship satisfaction. In other words, one feels less satisfied in a relationship when one's partner is bored.

Relative strength of actor and partner effects. In order to assess the relative strength of the actor and partner main effects and to determine whether this model is best characterized as a couple-oriented model, I followed the recommendations by Kenny et al. (2006) and calculated a sum score of the actor and partner effects for boredom and a difference score for the actor and partner effects for boredom. I reran the mixed model analyses only including the newly computed SUM and DIFFERENCE

scores as the fixed variables and satisfaction as the criterion variable. Significant SUM and non-significant DIFFERENCE effects indicate a couple-oriented model. More specifically, if the actor and partner effects are not significantly different and are judged to have the same relative strength (as provided by the DIFFERENCE variable), this is taken as evidence of between couple-level differences. Thus, couples are treated as the unit of analysis rather than individuals. Researchers are then able to conclude that couples' scores on a criterion variable predict an outcome measure. In the present study, the SUM effect was significant ($\beta = -.18$, $F\ (1, 22.75) = 55.90$, $p = .000$), whereas the DIFFERENCE variable was not ($\beta = -.06$, $F\ (1, 23.96) = 3.73$, $p = .07$). Thus, actor and partner effects had the same relative strength, implying that at the couple level, couples who report more boredom are less satisfied than couples who report less boredom. This suggests that boredom is an interdependent construct.

Interaction Effects

Actor's boredom X Gender. There was no significant actor by gender interaction, $\beta = .06$, $F\ (1, 31.07) = 2.12$, $p = .16$. Thus, the actor effect was constant across husbands and wives.

Partner's boredom X Gender. There was a significant partner by gender interaction, $\beta = -.11$, $F\ (1, 30.37) = 6.79$, $p = .01$, meaning that the partner effect was not constant across husbands and wives. More specifically, it was only wives who were less satisfied when their partners reported greater boredom (partner effects for female respondents, $\beta = -.20$, $p = .001$; partner effects for male respondents, $\beta = -.0037$, $p = .96$). While not expected, these results are consistent with the tendency for women to be more sensitive to changes in relationship quality (Cate et al., 1995).

Actor's boredom X Partner's boredom. The interaction between the actor's and partner's boredom was significant $\beta = -.08$ ($SE = .03$), $F(1, 21) = 5.043$, $p = .03$. This suggests that the partner effect intensified as the actor effect increased. In other words, the partner effect (i.e., the partner's greater boredom being associated with decreases in actor's satisfaction) increased as the actor's own boredom level augmented.

Actor's boredom X Partner's boredom X Gender. The three-way interaction between the actor effect, partner effect and gender was not significant, $F < 1$.

Relation Between Time 1 and Time 2 Relationship Boredom

I assessed the relation between Time 1 boredom and Time 2 boredom. Consistent with Study 4b, an actor's boredom score at Time 1 predicted the actor's boredom score two weeks later, $\beta = .68$ ($SE = .08$), $F(1, 38.57) = 8.60$, $p < .001$. However, a partner's boredom experience did not predict the actor's boredom experience two weeks later, $F(1, 38.57) = 2.47$, $\beta = .13$ $p = .12$. There was no significant Actor X Partner interaction, $F < 1$.

Thus, there was evidence that relational boredom is a dyadic phenomenon at the daily (Time 1) level. The experience of boredom by one partner influenced the relationship quality of the other partner. This provided support that this was not something that wholly resides within the individual, thus providing some evidence of external validity. The effects of boredom on the partner's satisfaction were especially apparent for wives'—their satisfaction decreased as their husband's boredom increased. Future research could explore the reasons why wives are more susceptible to a partner's boredom experience than are men.

General Discussion

The main purpose of the present investigation was to elucidate the concept of relational boredom using prototype methodology and to develop a measure. A multi-item scale of relational boredom was developed from laypeople's responses to the question "What does it mean to be bored in a dating/marital relationship?" In five studies, assessing approximately 350 participants who were in dating and marital relationships, support was found for a reliable and valid 30-item scale of relational boredom. On a conceptual level, this research served to further explicate the meaning of relational boredom in the context of Gable and Reis' (2001) framework of appetitive and aversive processes. More specifically, there was evidence that relational boredom is a low appetitive state, in terms of motivation, affect, and behaviours. The low appetitiveness of boredom distinguished it from general conflict, and from other low arousal, low pleasure affective states. Furthermore, relational boredom was identified as one of the strongest predictors of relationship satisfaction (in comparison to other individual, relational, and demographic variables), and was associated with decreased satisfaction assessed in a variety of ways, including daily diary data and couple-level analyses.

Prototype of Relational Boredom

As with other relationship constructs (e.g., love, commitment, respect), participants were able to generate a variety of features that characterize feeling bored in a relationship. Participants listed a range of features in the first step of the prototype analysis including: affective states, particularly the absence of positive affect (e.g., "lack of excitement", "no thrill", "not happy"), relationship properties (e.g., "routine", "lack of communication", "relationship is not moving forward"), characteristics of

partner (e.g., "annoyed with partner", "partner not willing to try new things"), and behavioural tendencies (e.g., "not wanting to be with partner", "not going out together", "don't want to spend time with partner"). In the second step of the prototype analysis, a sample of dating and married individuals rated the centrality of these features to the concept of relational boredom. The fact that some features were considered more central than others is consistent with research using the prototype approach to examine relational constructs (e.g., respect, Frei & Shaver; love, Fehr, 1988). The features that received the highest centrality ratings in Study 2 also were frequently listed in Study 1. The overlap, however, was strongest for the more prototypical items, rather than the entire prototype. Consistent with the features that were listed with the greatest frequency in Study 1, participants rated items that represented a lack of high arousal positive affect and lack of novelty as most characteristic of the construct in Study 2. Other themes that were frequently listed in Study 1 and rated with a relatively high degree of centrality in Study 2 were not having one's attention adequately captured by the relationship, not communicating, lack of feelings of togetherness, and a behavioural tendency to distance oneself from the partner physically. To a much lesser extent, the prototype involved aversiveness (e.g., "annoyed", feel stuck in a rut and can't pull away", "want to end the relationship") and apathy (e.g., "feeling nothing", "lack of motivation"). Thus, in terms of their knowledge of the construct, it appears that people separate the experience of boredom from conflict and other aversive processes.

In addition to identifying the prototypical features, it was interesting to note the features that people did not believe characterize relational boredom. In the case of boredom, the personality of the partners (e.g., "too similar to each other", "nothing in

common", "not compatible"), time (e.g., "spend too much time together", "not seeing enough of each other"), familiarity with partner ("feeling too comfortable", "know what to expect", "know everything about partner") were not frequently listed by participants in Study 1, nor were these features rated as central to the meaning of boredom in Study 2. Thus, people seemed to have an understanding that boredom in a relationship is not just a function of time and increased exposure to the partner. Instead, consistent with what Aron and his colleagues stress in their work, it is the quality of the time spent together that is more important. Although some people listed "spending too much time together" as a cause of boredom, even more reported "lack of quality time with partner", "lack of engaging in exciting activities", "not going out".

In sum, there was support for the idea that laypeople have consistent knowledge of relational boredom, whether assessed using recall methodology (i.e., feature generation) or recognition methodology (i.e., centrality ratings). Interestingly, the core meaning or essence of relational boredom that emerged did not differ between dating and married samples.

How do the features relate to the literature?

The most commonly listed features in Study 1 and the features that received the highest centrality ratings in Study 2 provided support for models of boredom in the literature. Consistent with Gable and Reis' idea that boredom is a low appetitive state, participants frequently listed an absence of positivity in the form of affect and approach motivation. In contrast, although boredom is considered a dissatisfying experience (Mikulas & Vodanovich, 1993), relatively few participants listed features suggesting

the presence of aversiveness. To laypeople, the core of relational boredom is a lack of something good.

According to the self-expansion model of relational boredom, boredom is a state that occurs when the expansion of the self-concept halts or slows down. Novelty and arousal, particularly the positive variety, have been associated with increased satisfaction and decreased boredom. Consistent with this model, a lack of self-expanding activities or exciting activities in layperson's terms, was linked with the experience of boredom. Aron and colleagues have emphasized that self-expanding activities are not only high in arousal, but also high in novelty. Similarly, laypeople believe that boredom means a lack of something new in the relationship. In short, the most prevalent themes in the present data were the lack of high arousal, positive affect and lack of novelty--themes that are consistent with the self-expansion model.

It is interesting to note that participants do not perceive boredom as representing a lack of growth in the relationship. This highlights one benefit of conducting a bottom-up approach, namely to ascertain how laypeople understand boredom. Several participants mentioned that things were not moving forward in the relationship, but the lack of growth was not a common theme.

The presence of additional themes in the relational boredom prototype suggests other aspects of this experience that might be important for the conceptualization and measurement of boredom. Increased exposure, as a straight and basic habituation-like explanation, was not central to people's conception of relational boredom. In the present study, the behavioural tendency to distance oneself from one's partner when feeling bored, not having one's attention fully captured, lack of feelings of togetherness,

and lack of communication were also important characteristics of the prototype of boredom. These themes have not been discussed by scholars who may have focused on a narrow band of the construct.

Advantage of the Prototype Approach

Unlike naïve or armchair psychology, prototype research is systematic and aggregates across many individuals' opinions, providing evidence for a collective view of boredom based on relational experience. The more frequently an item is listed, the more indicative it is that it is central to their conception of a construct. As outlined by Fehr (1984, 1988), an advantage of the prototype approach is that it allows for comparison of how laypeople's and experts' views are similar and different. In the present case, there was strong overlap between the two, although the prototype analysis also revealed aspects of boredom not addressed in scholars' models.

The merits of the prototype approach have recently been emphasized by Gregg, Hart, Sedikides, and Kumashiro (2008). These authors stress that one advantage of prototype analysis is that it provides substantial coverage of the construct. Definitions of boredom, as with many other constructs, have focused on top down methods. While the top down methods might have the advantage of greater rigour, it is often at the expense of coverage. As stressed by Gregg et al. (2008), both are important, and a balance needs to be struck between each quality.

Development of a Measure

Based on the prototype identified in Study 1 and verified in Study 2, a measure of relational boredom was developed, namely the Relational Boredom Scale (RBS). The RBS consists of 30 of the most prototypical items listed by dating and married

individuals. At this early stage of development, I wanted to retain the language used by laypeople and therefore chose not to place the features in a particular context, or to word them as statements. Other researchers have successfully used features as scale items (e.g., Aron & Westbay, 1996; Frei & Shaver, 2002). Given that the measure is ultimately intended for individuals in longer term, marital relationships, it was also important that I select items that were central to married individuals' conceptions of boredom. Fortunately, the samples overlapped considerably in their conceptualization and centrality ratings, making the scale suitable for use in both dating and marital relationships.

Merits of the Prototype Approach for Scale Construction

There are several advantages of using prototype methodology to construct a scale. First, as with other relationship constructs, relational boredom may be best characterized as having fuzzy boundaries rather than strict defining criteria. The prototype approach is well-suited for capturing the indistinct margins of relational boredom, as with other relationship constructs. Second, as argued by Fehr (1999), people rely on their conceptions of relationship variables, such as love, commitment (and in the present analysis, relational boredom) to make decisions about their relationships. A prototype-based measure ensures that the most exemplary markers of relational boredom in the minds of the respondents are included. Finally, Broughton (1989) has argued that a scale composed of items high in prototypicality (as in the present case), demonstrates greater validity than scales that include non-prototypical items (or even more traditional methods; e.g., empirical, rational).

Psychometric Properties: Preliminary Structure of the Scale

An exploration of the factor structure of the Relational Boredom Scale revealed two to three underlying components, including: *lack of self-expansion*, lack of *emotional connection*, and *disengagement from the relationship*. It is important to note that this structure remained when an exploratory factor analysis was conducted adjusting for skewness of items, as well as when I assessed the structure with the original items that were not reverse-worded. The *lack of emotional connection* and *disengagement from the relationship* factors were judged to be conceptually similar and were combined in the two-factor solution. Consequently, the most parsimonious factor structure, two components, was selected over the three-component solution at this point. Lack of self-expansion and disengagement characterize two distinct views of the low appetitive nature of relational boredom. The first factor represents an absence of novel, arousing and positive features of the relationship. The language that participants used to describe the absence of the high arousal, positive affective states and lack of novelty suggested that it was a property of the relationship that once was present but is no longer the case (e.g., "*loss* of romance", "*no longer* exciting", "feelings are *not as* intense *as they used to be*", "*no more* surprises", "*less* passion", "*decrease* in sexual interest"). It is interesting that the features were not simply all of the positively-valenced words in the scale--instead they were the positively valenced items that referred to novelty and "newness" in the relationship. This fits most with the self-expansion conceptualization and was therefore labelled *lack of self-expansion*. The second factor represented *disengagement from the relationship*. This took the form of

not wanting to spend time with the partner, not feeling togetherness, not communicating, and not having one's attention captured by the relationship.

Validation of a Scale

In Studies 3 to 5, preliminary support was found for the Relational Boredom Scale in terms of convergent, discriminant, and criterion validity. Although I used a prototype approach and relied on how laypeople conceptualize boredom, I made predictions about how laypeople would understand boredom and how this conceptualization would be linked to theoretically-related constructs. I situated my predictions within Gable and Reis' appetitive-aversive model of affective, motivational, and behavioural processes, and began with the idea that boredom represents low appetitiveness and is less related to aversive processes.

Convergent Validity: Appetitveness

There was strong support for the idea that boredom is best represented as a low appetitive state, in terms of the affective, motivational, and behavioural climate. Boredom was strongly and negatively associated with positive affect in the relationship (single session and over a two week period), state appetitive motivation, occurrence of exciting, shared activities in the relationship, and passionate love. This pattern of correlations remained significant even when controlling for boredom proneness, social desirability, conflict and satisfaction. These appetitive variables also emerged as the most important predictors of relational boredom in Study 3.

Contrary to predictions, boredom did not display a strong negative correlation with an individual difference variable, namely, growth beliefs. The growth belief construct is conceptualized as an appetitive variable. According to destiny-growth

theorists, individuals with greater growth beliefs should regard challenges as the potential for growth (e.g., Knee et al., 2005). However, that research has focused on how couples respond to aversive challenges (i.e., disagreements, conflict). It is possible that this scale does not extend to appetitive challenges.

Convergent Validity: Aversiveness

A different picture emerged for the relation between relational boredom and the aversive dimension of relationships. Although researchers who have described boredom-related states (e.g., empty shell marriage, relational atrophy, stagnation) have characterized boredom as being low in both positive/affectionate and negative/antagonistic properties, I predicted that everyday relational boredom would not take such an extreme form. Consistent with that idea, there were significant correlations between boredom and assessments of negative affect in the relationship (single session and across a two week period), conflict (single session and across a two week period), and jealousy. However, collectively, these variables did not emerge as strong predictors of boredom.

Discriminant Validity: Distinguishing Boredom from Other Related Variables

In order to further establish the uniqueness of relational boredom, I contrasted the association between boredom and various individual difference and relational variables with a general aversive state, namely conflict, and other low arousal, low pleasure, affective states, namely loneliness, and depression. Boredom shares in common with these states the low pleasure characterization, and, for loneliness and depression, also the low arousal status. Therefore, it was important that relational boredom could be distinguished from these constructs. Consistent with predictions,

conflict did not display the same strong negative relations with appetitive variables, nor did loneliness or depression. Relational boredom, conflict, loneliness, and depression may all be considered dissatisfying states, but boredom is unique in that it is not strongly linked with aversive processes.

I expected that individual differences in boredom proneness would be related to the experience of relational boredom, but not synonymous with it. Consistent with predictions, boredom proneness displayed a moderate to low positive correlation with relational boredom, suggesting that the Relational Boredom Scale is not simply a measure of general tendencies to feel bored. In fact, boredom proneness was more strongly linked with other low arousal, low pleasure states namely, loneliness and depression, than was relational boredom.

In sum, in the present investigation, there was support for the idea that relational boredom is not synonymous with states such as depression or loneliness, or general conflict.

Criterion Validity: Relational Satisfaction

In addition to situating relational boredom within a nomological net of appetitive and aversive processes, an important objective of my research was to link relational boredom with relationship quality. I selected Hendrick's Relationship Assessment Scale because it is a widely-used global measure of relationship satisfaction. Across three studies, with samples of dating and married individuals, scores on the Relational Boredom Scale were consistently related to decreased satisfaction scores. This finding was obtained in single-session, battery of questionnaires formats and in a two-week daily diary study, for both dating and married

participants. Furthermore, there was evidence for couple-level effects, such that a partner's relational boredom predicted decreases in the other partner's satisfaction, especially for wives. As well, couples who were more bored were less satisfied than couples who were not bored. Most importantly, boredom was the strongest predictor of satisfaction and did so uniquely in comparison to related individual, relationship and affective variables. The effect was stronger for dating individuals than for married individuals (where the effects did not reach significance presumably because of the smaller sample size). This same pattern, with a reduced number of variables also was obtained in the daily diary data.

Big Picture

A picture emerged for individuals who had higher scores on the Relational Boredom Scale: These individuals reported experiencing boredom more frequently and rated their relationship lower in terms of positive affect, state appetitive motivation, passionate love, exciting activities, and satisfaction—both globally and on a daily basis. Furthermore, a partner's boredom was linked with an actor's decreased satisfaction, particularly for wives. To a lesser extent, participants reported being more lonely and depressed, as well as experiencing negative affect and conflict. Bored individuals tended to display more of an avoidant attachment orientation and greater boredom proneness. In terms of emotional climate, relational boredom is best described as involving the perception of less positive affect, rather than more negative affect. Thus, boredom is not a completely affect-free state. Finally, the measure of relational boredom appeared to be tapping a relatively enduring state in the relationship as intended, rather than a temporary mood.

Theoretical Implications

There are several implications of this research, including the theoretical implications for the study of relational maintenance challenges, relational quality, and relational boredom in general. Additionally, there are more applied, clinical implications.

Implications for the Study of Relational Maintenance Challenges

The results of the present research have several implications for how relationship challenges are studied. At the heart of the present investigation was Gable and Reis' (2001) conceptualization of two, independent, general processes underlying relationship functioning, namely appetitive and aversive. Scholars differ in their views of what types of challenges receive the most attention in the literature (Gable & Reis, 2001; Kowalski, 2001). However, there is consensus that the pendulum swings from positive aspects of relationships receiving full attention (e.g., Kowalski, 1997, 2001) to negative aspects being the center of relationship research (e.g., Gable & Reis, 2001). While both are required to have a complete picture of relationship functioning, it is important to take stock of where the pendulum has swung. In the aversiveness literature, there are a variety of negative behaviours that may be considered challenges (e.g., rudeness, gossip, swearing, complaining, narcissism, betrayals; see Kowalski, 2007; Kowalski, Walker, Queen, & Sharpe, 2003). Many of these challenges are considered direct rule violations. On the other side are researchers who maintain that positive processes are not sufficiently addressed (i.e., the enhancement of relationships through capitalizing on positive events, laughter, fun, excitement, sharing positive emotions, novelty; Aron, Norman, & Aron, 2002; Aron, Norman, Aron, & McKenna,

2000; Baxter, 1996; Gable, Reis, Impett, & Asher, 2004). Research on the appetitive processes is in the beginning stages. Evidence from the present investigation suggests that the appetitive challenges that couples face, such as boredom, are important for relational functioning, in addition to the aversive challenges which have been the focus of past research. In other words, there was evidence that people view boredom as a lack or decrease of appetitive processes. Moreover, scores on a measure that reflected this conceptualization were linked with decreased satisfaction above and beyond aversive processes.

Suggestions for theories of relationship maintenance. The major theories of relationships, particularly attachment theory, social exchange theory, and even several growth motivation theorists, would benefit by considering not only the aversive challenges to relational maintenance, but also low appetitive challenges. For instance, in the attachment domain, it would be valuable to further explore the role of attachment as a secure base for exploring other aspects of the relationship with regards to excitement, novelty, and play.

Social exchange theorists would benefit from incorporating both aversive and appetitive processes into their conceptualization of expectations and need satisfaction. Relationship researchers (e.g., Fincham & Beach, 2006; Fincham & Linfield, 1997) have begun to reconsider the unidimensional conceptualization of satisfaction and are taking into account how appetitiveness and aversiveness shape relationship outcomes. It would be a good start to examine people's appetitive expectations in relationships. If individuals are assessing the value of their relationship by comparing it to a set of expectations it would be useful to know whether individuals have expectations for

appetitive processes. Researchers could explore whether violations of appetitive expectations lead to more boredom types of challenges, and whether violations of aversive expectations may lead to more conflict types. In other words, a two-dimensional view of satisfaction and expectations for the relationship may distinguish between different types of challenges. It would also be beneficial to study how relational boredom, or a dampening of appetitive processes, affects the maintenance processes outlined by Rusbult and her colleagues in the investment model (e.g., willingness to sacrifice, derogating alternatives, accommodation). For instance, boredom may be indicative of less appetitive qualities (such as intrinsic motivation, humour, creativity) being incorporated in accommodation processes (i.e., responding constructively to a partner's destructive response). Individuals who are bored may indeed accommodate, but might do so in a way that does not allow the smooth transition to non-conflict situations or longer lasting resolution. Alternatively it would be interesting to examine how the investment model maintenance processes shapes appetitive processes (e.g., boredom). For instance, a focus on sacrifices, derogating alternative, and being observant of the times when a partner is being destructive may result in a greater awareness of aversive processes and an inhibition of appetitive processes (leading to greater boredom).

Finally, growth motivation theorists, particularly those that study the impact of appetitive motivation on responding to conflict could explore how appetitive motivation interacts with monotony, initiating new ideas, responding to a partner's positive affect, and so on. In other words, growth motivation theorists (e.g., Knee, Lonsbary, Canevello, & Patrick, 2005; Knee, Patrick, Lonsbary, 2003; Knee, Patrick, Vietor, &

Neighbors, 2004) could extend their appetitive motivational focus to more appetitive contexts.

Implications for the Conceptualization of Relationship Quality

The present investigation has implications for the measurement of relationship quality. In the present studies, I found that participants linked the dampening of appetitiveness, in the form of relational boredom, with decreased satisfaction. This same pattern emerged for aversive processes, but, generally, to a lesser extent. Although the purpose of this investigation was not to determine the best predictor of relationship satisfaction, it was noteworthy that both appetitiveness and aversiveness variables were significant predictors of relationship satisfaction. A well-established finding in the marital literature is that the excited, enthralled feelings associated with the initial stages of relationship development eventually begin to wane and couples experience a sharp decrease in relationship satisfaction (e.g., Kurdek, 1999; Tucker & Aron, 1993). Thus, even if negative processes in the relationship are managed, the positive aspects also must be maintained. Otherwise, satisfaction will decrease.

Implications for the Study of Relational Boredom

The conceptualization of relational boredom in the present investigation and the links with appetitive and aversive processes has implications for the study of relational boredom. Aron and his colleagues have empirically demonstrated the relation between exciting activities and relationship satisfaction. However, they have not addressed the factors that shape the initiation of exciting activities. One such factor may be the low appetitive nature of the boredom experience itself. When measured as a state in a relationship (i.e., the reason you are motivated to be in a relationship with your partner,

rather than a global motivational orientation), boredom may be viewed as a reflection of the couple's motivational energy for the relationship. Individuals may not be motivated to engage in activities that could reduce boredom in that low appetitive energy state. Thus, the connection with appetitive motivational orientation points to a potential ironic effect of relational boredom, namely not feeling motivated to change the relational energy of the relationship. Interestingly, when basic needs are not met, people may decrease their attempts to satisfy those needs (unlike physical needs). This lack of trying may even become a habit—a self-perpetuating cycle of not being able to satisfy relational needs. Conversely, the more the needs are satisfied, the more the individual may want to act out of interest or autonomous motivation.

In future research, it will be interesting to examine what shapes an individual's decision to act on boredom or to compound the problem by distancing him or herself emotionally and physically. For instance, individual difference variables, such as attachment style and boredom proneness, might shape those decisions. People with a predisposition for boredom may be particularly likely to not try to change the low motivational energy. They also may not be competent at generating new activities and reanimating relationships.

Clinical Implications

Although the primary purpose of this research is to advance the theoretical understanding of relational boredom as a low appetitive relationship maintenance challenge, there are also applied implications of this research. As noted by Aron and Aron (1986) in their seminal book on the self-expansion model, "boredom may be the major underrated, under-treated obstacle to lasting love (p. 91). A measure of relational

boredom may be used as a tool by clinicians to help diagnose or bring to light issues the couple members may be facing in their relationship. The present measure is based on laypeople's conceptions that boredom represents disengagement (emotional and physical) from the relationship and a longing for a time when the relationship had more novelty and positive arousal. These feelings may be dismissed, especially if they are not teamed with direct conflict. The couple may not be aware about what is wrong, and how the relationship is slipping away and why they do not feel compelled or motivated to act on those feelings. Individuals may not be aware that their dissatisfaction they are experiencing may not only be a function of increased aversive processes, but also decreased appetitive qualities.

Aron and his colleagues have found that engaging in novel and arousing activities leads to increased satisfaction and presumably decreased boredom. One issue that the present investigation has brought to light are the potential difficulties clinicians may have when encouraging novel and arousing positive activities. Boredom is associated with decreased appetitive or intrinsic motivation. If partners are feeling a bit dull and are encouraged to try to alleviate boredom by making the relationship more rewarding with dinners, vacations, and "date nights" for instance, this may undermine the intrinsic reasons for being in the relationship, thereby perpetuating a state of boredom. Thus, it is not just the activities that are important, but also the perception that the activities are done for appetitive, intrinsic reasons. If done in a way that makes extrinsic motivation salient, the effects will be short-lived. For example, Seligman and his colleagues (1980) induced dating couples to perceive their motivations for involvement in the relationship as being dominated by either intrinsic (e.g., shared

enjoyment of an activity, mutual demonstrations of affection and a sense of closeness, social involvement as a couple, and the warmth and joy associated with satisfying a partner's needs) or extrinsic rewards (e.g., social status, respect, access to new opportunities and activities, new friends). Priming individuals with the extrinsic rewards for being in their relationship was associated with decreased love toward their partners. Thus, planning a "date night" or an event with another couple may have the ironic effect of further perpetuating the boredom experience, if the motivation for engaging in the activities is not internalized.

The couple level findings in Study 5 suggest that a husband's boredom has more of an effect on wives' satisfaction. Although further replication would need to be done before making recommendations for clinical analysis, the results of Study 5 suggest that it may be useful to bring attention to wives' communication of boredom to husbands because they may be less able to perceive this state.

Limitations and Future Research Directions

Prototype Approach in Scale Construction

One criticism of prototype-based scale construction is the reliance on the "non-expert" opinion of laypeople to define a construct. It is possible that laypeople are not completely aware of the meaning of relational constructs, such as boredom, thereby limiting the content of the scale. There was no evidence of this in the present investigation. The prototype identified by laypeople covered a wide breadth of features. Furthermore, there were no omissions from expert models of boredom. In fact, the more prototypical items mapped nicely onto existing research and theory on relational boredom (e.g., the lack of arousal, novelty, and general low appetitiveness). Individuals

also identified other aspects not specifically addressed by existing theories, including emotional and physical disengagement from the relationship. This took the form of not talking, not wanting to spend time with the partner, lacking feelings of togetherness, and not having one's attention adequately captured by the relationship and partner.

Another limitation of the prototype approach is that it does not allow for the control or regulation of the features that are generated by participants. While the benefit of this low restriction, open-ended method is that it provides sizeable coverage, the downside is that it might lack focus. In the present investigation, the features participants listed included feelings, behaviours, partner and relationship characteristics that might also be considered causes, correlates and consequences of boredom. While I accomplished my goal of identifying layconceptions of the state of relational boredom, I did not isolate the various components of relational boredom. The exploratory factor analysis illustrates the different types of boredom components. The lack of self expansion component might be viewed as more of a cause of relational boredom, whereas the disengagement factor might be more representative of the affective and behavioural consequences. Future research should be conducted to tease apart the causes and consequences of relationship from the general meaning.

Another potential drawback of the prototype approach is that it is limited by the sample and cultural context (Kelley, 1983). The sample in the present investigation was North American, well-educated, and of higher socio-economic status. Future research should assess cultural differences in the meaning of relational boredom and the extent to which the scale is generalizable to different groups (e.g., common law marriage, long term marriage with elderly people, same-sex relationships).

Methodology

There were several methodological limitations. They include issues with self report, correlational methodology, and selection of validity variables.

Self report. One issue with my validation studies (Study 3, 4a, 4b, and 5) was the reliance on self-report. Self-report methods are subject to biases and errors in recall. This was a particular concern when participants were asked to recall their global relationship experiences (Study 3 and Study 4a). There were several steps I took to limit these potential drawbacks. First, in Study 4b, I limited the recall time by having participants report on their affect and partner experiences at the end of day. In future research, it would be desirable to randomly contact participants throughout the day with the use of palm pilots, for example. Second, I measured the boredom experience longitudinally, as well as assessing the measurement of the Relational Boredom Scale over two time periods, spaced two weeks apart. Finally, I also assessed the boredom experience within couples, thereby extending reports of boredom beyond that of one individual.

Future research also should incorporate alternative means of assessing the boredom experience, beyond self report, in order to increase external validity. In Study 5, I moved beyond self-report and examined the partner's report of the boredom experience in the relationship. It will be important to shift to more observational methods. A challenging but worthwhile task will be to select behaviours that are representative of boredom. Potential examples include the amount of eye contact (as is done in habituation studies with infants; e.g., Hamlin, Hallinan, & Woodward, 2008)

and an absence of appetitive behaviours, such as, laughter and smiling during a shared task in the laboratory.

Correlational method. Another issue, aside from the potential problems with self-report, is that I used correlational methods to assess the relation between boredom and satisfaction. It was implied that increases in boredom leads to decreases in satisfaction, however, the studies I designed do not allow for that causal statement to be made. Furthermore, the relationship between boredom and satisfaction is probably reciprocal. It would be beneficial to move beyond the correlational analyses of the individual difference and relationship variables in the study, and examine the causal relationships with boredom.

The relationship between boredom and satisfaction is likely to be complex. It would be advantageous to examine potential mediators between boredom and satisfaction. For example, researchers could study how a partner's boredom influences the other partner's motivation to initiate new and exciting activities, to share feelings (positive and negative) or to engage in distancing behaviours. Those behaviours could in turn be used to predict the other partner's satisfaction on a following day using daily diary methodology.

Validity variable selection. Although every effort was made to include a large enough sample of relevant relationship constructs and individual difference measures in relational boredom's nomological net, there are still important variables that remain to be explored. For instance, it would be valuable to examine additional criterion validity variables including, divorce, time spent away from partner, infidelity, and so on.

Sample

In the present investigation, I tried not to rely on convenience samples by ensuring that married individuals from the community were included in the construction and validation of the scale. Nevertheless, there were several limitations related to the samples used in these studies. First, the manner in which the married participants were recruited may have limited the variability of the sample. For instance, the married participants from Studies 1b and 2b were recruited via university students (Study 1b) or from Continuing Education classes at the University of Manitoba (Study 2b). These samples may have higher socioeconomic status and more likely to possess personal traits such as self-improvement. The married individuals recruited from the community to participate in the daily diary (Study 4b) and the couple study (Study 5) responded to flyers posted in the community and volunteered to participate. Participants who volunteer for such studies may have certain characteristics that could influence boredom (e.g., time to participate, little conflict in relationship). However, in my defence, there were varied careers and incomes in the sample. The individuals in the sample had known and lived with each other for a substantial portion of time, many had children, careers, and other major responsibilities that could potentially compete with the marital relationship. The married individuals on average had been married for a substantial portion of time (i.e., approximately 15 years).

There were several other issues. First, the sample was relatively satisfied. In future research, couples with varying degrees of relationship quality will need to be assessed to fully understand what boredom means. As well, the number of married participants recruited was satisfactory, however, a larger sample would have allowed further analyses. For instance, if I had a larger married sample, I would have been able

to assess the factor structure of the Relational Boredom Scale in order to determine whether the factors identified with the dating sample would replicate. Accordingly, in future research it would be advantageous to include a larger, more varied sample of individuals and couples at different relationship stages and levels of relational quality.

Concluding Remarks

Boredom has been described as a ubiquitous phenomenon that has effects on all facets of life (see Vodanovich, 2003). In the present investigation I examined this phenomenon in the context of close relationships. Unlike aversive-type challenges that have received much research attention in the relational maintenance literature, I examined a relatively understudied dimension, appetitiveness, particularly low appetitiveness. The study of boredom in relationships has been undertaken by several researchers, notably Aron and his colleagues. However, what has not been studied, and what the present investigation contributes to the literature, is the conceptualization of relational boredom held by laypeople (i.e., a bottom-up approach), and the development of a multi-item scale of relational boredom. The development of a measure of relational boredom will complement and expand the maintenance literature. A good relationship is not just a matter of eliminating the negative processes--the absence of positivity (the other side of the coin) also needs to be considered.

References

Acitelli, L. K. (1992). Gender differences in relationship awareness and marital satisfaction among young married couples. *Personality and Social Psychology Bulletin, 18,* 102-110.

Aron, A., & Aron, E. N. (1986). Getting tired of the other. In A. Aron and E. N. Aron (Eds.). Love and the expansion of self: Understanding attraction and satisfaction. New York, NY: Hemisphere Publishing Corp.

Aron, A., & Aron, E. N. (1996). Love and the expansion of the self: The state of the model. *Personal Relationships, 3,* 45-58.

Aron, A., & Aron, E. (2000). Self-expansion motivation and including other in the self. In W. Ickes and S. Duck (Eds.). *The Social Psychology of Personal Relationships.* New York; John Wiley & Sons Ltd.

Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63,* 596-612.

Aron, A. & Henkemeyer, L. (1995). Marital satisfaction and passionate love. *Journal of Social and Personal Relationships, 12,* 139-146.

Aron, A., Norman, C. C., Aron, E. N., McKenna, C., & Heyman, R. E. (2000). Couples' shared participation in novel and arousing activities and experience relationship quality. *Journal of Personality and Social Psychology, 78,* 273-284.

Aron, A., Norman, C. C., Aron, E. N, Lewandowski, G. (2002). Shared participation in self-expanding activities: Positive effects on experienced marital quality. In

P. Noller and J. Feeney (Eds.). *Understanding Marriage (pp. 177-194),* Cambridge University Press.

Aron, A., Norman, C. C., Aron, E. N. (2001). Shared self-expanding activities as a means of maintaining and enhancing close romantic relationships. In J. Harvey and A. Wenzel (Eds.). Close romantic relationships: Maintenance and enhancement. (pp. 47-66). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Aron, A., & Westbay, L. (1996). Dimensions of the prototype of love. *Journal of Personality and Social Psychology, 70,* 535-551.

Arriaga, X. B., & Rusbult, C. E. (1998). Standing in my partner's shoes: Partner perspective-taking and reactions to accommodative dilemmas. *Personality and Social Psychology Bulletin, 9,* 927-948.

Baldwin, M. W. (1992). Relational Schemas and the processing of social information. *Psychological Bulletin, 112,* 461-484.

Bartholomew, K. & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61,* 226-244.

Baxter, L. A. & Montgomery, B. M. (1996). Relating: Dialogues and Dialectics. Guilford Press.

Beck, A. T., & Beamesderfer, A. (1974). Assessment of depression: The depression inventory. In P. Pichot and R. Olivier-Martin. *Psychological measurements in psychopharmacology.* Oxford, England: S. Karger.

Beauducel, A., Brocke, B., Strobel, A., & Strobel, A. Construct validity of sensation seeking: A psychometric investigation., *Zeitschrift-fur-Differentielle-und-Diagnostische-Psyhologie,* 20, 155-171.

Berlyne, D. E. (1960). Conflict, arousal and curiosity. New York: McGraw-Hill.

Blais, M. R., Sabourin, S., Boucher, C., & Vallerand, R. J. (1990). Toward a motivational model of couple happiness. *Journal of Personality and Social Psychology, 59,* 1021-1031.

Blaszczynski, A., McConaghy, N., & Frankova, A. (1990). Boredom proneness in pathological gambling. *Psychological Reports, 67,* 35-42.

Bowlby, J. (1969). *Attachment and loss: Attachment (Vol.1).* New York: Basic.

Bradley, M. M., Cuthbert, B. N., & Lang, P. J. (1993). Pictures as prepulse: Attention and emotion in startle modification. *Psychophysiology, 30,* 541-545.

Braiker, H., & Kelley, H. H. (1979). Conflict in the development of close relationships. In R. L. Burgess & T. L. Huston (Eds. *Social exchange in developing relationships*. New York: Academic.

Brehm, S. S. (1992). *Intimate Relationships* (2nd ed.). New York: McGraw-Hill.

Brennan, K., Clark, C., & Shaver, P. (1998). Self-report measurement of adult attachment: An integrative review. In J. Simpson and W. S. Rholes (Eds.) *Attachment theory and close relationships.* Guilford Press.

Broughton, R. (1984). A prototype strategy for construction of personality scales. *Journal of Personality and Social Psychology, 47,* 1334-1346.

Bryk, A. S. & Raudenbush, S. W. (1992). *Hierarchical Linear Models: Applications and Data Analysis Methods.* Sage.

Buss, D. M. & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review, 100,* 204-232.

Campbell, D. & Fiske, D. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix, *Psychological Bulletin, 56,* 81-105.

Campbell, L., Simpson, J. A., Boldry, J., & Kashy, D. A. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology, 88,* 510-531.

Canary, D. J., Stafford, L. (2001). Equity in the preservation of personal relationships. In J. Harvey and A. Wenzel (Eds.), *Close romantic relationships: Maintenance and enhancement.* Mahwah, NJ: Lawrence Erlbaum Associates.

Carvallo, M. & Gabriel, S. (2006). No man is an island: The need to belong and dismissing Avoidant attachment style. *Personality and Social Psychology Bulletin, 32,* 697-709.

Cate, J., Koval, S. A., Lloyd, S.A., & Wilson, G. (1995). Assessment of relationship thinking in dating relationships, *Personal Relationships, 2,* 77-95.

Caughlin, J. P. & Huston, T. L. (2006). The affective structure of marriage. In A. L. Vangelisti & D. Perlman (Eds.), *Cambridge Handbook of Personal Relationships (pp. 131-155).* New York, NY: Cambridge University Press.

Christensen, A., & Heavey, C. L. (1990). Gender and social structure in demand/withdraw pattern of marital conflict. *Journal of Personality and Social Psychology, 59,* 73-81.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112,* 155-159.

Cohen, J. (1988). *Statistical power analysis for the behavioural sciences (2nd edition).* Hillsdale, NJ: Erbaum.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd edition). Hillsdale, NJ: Erlbaum.

Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis.* Lawrence Erlbaum Associates.

Costello, A. B. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research and Evaluation, 10,* 1-8.

Crowell, J. A., Treboux, D., Gao, Y., Fyffe, C., Pan, H., & Waters, E. (2002). Assessing secure base behaviour in adulthood: Development of a measure, links to adult attachment representations, and relations to couples' communication and reports of relationships. *Developmental Psychology, 38,* 679-693.

Csikszentmihalyi, M. (1975). Play and intrinsic rewards. *Journal of Humanistic Psychology, 15,* 41-63.

Cunningham, M. R., Shamblen, S. R., Barbee, A. P., & Ault, L. K. (2005). Social allergies in romantic relationships: Behavioral repetition, emotional sensitization, and dissatisfaction in dating couples. *Personal Relationships, 12,* 273-295.

Cupach, W. R. & Metts, S. (1986). Accounts of relational dissolution: A comparison of marital and non-marital relationships. *Communication Monographs, 53,* 311-334.

Dahlen, E. R., Martin, R. C., Ragan, K., & Kuhlman, M. M. (2004). Boredom proneness in anger and aggression. Effects of impulsiveness and sensation seeking. *Personality and Individual Differences, 37,* 341-348.

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

Downey, G., Freitas, A. L., Michaelis, B., & Khouri, J. (1998). The self-fulfilling prophecy in close relationships. *Journal of Personality and Social Psychology, 75,* 545-560.

Farmer, R. & Sundberg, N. D. (1986). Boredom proneness-The development and correlates of a new scale. *Journal of Personality Assessment, 50,* 4-17.

Feeney, J. A. (1995). Adult attachment, emotional control, and marital satisfaction. *Personal Relationships, 6,* 169-185.

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

Feeney, J. A. & Noller, P. (1992). Attachment style and romantic love: relationship dissolution. *Australian Journal of Psychology, 44,* 69-74.

Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective. *Journal of Experimental Psychology: General, 113,* 464-486.

Fehr, B. (1988). Prototype analysis of the concepts of love and commitment. *Journal of Personality and Social Psychology, 55, 557-579.*

Fehr, B. (2004). Intimacy Expectations in Same-Sex Friendships: A Prototype Interaction-Pattern Model. *Journal of Personality and Social Psychology, 86,* 265-284.

Fehr, B., & Baldwin, M. (1996). Prototype and script analyses of laypeople's knowledge of anger. In G. J. O. Fletcher and J. Fitness (Eds.). *Knowledge structures in close relationships: A social psychological approach.* Hillsdale, NJ, England: Lawrence Erlbaum Associates.

Fehr, B., & Russell, J. A. (1991). The concept of love viewed from a prototype perspective. *Journal of Personality and Social Psychology, 60,* 425-438.

Fenichel, O. (1951). *On the psychology of boredom.* New York, NY, US: Columbia University Press.

Fincham, F. D. & Beach, S. R. H. (2006). Relationship satisfaction. In D. Perlman and A. Vangelisti (Eds.), *The Cambridge Handbook of Personal Relationships* (pp. 579-594). Cambridge: Cambridge University Press.

Fincham, F. D. & Linfield, K. J. (1997). A new look at marital quality: Can spouses feel positive and negative about their marriage? *Journal of Family Psychology, 11,* 489-502.

Fiske, D. W., & Maddi, S. R. (1961). *Functions of varied experience.* Oxford, England: Dorsey.

Fitness, J., & Fletcher, G. J. O. (1993). Love, hate, anger, and jealousy in close relationships: A prototype and cognitive appraisal analysis. *Journal of Personality and Social Psychology, 65,* 942-958.

Frei, J. R., & Shaver, P. R. (2002). Respect in close relationships: Prototype definition, self-report assessment, and initial correlates. *Personal Relationships, 9,* 121-139.

Friesen, M. D. & Fletcher, G. J. O. (2007). Evidence for a distinct forgiveness prototype: Convergent and discriminant validity. *Personal Relationships, 14,* 209-223.

Frijda, N. H. (1987b). Emotion, cognitive structure, and action tendency. *Cognition and Emotion, 1,* 115-143.

Gable, S. L., & Reis, H. T. (2001). Appetitive and aversive social interaction. In J. Harvey and A. Wenzel (Eds.), *Close romantic relationships: Maintenance and enhancement. (pp. 169-194).* Mahwah, NJ: Erlbaum.

Gable, S. L. & Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology, 87,* 228-245.

Gigy, L. & Kelly, J. B. (1992). Reasons for divorce: Perspectives of divorcing men and women. *Journal of Divorce and Remarriage, 18,* 169-188.

Gottman, J. M. (1993). The roles of conflict engagement, escalation or avoidance in marital interaction: A longitudinal view of five types of couples. *Journal of Consulting and Clinical Psychology, 61(1),* 6-15.

Hamlin, J. K., Hallinan, E. V., & Woodward, A. L. (2008). Do as I do: 7-month-old infants selectively reproduce others' goals. *Developmental Science, 11,* 487-494.

Hamilton, J. A., Haier, R. J., & Buchsbaum, M. S. (1984). Intrinsic Enjoyment and Boredom Coping scales: Validation with personality, evoked potential and attention measures. *Personality and Individual Differences, 5,* 183-193.

Harris, M. B. (2000). Correlates and characteristics of boredom proneness and boredom. *Journal of Applied Social Psychology, 30,* 576-598.

Harvey, J. H. & Wenzel, A. (Eds.) (2001). *Close relationships: Maintenance and enhancement.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Hassebrauck, M. (1997). Cognitions of relationship quality: A prototype analysis of their structure and consequences. *Personal Relationships, 4,* 163-185.

Hatfield, E. & Rapson, R. L. (1987). Passionate love. New directions in research. In W. H. Jones & D. Perlman (Eds.), *Advances in Interpersonal Relations, 1.* (pp. 109-139). Greenwich, CN: JAI Press.

Hazan, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology, 52,* 511-524.

Hazan, C. & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5,* 1-22.

Hazan, C. & Shaver, P. R. (2004). Attachment as an Organizational Framework for Research on Close Relationships. In H. T. Reis and C. E. Rusbult (Eds.), *Close relationships: Key readings.* (pp. 153-174). Philadelphia, PA, US: Taylor & Francis.

Hebb, D. O. (1955). Drives and the C. N. S. (conceptual nervous system). *Psychological Review, 62,* 243-254.

Helgeson, V. S., Shaver, P., & Dyer, M. (1987). Prototypes of intimacy and distance in same-sex and opposite sex relationships. *Journal of Social and Personal Relationships, 4,* 195-233.

Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family, 50,* 93-98.

Hofman, D. A. & Gavin, M. B. (1998) Centering decisions in hierarchical linear models: Implications for research in organizations. *Journal of Management, 24,* 623-641.

Huesmann, L. (1980). Toward a predictive model of romantic behaviour. In K. Pope (Ed.), *On love and loving (pp. 152-171).* San Francisco: Jossey-Bass.

Jacobson, N. S., & Margolin, G. (1979). *Marital therapy: Strategies based on social-learning and behavior exchange principles.* New York: Brunner/Mazel.

Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology.* Cambridge University Press.

Kass, S., Vodanovich, S. J., Stanny, C. J., & Taylor, T. M. (2001). Watching the clock: Boredom and vigilance performance. *Perceptual and Motor Skills, 92,* 969-976.

Kelley, H. H. (1983). The situational origins of human tendencies. A further reason for the analysis of structure. *Personality and Social Psychology Bulletin, 9,* 8-30.

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

Kelvin, P. (1977). Predictability, power and vulnerability in interpersonal attraction. In

S. Duck (Ed.), *Theory and practice in interpersonal attraction (pp. 355-378).* London: Academic Press.

Kenny, D. A., Kashy, D. A., & Cook, W. (1999). *Dyadic Data Analysis.* New York: The Guilford Press.

Kenrick, D. T., Trost, M. R. (2004). Evolutional approaches to relationships. In H. T. Reis and C. E. Rusbult (Eds.). *Close relationships: Key readings*. Psychology Press.

Kenrick, D. T., Trost, M. R. (1987). A biosocial theory of heterosexual relationships. In K. Kelley (Ed), *Females, males, and sexuality: Theories and research.* (pp. 59-100). Albany, NY, US: State University of New York Press.

Klorman, R. (1974). Habituation of fear: Effects of intensity and stimulus order. Psychophysiology, 11, 15-26.

Knapp, M. L., & Vangelisti, A. (1992). *Interpersonal Communication and Human Relationships.* Boston: Allyn & Bacon.

Knee, C. R. (1998). Implicit theories of relationships: Assessment and prediction of romantic relationship initiation, coping and longevity.

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

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

Knee, C. R., Patrick, H., & Lonsbary, C. (2003). Implicit theories of relationships: Orientations toward evaluation and cultivation. *Personality and Social Psychology Review, 7,* 41-55.

Knee, C. R., Patrick, H., Vietor, N. A., & Neighbors, C. (2004). Implicit theories of relationships: Moderators of the link between conflict and commitment. *Personality and Social Psychology Bulletin, 30,* 617-628.

Kowalski, R. M (Ed) (1997). *Aversive interpersonal behaviors.* New York, NY, US: Plenum Press.

Kowalski, R. M. (2001). The aversive side of social interaction revisited. *Behaving badly: Aversive behaviors in interpersonal relationships.* (pp. 297-309). Washington, DC, US: American Psychological Association.

Kowalski, R. M., Walker, S., Wilkinson, A., Queen, A., & Sharpe, B. (2003). Lying, cheating, complaining, and other aversive interpersonal behaviors: A narrative examination of the darker side of relationships. *Journal of Social and Personal Relationships, 20,* 471-490.

Kuley, N. B., & Jacobs, D. F. (1988). The relationship between dissociative-like experiences and sensation seeking among social and problem gamblers. *Journal of Gambling Behaviour, 4,* 197-207.

Kurdek, L. A. (1999). The nature and predictors of the trajectory of change in marital quality for husbands and wives over the first 10 years of marriage. *Developmental Psychology, 35,* 1283-1296.

La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on

attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology, 79,* 367-384.

Laurenceau, J. P. & Bolger, N. (2005). Using diary methods to study marital and family processes. Special Issue on Methodology in Family Science: *Journal of Family Psychology, 19,* 86-97.

Leary, M. R., Rogers, P. A., Canfield, R. W., & Coe, C. (1986). Boredom in interpersonal encounters: Antecedents and social implications. *Journal of Personality and Social Psychology, 51,* 968-975.

London, H., Schubert, D. S., & Washburn, D. (1972). Increase of autonomic arousal by boredom. *Journal of Abnormal Psychology, 80,* 29-36.

Mikulas, W. L., & Vodanovich, S. J. (1993). The essence of boredom. *The Psychological Record, 43,* 3-12.

Mikulincer, M., & Elka, S. (2000). Adult attachment style and cognitive reactions to positive affect: A test of mental categorization and creative problem solving. *Motivation and Emotion, 24,* 149-174.

Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and posttraumatic psychological distress: The impact of the Gulf War in Israel. *Journal of Personality and Social Psychology, 64,* 817-826.

Mikulincer, M., Florian, V. (1995). Appraisal of and coping with a real-life stressful situation: The contribution of attachment styles. *Personality and Social Psychology Bulletin, 21,* 406-414.

Nezlek, J. B. (2003). Using multilevel random coefficient modeling to analyze social

interaction diary data. *Journal of Social and Personal Relationships, 20,* 437-469.

Nezlek, J. B., & Plesko, R. M. (2003). Affect- and self based models of relationships between daily social interaction. *Personality and Social Psychology Bulletin, 28,* 211-223.

Noller, P., Feeney, J. A., Bonnell, D., & Callan, V. (1994). A longitudinal study of conflict in early marriage. *Journal of Social and Personal Relationships,*

O'Hanlon, J. F. (1981). Boredom: Practical consequences and a theory. *Acta Psychol, 49,* 53-82.

Pauhlus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver & L. S. Wrightsman (Eds.) Measurement of Personality.

Pekrun, R. (1992b). The impact of emotions on learning and achievement: Towards a theory of cognitive/ motivational mediators. *Applied Psychology, 41,* 359-376.

Perkins, R. E., & Hill, A. B. (1985). Cognitive and affective aspects of boredom. *British Journal of Psychology, 76,* 221-234.

Pfeiffer, S. M., & Wong, P. T. P. (1989). Multidimensional jealousy. *Journal of Social and Personal Relationships, 6,* 181-196.

Raudenbush, S. W. & Bryk, A. S. (2002). Hierarchical linear models: Applications and data analysis methods (2nd ediction). Newbury Park, CA: Sage.

Raudenbush, S. W., Bryk, A., & Congdon, R. T. (2004). HLM 6: Hierarchical Linear and Nonlinear Modeling. Scientific Software International.

Reis, H. T. & Gable, S. L. (2003). Toward a positive psychology of relationships. In C. L. Keyes & J. Haidt (Eds.), *Flourishing: The positive person and the good life (pp. 129-159).* Washington, DC: American Psychological Association.

Reis, H. T. & Rusbult, C. (2002). Close relationships: Key Readings. New York: Cambridge University Press.

Reissman, C., Aron, A., & Bergen, M. R. (1993). Shared activities and marital satisfaction: Causal direction and self-expansion versus boredom. *Journal of Social and Personal Relationships, 10,* 243-254.

Rempel, J. K., Holmes, J. G., & Zanna, M. P. (1985). Trust in close relationships. *Journal of Personality and Social Psychology, 49,* 95-112.

Rosch, E. H. (1973). On the internal structure of perceptual and semantic categories. In T. E. Moore (Ed.) Cognitive Development: The Acquisition of Language. New York: Academic Press.

Rupp, D. E., Vodanovich, S. J. (1997). The role of boredom proneness in self-reported anger and aggression. *Journal of Social Behavior and Personality, 12,* 925-936.

Rusbult, C.E. (1980). Commitment and satisfaction in romantic associations" A test of the investment model. *Journal of Experimental Social Psychology, 16,* 172-186.

Rusbult, C. E., Arriaga, X. B., & Agnew, C. R. (2001). Interdependence in close relationships. In G. J. O. Fletcher & M. S. Clark (Eds.), *Blackwell handbook of social psychology: Interpersonal processes* (pp. 359-387). Oxford: Blackwell.

Rusbult, C. E., Johnson, D. J., & Morrow, G. D. (1986b). Impact of couple patterns of problem solving on distress and nondistress in dating relationships. *Journal of Personality and Social Psychology, 50,* 744-753.

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

Rusbult, C. E., Olsen, N., Davis, J. L., & Hannon, P. A. (2001). Commitment and relationship maintenance mechanisms. In J. Harvey and A. Wenzel (Eds.). *Close romantic relationships: Maintenance and enhancement.* Mahwah, NJ: Lawrence Erlbaum Associates.

Rusbult, C. E., & Verette, J. (1991). An interdependence analysis of accommodation processes in close relationships. *Representative research in Social Psychology, 19,* 3-33.

Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, I. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology, 60,* 53-78.

Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology, 39,* 1161-1178.

Russell, D., Peplau, L. A., & Cutrona, C. E. (1980). The Revised UCLA Loneliness Scale: Concurrent and Discriminant Validity Evidence. *Journal of Personality and Social Psychology, 39,* 477-480.

Ryan, R. M., & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology, 57,* 749-761.

Ryan, R. M. & Deci, E. L. (1985). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55,* 68-78.

Ryan, R. M., & Deci, E. L. (2000). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry, 11,* 319-338.

Seligman, C., Fazio, R. H., & Zanna, M. P. (1980). Effects of salience of extrinsic rewards on liking and loving. *Journal of Personality and Social Psychology, 38,* 453-460.

Shaver, P., Schwartz, J., Kirson, D., & O'Connor, C. (1987). Emotion knowledge: Further exploration of a prototype approach. *Journal of Personality and Social Psychology, 52,* 1061-1086.

Simpson, J. A., Rholes, W. S., Orina, M., & Grich, J. (2002). Working models of attachment, support giving, and support seeking in a stressful situation. *Personality and Social Psychology Bulletin, 28,* 462-472.

Simpson, J.A., Rholes, W.S., & Nelligan, J. (1992). Support-seeking and support-giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology*, *62*, 434-446.

Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology*, 71, 899-914.

Sommers, J., & Vodanovich, S. J. (2000). Boredom proneness: its relationship to psychological and physical health symptoms. *Journal of Clinical Psychology, 56,* 149-155.

Tabachnick, B. G. & Fidell, L. S. (1988). Multivariate analysis. New York: Wiley and Sons.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics,* 5th edition.

Tellegen, A. (1982). *Brief manual for the Multidimensional Personality Questionnaire.* Minneapolis, MN: University of Minnesota Press.

Thackray, R. I., Jones, K. N., & Touchstone, R. M. (1974). Personality and physiological correlates of performance decrement on a monotonous task requiring sustained attention. *British Journal of Psychology, 65,* 351-358.

Thibault, W., & Kelley, H. (1959). *The social psychology of groups.* New York: Wiley.

Tucker, P., & Aron, A. (1993). Passionate love and marital satisfaction at key transition points in the family life cycle. *Journal of Social and Clinical Psychology, 12,* 135-147.

Vangelisti, A. L. & Daly, J. A. (1997). Gender differences in standards for romantic relationships. *Personal Relationships, 4,* 203-219.

Vodanovich, S. J. (2003). Psychometric measures of boredom: A review of the literature. *Journal of Psychology, 137,* 569-595.

Vodanovich, S. J., Verner, K. M., & Gilbride, T. V. (1991). Boredom proneness: Its relationship to positive and negative affect. *Psychological Reports, 69,* 1139-1146.

Vodanovich, Wallace, Kass (2005) Vodanovich, S. J., Wallace, J. C., & Kass, S. J. (2005). A confirmatory approach to the factor structure of the boredom proneness scale: Evidence for a two-factor short form. *Journal of Personality Assessment, 85,* 295-303.

Wasson, A. S. (1981). Susceptibility to boredom and deviant behavior at school. *Psychological Reports, 48,* 901-902.

Walster, E., Walster, G. W., & Berscheid, E. (1978). *Equity: theory and research.* Boston: Allyn & Bacon.

Walster, E., Walster, G. W., Traupmann, J. (1978). Equity and premarital sex. *Journal of Personality, 36,* 82-92.

Waters, E., & Cummings, E. N. (2000). A secure base from which to explore close relationships. *Child Development, 71,* 164-172.

Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS Scales. *Journal of Personality and Social Psychology, 54,* 1063-1070.

Watt, J. D., & Ewing, J. E. (1996). Toward the development and validation of a measure of sexual boredom. *Journal of Sex Research, 33*, 57-66.

Watt, J. D., & Vodanovich, S. J. (1999). Boredom proneness and psychosocial development. *Journal of Psychology, 133*, 303-314.

Zajonc, R. B. (1978). Attitudinal effects of mere exposure. *Journal of Personality and*

Social Psychology, 9, 1-28.

Zuckerman, M. (1971). Dimension of sensation seeking. *Journal of Consulting and Clinical Psychology, 36,* 45-52.

Zuckerman, M. (1974). The sensation seeking motive. In B. A. Maher (Ed.) Progress in Experimental Personality Research, vol. 7, Academic Press.

Zuckerman, M. (1979a). *Sensation Seeking: Beyond the Optimal Level of Arousal.* Lawrence Erlbaum Associates; Hillsdale, New Jersey.

Footnotes

[1] Jennifer LaGuardia and her colleagues have examined self determination theory (a growth motivation model) in the context of relationships and have examined a broader range of situations aside from conflict (e.g., La Guardia, Ryan, Couchman, & Deci, 2000; Deci, La Guardia; Moller; Scheiner, & Ryan, 2006).

[2] Aron and his colleagues are still refining what it is about those novel and arousing activities that contribute to increased relationship quality (e.g., positive vs. negative nature of the novel activity; novelty vs. arousal (Aron, Norman, Aron, & Lewandowski, 2002). Aron, Norman, & Aron (2001) stress that the activities must be shared and the partner must be salient during the novel and arousing task for the effects to occur.

[3] The idiosyncratic responses will be revisited again when comparing the married and dating samples for the reason that idiosyncratic responses in one sample may be non-idiosyncratic (i.e., listed by two or more participants) in the other sample.

[4] A relatively smaller number of the features were classified as uncodable (15%).

[5] In Study 1 I did not exclude the 12 casual daters from the analysis because they did not generate any features that were not listed by the serious daters. For the centrality rating phase I wanted to be more conservative in my approach and only wanted to include those individuals who rated themselves as being in a serious dating relationship.

[6] There were only 4 participants who reported being in serious dating relationship for less than 6 months.

[7] The other major individual difference measure of relation boredom, namely Zuckerman's (1974, 1996) sensation seeking scale was not selected for inclusion in this research because it was judged to be too long (40 item measure) and several of the items in the measure were outdated (Arnett, 1994).

[8] A review of scale construction techniques using the prototype method (e.g., Frei & Shaver, 2002; Aron & Westbay, 1996) reveals a variety of ways to select items.

[9] With exception, the item "lack of variety" item, in the top 34, was selected because it was judged as more representative of the theme of other top rated features than "decrease in frequency of sex", "no anticipation", "decrease in sexual interest", or "feels like your mind is elsewhere".

[10] Aron and Westbay used this approach of rating just a single item or small phrase fragment to measure love in relationships (Aron & Westbay, 1996).

[11] I did not expect that destiny beliefs would be related to boredom. Individuals who hold destiny beliefs subscribe to the idea that relationships are either meant to be or not. Although destiny beliefs have been linked with greater initial breakup rates (Knee et al., 2002), they have not been linked with destructive maintenance processes.

[12] To address the issue of whether the Relational Boredom Scale is best viewed as a state or trait measure of boredom (i.e., whether it is only certain individuals who experience relational boredom), I assessed the validity variables while controlling for trait boredom, namely boredom proneness. It was expected that the correlations would remain significant when keeping this variable constant. Boredom proneness will be considered further in the Individual Difference section.

[13] *Additional Variables*

H16: It was hypothesized that boredom would be related to the faith component of trust which refers to a global feeling that a partner will be responsive to an individual's needs. This relation was expected to be negative because the faith component of trust has been linked to intrinsic motivational properties in the relationship (Rempel, Holmes, & Zanna, 1985). In contrast, I hypothesized that boredom would only be weakly related to the predictability and dependability components of trust. Other researchers have noted that although predicting partner behaviors is important for relationship functioning, it does have potential drawbacks in the form of habituation-like relationship atrophy (Kelvin, 1977). There is an optimal amount of predictability in a relationship (not too much; not too little) and therefore I predicted a weak, negative relation, or perhaps no relation, with that component of trust. Dependability is characterized as an inference about a partner's disposition to be reliable, honest, and counted on. This variable was not expected to be related to relational boredom.

H17: A central aspect of self determination theory is need satisfaction. There are necessary conditions for growth and well-being in a relationship, namely relatedness, autonomy, and competence. Satisfaction of needs serves to energize human activity and is important for long-term psychological health. According to self-determination theory (SDT), without the satisfaction of those needs, negative consequences ensue. Therefore, I predicted that decreased basic needs would be associated with increased relational boredom.

H18: Relational boredom will be negatively related to positive relationship quality and positively related with perceptions of negative relationship quality. As with

the predictions for affect, the negative association with positive quality was expected to be stronger than the positive correlation with negative quality.

RQ3: At the core of the self-expansion model is the social-cognitive conceptualization of the self merging and expanding with the other. According to this model, when the movement of self incorporating the other halts or slows down, partners may feel tired or bored of each other. Therefore, it is possible that people may report being close, but still feel bored, due to a lack of expansion. Alternatively, when feeling bored in the relationship, this may be experienced as a lack of closeness with the partner. Thus it was not clear how boredom would be related--either very positively, as in the case where a couple has reached a plateau of closeness-- or very negatively, as in the case where the partners do not feel close because they are bored.

[14] One sample was drawn from a spring session and the other from a fall session, due to insufficient numbers in the spring session.

[15] The order of the questionnaires was as follows: Relational Boredom Scale; 15 original boredom items non reverse-worded; satisfaction; frequency of boredom; closeness (Inclusion of Other in the Self scale); state appetitive motivation (Relative Autonomy Index); trait appetitive motivation (Destiny-Growth beliefs); time spent with partner; interpersonal trust; positive and negative affect; basic needs; attachment style; positive and negative relationship quality; conflict; passionate love; jealousy; boredom proneness; loneliness; socially desirable responding; depression; regulatory mode; and demographics.

[16] Due to time constraints, the behavioural and emotional components of jealousy were not included.

[17] *Additional variables.* There were additional measures administered that were related, but not central, to my hypotheses including: trust (Trust Scale; Rempel, Holmes & Zanna, 1985); closeness (Inclusion of Other in the Self Scale; Aron, Aron, & Smollan, 1992), positive and negative relationship quality (Fincham & Linfield, 1997); and relational need satisfaction (Basic Needs Scale; La Guardia, Ryan, Couchman, & Deci, 2000).

[18] There was minimal missing data for the 30 Relational Boredom Scale items ($N = 18$ missing data points). All missing items were replaced with the mean for a particular item across all participants (i.e., series mean). More complicated missing data solutions were not considered due to the low frequency of missing data. It should be noted that 10 of the 18 missing data points were for the item "sex is exciting" suggesting that this item may not be applicable for some of the participants' relationships.

[19] With regard to the 15 items that were reverse-worded, I included the non-reverse worded version of those items (i.e., as they were listed by participants in the prototype generation phase) in another portion of the questionnaire package. See Table 5b for the means of the original (non-reversed) items.

[20] The "no spark" feature with a kurtosis of 23.46 was an extreme item.

[21] Oblique rotation was also used. Similar results were found.

[22] Comrey amd Lee (1992) suggest that "loadings in excess of .71 (50% overlapping variance) are considered excellent, .63 (40% overlapping variance) very good, .55 (30% overlapping variance) good, .45 (20% overlapping variance) fair, and .32 (10% overlapping variance) poor" (p. 625).

[23] The exceptions were cases where there was a .30 difference between the inclusion loading and the cross loading. For instance, an item could have a cross loading of .40 (above .32), however, the inclusion loading could be .74. In that case, the item was retained, even if the item did not satisfy the .32 cross-loading criterion.

[24] Using a principal components analysis with oblique rotation (using the default delta equals zero; delta changes the amount the factors are allowed to correlate; Costello & Osborne, 2005), similar results were found. The exceptions were, "rather spend time with others" and "interested in your partner" (R) which were also included in the first factor. The second factor had the addition of the item "things are not repetitive"(R).

[25] Using a principle components analysis with oblique rotation with a delta equal to zero, similar results were found. The exception were that the "full of passion" (R), and "lots of fun" (R) items loaded on the *self-expansion* factor, and the "feel unfulfilled" and not "lack of intimacy" items loaded on the *lack of emotional connection* factor.

[26] I also conducted the exploratory factor analyses with the transformed items using varimax rotation. There were nearly identical results for the exploratory factor analyses. There were some exceptions, however. For the two factor models, the "take each other for granted" item loaded on the *disengagement* factor and "things are not repetitive" item loaded on the *lack of self expansion* factor. For the three factor models, there were three additional items, "full of passion" (R), "full of romance" (R), "thrilling" (R) loaded on the *lack of self-expansion* factor; two additional items, "dull"

and "feels like you want change" that loaded on the *disengagement* from relationship factor. The *lack of emotional connection* factor remained identical.

[27] Participants also made ratings for the 15 non-reversed items and, for comparison, I assessed the reliability of this scale, (i.e., one that contained all of the 30 non reverse-worded items), $\alpha = .95$. The item-total correlations ranged from .34 to .82 (see second column, Table 7). Thus, the scales containing either the reversed or non reverse-worded items had comparable internal consistency.

[28] The reliability for each of the two factors, *lack of self expansion* and *disengagement from the relationship* was $\alpha = .90$.

[29] As can be seen in Table 8b, several of the variables were skewed (either positively or negatively) greater than the $p = .05$ level. Importantly, when I ran the analyses with transformed variables, the results were nearly identical.

[30] In support of Gable and Reis' distinction between appetitive and aversive processes in relationships, decreases in positive affect were only weakly related to increases in negative affect ($r = -.20$). In other words, the dimensions were relatively independent.

[31] Given the significant, positive relation between relational boredom and social desirability, I re-computed the correlations while controlling for social desirability. As seen in Table 9a, second column, when controlling for social desirability, there were negligible effects on the relations between relational boredom and all of the variables. Therefore, social desirability is not a significant concern for the Relational Boredom Scale.

[32] The difference between the two correlations was assessed using a formula to test differences between correlations within the same sample (Cohen & Cohen, 1983).

[33] Boredom also was associated with greater decreases in basic need fulfillment, less closeness, and greater avoidance relative to conflict (see Table 9b; all comparisons discussed were significantly different).

[34] In addition, negative relationship quality and basic need satisfaction were significant predictors.

[35] It was also surprising that basic need satisfaction was negatively and significantly linked with conflict, but not with boredom (even though a stronger relation was found between need satisfaction and boredom in the correlational analysis).

[36] Although satisfaction was selected to demonstrate the criterion validity and therefore is discussed later, I also included it in these analyses. Satisfaction was more strongly associated with relational boredom than with loneliness and depression.

[37] As well, decreased time spent with partner and basic needs were significant predictors.

[38] As well, basic needs was a significant predictor.

[39] I was concerned that the satisfaction item in the Relational Boredom Scale would inflate the relation between relational boredom and satisfaction. However, the results remained the same after I re-computed the correlations, removing the satisfaction item from the boredom scale.

[40] I also calculated the correlations with a three factor model. In order to create three unique factors based on the findings from the exploratory analysis, I simultaneously regressed each of the three factors on the other two factors (i.e., I ran

three regressions). I used the residual scores from each regression to represent the unique variance of each factor that is not shared with the other two (so that I could calculate semi-partial correlations).

As shown in Table 11b, many of the relations held for all three factors (e.g., boredom frequency, state autonomous motivational orientation, positive relationship quality, closeness, conflict, socially desirable responding, and destiny beliefs). The exception was the *lack of emotional connection* factor which tended to have higher correlations for the following variables: basic need satisfaction, faith component of trust, loneliness, depression, predictability component of trust, jealousy, anxious attachment, boredom proneness, and relational satisfaction. Finally, the lack of self-expansion factor displayed the weakest correlations (e.g., with positive affect, negative affect, dependability component of trust, and jealousy),

[41] H2: I wanted to assess the link between boredom and one component of the investment model (Rusbult, 1991), namely level of alternatives. I expected a low positive correlation between boredom and monitoring of alternatives.

H3: I predicted that individuals who are risk avoiders would report more boredom in their relationship. Risk avoiders place a greater emphasis on avoidance of pain, rather than the approach of pleasure (Goldberg et al., 2006). Given the conceptualization of boredom as a low appetitiveness process, I expected a weak positive relation between risk avoidance and experience of boredom in relationships.

The addition of new measures in the study necessitated the exclusion of some of the scales from Study 3. These included the measures of trust, jealousy, and boredom frequency. Trust and jealousy were not central to my hypothesis pertaining to the low

appetitive nature of relational boredom. As will be described shortly, boredom frequency was assessed with the married sample in the second portion of the study, the daily diary study.

[42] See Tables 11a and 11b for correlations with factors.

[43] At this point in the investigation, I decided to limit the recruitment to married individuals (who were not common law marriage) to reduce the number of potential extraneous variables. There may be qualitative differences between the two types of relationships. It may be that length of the relationship is more important than the type of marital status, however, with little research done in this area, I did not want to unintentionally add additional variables that may shape the boredom experience.

[44] One participant reported being in a same-sex marriage and was excluded from further analyses.

[45] In addition, they completed a measure of relationship alternatives (Rusbult, Martz, & Agnew, 1998), risk avoidance (Goldberg et al., 2006), ten additional affect items added to the 20-item positive and negative affect scale (PANAS). They did not complete measures of trust, jealousy, and boredom frequency (as was done in Study 3).

[46] Missing data were minimal ($N = 17$ missing values) and were replaced by the mean for that item. More complicated missing data calculations were not considered due to the low frequency of missing data.

[47] Variables that were skewed were transformed. The results remained similar when the analyses were run with the transformed variables. For ease of interpretation, the nontransformed variable analyses are presented.

[48] As well, alternatives were more linked with boredom than was conflict.

[49]As well, negative relationship qualities were more strongly related to conflict than was boredom.

[50] Conflict and negative affect were only more strongly correlated with boredom than loneliness.

[51] Only loneliness had a higher correlation with depression.

[52] There were too few cases to conduct a reliable regression with so many variables. Nevertheless, I conducted the regression to assess the pattern of findings.

[53] When analyzing this with each factor (i.e., lack of self expansion and disengagement) included in the regression analyses, instead of the entire unidimensional scale, the disengagement factor was a better predictor of satisfaction than was lack of self expansion.

[54] In addition, controlling for satisfaction had an impact on positive and negative relationship quality, basic need and alternatives.

[55] Is relational boredom simply an individual difference variable? In order to address the issue of whether the scale represents individual differences, the correlations were assessed again, controlling for boredom proneness. As can be seen in Table 15a, column 4 the correlations remained significant after controlling for boredom proneness. This replicated result is evidence that the findings using the Relational Boredom Scale are not solely a function of individual differences in the level of boredom proneness.

[56] See Table 15c for the correlations between each of the factors of relational boredom and the variables in the study.

[57] Participants also completed the Inclusion of Other in the Self scale (to measure closeness).

[58]These were all new couples (i.e., no overlap with Study 4a and 4b).

[59] The one couple who reported being married for under three years, reported being in the relationship for a total of six years.

Table 1a

Prototype of Relational Boredom for the Dating Sample

Features	Dating sample
no longer exciting	28.28
routine	18.18
lack of interest in partner	16.16
always doing the same thing	14.14
don't want to spend time with partner	11.11
know everything about partner	9.09
nothing to talk about	8.08
lack of communication	8.08
lack of fun	8.08
things seem repetitive	8.08
predictable	7.07
no spark	7.07
nothing new	6.06
relationship is not moving forward	6.06
nothing to do	6.06
spend too much time together	5.05
not willing to try new things	5.05
not happy	5.05
annoyed with partner	5.05
feel nothing	5.05
not satisfied	5.05
imagine yourself with someone else	4.04
nothing in common	4.04
things feel too comfortable	4.04
no more butterflies in stomach	4.04
no more surprises	3.03
lacking connection between partners	3.03
not wanting to be with partner	3.03
want to end relationship	3.03
feel trapped	3.03
feels like you want something new	3.03
no thrill	3.03
no energy	3.03
sick and tired of partner	3.03
feels like you want change	3.03
dull	3.03
less passion	3.03
not seeing enough of each other	2.02
don't care what partner does	2.02
lack of enjoyment	2.02

not going out together	2.02
decrease in attraction	2.02
partner different than you thought they were	2.02
not eager to see partner	2.02
decrease in sexual interest	2.02
lack motivation	2.02
lack of variety in relationship	2.02
lack of conversation	2.02
take each other for granted	2.02
feelings are not as intense as they used to be	2.02
rather spend time with others	2.02
forget important dates	2.02
lack of intimacy	2.02
too similar to each other	2.02
loss of romance	2.02
don't feel as special	2.02
doing things that interest your partner but not you	2.02
feels like your mind is elsewhere	2.02
sex is not exciting	2.02
feels like a chore	2.02

Note. This table contains 60 coded features.

Table 1b

Prototype of Relational Boredom for the Married Sample

Features	Married sample
no longer exciting	21.43
routine	18.57
lack of interest in partner	14.29
always doing the same thing	10.00
predictable	7.14
no spark	7.14
nothing to talk about	7.14
nothing in common	7.14
no anticipation	7.14
not compatible	5.71
not stimulating	5.71
not sharing feelings	5.71
nothing new	5.71
no more surprises	5.71
not seeing enough of each other not spending enough quality	5.71
decrease in sexual interest	5.71
don't want to spend time with partner	4.29
lack of communication	4.29
relationship is not moving forward	4.29
lacking connection between partners	4.29
not going out together	4.29
sex is not exciting	4.29
stuck in a rut	4.29
lack of fun	2.86
things seem repetitive	2.86
nothing to do	2.86
annoyed with partner	2.86
feels like you want something new	2.86
no energy	2.86
dull	2.86
lack of enjoyment	2.86
unfulfilled	2.86
avoid partner	2.86
lack of spontaneity	2.86
restless	2.86

Note. This table contains 35 coded features.

Table 1c

Prototype of Relational Boredom for Dating and Married Samples

Features	Dating sample	Married sample
no longer exciting	28.28	21.43
routine	18.18	18.57
lack of interest in partner	16.16	14.29
always doing the same thing	14.14	10.00
don't want to spend time with partner	11.11	4.29
know everything about partner	9.09	1.43
nothing to talk about	8.08	7.14
lack of communication	8.08	4.29
lack of fun	8.08	2.86
things seem repetitive	8.08	2.86
predictable	7.07	7.14
no spark	7.07	7.14
nothing new	6.06	5.71
relationship is not moving forward	6.06	4.29
nothing to do	6.06	2.86
spend too much time together	5.05	0
not willing to try new things	5.05	1.43
not happy	5.05	0
annoyed with partner	5.05	2.86
feel nothing	5.05	1.43
not satisfied	5.05	1.43
imagine yourself with someone else	4.04	1.43
nothing in common	4.04	7.14
things feel too comfortable	4.04	0
no more butterflies in stomach	4.04	0
no more surprises	3.03	5.71
lacking connection between partners	3.03	4.29
not wanting to be with partner	3.03	1.43
want to end relationship	3.03	0
feel trapped	3.03	0
feels like you want something new	3.03	2.86
no thrill	3.03	0
no energy	3.03	2.86
sick and tired of partner	3.03	1.43
feels like you want change	3.03	0
dull	3.03	2.86
less passion	3.03	0
not seeing enough of each other	2.02	5.71
don't care what partner does	2.02	1.43
lack of enjoyment	2.02	2.86

not going out together	2.02	4.29
decrease in attraction	2.02	1.43
partner different than you thought they were	2.02	0
not eager to see partner	2.02	0
decrease in sexual interest	2.02	5.71
lack motivation	2.02	1.43
lack of variety in relationship	2.02	1.43
lack of conversation	2.02	0
take each other for granted	2.02	1.43
feelings are not as intense as they used to be	2.02	0
rather spend time with others	2.02	1.43
forget important dates	2.02	0
lack of intimacy	2.02	0
too similar to each other	2.02	0
loss of romance	2.02	0
don't feel as special	2.02	0
doing things that interest your partner but not you	2.02	0
feels like your mind is elsewhere	2.02	0
sex is not exciting	2.02	4.29
feels like a chore	2.02	0
unfulfilled	0	2.86
avoid partner	0	2.86
lack of spontaneity	0	2.86
restless	0	2.86
stuck in a rut	0	4.29
not stimulating	0	5.71
not sharing feelings	0	5.71
no anticipation	0	7.14
not compatible	0	5.71

Note. This table contains all features listed by participants in both samples (69 features).

Table 2a

Centrality Ratings (Dating Sample)

lack of interest in partner	6.44
no longer exciting	6.33
no spark	6.28
feels like a chore	6.23
sick and tired of partner	6.23
lack of fun	6.15
loss of romance	6.13
want to end relationship	6.03
don't want to spend time with partner	6.03
dull	6.00
lack of conversation	5.92
not satisfied	5.92
less passion	5.90
no thrill	5.87
not wanting to be with partner	5.85
feels like you want change	5.85
lack of intimacy	5.82
feeling unfulfilled	5.82
things seem repetitive	5.79
nothing new	5.79
sex is not exciting	5.77
lack of enjoyment	5.76
not willing to try new things	5.71
feel trapped	5.71
not happy	5.71
relationship is not moving forward	5.71
decrease in sexual interest	5.68
take each other for granted	5.67
feel nothing	5.67
nothing to talk about	5.62
always doing the same thing	5.62
lack of variety in relationship	5.59
don't feel as special	5.59
lacking connection between partners	5.59
no more surprises	5.53
rather spend time with others	5.51
avoid partner	5.50
lack of spontaneity	5.47
annoyed with partner	5.46
imagine yourself with someone else	5.44
stuck in a rut and can't pull away	5.41
not stimulating	5.38

Table 2a *continued*

not eager to see partner	5.29
routine	5.26
predictable	5.26
decrease in frequency of sex	5.26
feelings are not as intense as they used to be	5.24
lack of communication	5.21
not compatible	5.21
decrease in attraction	5.03
feel restless when with partner	5.03
nothing to do	5.03
not sharing feelings with partner	5.03
feels like your mind is elsewhere	5.00
not going out together	4.97
lack motivation	4.94
not spending enough quality time together	4.87
doing things that interest your partner but not you	4.74
no energy	4.62
don't care what partner does	4.50
no more butterflies in stomach	4.44
nothing in common	4.29
partner different than you thought they were	4.29
spend too much time together	4.18
forget important dates	4.15
things feel too comfortable	3.76
know everything about partner	3.15
too similar to each other	2.59

Note. Ratings were made on a scale of 1-8, where 1 = not at all characteristic of boredom and 8 = very characteristic of boredom.

Table 2b

Centrality Ratings (Married sample)

lack of interest in partner	6.24
no spark	6.07
feels like you want change	5.84
not sharing feelings with partner	5.82
feels like a chore	5.73
sick and tired of partner	5.69
no longer exciting	5.67
feeling unfulfilled	5.67
loss of romance	5.64
lack of conversation	5.64
dull	5.58
no more surprises	5.55
no thrill	5.53
feel nothing	5.53
lack of fun	5.51
rather spend time with others	5.51
things seem repetitive	5.49
sex is not exciting	5.44
not satisfied	5.42
nothing new	5.42
don't want to spend time with partner	5.40
lack of intimacy	5.40
lacking connection between partners	5.31
less passion	5.29
take each other for granted	5.29
routine	5.09
decrease in frequency of sex	5.09
not stimulating	5.07
feelings are not as intense as they used to be	5.05
no anticipation	5.04
not spending enough quality time together	5.04
feels like your mind is elsewhere	5.02
decrease in sexual interest	4.95
lack of variety in relationship	4.93
decrease in attraction	4.93
predictable	4.84
relationship is not moving forward	4.82
want to end relationship	4.82
don't feel as special	4.80
always doing the same thing	4.78
nothing to do	4.69
feel trapped	4.67

Table 2b *continued*

not wanting to be with partner	4.65
lack of spontaneity	4.65
lack of enjoyment	4.64
not happy	4.64
nothing to talk about	4.62
lack of communication	4.60
imagine yourself with someone else	4.58
doing things that interest your partner but not you	4.58
annoyed with partner	4.56
not willing to try new things	4.55
stuck in a rut and can't pull away	4.53
no more butterflies in stomach	4.51
not going out together	4.47
don't care what partner does	4.44
avoid partner	4.40
no energy	4.31
feel restless when with partner	4.27
nothing in common	4.22
not compatible	4.00
lack motivation	3.96
forget important dates	3.62
partner different than you thought they were	3.55
things feel too comfortable	3.49
know everything about partner	3.47
spend too much time together	3.24
too similar to each other	3.13

Note. Ratings were made on a scale of 1-8, where 1 = not at all characteristic of boredom and 8 = very characteristic of boredom.

Table 2c

Centrality Ratings for Married and Dating Samples

Items	Married sample	Dating sample
lack of interest in partner	6.24	6.44
no spark	6.07	6.28
feels like you want change	5.84	5.85
not sharing feelings with partner	5.82	5.03
feels like a chore	5.73	6.23
sick and tired of partner	5.69	6.23
no longer exciting	5.67	6.33
feeling unfulfilled	5.67	5.82
lack of conversation	5.64	5.92
loss of romance	5.64	6.13
dull	5.58	6.00
no more surprises	5.55	5.53
no thrill	5.53	5.87
feel nothing	5.53	5.67
lack of fun	5.51	6.15
rather spend time with others	5.51	5.51
things seem repetitive	5.49	5.79
sex is not exciting	5.44	5.77
not satisfied	5.42	5.92
nothing new	5.42	5.79
lack of intimacy	5.40	5.82
don't want to spend time with partner	5.40	6.03
lacking connection between partners	5.31	5.59
take each other for granted	5.29	5.67
less passion	5.29	5.90
routine	5.09	5.26
decrease in frequency of sex	5.09	5.26
not stimulating	5.07	5.38
feelings are not as intense as they used to be	5.05	5.24
no anticipation	5.04	5.31
not spending enough quality time together	5.04	4.87
feels like your mind is elsewhere	5.02	5.00
decrease in sexual interest	4.95	5.68
lack of variety in relationship	4.93	5.59
decrease in attraction	4.93	5.03
predictable	4.84	5.26
relationship is not moving forward	4.82	5.71
want to end relationship	4.82	6.03
don't feel as special	4.80	5.59

Table 2c *continued*

always doing the same thing	4.78	5.62
nothing to do	4.69	5.03
feel trapped	4.67	5.71
not wanting to be with partner	4.65	5.85
lack of spontaneity	4.65	5.47
lack of enjoyment	4.64	5.76
not happy	4.64	5.71
nothing to talk about	4.62	5.62
lack of communication	4.60	5.21
imagine yourself with someone else	4.58	5.44
doing things that interest your partner but no	4.58	4.74
annoyed with partner	4.56	5.46
not willing to try new things	4.55	5.71
stuck in a rut and can't pull away	4.53	5.41
no more butterflies in stomach	4.51	4.44
not going out together	4.47	4.97
don't care what partner does	4.44	4.50
avoid partner	4.40	5.50
no energy	4.31	4.62
feel restless when with partner	4.27	5.03
nothing in common	4.22	4.29
not compatible	4.00	5.21
lack motivation	3.96	4.94
forget important dates	3.62	4.15
partner different than you thought they were	3.55	4.29
things feel too comfortable	3.49	3.76
know everything about partner	3.47	3.15
spend too much time together	3.24	4.18
too similar to each other	3.13	2.59

Note. Ratings were made on a scale of 1-8, where 1 = not at all characteristic of boredom and 8 = very characteristic of boredom. The features were sorted in descending order for ratings made by the married sample.

Table 3

Rank Order of Centrality Ratings

Item	Total	Rank	Married Sample	Rank	Dating Sample	Rank
Lack of interest in partner	6.34	1	6.24	1	6.44	1
No spark	6.17	2	6.07	2	6.28	3
No longer exciting	6.00	3	5.67	7	6.33	2
Feels like a chore	5.98	4	5.98	5	6.23	4
Sick and tired of partner	5.96	5	5.69	6	6.23	5
Loss of romance	5.89	6	5.64	9	6.13	7
Feels like you want change	5.85	7	5.84	3	5.85	16
Lack of fun	5.83	8	5.51	15	6.15	6
Dull	5.79	9	5.58	11	6.00	10
Lack of conversation	5.78	10	5.64	10	5.92	11
Feeling unfulfilled	5.74	11	5.67	8	5.82	18
Don't want to spend time with partner	5.71	12	5.40	21	6.03	8
No thrill	5.70	13	5.53	13	5.87	15
Not satisfied	5.67	14	5.42	20	5.92	12
Things seem repetitive	5.64	15	5.49	17	5.79	20
Lack of intimacy	5.61	16	5.40	22	5.82	19
Sex is not exciting	5.61	17	5.44	18	5.77	22
Nothing new	5.61	18	5.42	19	5.79	21
Feel nothing	5.60	19	5.53	14	5.67	29
Less passion	5.59	20	5.29	24	5.90	13
No more surprises	5.54	21	5.55	12	5.53	36
Rather spend time with others	5.51	22	5.51	16	5.51	27
Take each other for granted	5.48	23	5.25	25	5.67	30
Lacking connection between partners	5.45	24	5.31	23	5.59	34
Not sharing enough feelings together	5.42	25	5.82	4	5.03	50
Lack of variety in the relationship	**5.26**	**29**	**4.93**	**32**	**5.59**	**37**
Not stimulating	**5.23**	**31**	**5.07**	**28**	**5.38**	**43**
Not spending enough quality time together	**4.96**	**50**	**5.04**	**30**	**4.87**	**60**
Routine	**5.18**	**36**	**5.09**	**26**	**5.26**	**47**
Feelings are not intense as they used to be	**5.14**	**40**	**5.05**	**29**	**5.24**	**48**

Note. The five bolded features were selected from the married sample. These features had ranks between 25 and 35.

Table 4

List of Reversed Items

Original feature	Reverse-Worded feature
No surprises	Full of surprises
No spark in the relationship	There is a spark in the relationship
Lack of fun	Lots of fun
Feelings are not as intense as they used to be	Feelings are intense as they used to be
No passion	Full of passion
Not stimulating	Stimulating
Not interested in your partner	Interested in your partner
Nothing new happening	Always something new happening
Lack of variety	Full of variety
Sex is not exciting	Sex is exciting
Things are repetitive	Things are not repetitive
No romance	Full of romance
Not spending enough quality time together	Spend enough quality time together
No thrill	Thrilling
Not exciting	Exciting

Items not reversed

Dull
Lack connection between each other
Sick and tired of your partner
Feel nothing
Take each other for granted
Not satisfied
Lack of intimacy
Lack of conversation
Rather spend time with others
Feels like you don't want to spend time with your partner
Feel unfulfilled in the relationship
Feels like a chore
Feels routine
Not sharing feelings with each other
Feels like you want change

Table 5a

Descriptives for the 30 Relational Boredom Scale Items (Dating Sample)

Item	Mean	Standard deviation	Skewness	Kurtosis
Dull	1.63	1.07	1.90*	3.15*
Lack connection between each other	1.57	1.08	2.45*	6.52*
Full of surprises (R)	4.22	1.45	-.011	-.50
Sick and tired of your partner	1.42	.92	2.73*	8.60*
There is a spark in the relationship (R)	2.77	1.77	.87*	-.18
Feel nothing	1.19	.71	4.62*	23.46*
Take each other for granted	2.47	1.54	1.11*	.67*
Not satisfied	1.67	1.17	2.27*	5.28*
Lots of fun (R)	2.50	1.44	.86*	.32
Lack of intimacy	1.81	1.25	1.72*	2.39*
Lack of conversation	1.79	1.33	2.09*	4.18*
Feelings are intense as they used to be (R)	3.27	1.95	.48*	-1.03*
Full of passion (R)	3.02	1.64	.50*	-.76*
Stimulating (R)	3.09	1.57	.48*	-.55
Rather spend time with others	1.91	1.38	1.97*	3.62*
Interested in your partner (R)	1.79	1.23	2.04*	4.82*
Feels like you don't want to spend time with your partner	1.55	1.09	2.48*	6.36*
Always something new happening (R)	3.93	1.59	.04	-.52
Full of variety (R)	3.85	1.51	.31	-.35
Feel unfulfilled in the relationship	1.87	1.35	1.74*	2.44*
Sex is exciting (R)	2.42	1.55	1.09*	.57
Feels like a chore	1.71	1.19	1.93*	3.64*
Things are not repetitive (R)	4.21	1.53	-.11	-.69*
Full of romance (R)	3.30	1.61	.31	-.61*
Spend enough quality time together (R)	2.95	1.71	.54*	-.54
Feels routine	2.85	1.64	.65*	-.45
Not sharing feelings with each other	1.91	1.40	1.79*	2.74*
Feels like you want change	2.22	1.68	1.45*	1.14*
Thrilling (R)	3.49	1.55	.34*	-.54
Exciting (R)	3.25	1.60	.33*	-.75*

Note. The items indicated by (R) are reverse-worded features. N ranges from 241-245, except for "sex is exciting, N = 235. * = $p < .05$; ** $p = < .01$.

Table 5b

Fifteen Original Items (Dating Sample)

	Item	Mean	N	Standard deviation	Skewness	Kurtosis
3	No surprises	2.19	243	1.49	1.41	1.35
5	No spark	1.55	244	1.01	2.16	4.40
9	Lack of fun	1.62	244	1.04	2.24	5.86
12	Feelings not intense	2.07	243	1.57	1.52	1.42
13	Little passion	1.68	244	1.14	1.85	2.71
14	Not stimulating	1.82	244	1.82	1.76	2.52
16	Lack of interest	1.45	244	1.05	2.77	7.71
18	Nothing new	2.31	244	2.31	1.23	.81
19	Lack of variety	2.25	244	1.39	1.05	.18
21	Sex not exciting	1.65	234	1.28	2.46	5.94
23	Repetitive	2.48	244	1.39	.93	.26
24	Loss of romance	1.74	243	1.12	1.62	2.05
25	Not enough time together	2.16	244	1.61	1.34	.92
29	No thrill	1.84	244	1.14	1.41	1.27
30	Not exciting	1.80	157	1.21	1.77	2.78

Table 6a

Exploratory Factor Analysis of Relational Boredom Items: Varimax Rotated Factor Loadings for the Two-Factor Solution (Dating Sample)

Item	Factor 1	Factor 2
Not satisfied	**.799**	
Sick and tired of partner	**.755**	
Lack connection between each other	**.715**	
Feels like you want change	**.697**	
Dull	**.686**	
Feels like a chore	**.638**	
Feel unfulfilled in the relationship	**.637**	
Feels like you don't want to spend time with your partner	**.578**	
Feel nothing	**.574**	
Not sharing feelings with each other	**.572**	
Lack of intimacy	**.557**	
Lack of conversation	**.544**	
Interested in your partner	.541	.363
Rather spend time with others	.511	
There is a spark in the relationship	.499	.459
Take each other for granted	.437	
Feels routine	.435	.377
Spend enough quality time together	.303	
Exciting		**.814**
Always something new happening		**.810**
Full of variety		**.787**
Thrilling		**.764**
Full of romance	.326	**.746**
Full of passion	.376	**.720**
Stimulating	.485	.645
Full of surprises		**.643**
Feeling are intense as they used to be	.450	.594
Sex is exciting		**.582**
Lots of fun	.465	.582
Things are not repetitive		.476

Note. Loadings below .30 were excluded. This Table contains untransformed items.

Factor 1 = *disengagement from the relationship*; Factor 2 = *lack of self expansion.*

Bolded items were selected for inclusion and met the cross loading criteria.

Table 6b

Exploratory Factor Analysis of Relational Boredom Items: Varimax Rotated Factor Loadings for the Three-Factor Solution (Dating Sample)

Item	Factor 1	Factor 2	Factor 3
Always something new happening	**.808**		
Exciting	**.793**		
Full of variety	**.787**		
Thrilling	**.735**	.364	
Full of romance	**.721**	.353	
Full of passion	.685	.448	
Full of surprises	**.662**		
Stimulating	.609	.497	
Sex is exciting	**.586**		
Lots of fun	.568		.382
Feeling are intense as they used to be	.558	.474	
Things are not repetitive	.475		
There is a spark in the relationship	.447		.429
Not sharing feelings with each other		**.757**	
Lack connection between each other		**.704**	
Lack of conversation		**.621**	
Not satisfied		.582	.562
Feels like you want change		.570	.430
Feel unfulfilled in the relationship		.564	.345
Feels like a chore		.532	.371
Lack of intimacy		**.530**	
Feels routine	.337	.486	
Take each other for granted		.480	
Spend enough quality time together			
Sick and tired of partner			**.772**
Rather spend time with others			**.681**
Feels like you don't want to spend time with your partner			**.670**
Dull			**.578**
Feel nothing			**.577**
Interested in your partner	.354		.495

Note. Loadings below .30 were excluded. This Table contains untransformed items.

Factor 1 = *lack of self-expansion*; Factor 2 = *lack of emotional connection*; Factor 3 = *disengagement from the relationship*. Bolded items were selected for inclusion.

Table 7

Corrected Item-Total Correlations for the 30-item Relational Boredom Scale (Dating Sample)

Scale numbers	Scale items	Corrected item-total Correlations	Corrected item-total correlations for original items (i.e., non reverse-worded)
30	*Exciting*	.77	.61
13	*Full of passion*	.76	.69
24	*Full of romance*	.73	.78
29	*Thrilling*	.72	.82
19	*Full of variety*	.59	.74
14	*Stimulating*	.77	.78
12	*Feelings are intense as they used to be*	.72	.77
9	*Lots of fun*	.71	.71
18	*Always something new happening*	.54	.76
1	Dull	.66	.70
5	*There is a spark in the relationship*	.67	.79
8	Not satisfied	.72	.78
28	Want change	.68	.71
26	Feels routine	.54	.59
16	*Interested in your partner*	.61	.63
20	Feel unfulfilled	.62	.68
3	*Full of surprises*	.47	.69
21	*Sex is exciting*	.50	.49
4	Sick and tired of partner	.61	.69
10	Lack of intimacy	.58	.57
23	*Things are not repetitive*	.47	.71
2	Lack connection	.56	.61
27	Not sharing feelings	.54	.56
6	Feel nothing	.50	.52
7	Take each other for granted	.48	.51
22	Feels like a chore	.50	.56
17	Don't want to spend time with partner	.43	.46
15	Rather spend time with others	.40	.43
11	Lack of conversation	.45	.49
25	*Spend enough quality time together*	.29	.34

Note. Italicized items were reverse-coded prior to analyses in the first column of corrected item-total correlations. The Table contains untransformed items. The second column of corrected item-total correlations is based on the 30 original features (i.e., non-reversed scale format). This was done by having participants rate the 15 items that

were reversed on a separate page in the non-reversed format (i.e., participants rated 15 of the items twice, once in each format, reverse-worded and non reverse-worded).

Table 8a

Descriptives for the Individual Difference and Relationship Variables (Dating Sample)

	Mean	Range of scale	Standard deviation	Range of means
Relational boredom	2.52	1-7	.87	1.07 - 5.27
Boredom frequency	2.46	1-7	1.17	
State appetitive motivation (RAI)	4.36	1-7	2.95	-4.00 - 11.20
Growth beliefs	5.57	1-7	.82	2.50 - 7.00
Destiny beliefs	4.16	1-7	1.10	1.25 - 7.00
Positive affect	3.63	1-5	.73	1.70 - 5.00
Passionate love	7.02	1-9	1.28	2.47 - 8.93
Negative affect	1.81	1-5	.72	1.00 - 4.70
Conflict	3.42	1-9	1.62	1.00 - 8.00
Depression	1.67	1-4	.46	1.00 - 3.55
Loneliness	2.91	1-4	.62	1.00 - 4.00
Jealousy	5.88	1-7	1.00	1.63 - 7.00
Socially desirable responding	12.00	1-7	5.62	1.00 - 31.00
Relational satisfaction	4.19	1-5	.62	1.86 - 5.00
Boredom proneness	3.18	1-7	.72	1.46 - 6.21
Avoidant attachment	2.11	1-7	.90	1.00 - 5.33
Anxious attachment	3.20	1-7	1.29	1.00 - 6.39
Interpersonal trust	1.85	-3 to 3	.86	-2.38 - 3.00
Faith (trust)	2.16	-3 to 3	.89	-3.00 - 3.00
Dependability (trust)	.99	-3 to 3	.89	-1.80 - 3.00
Predictability (trust)	1.58	-3 to 3	1.17	-3.00 - 3.00
Positive relationship quality	9.06	1-10	1.61	
Negative relationship quality	4.04	1-10	2.42	
Closeness	5.33	1-7	1.40	
Basic needs	6.10	1-7	.90	2.33 - 7.00
Relationship length (Months)	28.47	1-462	43.97	
Participant age	20.88	18-62	5.36	

Note. For the single-item measures, the range of means is not provided.

Table 8b

Descriptives for the Individual Difference and Relationship Variables (Dating Sample)

	Skewness	Kurtosis	Cronbach alpha
Relational boredom	.83**	.19	.94
Boredom frequency	.85**	.34	
State appetitive motivation (RAI)	-.36*	-.39	*t*
Growth beliefs	-.37*	.25	.52
Destiny beliefs	.11	-.19	.64
Positive affect	-.34*	-.39	.84
Passionate love	-.90**	.55	.90
Negative affect	1.48**	2.22	.87
Conflict	.69**	-.30	.81
Depression	1.08**	1.06	.84
Loneliness	-.44*	-.27	.88
Jealousy	-1.48**	2.55	.85
Socially desirable responding	.46*	.09	.78
Relational satisfaction	-1.34**	1.84	.84
Boredom proneness	.51*	.70	.83
Avoidant attachment	1.19**	1.02	.90
Anxious attachment	.47*	-.57	.92
Interpersonal trust	-.1.54**	3.62	.87
Faith (trust)	-2.09**	6.49	.82
Dependability (trust)	-.51*	.33	.59
Predictability (trust)	-1.08**	1.13	.60
Positive relationship quality	-.76**	14.84	
Negative relationship quality	.76**	-.43	
Closeness	-.58**	-.40	
Basic needs	-1.46**	2.11	.86
Relationship length (Months)			
Participant age			

Note. t = Consists of weighted items and thus the reliability is not calculated (i.e., the scale does not consist of a sum of items). Cronbach's alpha coefficients are not provided for single-item measures.

Table 9a

Correlations Between Scores on the Relational Boredom Scale and Individual Difference and Relationship Variables (the Dating Sample)

	Relational Boredom Scale (30 item)	Relational Boredom controlling for Social Desirable Responding	Relational Boredom Scale Controlling for Conflict	Relational Boredom Scale Controlling for Boredom Proneness	Relational Boredom Scale Controlling for Satisfaction
Convergent validity: Face validity					
Boredom frequency	.66 **	.64 **	.58 **	.63 **	.44 **
Convergent validity: Appetitive variables					
Relative autonomy index	-.58 **	-.55 **	-.47 **	-.54 **	-.37 **
Growth beliefs	-.22 **	-.19 *	-.26 **	-.16	-.09
Destiny beliefs	.09	.08	.13 *	.05	.15 *
Positive affect	-.64 **	-.63 **	-.58 **	-.61 **	-.46 **
Passionate love	-.39 **	-.39 **	-.42 **	-.42 **	-.23 **
Convergent validity: Aversive variables					
Negative affect	.43 **	.39 **	.18 **	.36 **	.06
Conflict	.53 **	.49 **		.46 **	.06
Depression	.35 **	.27 **	.21 *	.20	.11 †
Loneliness	.33 **	.27 **	.18 **	.20	.14 *
Jealousy	.25 **	.17 **	.06	.18	.07
Discriminant validity					
Socially desirable responding	-.27 **		-.17 **	-.16	-.09
Criterion validity					
Relational satisfaction	-.74 **	-.72 **	-.63 **	-.72 **	
Individual Differences					
Boredom proneness	.32 **	.24 **	.16 *		.16 *
Avoidance attachment	.55 **	.50 **	.46 **	.50 **	.21 **
Anxiety attachment	.35 **	.26 **	.14 *	.21 *	.09
Additional variables					
Interpersonal trust	-.59 **	-.54 **	-.37 **	-.52 **	-.07
Dependability (trust)	-.20 **	-.16 *	-.08	-.16 *	.10
Predictability (trust)	-.47 **	-.44 **	-.22 **	-.42 **	-.05
Faith (trust)	-.64 **	-.59 **	-.48 **	-.58 **	-.18**

Positive relationship quality	-.44 **	-.41 **	-.36 **	-.40 **	-.16 *
Negative relationship quality	.48 **	.43 **	.20 **	.42 **	.02
Basic needs	-.65 **	-.61 **	-.53 **	-.59 **	-.30 **
Closeness	-.35 **	-.31 **	-.31 **	-.36 **	-.07
Relationship length	.16 *	.18 **	.17 **	.18 *	.18 **
Participant age	.12 ŧ	.11 ŧ	.14 *	.13 *	.15 *

Note. N=245. This Table contains untransformed variables. * = $p < .05$; ** $p = < .01$.

ŧ = marginally significant.

Table 9b

Correlations between Conflict and the Individual Difference and Relationship Variables (Dating Sample)

	Conflict	Relational Boredom	Loneliness	Depression
Boredom frequency	.39**	.66 **	.24*	.26*
Relative autonomy index	-.41**	-.58 **		
Growth beliefs	.003	-.22 **	.02	-.08
Destiny beliefs	-.03	.09	.07	.12
Positive affect	-.35**	-.64 **	-.20	-.22*
Passionate love	-.06	-.39 **	.10	.12
Negative affect	.58**	.43 **	.42**	.48**
Conflict		.53 **	.36**	.33**
Depression	.33**	.35 **	.67**	
Loneliness	.36**	.33 **		.30**
Jealousy	.38**	.25 **	.34**	.54**
Socially desirable responding	-.25**	-.27 **	-.28	
Relational satisfaction	-.65**	-.74 **	-.32**	-.39**
Boredom proneness	.38**	.32 **	.49**	.68
Avoidant attachment	.34**	.55 **	.29**	.38**
Anxious attachment	.46**	.35 **	.61**	.60**
Interpersonal trust	-.62**	-.59 **	-.34**	-.36**
Faith (trust)	-.52**	-.64 **	-.29**	-.32**
Dependability (trust)	-.24**	-.20 **	-.14**	-.10
Predictability (trust)	-.61**	-.47 **	-.30**	-.34**
Basic needs	-.46**	-.65 **	-.45**	-.42**
Closeness	-.14*	-.35 **	-.11	-.10
Negative relationship quality	.64**	.48 **	.27*	.29*
Positive relationship quality	-.25**	-.44 **	-.10	-.18
Relationship length	.03	.16 *	-.03	
Participant age	.005	.12		

Note. * = $p < .05$; ** $p = < .01$.

Table 9c

Regression Analysis With Boredom and Conflict as the Dependent Variables

Variable	*B*	*SE B*	B	*B*	*SE B*	B
		Boredom			Conflict	
Boredom frequency	.13	.04	.17**	.006	.08	.005
Growth	-.04	.04	-.04	.24	.09	.12*
Relative autonomy index	-.04	.01	-.12*	.01	.03	.02
Trust	-.04	.06	-.04	-.61	.13	-.32**
Positive affect	-.35	.06	-.29**	.03	.13	.01
Positive relationship qualities	-.03	.03	-.05	-.06	.06	-.06
Basic needs	-.10	.07	-.10	.52	.14	.28**
Closeness	-.04	.03	-.07	.06	.06	.05
Passionate love	-.09	.03	-.14**	.07	.07	.05
Negative affect	.02	.06	.02	.56	.13	.25**
Negative relationship qualities	-.01	.02	-.03	.24	.04	.36**
Conflict	.10	.03	.18**			
Loneliness	.08	.08	.06	-.18	.17	-.07
Depression	.13	.11	.07	-.54	.23	-.15*
Socially desirable responding	.003	.007	.02	.007	.01	.02
Destiny	.05	.03	.07	-.05	.07	-.03
Jealousy	.13	.04	-.15**	-.22	.09	.13*
Boredom proneness	-.09	.06	-.07	.37	.13	.17**
Avoidant attachment	.11	.05	.11*	-.09	.11	-.05
Anxious attachment	.05	.04	.07	.09	.08	.07
Gender of participant	-.03	.04	-.03	-.06	.09	-.03
Time spent with partner	.02	.04	.02	-.01	.09	-.006
Age of participant	-.001	.01	-.004	.01	.02	.05
Length of relationship	.002	.001	.10	.001	.003	.04
Relational boredom				.45	.15	.24**
	$R^2 = .74$ (SE= .46)			$R^2 = .66$ (SE= 1.00)		

Note. * = $p < .05$; ** $p = < .01$.

Table 9d

Regression Analysis with Loneliness and Depression as the Dependent Variables (Dating Sample)

	Loneliness			Boredom			Depression		
Variable	*B*	*SE*	B	*B*	*SE*	β	*B*	*SE*	*B*
Boredom frequency	.02	.04	.04	.13	.04	.17**	-.006	.03	-.01
State appetitive motivation	.009	.01	.04	-.04	.01	-.12*	.001	.009	.008
Growth beliefs	-.03	.04	-.03	-.04	.04	-.04	-.003	.03	-.005
Destiny beliefs	.009	.03	.02	.05	.03	.07	.02	.02	.05
Positive affect	-.03	.05	-.03	-.35	.06	-.29**	-.002	.04	-.003
Passionate love	-.02	.03	.04	-.09	.03	-.14**	.05	.02	.14*
Negative affect	.01	.06	.02	.02	.06	.02	.12	.04	.19**
Conflict	-.03	.03	-.08	.10	.03	.18**	-.06	.02	-.21**
Loneliness				-.08	.08	-.06	-.28	.05	.37**
Depression	-.51	.09	-.38*	.13	.11	.07			
Jealousy	.01	.06	-.02	.13	.04	-.15**	-.05	.03	-.10†
Socially des. resp.	.000	.006	.002	.003	.007	.02	.002	.004	.02
Satisfaction	-.07	.09	-.06	-.42	.10	-.29**	-.13	.07	-.16†
Boredom proneness	-.12	.05	.14*	-.09	.06	-.07	.15	.04	.23**
Avoidant attachment	.03	.05	.05	.11	.05	.11*	.06	.03	.12†
Anxious attachment	-.09	.03	.19**	.05	.04	.07	.05	.03	.14*
Gender	-.11	.04	.15**	-.03	.04	-.03	.01	.03	.02
Trust	-.06	.06	-.08	-.04	.06	-.04	.004	.04	.007
Basic needs	.18	.06	.25**	-.10	.07	-.10	.10	.05	.18*
Closeness	-.009	.02	.02	-.04	.03	-.07	.005	.02	.02
Negative rel. qualities	.01	.02	.04	-.01	.02	-.03	.009	.01	.05
Positive rel. qualities	-.04	.02	-.02	-.03	.03	-.05	-.02	.02	-.05
Time spent with partner	.12	.04	-.16**	.02	.04	.02	-.03	.03	-.05
Length of rel.	-.001	.001	.11	.002	.001	.10	.001	.001	.08
Age of participant	.006	.009	-.06	-.001	.01	-.004	-.007	.006	-.08
Relational boredom	-.06	.06	.09				.03	.05	.06

$R^2 = .60$ (SE = .42)

Note. * = $p < .05$; ** $p = <.01$; † = $p < .10$

Table 10

Regression Analysis with Satisfaction as the Dependent Variable (Dating Sample)

Variable	*B*	*SE B*	B
Boredom frequency	.03	.03	.07
Relative autonomy index	-.003	.01	-.01
Growth	.05	.03	.06
Destiny	.006	.02	.01
Positive affect	.002	.04	.002
Passionate love	.03	.02	.06
Negative affect	-.06	.04	.002
Conflict	-.08	.02	-.20**
Loneliness	-.04	.05	-.04
Depression	-.13	.07	-.10 †
Jealousy	.03	.03	.04
Socially desirable responding	-.004	.004	-.03
Boredom proneness	.06	.04	.07
Avoidant attachment	-.07	.03	-.11*
Anxious attachment	.008	.03	.02
Gender	-.03	.03	-.04
Trust	.12	.04	.17**
Positive relationship qualities	.04	.02	.09*
Negative relationship qualities	-.03	.01	-.14**
Basic needs	.05	.05	.07
Closeness	.02	.02	.06
Time spent with partner	-.001	.03	-.001
Length of relationship	.000	.001	-.03
Age	.002	.006	.01
Relational boredom	-.21	.05	-.30**

$R^2 = .76$ (SE = .31)

Note. * = $p < .05$; ** $p = <.01$; † = $p < .10$.

Table 11a

Correlations Between Two Relational Boredom Scale Factors and Individual Difference and Relationship Variables (Dating Sample)

	Relational Boredom Scale (30 item)	Factor 1: Lack of self-expansion	Factor 2: Disengagement
Boredom frequency	.66 **	.52**	.66**
Relative autonomy index	-.58 **	-.44**	-.55
Growth beliefs	-.22 **	-.23**	-.19**
Destiny beliefs	.09	.05	.04
Positive affect	-.64 **	-.67**	-.50**
Passionate love	-.39 **	-.40**	-.31**
Negative affect	.43 **	.20**	.53**
Conflict	.53 **	.39**	.49**
Loneliness	.33 **	-.15*	-.39**
Depression	.35 **	.19**	.39**
Jealousy	.25 **	-.09	-.31**
Socially desirable responding	-.27 **	-.21**	-.23**
Relational satisfaction	-.74 **	-.54**	-.74**
Boredom proneness	.32 **	.19**	.33**
Avoidant attachment	.55 **	.38**	.56**
Anxious attachment	.35 **	.18**	.40**
Interpersonal trust	-.59 **	-.42**	-.42**
Faith (trust)	-.64 **	-.51**	-.65**
Dependability (trust)	-.20 **	-.18**	-.18**
Predictability (trust)	-.47 **	-.31**	-.51**
Positive rel. quality	-.44 **	-.36**	-.39**
Negative rel. quality	.48 **	.39**	.46**
Basic needs	-.65 **	-.42**	-.72**
Relationship length	.16 *	.14*	.13*
Participant age	.12	.10	.12

Note. * = $p < .05$; ** $p = < .01$.

Table 11b

Correlations Between Three Relational Boredom Scale Factors and Individual Difference and Relationship Variables (Dating Sample)

	Relational Boredom Scale (30 item)	Factor 1: Lack of self-expansion	Factor 2: Lack of emotional connection	Factor 3: Disengagement
Boredom frequency	.66 **	.48**	.49**	.48**
Relative autonomy index	-.58 **	-.40**	-.36**	-.41**
Growth beliefs	-.22 **	-.23**	-.18**	-.12†
Destiny beliefs	.09	.04	-.07	.09
Positive affect	-.64 **	-.62**	-.37**	-.35**
Passionate love	-.39 **	-.36**	-.23**	-.23**
Negative affect	.43 **	.17**	.41**	.40**
Conflict	.53 **	.33**	.34**	.31**
Loneliness	.33 **	.15*	.33*	.26**
Depression	.35 **	.19**	.38**	.30**
Jealousy	.25 **	.07	.29**	.22**
Socially desirable responding	-.27 **	-.20**	-.20**	-.16*
Relational satisfaction	-.74 **	-.45**	-.57**	-.48**
Boredom proneness	.32 **	.19**	.30**	.15**
Avoidant attachment	.55 **	.34**	.49**	.49**
Anxious attachment	.35 **	.18*	.37**	.22**
Interpersonal trust	-.59 **	-.37**	-.53**	-.39**
Faith (trust)	-.64 **	-.45**	-.58**	-.41**
Dependability (trust)	-.20 **	-.17*	-.18**	-.09
Predictability (trust)	-.47 **	-.25**	-.42**	-.34**
Positive relationship quality	-.44 **	-.30**	-.34**	-.29**
Negative relationship quality	.48 **	.33**	.36**	.26**
Basic needs	-.65 **	-.36**	-.67**	-.50**
Relationship length	.16 *	.03	.17*	.001
Participant age	.12	.07	.17**	-.01

Note. * = $p < .05$; ** $p = < .01$; † = $p < .10$.

Table 12

Descriptives for the 30 Items of the Relational Boredom Scale (Married Sample)

	Item	*M*	*SD*	Skewness	Kurtosis
1	Dull	2.64	1.59	.73*	-.43
2	Lack connection between each other	2.27	1.24	.59	-.93
3	*Full of surprises*	4.65	1.60	-.26	-.70
4	Sick and tired of your partner	1.95	1.51	1.98*	3.71*
5	*There is a spark in the relationship*	3.10	1.91	.57	-.73
6	Feel nothing	1.45	.99	2.26*	4.10*
7	Take each other for granted	3.07	1.73	.28	-1.05
8	Not satisfied	2.64	1.77	.95*	-.11
9	*Lots of fun*	3.46	1.93	.35	-.99
10	Lack of intimacy	3.09	1.86	.39	-1.21
11	Lack of conversation	3.05	1.69	.55	-.44
12	*Feelings are intense as they used to be*	4.11	1.92	-.01	-1.23
13	*Full of passion*	4.09	2.04	.04	-1.26
14	*Stimulating*	3.75	1.89	.31	-.97
15	Rather spend time with others	2.02	1.45	1.76*	2.82*
16	*Interested in your partner*	2.18	1.43	.92*	-.41
17	Feels like you don't want to spend time with your partner	2.16	1.45	1.46*	1.72*
18	*Always something new happening*	4.34	1.77	.03	-1.00
19	*Full of variety*	4.62	1.65	-.14	-.82
20	Feel unfulfilled in the relationship	2.64	1.88	1.10*	.16
21	*Sex is exciting*	3.69	2.11	.38	-1.16
22	Feels like a chore	2.29	1.67	1.56*	1.82*
23	*Things are not repetitive*	4.52	1.42	-.21	-.63
24	*Full of romance*	4.76	1.74	-.61	-.39
25	*Spend enough quality time together*	4.13	1.93	-.12	-1.42*
26	Feels routine	3.63	1.82	.12	-1.05
27	Not sharing feelings with each other	3.07	1.77	.65	-.42
28	Feels like you want change	2.89	2.11	.76*	-.82
29	*Thrilling*	4.78	1.71	-.30	-.83
30	*Exciting*	4.60	1.86	-.27	-.97

Note. $N = 56$. * = $p < .05$. Italicized items are reversed features. The means reported are non-reversed. Participants made ratings of how well each feature characterizes their relationship on a scale, where 1=not at all true and 7=completely true.

Table 13

Corrected Item-Total Correlations (Married Sample)

Scale number	Scale items	Corrected Item-total correlations
29	*Thrilling (No thrill)*	.82
30	*Exciting (Not exciting)*	.81
13	*Full of passion (Little passion)*	.79
14	*Stimulating (not stimulating)*	.77
24	*Full of romance (Loss of romance)*	.77
20	Feel unfulfilled	.76
2	Lack connection	.73
19	*Full of variety (Lack of variety)*	.73
28	Want change	.73
8	Not satisfied	.71
12	*Feelings are intense as they used to be (Feelings are not as intense as they used to be)*	.71
18	*Always something new happening (Nothing new)*	.67
21	*Sex is exciting (Sex is not exciting)*	.66
9	*Lots of fun (Lack of fun)*	.65
10	Lack of intimacy	.65
26	Feels routine	.65
22	Feels like a chore	.64
16	*Interested in your partner (Lack of interest in partner)*	.63
1	Dull	.62
5	*There is a spark in the relationship (No spark)*	.62
27	Not sharing feelings	.62
7	Take each other for granted	.60
3	*Full of surprises (No surprises)*	.55
17	Don't want to spend time with partner	.55
11	Lack of conversation	.52
15	Rather spend time with others	.51
6	Feel nothing	.49
23	*Things are not repetitive (Repetitive)*	.49
25	*Spend enough quality time together (Not spending) enough quality time together*	.43
4	Sick and tired of partner	.34

Note. Italicized items are reverse-worded items. Items in brackets represent the original wording of the item before the wording was reversed.

Table 14a

Descriptives for the Individual Difference and Relationship Variables (Married Sample)

	M	Range	*SD*	Range
Relative autonomy index	4.03	1 - 7	3.33	-5.80 - 10.40
Growth beliefs	5.35	1 - 7	.88	3.50 - 7.00
Destiny beliefs	3.74	1 - 7	1.15	1.75 - 6.25
Positive affect	3.17	1 - 5	.87	1.50 - 4.90
HAHP	3.20	1 – 5	3.20	1.50 - 5.00
LAHP	3.47	1 - 5	1.03	1.00 - 5.00
Passionate love	6.07	1 - 9	1.78	1.67 - 9.00
Negative affect	1.80	1 - 5	.83	1.00 - 4.80
HALP	1.86	1 - 5	.82	1.00 - 4.45
LALP	1.90	1 - 5	1.12	1.00 - 5.00
Conflict	3.74	1 - 9	1.70	1.00 - 8.60
Loneliness	2.81	1 - 4	.66	1.40 - 4.00
Depression	1.69	1 - 4	.52	1.00 - 2.80
Socially desirable responding	11.88	1 - 7	5.38	2.00 - 30.00
Relational satisfaction	3.22	1 - 5	.36	2.29 - 3.86
Boredom proneness	3.17	1 - 7	.73	1.56 - 4.71
Avoidant attachment	2.49	1 - 7	1.14	1.06 - 5.00
Anxious attachment	3.06	1 - 7	1.29	1.00 - 5.94
Positive relationship quality	8.82	1 - 10	1.33	5 - 10
Negative relationship quality	4.02	1 - 10	2.32	1 - 10
Basic needs	5.65	1 - 7	1.35	1.78 - 7.00
Closeness	4.67	1 - 7	1.70	1 - 7
Alternatives	2.11	1 - 4	.81	1.00 - 4.00
Risk avoidance	4.72	1 - 7	1.20	2.20 - 7.00
Relationship length (years)	16.28		9.00	5 - 41
Age	38.30		8.46	24 - 60
Relational Boredom	3.31	1 - 7	1.19	1.37 - 6.03

Note. * = $p < .05$; ** $p = < .01$. HALP = high arousal, low pleasure; LALP = low arousal low pleasure; HAHP = high arousal high pleasure; LAHP = low arousal high pleasure.

Table 14b

Descriptives for the Individual Difference and Relationship Variables (Married Sample)

	Skew	Kurtosis	Cronbach alpha
State appetitive motivation	-.64**	.19	x
Growth beliefs	.23	-.81	.55
Destiny beliefs	.22	-.94	.72
Positive affect	-.22	-.79	.94
HAHP	-.11	-.98	.92
LAHP	-.65**	.07	.88
Passionate love	-.69**	.009	.94
Negative affect	1.35**	.85	.96
HALP	1.38**	1.06	.93
LALP	1.38**	.85	.93
Conflict	.98**	1.26	.80
Loneliness	-.21	-.77	.92
Depression	.52**	-.80	.89
Socially desirable responding	.95**	1.63	.78
Relational satisfaction	-.79*	.43	.50
Boredom proneness	.02	.91	.84
Avoidant attachment	.64**	-.63	.92
Anxious attachment	.61**	-.28	.92
Positive relationship quality	-.95**	-.03	
Negative relationship quality	.96**	.30	
Basic needs	-1.21**	.87	.93
Closeness	-.64**	-.40	
Alternatives	.41	-.35	.84
Risk avoidance	.17	-.53	.85
Relationship length (years)	.98**	.42	
Age	.63**	.18	
Relational Boredom	.36	-.56	.96

Note. * = $p < .05$; ** $p = < .01$. HALP = high arousal, low pleasure; LALP = low arousal low pleasure; HAHP = high arousal high pleasure; LAHP = low arousal high pleasure. x = weighted computation of scale, thus Cronbach alpha is not computed.

Table 15a

Correlations Between the Relational Boredom Scale Scores and Individual Difference and Relationship Variables. (Married Sample)

	Relational Boredom	Relational Boredom Scale Controlling for Satisfaction	Relational Boredom Scale Controlling for Conflict	Relational Boredom Scale Controlling for Boredom Proneness
State appetitive motivation	-.63**	-.37**	-.53**	-.59**
Growth beliefs	-.18	-.32*	-.11	-.15
Destiny beliefs	.01	.13	-.05	.0008
Positive affect	-.80**	-.67**	-.73**	-.74**
HAHP	-.76**	-.63**	-.76**	-.77**
LAHP	-.74**	-.52**	-.65**	-.75**
Passionate love	-.68**	-.37*	-.60**	-.67**
Negative affect	.67**	.33*	.38**	.58**
HALP	.64**	.33*	.44**	.61**
LALP	.69**	.27†	.53**	.66**
Conflict	.55**	.19	-	.49**
Loneliness	.52**	.30*	.46**	.45**
Depression	.43**	.13	.21	.30*
Socially desirable responding	-.21	-.07	-.08	-.13
Relational satisfaction	-.78**	-	-.70**	-.77**
Boredom proneness	.37**	.27†	.23*	-
Avoidant attachment	.73**	.45**	.62**	.70**
Anxious attachment	.30*	.20	.20	.20
Positive relationship quality	-.52**	-.21	-.42**	-.52**
Negative relationship quality	.54**	.17	.32*	.52**
Basic needs	-.76**	-.45**	-.64**	-.72**
Closeness	-.56**	-.06	-.43**	-.60**
Alternatives	.39**	.11	.31*	.46**
Risk avoidance	-.03	.03	-.11	.009
Time with partner (alone)	-.44**	-.26*	-.42**	-.44*

Note. $N = 56$. * = $p < .05$; ** $p = < .01$; † = $p < .10$. These variables are untransformed. HALP = high arousal, low pleasure; LALP = low arousal low pleasure; HAHP = high arousal high pleasure; LAHP = low arousal high pleasure.

Table 15b

Correlations for the Relational Boredom Scale Scores, Conflict, Loneliness, and Depression with Individual Difference and Relationship Variables (Married Sample)

	Relational Boredom Scale	Conflict	Loneliness	Depression
State appetitive motivation	-.64**	-.43**	-.49	-.46**
Growth beliefs	-.19	-.20	.13	-.01
Destiny beliefs	.02	.12	.01	.14
Positive affect	-.74**	-.44**	-.43**	-.41**
LAHP	-.74**	-.58**	-.34**	-.47**
HAHP	-.76**	-.37**	-.44**	-.37**
Passionate love	-.68**	-.45**	-.17	-.26
Negative affect	.60**	.69**	.44**	.59**
LALP	.69**	.64**	.47	.63**
HALP	.64**	.69**	.41	.55**
Conflict	.55**		.27*	.49**
Loneliness	.53**	.27*		.67**
Depression	.43**	.49**	.67**	
Alternatives	.38**	.30*	.07	.12
Socially desirable responding	-.21	-.29*	-.23	-.22
Relational satisfaction	-.78**	-.57**	-.45**	-.46**
Boredom proneness	.36**	.32*	.48**	.56**
Avoidance attachment	.74**	.55**	.54**	.49**
Anxiety attachment	.30*	.25†	.48**	.51**
Positive relationship quality	-.52**	-.35**	-.33*	-.25†
Negative relationship quality	.54**	.62**	.34*	.26*
Basic needs	-.76**	-.65**	-.54**	-.57**
IOS	-.58**	-.49**	-.17	-.33*
Risk avoidance	-.03	-.06	.02	-.13
Time with partner (alone)	-.38**	-.19	-.10	-.10
Marital length	.07	-.10	-.09	.03

Note. * = $p < .05$; ** $p = < .01$; † = $p < .10$. HALP = high arousal, low pleasure; LALP = low arousal low pleasure; HAHP = high arousal high pleasure; LAHP = low arousal high pleasure.

Table 15c

Correlations Between the Two Exploratory Factors of the Relational Boredom Scale Scores and Individual Difference and Relationship Variables (Married Sample)

	Factor 1: Disengagement	Factor 2: Lack of Self-Expansion
State appetitive motivation (RAI)	-.68**	-.50**
Growth beliefs	-.19	-.14
Destiny beliefs	.10	-.06
Positive affect	-.73**	-.76**
HAHP	-.69**	-.74**
LAHP	-.71**	-.63**
Passionate love	-.64**	-.63**
Negative affect	.75**	.50**
HALP	.72**	.48**
LALP	.75**	.51**
Conflict	.55**	.46**
Loneliness	.51**	.49**
Depression	.51**	.29*
Socially desirable responding	-.22	-.20
Relational satisfaction	-.77**	-.68**
Boredom proneness	.35*	.36**
Avoidant attachment	.67**	.69**
Anxious attachment	.42**	.15
Positive relationship quality	-.57**	-.39**
Negative relationship quality	.53**	.51**
Basic needs	-.76**	-.62**
Closeness	-.63**	-.42**
Alternatives	.44**	.28*
Risk avoidance	-.06	.15
Time with partner (alone)	-.47**	-.38**

Note. * = $p < .05$; ** $p = < .01$.

Table 16

Regression Analysis with Satisfaction as the Dependent Variable (Married Sample)

Variable	*B*	*SE B*	β
State Appetitive Motivation	.009	.02	.09
Growth beliefs	-.06	.04	-.14
Destiny beliefs	.03	.03	.11
Positive Relationship affect	.003	.07	.008
Passionate love	.04	.03	.20
Negative Relationship affect	.01	.09	.03
Conflict	.001	.03	.007
Loneliness	.03	.08	.05
Depression	-.09	.11	-.14
Socially Desirable Responding	.008	.007	.12
Boredom proneness	.04	.05	.08
Avoidance	.06	.05	.20
Anxiety	.01	.04	.05
Positive relationship qualities	-.01	.04	-.04
Negative Relationship qualities	-.03	.02	-.20
Basic Need fulfillment	.05	.04	.17
Closeness	.05	.03	.22
Risk Avoidance	-.01	.03	-.05
Alternatives	-.02	.05	-.05
Relational Boredom	-.11	.06	-.35 †

Note. † = $p < .10$

Table 17

Summary Statistics from Unconditional Models in the Daily Diary Study

Daily Measures (drawn from unconditional models)	Mean	Rating scale	Standard error	P-value	Reliability
Boredom	1.29	1-5	.05	.00	.82
Satisfaction	4.02	1-5	.15	.00	.98
Negative Affect	1.31	1-5	.05	.00	.88
Positive Affect	2.74	1-5	.12	.00	.97
Excitement	2.58	1-5	.15	.00	.94
HALP	1.29	1-5	.04	.00	.85
LALP	1.36	1-5	.06	.00	.89
HAHP	2.60	1-5	.13	.00	.97
LAHP	3.20	1-5	.14	.00	.95
Anger	1.68	1-9	.10	.00	.77
Argue	1.39	1-9	.07	.00	.64
Percentage of time spent with partner	5.22	1-10	.35	.00	.80

Note. $df = 45$. HALP = high arousal, low pleasure; LALP = low arousal low pleasure; HAHP = high arousal high pleasure; LAHP = low arousal high pleasure.

Table 18

Relational Boredom Scale Scores Predicting Daily Experiences

Relational Boredom (Level 2) predicting daily measures (Level 1)	intercept	*SE*	*p*	β	*SE*	*p*	ŧ
Boredom	.79	.13	.00	.15	.04	.00	.08
Satisfaction	6.00	.27	.00	-.60	.08	.00	.42
Negative Affect	.99	.12	.00	.09	.03	.00	.07
Positive Affect	4.51	.24	.00	-.52	.07	.00	.32
Excitement	2.58	.09	.00	-.61	.07	.00	.34
HALP	1.29	.04	.00	.08	.03	.03	.07
LALP	1.36	.06	.00	.13	.05	.00	.14
HAHP	2.60	.08	.00	-.50	.06	.00	.53
LAHP	3.20	.09	.00	-.57	.06	.00	.32
Anger	1.68	.09	.00	.31	.07	.00	.23
Argue	1.39	.06	.00	.12	.05	.03	.12
Percentage of time spent with partner	5.22	.21	.00	-.71	.16	.00	1.47
Novel and arousing activities	.63	.11	.00	-.07	.03	.02	.06

Note. HALP = high arousal, low pleasure affect; LALP = low arousal, low pleasure affect; HAHP = high arousal, high pleasure affect; LAHP = low arousal, high pleasure affect.

Table 19

Hierarchical Linear Model Analysis with Daily Boredom Predicted by Daily Experiences

Daily Boredom (Level 1) predicted by daily measures (Level 1)	β	*SE*	*p*
Satisfaction	-.21	.06	.00
Negative Affect	.71	.12	.00
Positive Affect	-.19	.06	.00
Excitement	-.004	.01	.78
HALP	.52	.05	.00
LALP	.53	.10	.00
HAHP	-.20	.05	.00
LAHP	-.10	.04	.02
Anger	.17	.04	.00
Argue	.10	.03	.002
Percentage of time spent with partner	-.01	.01	.27
Novel and arousing activities	-.04	.06	.52

Note. HALP = high arousal, low pleasure affect; LALP = low arousal, low pleasure affect; HAHP = high arousal, high pleasure affect; LAHP = low arousal, high pleasure affect.