# Dyadic perfectionism, communication patterns and relationship quality in couples 

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# DYADIC PERFECTIONISM, COMMUNICATION PATTERNS AND RELATIONSHIP QUALITY IN COUPLES 

by

## Anna Arcuri

A Dissertation
Submitted to the Faculty of Graduate Studies through the Department of Psychology in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy at the University of Windsor

Windsor, Ontario, Canada

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Dyadic perfectionism, communication patterns and relationship quality in couples

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## AUTHOR'S DECLARATION OF ORIGINALITY

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#### Abstract

Maladaptive dyadic perfectionism and couples' negative communication patterns, particularly demand-withdraw and mutual avoidance-withholding patterns of communication, are among various factors that are associated with poor relationship quality. Individuals high in maladaptive dyadic perfectionism are inclined to believe that their romantic partner's performance always falls short of their high ideal expectations. Informed by Robins and Boldero's (2003) relational discrepancy theory, this study was designed to assess three primary questions: (a) How does maladaptive dyadic perfectionism relate to perceived relationship quality for both partners?; (b) How does maladaptive dyadic perfectionism relate to negative communication patterns between romantic partners?; and (c) Do negative communication patterns between partners mediate the association between maladaptive dyadic perfectionism and perceived relationship quality? Both partners in 113 heterosexual, monogamous, long-term romantic relationships were recruited from community resources and from the Psychology Department Participant Pool at the University of Windsor. All participants completed measures to assess dyadic perfectionism, communication patterns, relationship quality and other relationship variables. Structural Equation Modeling was used to assess hypotheses. Actor-Partner Interdependence Model (APIM) analyses indicated that actor but not partner effects were supported for men and women; maladaptive dyadic perfectionism in one partner was associated with their own perceptions of relationship quality, but not with their partner's perceptions of relationship quality. APIM analyses indicated that actor and partner effects between maladaptive dyadic perfectionism and communication were significant, with the exception of the partner effect between


women's maladaptive dyadic perfectionism and men's reports of negative communication patterns. The Actor-Partner Interdependence Mediation Model analysis indicated that actor-actor mediated effects were significant for men and women; reports of negative communication patterns by one partner partially explained the association between their own maladaptive dyadic perfectionism and their personal perceptions of relationship quality. The hybrid APIM and Common Fate Mediation Model analysis indicated that a couple's negative communication patterns mediated the association between maladaptive dyadic perfectionism and perceived relationship quality for both partners when communication was assessed as a latent common fate variable. Thus, couples' negative communication patterns partially explain the association between maladaptive dyadic perfectionism and perceived relationship quality and contribute to our understanding of how maladaptive dyadic perfectionism relates to relationship dynamics.

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## CHAPTER I

## Introduction

## Overview

## Context of the Problem

Individuals are motivated to form and maintain close, supportive and stable relationships with others (Baumeister \& Leary, 1995), and the degree to which this goal is satisfied impacts their psychological and physical well-being (e.g., Argyle, 2001; Deci \& Ryan, 1985; Ryff, 1995). Romantic relationships have consistently been identified as vital contributors to overall life satisfaction (Twenge \& King, 2005), emotional wellbeing (Chung et al., 2003), happiness (Bookwala \& Franks, 2005), physical and psychological health (e.g., Berscheid \& Regan, 2005; Kiecolt-Glaser, 2001) and longevity (Berkman \& Syme, 1994; Burman \& Margolin, 1992; Myers, 1999). The welldocumented negative effects of poor relationship quality on psychological and physical well-being underscore the importance of evaluating factors that impact relationships and the processes by which relationship quality is enhanced or undermined.

Maladaptive dyadic perfectionism and negative communication patterns, particularly demand-withdraw and mutual avoidance-withholding communication patterns, figure prominently among factors that are associated with poor relationship quality. "Maladaptive dyadic perfectionism" refers to one partner setting high ideal expectations for the other and perceiving that their partner falls short of meeting these standards (Shea, 2000). Demand-withdraw communication, as described by Gottman (1994; 1999) is a corrosive communication pattern in which one relationship partner makes demands and the other emotionally or physically withdraws, whereas mutual
avoidance-withholding communication is characterized by both partners' avoidance of discussions and withholding of emotional or physical contact (Caughlin \& Huston, 2002). Negative communication patterns, comprised of demand-withdraw and mutual avoidance-withholding patterns, predict lower relationship quality (Christensen \& Heavey, 1990). Maladaptive dyadic perfectionism is a relatively recent addition to couples research, and the study of the associations among maladaptive dyadic perfectionism, negative communication patterns and relationship quality remains underdeveloped. Individuals who are high in maladaptive dyadic perfectionism may employ specific negative interaction behaviours such as criticism, which initiate negative communication patterns such as demand-withdraw and mutual avoidance-withholding patterns of communication. Therefore, conceptually, it makes sense that negative communication patterns would mediate the association between maladaptive dyadic perfectionism and perceived relationship quality.

The current study was designed to assess three linked questions:

1. How does maladaptive dyadic perfectionism relate to perceived relationship quality for both romantic partners?
2. How does maladaptive dyadic perfectionism relate to negative communication patterns between romantic partners?
3. Do negative communication patterns between partners mediate the association between maladaptive dyadic perfectionism and perceived relationship quality? Gender differences pertaining to these three primary questions also were assessed. In addition, the current study addressed two subsidiary questions:
(a) Does intrapersonal perfectionism moderate the association between maladaptive dyadic perfectionism and perceived relationship quality?
(b) How does maladaptive dyadic perfectionism relate to expected relationship dissolution?

Several conceptual and methodological issues have been identified in critical reviews of the literature and were addressed in the current study. First, most research supporting the association between dyadic perfectionism and relationship outcomes relies on the responses of only one partner in a romantic relationship. However, relationships are fundamentally dyadic; an individual's relationship experience is influenced by their partner's characteristics and responses. The current study extends previous work in that (a) both partners in monogamous, heterosexual, long-term romantic relationships were sampled, and (b) dyadic analyses were employed to test the inherent interdependent nature of romantic relationships.

Second, reviewers have pointed to the need to employ more complex models in couples research to describe how personality variables influence relationship behaviours and distress (Bradbury \& Fincham, 1988; Karney \& Bradbury, 1995). Consistent with this recommendation, the extent to which relationship behaviours, specifically couples’ negative communication patterns, mediate the association between maladaptive dyadic perfectionism and perceived relationship quality was assessed.

Third, couples who had been together for longer periods of time were recruited for the current study: (a) to minimize the impact of the "honeymoon phase" - the predominantly positive evaluations of partners early in the relationship, on perceived relationship quality, and (b) because relationship patterns tend to become more established, more polarized and have more influence on relationship quality over time (Heavey, Layne, \& Christensen, 1993).

## Organization of the Literature Review

The following literature review describes definitions and pertinent theoretical backgrounds related to constructs of major interest in the current study, specifically relationship quality, dyadic perfectionism and communication patterns in couples. Theoretical and empirical support for hypothesized associations between study variables is also reviewed. Finally, a description of the purpose of the current study, improvements to the methodological limitations identified in the literature and specific study hypotheses is presented.

## Literature Review

## Relationship Quality

Despite decades of research, there is considerable variability in the definition of relationship quality (Hassebrauck \& Fehr, 2002). The literature features a large number of synonyms for relationship quality such as satisfaction, adjustment, success, happiness, companionship and functioning, which speaks to the lack of consensus among researchers (Fincham \& Rogge, 2010). Defining relationship quality and relationship satisfaction has been particularly challenging - some researchers have attempted to differentiate these two terms, whereas others continue to use them interchangeably (Fincham \& Rogge, 2010). Hendrick (1988) asserts that relationship satisfaction reflects contentment and the perception that the partner is meeting self-perceived needs. However, other researchers see relationship satisfaction as just one facet of the multidimensional construct of relationship quality (Fletcher, Simpson, \& Thomas, 2000b; Hassebrauck \& Fehr, 2002; Spanier, 1976). For instance, Fletcher, Simpson, and Thomas (2000) identified six distinct constructs that have often been used to represent relationship quality: satisfaction (S. S. Hendrick, 1988), commitment (Adams \& Jones, 1997; Lund, 1985), trust (Holmes
\& Boon, 1990; Rempel, Holmes, \& Zanna, 1985), closeness or intimacy (Aron, Aron, \& Smollan, 1992; Sternberg, 1986), passion (Aron \& Westbay, 1996; Sternberg, 1986) and love (Fehr \& Russell, 1991; Rubin, 1973).

In their review of the literature on methods used in quantitative studies of romantic relationships, Cooper and Sheldon (2002) observe that researchers are increasingly shying away from using a single, global relationship construct such as satisfaction to assess relationships, and instead, using multiple relationship constructs to more broadly evaluate relationship functioning. Consistent with contemporary research that adopts a broader, multidimensional approach to the study of relationship quality (Fletcher et al., 2000b; Hassebrauck \& Fehr, 2002), for the purpose of the current study, relationship quality is broadly defined as a multidimensional construct that reflects the overall condition of a committed relationship with an intimate partner, and incorporates the subjective evaluation of specific relationship components, including satisfaction, intimacy, commitment, trust, passion and love.

Many researchers have been dedicated to the exploration and prediction of relationship quality (Sternberg \& Hojjat, 1997). Some scholars suggest that holding high relationship standards for a romantic partner is related to lower relationship quality (Möller, Rabe, \& Nortje, 2001). "Standards per se are not dysfunctional [but may] become problematic when they are extreme or rigid or when they detract from other aspects of an individual's life" (Baucom, Epstein, Sayers, \& Sher, 1989, p. 32). When relationship standards are extreme, unrealistic, rigid, or demanding, both relationship partners may be more vulnerable to relationship distress. The partner holding the demanding standards experiences disappointment and anger when their expectations are unmet, and the other partner is distressed and resentful about being expected to meet such
extreme standards (Baucom \& Epstein, 1990). Other researchers have reported that it is the individual's perception of their partner's behaviour, rather than their partner's actual overt behaviour, that directly affects their perceptions of relationship quality (Davis \& Oathout, 1987; Murray et al., 1996).

The association between individuals' appraisals of their romantic partners' behaviour and perceived relationship quality was assessed in the present study by drawing on ideas presented by Robins and Boldero (2003) in their discussion of relational discrepancy theory. These theorists drew on Higgins' (1987, 1989a, 1989b) selfdiscrepancy theory to help describe the association between relationship discrepancies and relationship maintenance and quality.

In his self-discrepancy theory, Higgins proposes that there are three domains of the self: the actual self, the ideal self and the ought self. The actual self is defined as personal representations of the attributes that one possesses or that one perceives others to believe one actually possesses; the ideal self is defined as personal representations of the attributes - aspirations and wishes, that one ideally would like to possess or that one perceives others would ideally like one to possess; and the ought self is defined as personal representations of the attributes - duty, obligations, or responsibilities, that one should or ought to possess or that one perceives others to believe one should or ought to possess (Higgins, 1987). Thus, ideal 'self-guides' encompass attributes that individuals aspire to, ought 'self-guides' include attributes that individuals strive toward and the 'other' perspective of self-guides reflect aspirations and obligations that individuals perceive others to have of them. Higgins proposed that various combinations of selfdiscrepancies produce different negative psychological outcomes. Discrepancies between actual and ideal self-guides result in dejection-related emotions such as disappointment,
dissatisfaction and shame, whereas discrepancies between actual and ought self-guides are linked to agitation-related emotions such as fear, threat and restlessness (Higgins, 1987).

Expanding upon Higgins' theory, Robins and Boldero (2003) developed their relational discrepancy theory to explain self-guides in the context of romantic relationships. Robins and Boldero hypothesize that individuals use ideal and ought selfguides when evaluating their romantic partners. According to these researchers, ideal-self guides are characterized by attributes that an individual would like their partner to possess, whereas ought self-guides are characterized by attributes that an individual believes their partner should possess. These researchers purport that relational discrepancies among actual, ideal and ought self-guides are related to different perceptions of the relationship, different behavioural consequences and different negative emotional reactions, with the strength of the emotional consequences associated to the proportion of the discrepancy.

Couples research has focused on the discrepancy between actual self and ideal self-guides. Empirical findings indicate that individuals report harmonious relationship functioning when they perceive their partners as fulfilling their ideal self-guides, and report relationship dissatisfaction, conflict and resentment when they perceive that their partners do not meet these expectations (Fons-Scheyd, 2008; Lopez, Fons-Scheyd, BushKing, \& McDermott, 2011; Shea, Slaney, \& Rice, 2006). Based on this theoretical backdrop and the associated empirical findings, it seems likely that the perceived discrepancies between actual and ideal self-guides in the context of a relationship can be conceptually encompassed in maladaptive dyadic perfectionism, which is characterized by the belief that one's partner does not adhere to one's ideal expectations. It seems
reasonable to expect that discrepancies between the attributes that an individual would like their partner to possess and the attributes that their partner actually does possess are associated with dejection-related emotions such as disappointment and dissatisfaction, and are likely to negatively impact couples' communication patterns and relationship quality.

## Dyadic Perfectionism

Intrapersonal perfectionism. Theoretical conceptualizations and the assessment of dyadic perfectionism evolved out of the study of intrapersonal perfectionism, typically referred to simply as perfectionism. A brief overview of perfectionism is provided here. Traditionally, perfectionism has been defined as a unidimensional construct. However, more recently, empirical findings indicate that perfectionism typically comprises two underlying dimensions (e.g., Frost, Heimberg, Holt, Mattia, \& Neubauer, 1993; Grzegorek, Slaney, Franze, \& Rice, 2004; Hamachek, 1978; Slaney, Rice, \& Ashby, 2002; Slaney, Rice, Mobley, Trippi, \& Ashby, 2001). A variety of terms have been proposed to represent the two dimensions; these include adaptive and maladaptive perfectionism (Rice, Ashby, \& Slaney, 1998), functional and dysfunctional perfectionism (Rheaume, Freeston, et al., 2000), and healthy versus unhealthy perfectionism (Stumpf \& Parker, 2000). In their review of the literature, Stoeber and Otto (2006) point out that despite the variety of proposed labels for these dimensions, there is significant agreement that perfectionism encompasses both positive and negative aspects.

The conceptualization of adaptive and maladaptive perfectionism is of particular relevance to the current study because the theoretical conceptualization and assessment of dyadic perfectionism evolved out of the study of adaptive and maladaptive perfectionism. Adaptive perfectionism incorporates high standards for personal performance and
maladaptive perfectionism incorporates high standards for personal performance combined with the tendency to self-evaluate performance as consistently falling short of these standards (Rice et al., 2002; 2007). Stoeber and Otto's (2006) review of the literature demonstrates that adaptive forms of perfectionism are primarily related to positive characteristics, whereas maladaptive forms of perfectionism are primarily related to negative characteristics.

Dyadic perfectionism. Dyadic perfectionism is defined as the perfectionismrelated attitudes that individuals hold about their romantic partners (Lopez, Fons-Scheyd, Bush-King, \& McDermott, 2011). Confirmatory analyses indicate that dyadic perfectionism is comprised of three factors: order, marked by judgments that an individual's partner is orderly and organized; high standards, marked by setting high performance expectations such as high expectations at work or at school of an individual's partner; and discrepancy, marked by a discrepancy between the ideal standards expected of one's partner and the perception of the partner's actual performance (Slaney, Pincus, Uliaszek, \& Wang, 2006).

Dyadic perfectionism is conceptualized as adaptive or maladaptive. Adaptive dyadic perfectionism is marked by high performance expectations of one's partner, whereas maladaptive dyadic perfectionism is marked by high performance expectations of one's partner combined with the perception that an individual's partner consistently falls short of meeting these high expectations (i.e., discrepancy; Lopez, Fons-Scheyd, Bush-King, \& McDermott, 2011). Of note, order is not considered a core aspect of perfectionism (e.g., Frost et al., 1990; Hewitt \& Flett, 1991) and does not enhance the identification of adaptive and maladaptive dyadic perfectionism (Lopez, Fons-Scheyd, Bush-King, \& McDermott, 2011). The most important distinction is that perfectionism
relates to an individual's adaptive and maladaptive intrapersonal perfectionistic beliefs, i.e., beliefs about themselves, whereas dyadic perfectionism relates to an individual's adaptive and maladaptive interpersonal perfectionistic beliefs, i.e., beliefs about their romantic partner.

Empirical findings support the hypothesis that maladaptive dyadic perfectionism is characterized by a chronic discrepancy between an individual's expectations of the partner and the partner's actual performance, and the contention that high standards and a wish for order are not fundamentally maladaptive (Slaney, Pincus, Uliaszek, \& Wang, 2006). For example, using a latent class analysis, Lopez and colleagues (2011) found that adaptive and maladaptive dyadic perfectionists scored high on the High Standards subscale of the Dyadic Almost Perfect Scale (DAPS), with maladaptive dyadic perfectionists also reporting high Discrepancy scores. Furthermore, these authors reported that nondyadic perfectionists scored lower than the dyadic perfectionists on the High Standards subscale. Taken together, these findings suggest that the High Standards and Discrepancy subscales are central to identifying adaptive and maladaptive dyadic perfectionism, and that the Discrepancy subscale is central to differentiating maladaptive from adaptive forms of dyadic perfectionism. Therefore, an individual's wish for high standards or expectations for order in a partner are not inherently maladaptive, particularly if these wishes are satisfied. However, an individual's belief that their high standards and expectations for order in a partner are chronically unmet may be maladaptive.

In the current study, dyadic perfectionism was conceptualized as either adaptive or maladaptive as this view is consistent with the contemporary conceptualization of dyadic perfectionism (e.g., Lopez, Fons-Scheyd, Bush-King, \& McDermott, 2011; Slaney,

Pincus, Uliaszek, \& Wang, 2006). Importantly, the study of maladaptive dyadic perfectionism was the primary focus of the current study as it reflects Robins and Boldero's (2003) relational discrepancy theory in which discrepancies between ideal and actual self-guides likely contribute to negative relationship behaviours and perceptions of romantic relationships. Based on relational discrepancy theory, individuals high in maladaptive dyadic perfectionism are likely to judge their partners' behaviours as falling short of their ideal self-guides, and are also more likely to experience disappointment and resentment, which may increase their use of negative communication behaviours and lower their perceived relationship quality.

## Empirical support for the association between maladaptive dyadic

perfectionism and relationship quality. Researchers have demonstrated that maladaptive dyadic perfectionism, assessed by the discrepancy between an individual's held standards and their perception of their romantic partner's actual performance, is correlated with negative emotions such as depression and anxiety (Ashby \& Rice, 2002; Grzegorek et al., 2004; Periasamy \& Ashby, 2002; Rice \& Slaney, 2002; Slaney et al., 2002; Slaney, Rice, Mobley, Trippi, \& Ashby, 2001; Suddarth \& Slaney, 2001) which, in turn, may be related to relationship distress and poorer relationship quality (Lopez, FonsScheyd, Morua, \& Chaliman, 2006; Shea, Slaney, \& Rice, 2006). Some researchers have found that the discrepancy between an individual's high standards for a partner and the perception of the partner's actual performance is a better predictor of reduced relationship quality than is simply holding high standards for the partner. For instance, for women, the High Standards subscale of the Dyadic Almost Perfect Scale (DAPS), which assesses a respondent's performance expectations of their partner, was positively related to relationship satisfaction (Shea, Slaney, \& Rice, 2006). However, the Discrepancy
subscale of the DAPS, which represents the discrepancy between one's perfectionistic ideals for a romantic partner and beliefs about a partner's ability to meet these ideals, was negatively related to relationship satisfaction (Fons-Scheyd, 2008; Shea, Slaney, \& Rice, 2006). One limitation with these studies however, is that they sampled only one partner, typically the female partner in the relationship. Unfortunately, this methodological choice ignores the interdependent influence that each partner contributes to relationship quality, precludes the application of gender analyses and limits the understanding of maladaptive dyadic perfectionism on actual relationship processes.

Other researchers who have assessed the association between perfectionistic expectations of romantic partners and relationship outcomes have sampled both dyad partners. For example, Haring and colleagues (2003) adapted two scales from the Multidimensional Perfectionism Scale (MPS; Hewitt \& Flett, 1991; cf. Habke, Hewitt, \& Flett, 1999) to assess the association between relationship quality and both partneroriented perfectionism, meaning perfectionistic expectations towards one's partner and partner-prescribed perfectionism, meaning perceived perfectionistic expectations from one's partner. Respondents who believed that their partners expected perfection of them reported poorer dyadic adjustment, and their spouses also reported poorer dyadic adjustment and marital satisfaction.

Stoeber (2012) recently used partner-oriented perfectionism and partnerprescribed perfectionism subscales (MPS; Hewitt \& Flett, 1991; cf. Habke, Hewitt, \& Flett, 1999) to assess the association between perfectionistic expectations of partners and relationship outcomes among 58 university student couples. These researchers reported that individuals who had perfectionistic expectations of their partner and individuals who perceived that their partner expected them to be perfect reported lower levels of
relationship satisfaction compared to individuals with no expectations of their partners or individuals who did not perceive their partners to expect them to be perfect. In addition, an individual's perfectionistic expectations of their partner predicted their partner's perceived perfectionistic expectations from one's partner, indicating that partners were aware that they were expected to be perfect. Haring and colleagues (2003) and Stoeber's (2012) findings support the association between perfectionistic expectations of one's partner and lower relationship satisfaction for both romantic partners. However, these researchers assessed partner-oriented perfectionism as a unitary construct. Unfortunately, this methodological choice does not distinguish adaptive and maladaptive aspects of dyadic perfectionism to permit a more comprehensive depiction of the association between various aspects of dyadic perfectionism and perceived relationship quality for both partners.

## Communication Patterns as a Mechanism for the Association between Maladaptive Dyadic Perfectionism and Perceived Relationship Quality

Although empirical reports support the association between maladaptive dyadic perfectionism and perceived relationship quality, the mechanism by which maladaptive dyadic perfectionism is associated with relationship quality is unknown. Couples' communication is a logical choice as a mechanism that could account for the association between maladaptive dyadic perfectionism and perceived relationship quality since research findings have shown that maladaptive dyadic perfectionism is associated with destructive problem-solving behaviours - a construct related to couples' communication patterns (Fons-Scheyd, 2008), and that couples' communication patterns are consistently associated with relationship quality (e.g., Bradbury \& Karney, 1993). To date however, researchers have not assessed the direct association between maladaptive dyadic
perfectionism and communication patterns between partners. The question of whether couples' communication patterns mediate the association between dyadic perfectionism and relationship quality has been suggested in previous empirical studies (Ashby, Rice, \& Kutchins, 2008; Lopez et al., 2011; Shea, 2000), but has yet to be empirically assessed.

## Communication in Couples

Couples researchers have conceptualized communication as a system of positive and negative interdependent patterns of interaction (Caughlin \& Huston, 2002). Three salient communication patterns have been identified: constructive, avoidant-withholding and demand-withdraw patterns (e.g., Christensen \& Shenk, 1991; Christensen \& Sullaway, 1984; Hahlweg, Kaiser, Christensen, Fehm-Wolfsdorf \& Groth, 2000; Noller \& White, 1990). Constructive communication, in which partners express their feelings and aim to resolve problems, is conceptualized as a positive communication pattern. On the other hand, mutual avoidance-withholding and demand-withdraw patterns are seen as negative patterns of communication. For the purpose of the current study, negative communication patterns incorporate mutual avoidance-withholding and demandwithdraw communication patterns. Mutual avoidance-withholding patterns are marked by both partners' avoidance of discussions and withholding of emotional or physical contact. Demand-withdraw patterns are marked by demands, criticism and complaints from one partner, and withdrawal by the other; demanding provokes withdrawal, and withdrawal in turn, provokes more demands (Caughlin \& Huston, 2002).

Importantly, the demand-withdraw pattern is comprised of a cascade of responses that includes criticism, defensiveness, contempt and stonewalling. Gottman (1994) famously identified these four negative communication behaviours as "The Four Horsemen of the Apocalypse" (p. 110). Criticism involves attacking a partner's character
instead of commenting on a specific behaviour. Defensiveness, a typical response to criticism, involves a denial of responsibility. Contempt demonstrates a lack of respect for a partner, and stonewalling involves emotional, psychological and/or physical withdrawal (Gottman, 1994b). Partner one typically criticizes, complains, nags and makes demands of partner two, who typically attempts to avoid conflict through defensiveness and passive idleness (Christensen, 1987, 1988). Subsequently, partner one typically responds with contempt, and partner two uses stonewalling and further withdrawal (Gottman \& Levenson, 1992).

Demand-withdraw communication pattern and gender. Some researchers have reported that the woman-demand- man-withdraw pattern occurs more often than the man-demand— woman-withdraw interactional pattern (Christensen \& Heavey, 1993). For instance, investigators have observed that the demand-withdraw pattern is characteristically marked by wives demanding change, often through criticism and complaints, and husbands withdrawing, either emotionally or physically, through defensiveness or passivity such as not responding and making irrelevant comments (Schaap, 1982; Schaap, Buunk, \& Kerkstra, 1988). However, more recently, researchers have found that the demander is typically the partner who generates the conflict and desires change, whereas the withdrawer is the partner who does not desire change (e.g., Klinetob \& Smith, 1996). For instance, Heavey, Christensen, and Malamuth (1995) found that when couples discussed the husbands' problem, partners did not assume gender specific demander or withdrawer roles. However, this did occur when couples discussed wives' problems; under such circumstances, women were more likely to be demanding and men were more likely to withdraw. Interestingly, time-series analyses show that for most couples, the direction of influence between demand and withdraw
behaviours is bidirectional; demand behaviours predict withdrawal behaviours and viceversa (Klinetob \& Smith, 1996). Therefore, although gender role differences in the demand-withdraw interactional pattern have been reported, observed gender differences depend on the context of the discussion and on the partner who initiates the demand and desires change.

## Empirical support for the association between communication in couples and

 perceived relationship quality. There is a reasonably well-developed literature on communication patterns among married partners and the importance of communication for relationship satisfaction and maintenance (e.g., Bradbury \& Karney, 1993). Communication patterns between partners are consistently linked to perceived relationship quality, perhaps because communication patterns impact the ways in which couples manage conflict within their relationship, and because the way in which partners manage conflict is a better predictor of relationship satisfaction than is the experience of conflict itself (Guerrero, Anderson, \& Afifi, 2011).Overall, open, expressive and constructive forms of communication are associated with greater relationship satisfaction (e.g., Evans, Pellizzari, Culbert, \& Metzen, 1993; Christensen \& Shenk, 1991; Noller \& White, 1990). Negative communication patterns, comprised of demand-withdraw and mutual avoidance-withholding patterns, are associated with reduced satisfaction (e.g., Fletcher, 2002; Gordon, Baucom, Epstein, Burnett, \& Rankin, 1999; Heavey, Christensen, \& Malamuth, 1995; Kincaid \& Caldwell, 1995; Sher \& Weiss, 1991) and are predictive of marital dissolution (Gottman \& Levenson, 2000), particularly when the ratio of negative to positive behaviours is high (Punyanunt- Carter, 2004). Importantly, in both observational and self-report studies, the demand-withdraw pattern has emerged as one of the most destructive patterns in dyadic
communication, and the pattern distinguishes satisfied couples from dissatisfied couples (Cornelius \& Alessi, 2007). However, Smith, Heaven, and Ciarrochi (2008) found that the mutual avoidance-withholding pattern of communication was a stronger predictor of relationship dissatisfaction compared to the demand-withdraw pattern of communication. Taken together, the association between poor communication and relationship distress has been consistently supported in studies using self-report measures (e.g., Craske, Burton \& Barlow, 1989) and observational assessments (e.g., Yelsma, 1984), as well as in studies assessing married couples with varying relationship status (e.g., newlyweds compared to longer-term marriages; Rippetoe \& Rogers, 1987). These findings support the view of communication as a system of positive and negative interdependent patterns of interaction and also document a clear association between communication and relationship quality.

Current understanding of the association between communication in couples and relationship quality is based primarily on the evaluation of communication patterns in married couples. There has been far less attention paid to communication patterns among unmarried couples. However, Markman and colleagues (1993) reported partial support for the demand-withdraw pattern among unmarried, dating partners. In their study, men were more likely than were women to express complaints about their partners' demands, but women were not more likely than were men to express complaints about their partners' withdrawal behaviours. Based on these findings, men find their dating partners' complaints distressing; but women are not distressed by their dating partners' withdrawal behaviours. Vogel, Wester, and Heesacker (1999) found that about half of the dating couples in their sample conformed to the female-demand and male-withdraw pattern of communication ( $51 \% ; n=55$ ), particularly during difficult discussions. These researchers also found that some couples reported male-demand and female-withdraw
patterns ( $28 \% ; n=29$ ), whereas others reported equal demand-withdraw patterns ( $21 \% ; n$ = 23). Taken together, these findings suggest that the established demand-withdraw pattern of communication reported among married couples is also present among unmarried couples.

## Perfectionism as a Moderator to the Association between Maladaptive Dyadic Perfectionism and Perceived Relationship Quality

Some researchers have attempted to distinguish the association between intrapersonal perfectionism and relationship outcomes and the association between dyadic perfectionism and relationship outcomes. For instance, Shea (2000) used the Multidimensional Perfectionism Scale (MPS; Hewitt \& Flett, 1991) to assess intrapersonal perfectionism and the Dyadic Almost Perfect Scale (DAPS) to assess dyadic perfectionism and found that the DAPS was a stronger predictor of relationship quality than was the Multidimensional Perfectionism Scale. In a more recent study, Fons-Scheyd (2008) assessed intrapersonal perfectionism using the self-oriented perfectionism subscale of the MPS. Self-oriented perfectionism involves setting markedly high, unrealistic standards for personal performance (Hewitt \& Flett, 1991), and is most consistent with historical definitions of perfectionism as a negative personality characteristic (e.g., Hollender, 1965; Pacht, 1984). Fons-Scheyd (2008) found that intrapersonal perfectionism was not highly correlated with maladaptive dyadic perfectionism as assessed by the Discrepancy subscale of the DAPS. Of note, after controlling for selforiented perfectionism, the DAPS Discrepancy subscale was associated with relationship problem-solving behaviours, suggesting that maladaptive dyadic perfectionism was uniquely associated with relationship outcome variables above and beyond the association between intrapersonal perfectionism and relationship outcomes. Taken together, these
findings provide some empirical support for the hypothesis that maladaptive dyadic perfectionism explains variation in relationship outcomes beyond intrapersonal perfectionism, which traditionally has been associated with poor relationship outcomes (Flett, Hewitt, Shapiro, \& Rayman, 2001; Habke \& Flynn, 2002; Haring, Hewitt, \& Flett, 2003; Martin \& Ashby, 2004). As Fons-Scheyd points out however, it is possible that self-oriented perfectionism moderates the association between maladaptive dyadic perfectionism and relationship quality, and it is important to empirically assess this possibility.

## The Current Study

Individuals high in maladaptive dyadic perfectionism tend to report lower levels of perceived relationship quality compared to individuals who do not judge their partners' behaviours to be chronically subpar. Additionally, individuals who believe that their partners expect perfection of them report reduced dyadic adjustment (Haring et al., 2003) and reduced relationship satisfaction (Stoeber, 2012) relative to individuals who do not believe that their partners expect them to be perfect. Accordingly, it seems likely that partners of individuals who are high in maladaptive dyadic perfectionism will also report reduced relationship quality. Overall, it appears that increased maladaptive dyadic perfectionism reported by one partner is likely to be associated with reports of reduced relationship quality by both partners in the relationship.

To date, there has not been much research attention to the possible direct association between maladaptive dyadic perfectionism and communication patterns in romantic relationships. However, maladaptive dyadic perfectionism has been found to relate to destructive problem-solving behaviours - a construct that is related to couples' communication patterns (Fons-Scheyd, 2008). Conceptually, the propensity among
maladaptive dyadic perfectionists to believe that their partners are deficient appears likely to foster a relationship culture that detrimentally affects communication patterns between romantic partners.

Research findings consistently indicate that negative communication patterns between partners, particularly demand-withdraw and mutual avoidance-withholding patterns of communication, are related to reports of reduced relationship quality among married couples. This association also has been reported among unmarried couples. It is important to assess the association between maladaptive dyadic perfectionism and negative communication patterns prior to assessing more nuanced gender related associations between maladaptive dyadic perfectionism and negative communication patterns.

Researchers also have reported that maladaptive dyadic perfectionism is a stronger predictor of relationship outcomes than is intrapersonal perfectionism and that maladaptive dyadic perfectionism is uniquely associated with relationship outcome variables above and beyond intrapersonal perfectionism. Thus, following research recommendations, assessing the extent to which intrapersonal perfectionism moderates the association between maladaptive dyadic perfectionism and perceived relationship quality will provide better understanding of the complex processes that underlie the association between these variables. Moreover, given that individuals high in maladaptive dyadic perfectionism report reduced relationship quality, it seems reasonable that these individuals also may be less optimistic about the long-term viability of their current relationship, and therefore more inclined to believe that their relationship will dissolve.

According to relational discrepancy theory, individuals who report discrepancies between desired partner attributes and actual partner attributes demonstrate negative emotional and behavioural reactions. It makes sense that partners who score high in maladaptive dyadic perfectionism may experience dejection-related feelings about their partner that negatively affect the communication patterns within the relationship. Specifically, individuals who are high in maladaptive dyadic perfectionism may be more critical in their communication, which in turn may initiate demand-withdraw and mutual avoidance-withholding interactions between romantic partners. Based on reported empirical findings and relational discrepancy theory, it seems worthwhile to assess whether negative communication patterns, specifically demand-withdraw and mutual avoidance-withholding patterns, mediate the association between maladaptive dyadic perfectionism and perceived relationship quality, especially given the long-term implications of communication on relationship quality (Guay, Boisvert, \& Freeston, 2003). Such an assessment will contribute to better understanding of the complex processes that help to explain the association between maladaptive dyadic perfectionism and perceived relationship quality.

## Purpose of the Study

The primary goals of the current study were to evaluate: (a) how maladaptive dyadic perfectionism relates to perceptions of relationship quality reported by both partners in monogamous, heterosexual, long-term, unmarried romantic relationships; (b) how maladaptive dyadic perfectionism relates to negative communication patterns between relationship partners; and (c) whether negative communication patterns, particularly demand-withdraw and mutual avoidance-withholding communication patterns, mediate the association between maladaptive dyadic perfectionism and
perceived relationship quality. Additionally, gender differences were assessed in order to better understand the interdependent influence of maladaptive dyadic perfectionism on relationship processes.

Two subsidiary questions also were addressed. The first was whether intrapersonal perfectionism, specifically self-oriented perfectionism, moderates the association between maladaptive dyadic perfectionism and perceived relationship quality: Is the association between maladaptive dyadic perfectionism and perceived relationship quality more robust among individuals who are high in self-oriented perfectionism compared to those who are low in self-oriented perfectionism? The second subsidiary question focuses on whether maladaptive dyadic perfectionism relates to expected relationship dissolution: Are respondents who are high in maladaptive dyadic perfectionism more inclined to expect their relationship to dissolve than are respondents who are low in maladaptive dyadic perfectionism?

## Response to Methodological Limitations Identified in the Literature

The lack of consensus in the definition of relationship quality among researchers has impacted the assessment of relationship quality and research on this topic. A number of omnibus measures of relationship satisfaction that are widely used in research on relationship quality, such as the Marital Adjustment Test (MAT; Locke \& Wallace, 1959) and the Dyadic Adjustment Scale (DAS; Spanier, 1976; Funk \& Rogge, 2007) lack theoretical grounding and have been criticized by experts for a number of reasons. First, these measures create interpretation difficulties because they confound subjective, selfreport evaluations of intrapersonal processes such as relationship satisfaction with interpersonal relationship processes including communication (Eddy, Heyman \&Weiss, 1991; Fincham \& Bradbury, 1987; Fincham \& Rogge, 2010; Fletcher, Simpson, \&

Thomas, 2000; Heyman, Sayers, \& Bellack, 1994; Norton, 1983). Second, omnibus summed scores such as those reflected in scores on the Marital Adjustment Test preclude the investigation of the interactive effects of inter- and intrapersonal processes, thus reducing construct validity (Berscheid \& Regan, 2005; Fincham \& Beach, 2006;

Fincham, Bradbury, Arias, Byrne, \& Karney, 1997). Third, atheoretical measures such as the Marital Adjustment Test and the Dyadic Adjustment Scale have a high degree of measurement error, which increases Type II error (Funk \& Rogge, 2007). In the current study, conceptualization and assessment of relationship quality as a multidimensional construct was intended to minimize interpretation biases by (a) distinguishing relationship quality and relationship satisfaction; (b) distinguishing interpersonal and intrapersonal processes; and (c) eliminating lower statistical power because of the high degree of measurement error that are inherent in omnibus, atheoretical measures of relationship satisfaction.

A second well-documented shortcoming inherent in couples research is the nonindependence of responses because each partner influences the other. Traditional analytic approaches are inadequate for couples data because the violation of the independence assumption generates biased estimates of statistical significance (Cook \& Kenny, 2005; Kivlighan, 2007). The Actor-Partner Interdependence Model (APIM; e.g., Kenny \& Cook, 1999; Kenny, 1996) and the Common Fate Model (CFM; e.g., Griffin \& Gonzalez, 1995), described in the Results section (see page 51), have been proposed to address the statistical problems that ensue when both partners in a relationship participate in couples research. Dyadic analyses, specifically APIM and hybrid APIM and Common Fate Mediation Model analyses were appropriately used in the current study to account for the nonindependence of observations in couples responses.

Third, most researchers who have assessed the association between maladaptive dyadic perfectionism and perceived relationship quality using the Dyadic Almost Perfect Scale (DAPS) have sampled only one romantic partner, which ignores the interdependent impact of each partner on relationship quality, prohibits the evaluation of gender analyses, and limits the understanding of maladaptive dyadic perfectionism on relationship dynamics. The current study addressed this methodological limitation by sampling both partners in long-term romantic relationships.

Fourth, some researchers have criticized observational studies of communication patterns as unrepresentative of couples' typical interactions. For example, Futris, Campbell, Nielsen, and Burwell (2010) report that negative communication patterns such as the demand-withdraw pattern may be less frequently demonstrated in observational studies where couples may be consciously monitoring their communication and be mindful of the impressions they may be making on observers. Therefore, self-report inventories, as utilized to assess negative communication patterns in the current study, appear to be a valid methodology.

Finally, Cooper and Sheldon (2002) reported that about 45\% of the studies in their review of couples research employed college samples. However, these authors note that participant samples in relationship studies should not be restricted to college students because such participants are less likely to be committed to a single romantic partner. Consequently, the preferred strategy is to recruit community samples of adult couples in ongoing relationships. Although some couples were recruited from a university population for the current study, couples from the broader community were also recruited to increase the generalizability of findings.

## Hypotheses

## Hypothesized Associations between Pairs of Variables

Actor and partner effects were predicted for the following associations between pairs of variables. Actor effects represent the effect of an individual's independent variable on their own outcome variable and partner effects represent the effect of an individual's independent variable on their partner's outcome variable (Cook \& Kenny, 2005). For the following hypotheses, negative communication patterns refer to one individual's perception of their own and their partner's communication patterns rather than simply their perception of their own communication patterns. Therefore, negative communication patterns represent a partner's report of the communication patterns between both partners within the relationship.

Hypothesis one. Maladaptive dyadic perfectionism reported by one partner will be negatively associated with their own report of perceived relationship quality (actor effect) and their partner's report of perceived relationship quality (partner effect).

Hypothesis two. Maladaptive dyadic perfectionism reported by one partner will be positively associated with their own report of negative communication patterns (actor effect) and their partner's report of negative communication patterns (partner effect).

Hypothesis three. Negative communication patterns reported by one partner will be negatively associated with their own report of perceived relationship quality (actor effect) and their partner's report of perceived relationship quality (partner effect).

## Hypothesized Mediation Models

Hypothesis four. A mediation model that initially predicts partial mediation rather than complete mediation was adopted in the current study, as per Baron and Kenny's (1986; cf. Kenny, 2008; Ledermann \& Macho, 2009) recommendation.
(a) Actor-actor mediated effects. Negative communication patterns reported by one partner will partially mediate the association between their own report of maladaptive dyadic perfectionism and their own report of perceived relationship quality.
(b) Actor-partner mediated effects. Negative communication patterns reported by one partner will partially mediate the association between their own report of maladaptive dyadic perfectionism and their partner's report of perceived relationship quality.
(c) Partner-actor mediated effects. Negative communication patterns reported by one partner will partially mediate the association between their partner's report of maladaptive dyadic perfectionism and their own report of perceived relationship quality.
(d) Partner-partner mediated effects. Negative communication patterns reported by one partner will partially mediate the association between their partner's report of maladaptive dyadic perfectionism and their partner's report of perceived relationship quality.

Hypothesis five. Couples' negative communication patterns, assessed as a latent variable in which both partners' reports of negative communication patterns are reflected in the variable, will partially mediate the association between (a) maladaptive dyadic perfectionism in one partner and their own report of perceived relationship quality and (b) maladaptive dyadic perfectionism in one partner and their partner's report of perceived relationship quality.

## Subsidiary Hypotheses

## Hypothesis six.

Actor-moderated actor effects. Intrapersonal perfectionism reported by one partner will moderate the association between their own report of maladaptive dyadic perfectionism and their own report of perceived relationship quality. Therefore, the association between increased maladaptive dyadic perfectionism and reduced relationship quality will be more robust among women and men who report higher levels of intrapersonal perfectionism compared to those who report lower levels of intrapersonal perfectionism.

Hypothesis seven. Maladaptive dyadic perfectionism reported by one partner will be positively associated with their own expectation that the romantic relationship will dissolve (actor effect).

## CHAPTER II

## Method

## Participant Numbers and Characteristics

Participants in this study were unmarried heterosexual partners in monogamous, romantic relationships of at least six months continuous duration (see Rationale for the Current Sample, Appendix A). The final sample included 113 couples; $60 \%$ were recruited from community sources and $40 \%$ from the University of Windsor Psychology Participant Pool. The mean age in the total sample was $24.6(S D=3.8$; range $=20-38)$; 25.2 years for the male participants $(S D=4.1$; range $=20-38)$ and 24.1 years for the female participants $(S D=3.4$; range $=20-37)$. The couples reported being in a continuous relationship for an average of 3.5 years $(S D=2.5$; range $=6$ months -11.6 years). Approximately half ( $N=57 ; 50.4 \%$ ) were dating, 7 ( $6.2 \%$ ) were engaged but not cohabiting, 36 ( $31.9 \%$ ) were cohabiting but not engaged, and 13 (11.5\%) were both engaged and cohabiting. On average, cohabiting couples had lived together for 13.6 months ( $S D=9.67$; range $=1-35$ months). Eighteen couples ( $16 \%$ ) were involved in long distance relationships and three participants reported that they had previously been married. The majority of participants identified as Caucasian ( $N=192 ; 85 \%$ ); 4 (1.8\%) identified as African Canadian; 3 (1.3\%) as Asian or Pacific Islander; 3 (1.3\%) as Middle Eastern; $2(0.9 \%)$ as Latino/Latina, $1(0.4 \%)$ as Arabic and $20(8.8 \%)$ as "Other"; 1 ( $0.4 \%$ ) did not indicate ethnicity. Recruitment strategies and attrition in the sample are described below.

Couples recruited from the community. Couples from the community at large were recruited using a variety of methods, including a Facebook page and posters
distributed on bulletin boards across the University of Windsor (see Community Advertisement, Appendix B). The Facebook page provided Facebook subscribers with the study information and the researcher's contact information. Before committing to participate in the study, potential participants were asked to discuss the possibility of taking part in the current study with their romantic partner to ensure that their partners were willing to participate. Snowball sampling was also utilized; participating couples were asked to provide other couples with the researcher's email address. As a result of community recruitment efforts, 93 individuals emailed the researcher to inquire about the study. Of the potential 93 couples, two couples were not eligible to participate; one couple because the partners had lived together for more than three years and one couple because the partners had dated for less than six months. Of the 91 eligible dyads, at least one partner of 79 couples ( $86.81 \%$ ) completed the study. Eleven couples were subsequently excluded; five couples were excluded because the second relationship partner did not initiate the study, another five were excluded because the second relationship partner initiated but withdrew from the study, and one couple was excluded because the duration of their relationship was less than six months and this did not meet inclusion criteria. Thus, the final community sample included 68 couples (see Community and Participant Pool Sample Characteristics, Appendix C).

Couples recruited from the participant pool. Couples were also recruited through the Psychology Department Participant Pool at the University of Windsor, a webbased online system that allows registered participants to access information about studies for which they meet the inclusion criteria. Students who participate in research studies are permitted to earn course credits that can be applied to their final grades in eligible courses. As part of the registration process, students provide demographic information
and respond to screening questions. One screening question on the registration questionnaire was included to identify potential participants for this study: "Are you currently involved in an unmarried, heterosexual, monogamous romantic relationship, without children, that has been continuous over at least the past 6 months?" Only people who responded "yes" to this screening question were able to sign up for the study through the participant pool website. The current research was described as a study that assesses "thoughts, feelings, and behaviours among long-term romantic partners" (see Psychology Participant Pool Description, Appendix D). As part of the registration process, eligible participants were asked to enlist their romantic partners as participants.

As a result of participant pool recruitment efforts, 66 individuals emailed the researcher to inquire about the current study. At least one partner in 59 of these 66 potential couples ( $89.39 \%$ ) participated in the study. However, four of the initiating individuals did not meet the inclusion criteria and were unable to continue with the study. Another nine couples were excluded because only one of the partners completed the study, and one couple was excluded because one partner was younger than 20 years of age. Thus, the final participant pool sample included 45 couples (see Community and Participant Pool Sample Characteristics, Appendix C).

## Procedure

Online data collection. The research proposal was reviewed and received clearance from the Research Ethics Board at the University of Windsor prior to beginning recruitment. To enter the study, one partner in each couple was required to contact the primary researcher via email to obtain the study website information, login username and password, and a research identification number (RID) for each partner (see Email Response to Potential Participants, Appendix E).

All participants were assigned unique RIDs which linked corresponding partners. After logging into the study website, each partner independently provided informed consent (see Community Sample: Letter of Information for Consent, Appendix F and G; Participant Pool: Letter of Information for Consent; Student and Partner Forms, Appendix H and I). The partner who had made the initial contact with the researcher responded to a series of screening questions (see Screening Questions, Appendix J); participants whose responses indicated that they met inclusion criteria were permitted to provide demographic information and continue with the online questionnaire package, whereas participants who did not meet inclusion criteria were not permitted to continue. The noninitiating partner in each couple recruited from the community and the participant pool was asked to select their preferred compensation and to provide a mailing address to which the chosen gift card was mailed upon completion of the study.

Measures were presented in counter-balanced order to control for order effects. There were two versions of the questionnaire packages for partner one and two versions for partner two. Several efforts were made to ensure that partners in a couple completed the study independently. First, partners completed online packages in which measures were presented in different orders. This minimized the likelihood that partners were able to simultaneously complete the study. Second, participants were explicitly asked to complete the questionnaire package independently and to refrain from discussing their responses with their partners until both had submitted their completed questionnaire. Third, the dates and times at which partners completed the online questionnaire package were reviewed to assess conspicuous behaviour such as consecutive and nearly immediate completion of the study for partner one and partner two. No conspicuous behaviour was noted in the current study.

Approximately 40 minutes per respondent ( 80 minutes per couple) were required to complete all measures. All participants were instructed to complete the online study within one week of receiving their login information. Reminder emails were sent to couples who did not submit the study within three days (see Reminder Email for Study Completion, Appendix K). Responses for each partner were downloaded into separate SPSS files, and then merged into a single file.

Laboratory data collection. As couples were recruited into the study, they were invited to complete the online questionnaire package in a laboratory setting at the University of Windsor in order to generate a small comparison group that could function as a reliability check. Participants who chose to complete the study in the lab were asked to notify the researcher via email to arrange an appointment. As expected, most participants wanted to complete the study online at their own convenience but 30 couples (21 recruited from the community and 9 recruited from the participant pool) did agree to complete the questionnaires in the lab. Couples who completed the study in the lab followed the same procedures as previously outlined for the online study participation. Each partner provided informed consent and independently completed the questionnaire package.

Compensation. Gift certificates were provided to community couples by mail to acknowledge their participation in the study. Couples selected one of the following forms of compensation: a gift card for two free admissions, popcorn and refreshments that could be used at Famous Players, Cineplex Odeon or Galaxy Cinemas OR a $\$ 20$ Shell Canada gift card. Students who registered for the study through the University of Windsor Psychology Participant Pool received one credit for their participation; their partners received a $\$ 10$ gift card to Tim Hortons. If both partners were enrolled in eligible
psychology courses at the University of Windsor, both earned one course credit for their participation. All community and participant pool couples who participated in the lab (i.e., not online) were also entered into a draw to win a $\$ 25$ gift card to Cara Restaurants, specifically, Swiss Chalet, Montana's, Harvey's, Milestones, or Kelsey's to compensate them for travel time.

## Measures

Demographic information. Respondents provided demographic information including their age, sex, ethnicity, relationship status and relationship duration. Respondents also indicated the method by which they were recruited.

Relationship quality. Relationship quality was assessed using the theoretically developed Perceived Relationship Quality Components Inventory (PRQC Inventory; Fletcher, Simpson, \& Thomas, 2000b), an 18-item multidimensional measure that assesses six facets of perceived relationship quality. Subscales include Satisfaction (e.g., How happy are you with your relationship?), Commitment (e.g., How devoted are you to your relationship?), Intimacy (e.g., How connected are you to your partner?), Trust (e.g., How much can you count on your partner?), Passion (e.g., How lustful is your relationship?) and Love (e.g., How much do you adore your partner?). Each subscale is comprised of three items, all of which have high face validity. Items are rated on a sevenpoint Likert scale ranging from 1 (not at all) to 7 (extremely); higher scores reflect greater perceived relationship quality.

Coefficient alphas for the overall 18-item scale reportedly ranged from .90 to .94 (Boyes \& Latner, 2009; Kearns \& Fincham, 2005). Coefficient alphas for the six subscales ranged from .74 to .96 ; and one-month test-retest subscale reliabilities ranged from .78 to .96 (Fletcher, Simpson, \& Thomas, 2000a). Confirmatory factor analysis
supports the construct validity of this scale (Fletcher et al., 2000b); there are six semiindependent factors corresponding to the scales described above that load onto one second-order factor representing Global Perceived Relationship Quality. The means of the various components of the PRQC may be added to obtain an overall score that is broadly defined as "relationship quality" (Bagwell et al., 2005; Fletcher et al., 2000). Given that the primary focus of the current study was overall perceived relationship quality, the Global Perceived Relationship Quality score was employed in the analyses. In the current sample, coefficient alpha for the overall 18 -item scale was .94 for women and .92 for men (see Table 1; Internal consistency coefficients).

Dyadic perfectionism. The Dyadic Almost Perfect Scale (DAPS; Shea, Slaney, \& Rice, 2006), a 26-item multidimensional self-report measure, was used to assess dyadic perfectionism because it is the only measure that directly assesses respondents' interpersonal perfectionistic beliefs about specific unmarried romantic partners and it permits the assessment of maladaptive dyadic perfectionism among individuals who hold perfectionistic standards of their partners. Specifically, the DAPS evaluates respondents' expectations of their romantic partners and their perception of the extent to which their partner fulfills their expectations. The DAPS was developed by adapting items from the Almost Perfect Scale APS-R (Slaney \& Rice, 1996). Confirmatory analyses indicate that the DAPS is comprised of three subscales. The four-item Order subscale (e.g., "I think my partner should be organized") assesses respondents' specific expectations related to their partner being neat and orderly. The six-item Standards subscale (e.g., "I expect my partner to try to do her/his best at everything she/he does") assesses respondents' expectations that their romantic partners will demonstrate excellent performance and motivation. The 16-item Discrepancy subscale (e.g., "I am not satisfied, even when I

Table 1.
Internal consistency coefficients: Cronbach's alpha ( $N=113$ )

|  | Alpha |  |
| :--- | :---: | :---: |
| Variable | Women | Men |
| PRQC Inventory Total score | .94 | .92 |
| DAPS Discrepancy subscale | .92 | .88 |
| DAPS High standards subscale | .84 | .87 |
| CPQ Demand-withdraw subscale | .65 | .74 |
| CPQ Mutual avoidance-withholding subscale | .73 | .68 |
| CPQ Negative communication | .75 | .80 |
| CPQ Constructive communication | .79 | .83 |
| MPS Self-oriented perfectionism | .90 | .85 |
| MPS Other-oriented perfectionism | .80 | .78 |
| MPS Socially-prescribed perfectionism | .86 | .81 |

Note. DAPS discrepancy subscale = maladaptive dyadic perfectionism;
CPQ negative communication $=$ demand - withdraw and mutual avoidance-withholding scores.
know my significant other has done his/her best') assesses respondents' perception that their romantic partner is inadequate to fulfill their expectations. Each item is rated on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Cronbach coefficient alphas range from adequate to excellent; .73 (Order), .83 (Standards) and . 93 (Discrepancy; Lopez et al., 2006; Shea et al., 2006). The Discrepancy subscale score was used to assess maladaptive dyadic perfectionism as the discrepancy subscale distinguishes adaptive from maladaptive dyadic perfectionism (Lopez, Fons-Scheyd, Bush-King, \& McDermott, 2011). The Standards subscale was included in the current study to compare adaptive and maladaptive dyadic perfectionism (Lopez et al., 2011). The Order subscale was not included in the statistical analyses of the current data because (a) it demonstrates lower psychometric properties than the other two subscales and (b) the current study focused on the assessment of maladaptive dyadic perfectionism, defined by the Discrepancy subscale; the Order score does not contribute to the assessment of maladaptive dyadic perfectionism. There is considerable data to support the independence of the Discrepancy and Standard subscales of the DAPS (Lopez et al., 2006; Lopez, Fons-Scheyd, Bush-King, \& McDermott, 2011; Shea et al., 2006). In the current sample, the coefficient alpha for the Discrepancy subscale was .92 for women and .88 for men, the coefficient alpha for the Standard subscale was .84 for women and .87 for men (see Table 1; Internal consistency coefficients).

Communication patterns. Communication in couples was assessed using the Communication Patterns Questionnaire (CPQ; Christensen, 1987, 1988; Christensen \& Shenk, 1991; Christensen \& Sullaway, 1984), a 35-item self-report measure that assesses various communication behaviours when respondents are attempting to resolve a relationship problem at the dyadic level, in other words, the communication patterns of
both partners rather than one partner. Items are rated on a nine-point Likert scale ranging from 1 (very unlikely) to 9 (very likely).

Christensen and Shenk (1991) outlined three subscales for the CPQ: Mutual Constructive Communication in which both partners initiate discussions about problems, are emotionally expressive and engage in compromise (e.g., "Both members suggest possible solutions and compromises"); Demand-Withdraw in which one partner initiates discussions, nags, criticizes and makes demands, whereas the other partner withdraws (six items; e.g., Woman tries to start a discussion whereas Man tries to avoid a discussion); and Mutual Avoidance and Withholding in which both partners avoid the discussion of problems, avoid each other and withhold either emotional or physical contact subsequent to conflictual discussions (three items; e.g., "Both members avoid discussing the problem"). Subscale Cronbach alphas range from .62 to .86 (Christensen \& Shenk, 1991). Consistency between self-report, partner self-reports and observer ratings has also been reported (e.g., Berns et al., 1999; Bodenmann, Kaiser, Hahlweg, \& Fehm-Wolfsdorf, 1998). For the purpose of the current study, the couples' negative communication patterns construct was comprised of the Demand-Withdraw and Mutual Avoidance and Withholding scales. In the current sample, the coefficient alpha for couples' negative communication behaviours was .75 for women and .80 for men (see Table 1; Internal consistency coefficients).

Perfectionism. A measure of perfectionism was included in the current study to permit assessment of the association between intrapersonal perfectionism and maladaptive dyadic perfectionism, relevant to one of the subsidiary hypotheses. The Multidimensional Perfectionism Scale (MPS; Hewitt \& Flett, 1991) is a 45-item multidimensional measure of perfectionism comprised of three subscales: self-oriented
perfectionism (e.g., "When I am working on something, I cannot relax until it is perfect"); other-oriented perfectionism (e.g., "If I ask someone to do something, I expect it to be done flawlessly"); and socially-prescribed perfectionism (e.g., "I feel that others are too demanding of me"). Each subscale has 15 items rated on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). Scores are summed; higher scores indicate higher levels of perfectionism.

Reported coefficient alphas ranged between .79 and .89 for the three subscales and three-month test-retest reliabilities are $.88, .85, .75$ for self-oriented, other-oriented and socially-prescribed perfectionism, respectively (Hewitt, \& Flett, 1991a). Sociallyprescribed perfectionism assesses the respondent's perception that others expect them to be perfect. Lower socially-prescribed test-retest reliability scores may be reported because transient situational demands may differentially impact the extent to which individuals believe perfectionism is expected of them. In the current study, the selforiented perfectionism subscale was used to evaluate intrapersonal perfectionism as this subscale assesses perfectionism of oneself, whereas other-oriented and sociallyprescribed perfectionism are considered relational subscales of the MPS. In the current sample, the coefficient alpha for self-oriented perfectionism was .90 for women and .85 for men, the coefficient alpha for other-oriented perfectionism was .80 for women and .78 for men, and the coefficient alpha for socially-prescribed perfectionism was .86 for women and .81 for men (see Table 1; Internal consistency coefficients).

Relationship maintenance. Two items were designed for inclusion in the current study to assess the association between maladaptive dyadic perfectionism in one partner and their belief about impending relationship dissolution, relevant to one of the subsidiary hypotheses. Therefore, the items were designed to assess partners' perception of the
likelihood that they would remain involved in their current romantic relationship (i.e., "How likely is it that you will break-up with your current romantic partner over the next six months?" and "How likely is it that you will break-up with your current romantic partner over the next year?"). These items were rated on five-point Likert scales: 1 (very unlikely), 2 (unlikely), 3 (somewhat likely), 4 (likely) and 5 (very unlikely). The two items were included at the end of each questionnaire package to reduce the possible influence of these questions on responses to other measures.

## CHAPTER III

## Results

## Overview

The strategy used for data analyses and the results of the study are presented below. First, power analyses were conducted using Mplus 6.1 (Muthen \& Muthen, 2002). Next, Pearson product-moment correlations were computed to test hypothesized relationships between pairs of variables and to test non-independence for the purpose of dyadic analyses. The integrity of the data set was assessed to ensure that statistical assumptions for structural equation modelling analyses were met and problems related to missing data, outliers, skewness, and kurtosis were addressed. Descriptive statistics were calculated for all study variables. $T$-test and regression analyses were used to assess mean differences by gender, sample (community versus participant pool couples), relationship status (dating versus engaged versus cohabiting versus engaged and cohabiting), and participation method (online versus in-laboratory). Dyadic analyses using structural equation modelling were conducted to test the main study hypotheses and the subsidiary hypotheses. Data analyses were conducted using AMOS 20.0 (Arbuckle, 1995-2011) and the Statistical Package for the Social Sciences (SPSS 20.0; SPSS, Inc., 2012). Alpha was set at .05 for all analyses.

## Power Analyses

A power analysis was conducted using a Monte Carlo method implemented in Mplus 6.1 (Muthen \& Muthen, 2002). Findings indicated that two predictor variables (male and female maladaptive dyadic perfectionism), two mediator variables (male and female negative communication patterns), and two outcome variables (male and female
perceived relationship quality), a small to medium effect size (.25), and 100 observations (couples) would produce a good model fit, $\chi^{2}(1, N=100)=1.05, p>.05$; root mean square error of approximation, $\mathrm{RMSEA}=.036$, and standardized root mean square residual, $\mathrm{SRMR}=.015 .{ }^{1}$

According to Kenny and Cook (1999), sample size restrictions common to structural equation modelling (SEM) do not apply when SEM is used in dyadic analyses without latent variables. Instead, sample size recommendations in multiple regression analyses may be applied to achieve adequate power. Therefore, a power analysis was conducted with $G^{*}$ power 3.1 computer program using multiple regressions (Faul, Erdfelder, Buchner, \& Lang, 2009). With four predictor variables and a small effect size (.10), at least 64 cases (couples) were recommended to achieve adequate power (.80). Taking both the Monte Carlo power analysis and G*power findings based on Kenny and Cook's (1999) sample size recommendation, the total sample size obtained (113 couples), was judged to be sufficient to assess the hypothesized models in the current study.

## Data Management and Statistical Assumptions

Participant responses to the online study were downloaded directly into an SPSS file, making it unnecessary to assess the accuracy of second-hand data entry. Prior to performing analyses, the integrity of the data set was assessed to establish that assumptions for dyadic SEM analyses were met. Decisions were made about how to address issues including missing data, outliers, skewness, and kurtosis.

[^0]Test of non-independence. In dyadic analyses, the power of the test of nonindependence, which assesses the probability of detecting whether scores contributed by members of each dyad are correlated, is critical (Kenny, Kashy, \& Cook, 2006). Kenny, Kashy, and Cook (2006) recommend that at least 25 couples are needed to test for nonindependence. Two-tailed Pearson product-moment correlation coefficients for outcome variables were conducted to test for non-independence. All variables used in the current study demonstrate non-independence (see Appendix L for bivariate correlations), indicating that dyads, not individuals, should represent the unit of analysis in subsequent analyses. Consequently, the dyad was the unit of analysis in the current analyses and the sample size was equal to the number of dyads ( $n=113$ ).

Treatment of missing data. Recommended procedures for examining the amount and nature of missing data, and managing missing data were used (Schafer \& Graham, 2002; Schlomer, Bauman, \& Card, 2010). The item nonresponse rate was very low; there were between one and four items missing in variables with missing responses ( $0.885 \%$ to $3.54 \%$ ). Dummy variables in which missing data on a variable were coded as 1 and all non-missing values were coded as 0 were created to determine the pattern of missing values. Correlations between dummy variables and other variables of interest were assessed to identify whether values were missing completely at random (MCAR) or missing at random (MAR; Schlomer, Bauman, \& Card, 2010). Significant relationships between dummy variables and other study variables were not found with the exception of a significant correlation between (a) the dummy coded discrepancy scale of the Dyadic Almost Perfect Scale (DAPS) and the self-oriented perfectionism subscale of the Multidimensional Perfectionism Scale, and (b) the dummy coded self-oriented perfectionism subscale and the discrepancy subscale, indicating that data was missing at

Table 2.
Bivariate correlations for primary study variables ( $N=113$ )

| Variables | 1 |  | 2 |  |  | 3 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women | Men | Women | Men | Women | Men |  |
| 1. Discrepancy |  |  |  |  |  |  |  |
| Women | 1.00 | $.34^{* *}$ | $.34^{* *}$ | .18 | $-.45^{* *}$ | $-.25^{* *}$ |  |
| Men | $.34^{* *}$ | 1.00 | $.31^{* *}$ | $.29^{* *}$ | -.17 | $-.40^{* *}$ |  |
| 2. Negative communication |  |  |  |  |  |  |  |
| Women | $.34^{* *}$ | $.31^{* *}$ | 1.00 | $.57^{* *}$ | $-.36^{* *}$ | $-.30^{* *}$ |  |
| Men | .18 | $.27^{* *}$ | $.57^{* *}$ | 1.00 | $-.21^{*}$ | $-.37^{* *}$ |  |
| 3. Relationship quality |  |  |  |  |  |  |  |
| Women | $-.45^{* *}$ | -.17 | $-.36^{* *}$ | $-.21^{*}$ | 1.00 | $.56^{* *}$ |  |
| Men | $-.25^{* *}$ | $-.40^{* *}$ | $-.30^{* *}$ | $-.37^{* *}$ | $.56^{* *}$ | 1.00 |  |

Note. Discrepancy = maladaptive dyadic perfectionism; negative communication $=$ demand-withdraw and mutual avoidance-withholding communication patterns.

* $p<.05 . * * p<.01$. (two-tailed test).
random (MAR; Schlomer, Bauman, \& Card, 2010). Given the limited number of missing items, the data were also visually inspected to assess for patterns of missing values; data appeared to be missing at random.

Full Information Maximum Likelihood (FIML) method to handling missing data, available in AMOS, was used to handle missing data in the current data set. FIML generates maximum-likelihood-based statistics based on the available data (Roth, 1994). FIML, also referred to as Raw Maximum Likelihood, is superior to common methods of handling missing data such as listwise and pairwise data deletion and mean substitution (Enders \& Bandalos, 2001), particularly when data is missing at random. For these reasons, FIML was appropriately used to handle missing responses for the dyadic analyses in the current data set.

Treatment of outliers. The presence of univariate outliers on both dichotomous and continuous variables was assessed. Outliers in each variable were screened separately for female and males as the analyses for distinguishable dyads, described in greater detail below, handle the women's and men's data as separate variables (E.Z. Woody, personal communication, July 15, 2013). Univariate outliers on dichotomous variables, assessed by evaluating frequency distributions, were not detected in the current data set. Univariate outliers on continuous variables were assessed by scanning histograms and assessing standardized values (z-scores) for females and males.

For female partners (Partner 1), significant univariate outliers with absolute zscores greater than three (Kline, 2011) were identified for the following variables: discrepancy subscale of dyadic perfectionism $(n=1$; value $=83)$, mutual avoidance ( $n=$ $2 ; M=22.5, S D=.71$ ), and relationship quality ( $n=3 ; M=67.67, S D=7.23$ ). Outliers on the discrepancy subscale and mutual avoidance were replaced with the next most
extreme score that was within three standard deviations of the mean, as recommended by Kline (2011). Treatment of outliers on relationship quality is discussed below.

For male partners (Partner 2), significant univariate outliers were identified for the following variables: discrepancy subscale of dyadic perfectionism $(n=1$; value $=69)$, high standards subscale of dyadic perfectionism ( $n=1$; value $=6$ ), mutual avoidance ( $n=$ 1 ; value $=22$ ) and relationship quality ( $n=4 ; M=77.09, S D=2.41$ ). Outliers on the discrepancy, high standards and mutual avoidance variables were replaced with the next most extreme score that was within three standard deviations of the mean (Kline, 2011). Treatment of outliers on relationship quality is discussed below.

Mahalanobis' distance squared values and the corresponding $p 2$-values ( $p 2<.05$ ) provided by AMOS were used to identify possible multivariate outliers. As the dyad was the unit of observation, the main analyses were conducted with and without outlier dyads, identified for each analysis, to better understand the impact of outliers on findings (E.Z. Woody, personal communication, July 15, 2013). Differences were not found; the results were robust with the inclusion of outliers and thus, multivariate outliers were retained to preserve the power in the current study. Of note, Stochastic regression imputation method available in AMOS was used to impute missing values prior to performing the Test for Normality and Outliers, as required by AMOS.

Standardized residuals, with an absolute value exceeding three, were used to identify possible outliers on the outcome variable - perceived relationship quality for each dyad partner (Field, 2005). For female partners, four cases were identified and for male partners, one case was identified. Influential outliers were not identified using Cook's Distance criterion in which values exceeding one were considered problematic (Field, 2005). Given that influential outliers were not identified, outliers on relationship
quality were not removed because they did not significantly impact the regression analysis (Field, 2005).

Normality. All variables were normally distributed with the exception of relationship quality. For female partners, a histogram plot and values of skewness and kurtosis $($ skewness $=-1.91$, kurtosis $=4.80)$ indicated that relationship quality was negatively skewed. Values were reflected; each value for female relationship quality was subtracted from one plus the absolute maximum value for female relationship quality ( $1+$ 1.81) to produce a positively skewed distribution in which transformations were then computed. Log transformations improved the negatively skewed distribution for relationship quality $($ skewness $=.729$, kurtosis $=.446)$. Data were re-screened to assess for outliers; univariate outliers were not identified on the transformed variable.

For male partners, a histogram plot and values of skewness and kurtosis $($ skewness $=-1.65$, kurtosis $=3.31)$ indicated that relationship quality was negatively skewed. Values were reflected; each value for male relationship quality was subtracted from one plus the absolute maximum value for male relationship quality $(1+1.72)$ to produce a positively skewed distribution in which transformations were then computed. Log transformations improved the negatively skewed distribution (skewness $=.785$, kurtosis $=.290$ ). Data were re-screened; univariate outliers were not identified on the transformed variable. The reflected log transformed scores for female and male partners were used in subsequent analyses because the transformation improved the skewed distribution of the variables.

Collinearity. A visual investigation of the correlations matrix did not reveal very large correlations, i.e., $r>.9$, between predictor variables; thus, the multicollinearity assumption was not violated. Tolerance and the variance inflation factor (VIF) values
also were assessed and confirmed the absence of multicollinearity as tolerance values were greater than .10 and VIF values did not exceed 10 (Field, 2005).

Linearity and homoscedasticity. Plots for regression diagnostics, particularly a scatterplot of standardized predicted values by standardized residual values, a histogram of the standardized residuals and the normal probability plot were evaluated for each dyad partner. The evenly dispersed data in the scatterplots indicated that the linearity and homoscedasticity assumptions were met. The normally distributed histograms and the evenly distributed residuals around the predicted scores lines indicated that the homoscedasticity assumption was met.

Based on the evaluation of these assumptions, it was judged to be appropriate to conduct SEM analyses using the current data set.

## Descriptive Statistics

Means, standard deviations and regression analyses to test for differences in important variables by gender, population (community versus participant pool couples), relationship status (dating versus engaged versus cohabiting versus engaged and cohabiting), and method of study participation (online versus in-laboratory) are presented in Table 3 (see page 49) and in Appendix M to O . Gender comparisons in important study variables are of particular interest in the current study as subsequent dyadic analyses handle women's and men's data as separate variables. Comparisons by population, relationship status and method of study participation are provided to better understand potential group similarities and differences among participants in the current sample. Regression analyses using the enter method, rather than ANOVAs were used for the between-group comparisons because their use is considered to be more suitable when there are unequal group sizes (Field, 2005) and because they yield the same results in
analyses involving equal group sizes. An individual's mean scale score or subscale score was used to handle missing responses only for descriptive statistics. As discussed, FIML was appropriately used to handle missing responses for all analyses.

Gender comparisons. Between-group comparisons using regression analyses were conducted to assess for possible mean differences between male and female respondents on major study variables (see Table 3). Compared to men, women reported greater discrepancies in perceptions of their partners' ideal and actual performance and higher levels of self-oriented perfectionism.

Population comparisons. Between-group comparisons using regression analyses were conducted to assess mean differences between women recruited from the community versus the participant pool, and between men recruited from the community versus the participant pool (see Means and Standard Deviations Based on Recruitment Method, Appendix M). Total mean scores for couples recruited from the community were not computed because the assumption of independence was inherently violated and therefore, total mean differences reflect biased findings.

Compared to women recruited through the participant pool, women recruited from the community reported significantly higher standards for their partners and higher levels of constructive communication, and reported significantly less use of demand-withdraw communication patterns. There were no between-group differences between men recruited from the community versus those recruited through the participant pool.

Relationship status comparisons. Regression analyses using dummy codes for relationship status were conducted to assess for possible mean differences between women in dating versus engaged versus cohabiting versus engaged and cohabiting relationships. Four dummy code variables were computed; one for dating, one for

Table 3.
Means and standard deviations for women $(N=113)$ and men $(N=113)$

|  | Partner 1: <br> Women <br> $(N=113)$ | Partner 2: <br> Men <br> $(N=113)$ | $t-$ <br> statistic | Cohen's <br> $d$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Variable | $M$ | $S D$ | $M$ | $S D$ | $t(226)$ | $d$ |
| Relationship quality | 112.15 | 11.97 | 113.70 | 10.73 | 0.53 | 0.14 |
| Discrepancy | 35.95 | 13.96 | 30.72 | 11.36 | $3.09^{* *}$ | 0.41 |
| High standards | 31.35 | 6.06 | 29.98 | 7.63 | 1.50 | 0.20 |
| Constructive communication | 12.47 | 9.02 | 10.86 | 9.63 | 1.30 | 0.17 |
| Demand-withdraw | 21.39 | 8.87 | 22.43 | 9.98 | -0.83 | 0.11 |
| Mutual avoidance | 7.84 | 4.55 | 8.31 | 4.37 | -0.80 | 0.10 |
| Negative communication | 29.23 | 11.75 | 30.75 | 12.99 | -0.91 | 0.12 |
| Self-oriented perfectionism | 72.91 | 14.80 | 68.58 | 14.07 | $2.26^{*}$ | 0.30 |

Note. Discrepancy $=$ maladaptive dyadic perfectionism; negative communication $=$ demand-withdraw and mutual avoidance-withholding communication patterns.

* $p<.05$. ** $p<.01$. (two-tailed test).
engaged, one for cohabiting, and one for engaged and cohabiting relationships. For instance, for the 'engaged dummy variable', engaged respondents were coded 1 and all other respondents were coded 0 . Analogous dummy codes were computed for the other groups of relationship status. Similar analyses were conducted to assess mean differences between men in dating versus engaged versus cohabiting versus engaged and cohabiting relationships (see Means and Standard Deviations Based on Relationship Status, Appendix N). Total mean scores for dating, engaged, cohabiting, and engaged and cohabiting couples were not computed as the assumption of independence is inherently violated in couples research, and tests that assess mean differences are biased. There were no significant between-group differences by relationship status for either women or men on any of the major study variables.

Participation method comparison. Between-group comparisons using regression analyses were conducted to assess mean differences between women who completed the study online versus those who completed it in-laboratory (see Means and Standard Deviations Based on Participation Method, Appendix O). Mean differences between men who completed the study online versus in-laboratory were also assessed. Total mean scores for couples who participated online and couples who participated inlab were not computed as the assumption of independence is inherently violated in couples research. Compared to women who completed the study online, women who completed the study in the laboratory reported significantly higher levels of constructive communication and self-oriented perfectionism. Men who completed the study in the laboratory reported significantly lower levels of negative communication and higher levels of positive communication compared to men who completed the study online.

## Hypothesis Testing

## Defining Variables

In the statistical analyses described below, maladaptive dyadic perfectionism was assessed using the discrepancy subscale score of the Dyadic Almost Perfect Scale (DAPS) because the discrepancy subscale score distinguishes adaptive from maladaptive dyadic perfectionism (Lopez, Fons-Scheyd, Bush-King, \& McDermott, 2011). Negative communication was comprised of the demand-withdraw and mutual avoidancewithholding subscale scores of the Communication Patterns Questionnaire (CPQ). Relationship quality was assessed using the reflected $\log$ transformed Perceived Relationship Quality Components (PRQC) total score. Intrapersonal perfectionism was assessed using the self-oriented perfectionism subscale scores of the Multidimensional Perfectionism Scale (MPS) and expected relationship dissolution was assessed using the two items created for the current study.

## Planned Analyses

Actor-Partner Interdependence Model and its extensions. The Actor-Partner Interdependence Model (APIM) and extended versions of the APIM have been proposed as the most appropriate strategies for assessing dyadic data. APIM analyses consider the dyad as the unit of analysis, evaluate associations between personal variables at the level of the dyad members, i.e., at the individual level, and permit concurrent and independent estimation of three types of effects, while controlling for each. Actor effects represent the effect of an individual's independent variable on their own outcome variable. Partner effects represent the effect of an individual's independent variable on their partner's outcome. Interaction effects represent both within and between actor and partner variables (Cook \& Kenny, 2005). APIM analyses were used to assess the actor and
partner effects between pairs of study variables, specifically the effects between: maladaptive dyadic perfectionism and perceived relationship quality, maladaptive dyadic perfectionism and negative communication patterns, and negative communication patterns and perceived relationship quality. Although gender differences between actor and partner effects were not specifically hypothesized in the current study, gender analyses were applied to better understand the associations between the pairs of variable. APIM analyses also were used to assess the association between maladaptive dyadic perfectionism and expectations of impending relationship dissolution.

The addition of a mediator variable in the APIM produces the Actor-Partner Interdependence Mediation Model (APIMeM; Campbell, Simpson, Kashy, \& Fletcher, 2001; Kenny, 1996; Kenny \& Cook, 1999; Ledermann \& Bodenmann, 2006). The APIMeM estimates actor and partner mediation effects at the level of the dyad members; in other words, it estimates individual effects. APIMeM analyses were used to assess whether negative communication patterns mediate the association between maladaptive dyadic perfectionism and perceived relationship quality. As represented in the APIMeM in Figure 1, this model permits the assessment of two actor-actor mediated effects $\left(\mathrm{MDP}_{\mathrm{W}}^{\rightarrow} \mathrm{CC}_{\mathrm{W}} \rightarrow \mathrm{RQ}_{\mathrm{W}}, \mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}}^{\rightarrow} \mathrm{RQ}_{\mathrm{M}}\right)$, two actor-partner mediated effects $\left(\mathrm{MDP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{W}} \rightarrow \mathrm{RQ}_{\mathrm{M}}, \mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}}^{\rightarrow} \mathrm{RQW}_{\mathrm{W}}\right.$ ), two partner-actor mediated effects $\left(\mathrm{MDP}_{\mathrm{W}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}}^{\rightarrow}\right.$ RQ $\left.\mathrm{M}_{\mathrm{M}}, \mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{W}}^{\rightarrow} \mathrm{RQ}_{\mathrm{W}}\right)$ and two partner-partner mediated effects $\left(\mathrm{MDP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{M}}^{\rightarrow} \mathrm{RQ}_{\mathrm{W}}, \mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{W}} \rightarrow \mathrm{RQ}_{\mathrm{M}}\right)$.

Similarly, adding a moderator variable to the APIM produces the Actor-Partner Interdependence Moderator Model (API Moderator Model; Bodenmann, Ledermann, \& Bradbury, 2007; Campbell, Simpson, Kashy, \& Rholes, 2001; Cook \& Kenny, 2005),

Figure 1.
The Final Actor-Partner Interdependence Mediation Model


Figure 1. The final Actor-Partner Interdependence Mediation Model in which maladaptive dyadic perfectionism represents the exogenous variables, negative communication patterns represent the mediator variables and perceived relationship quality represents the endogenous variables. MDP = maladaptive dyadic perfectionism; $\mathrm{CC}=$ negative communication patterns; $\mathrm{RQ}=$ perceived relationship quality; $\mathrm{w}=$ women; $\mathrm{m}=\mathrm{men} ; e 1$ to $e 4=$ error variance .
which estimates actor and partner moderation effects at the level of the dyad members; in other words, individual effects. The API Moderator Model was used to assess whether intrapersonal perfectionism moderates the association between maladaptive dyadic perfectionism and perceived relationship quality.

The Common Fate Model and its extensions. The Common Fate Model (CFM) is a simplified version of the APIM (Ledermann, Macho, \& Kenny, 2011). The CFM assumes that both dyad partners are impacted by a common dyadic factor such as communication or an influential external source such as quality of housing. Thus, the CFM was designed to evaluate associations between variables that have an effect on both partners of a dyad, at the level of the dyads (Ledermann \& Macho, 2009). Assessment at the level of the dyad means both partners' reports are reflected in the assessment of the variables of interest. The Common Fate Mediation Model (e.g., Griffin \& Gonzalez, 1995; Ledermann \& Macho, 2009; Kenny, 1996; Kenny \& La Voie, 1985; Woody \& Sadler, 2005), an extended version of the CFM, has been introduced to estimate mediation effects at the level of the dyads. Researchers have also proposed that the CFM can be combined with the APIM to produce a hybrid dyadic model (Ledermann \& Kenny, 2011; Ledermann \& Macho, 2009). As represented in Figure 2, the hybrid APIM and Common Fate Mediation Model was used in the current study to assess whether couples’ negative communication patterns mediate the association between maladaptive dyadic perfectionism and perceived relationship quality when communication was assessed as a latent common fate variable.

As the current sample was comprised of heterosexual couples, gender was used to distinguish between the two partners in each couple across all dyads in the data set.

APIM with distinguishable dyad partners are best assessed using Structural Equation

## Figure 2.

The Final Hybrid Actor-Partner Interdependence and Common Fate

## Mediation Model



Figure 2. The final hybrid Actor-Partner Interdependence and Common Fate Mediation Model in which maladaptive dyadic perfectionism and perceived relationship quality are assessed as observed variables and couples' negative communication is assessed as a latent variable. Maladaptive $\mathrm{DP}=$ maladaptive dyadic perfectionism; couples' comm = couples' negative communication patterns at the level of the dyads; $e 1$ to $e 4=$ error terms; $r c c=$ residual (unexplained) portion of variance.

Modelling (SEM) analyses (Kenny \& Acitelli, 2001). SEM procedures with maximum likelihood estimation (MLE) were used for all dyadic analyses in the current study. The obtained data is comprised of mixed independent variables because variation exists within the dyads and between dyads - each individual's score differs from their partner's score and, on average, some dyads score higher than others (Kenny, Kashy, \& Cook, 2006).

Evaluating model fit. Three fit indices were used to evaluate model fit for all SEM analyses: the chi-square statistic, the comparative fit index (CFI) and the root mean square of approximation (RMSEA). A non-significant chi-square statistic suggests a very good fit. CFI values range from zero to one; values over 0.90 suggest reasonably good fit and values above 0.95 signify very good fit (Byrne, 2001). RMSEA values also range from zero to one; values below . 06 indicate a good fit (Hu \& Bentler, 1999), values between .06 and the stringent upper limit of .07 indicate mediocre fit (Steigner, 2007) and values greater than .10 are classified as unacceptable (Byrne, 1998). Chi-square difference tests were used to test nested model comparisons.

## Preliminary Bivariate Correlations among Variables

Bivariate correlations among primary study variables for women and men are presented in Table 2 (page 43) and bivariate correlations among study variables are presented in Appendix O.

For both men and women, maladaptive dyadic perfectionism was significantly correlated with negative communication and relationship quality; negative communication was correlated with reduced relationship quality. These associations between important study variables are consistent with expectations and supported the appropriateness of dyadic analyses.

## Hypothesized Relationships between Pairs of Variables

Hypothesis one. Maladaptive dyadic perfectionism reported by one partner will be negatively associated with their own report of perceived relationship quality (actor effect) and their partner's report of perceived relationship quality (partner effect). As depicted in Figure 3, the Actor-Partner Interdependence Model (APIM) with women's and men's maladaptive dyadic perfectionism as the exogenous variables (predictor variables) and women's and men's perceived relationship quality as the endogenous variables (criterion variables) was used to evaluate the actor and partner effects specific to the first hypothesis.

Actor effects between maladaptive dyadic perfectionism and perceived relationship quality were negative and significant for both women ( $p<.001$ ) and men ( $p$ <.001); more elevated scores on maladaptive dyadic perfectionism were associated with less positive self-perceptions of relationship quality. The standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one standard deviation, perceived relationship quality decreased by .44 standard deviations for women, and .36 standard deviations for men. This model explains $20 \%$ of the variance in women's perceptions of relationship quality and $18 \%$ of the variance in men's perceptions of relationship quality.

Partner effects between maladaptive dyadic perfectionism and perceived relationship quality were not significant for either women $(p=.154)$ or men $(p=.763)$, indicating that scores on maladaptive dyadic perfectionism reported by one partner were not significantly related to the other partner's perceptions of relationship quality. Taken together, these findings indicate partial support for hypothesis one; that is, personal reports of maladaptive dyadic perfectionism were negatively associated with self-

Figure 3.
Maladaptive Dyadic Perfectionism and Perceived Relationship Quality Actor-Partner Interdependence Model with Standardized Estimates


Figure 3. The Actor-Partner Interdependence Model in which maladaptive dyadic perfectionism represents the exogenous variables and perceived relationship quality represents the endogenous variables. Maladaptive $\mathrm{DP}=$ maladaptive dyadic perfectionism; $r=$ residual (unexplained) portion of variance.
perceived relationship quality (actor effects), but not with partner perceptions of relationship quality (i.e., no partner effects).

The overall APIM model with distinguishable dyads is a saturated model $\left[\chi^{2}(0)=\right.$ .000]; thus measures of fit cannot be computed (Kenny, Kashy, \& Cook, 2006). Chisquare difference tests were used to assess whether actor or partner effects differed for men and women. There was no significant difference between the two actor effects [ $\chi^{2}{ }_{\mathrm{D}}$ $(1)=.002, p=.964]$, indicating that the association between women's scores on maladaptive dyadic perfectionism and women's perceptions of relationship quality was not significantly different in size than the association between men's scores on maladaptive dyadic perfectionism and men's perceptions of relationship quality. Similarly, there was no difference between the two partner effects [ $\chi^{2}{ }_{\mathrm{D}}(1)=.388, p=$ .533], indicating that the association between women's maladaptive dyadic perfectionism and men's perceived relationship quality was not significantly different from the corresponding association between men's maladaptive dyadic perfectionism and women's perceived relationship quality. Actor and partner effects between maladaptive dyadic perfectionism and perceived relationship quality did not differ for women or for men.

Chi-square difference tests were used to assess whether the differences between actor and partner effects were statistically significant. Findings indicated that the effect of women's maladaptive dyadic perfectionism on women's perceptions of relationship quality (actor effect) was significantly larger in size than the effect of women's maladaptive dyadic perfectionism on men's perceptions of relationship quality (partner effect) $\left[\chi^{2}{ }_{\mathrm{D}}(1)=11.903, p=.001\right]$. Similarly, the effect of men's maladaptive dyadic perfectionism on men's perceptions of relationship quality (actor effect) was significantly
larger than the effect of men's maladaptive dyadic perfectionism on women's perceived relationship quality (partner effect) $\left[\chi^{2}{ }_{D}(1)=13.973, p<.001\right]$. In summary, for both men and women, the significant actor effects between maladaptive dyadic perfectionism and perceived relationship quality were significantly larger than the non-significant partner effects between maladaptive dyadic perfectionism and perceived relationship quality. In other words, the associations between personal maladaptive dyadic perfectionism and personal perceptions of relationship quality were significantly larger than the associations between personal maladaptive dyadic perfectionism and a partner's perception of relationship quality.

Hypothesis two. Maladaptive dyadic perfectionism reported by one partner will be positively associated with their own report of negative communication patterns (actor effect) and their partner's report of negative communication patterns (partner effect). As depicted in Figure 4, the APIM with women's and men's maladaptive dyadic perfectionism as the exogenous variables and women's and men's reports of negative communication patterns as the endogenous variables, was used to evaluate the actor and partner effects specific to the second hypothesis.

Actor effects between maladaptive dyadic perfectionism and negative communication patterns were positive and significant for both women ( $p=.004$ ) and men ( $p=.008$ ); higher levels of personal maladaptive dyadic perfectionism were associated with increased personal reports of negative communication patterns. The standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one standard deviation, reports of negative communication patterns increased by .26 standard deviations for women, and by .25 standard deviations for men. This model explains $15 \%$

Figure 4.
Maladaptive Dyadic Perfectionism and Negative Communication Patterns Actor-Partner Interdependence Model with Standardized Estimates


Figure 4. The Actor-Partner Interdependence Model in which maladaptive dyadic perfectionism represents the exogenous variables and negative communication patterns represent the endogenous variables. Maladaptive $\mathrm{DP}=$ maladaptive dyadic perfectionism, negative communication $=$ negative communication patterns; $r=$ residual (unexplained) portion of variance.
of the variance in women's reports of negative communication patterns in the relationship and $9 \%$ of the variance in men's reports of negative communication patterns.

The partner effect between maladaptive dyadic perfectionism and negative communication patterns was not significant for women ( $p=.310$ ); women's personal levels of maladaptive dyadic perfectionism were not significantly related to their partner's reports of negative communication patterns. However, the partner effect between maladaptive dyadic perfectionism and negative communication patterns was positive and significant for men ( $p=.018$ ); men's personal reports of maladaptive dyadic perfectionism were significantly related to women's reports of negative communication patterns. Thus, partner effects were observed for men but not for women. Taken together, these findings provide partial support for hypothesis two; maladaptive dyadic perfectionism reported by one partner was positively correlated with their own reports of negative communication in the relationship (actor effects), and men's reports of maladaptive dyadic perfectionism were correlated with women's reports of negative communication (i.e., partner effect for men). However, the partner effect for women was not supported.

Chi-square difference tests showed no significant differences between the two actor effects $\left[\chi^{2}{ }_{\mathrm{D}}(1)=.227, p=.634\right]$, indicating that the association between women's maladaptive dyadic perfectionism and women's reports of negative communication patterns was not significantly different than the association between men's maladaptive dyadic perfectionism and men's reports of negative communication patterns. Similarly, there was no difference between the two partner effects $\left[\chi^{2}{ }_{\mathrm{D}}(1)=.908, p=.341\right]$, indicating that the association between women's maladaptive dyadic perfectionism and
men's reports of negative communication patterns did not differ significantly from the corresponding association between men's maladaptive dyadic perfectionism and women's reports of negative communication patterns. Actor and partner effects between maladaptive dyadic perfectionism and negative communication patterns did not differ for women or for men.

A chi-square difference test also indicated that the actor effect of women's maladaptive dyadic perfectionism on women's reports of negative communication patterns did not differ significantly in size from the partner effect of women's maladaptive dyadic perfectionism on men's perceptions of negative communication patterns [ $\left.\chi^{2}{ }_{\mathrm{D}}(1)=2.501, p=.114\right]$. Similarly, the actor effect of men's maladaptive dyadic perfectionism on men's reports of negative communication patterns was not significantly different in size from the corresponding partner effect of men's maladaptive dyadic perfectionism on women's reports of negative communication patterns $\left[\chi^{2}{ }_{D}(1)=\right.$ $.409, p=.523]$. Thus, for both women and men, actor effects between maladaptive dyadic perfectionism and negative communication patterns did not differ significantly from partner effects between maladaptive dyadic perfectionism and negative communication patterns. In other words, the association between personal reports of maladaptive dyadic perfectionism and self-perceived reports of negative communication in the relationship (actor effects) did not differ significantly in size from the associations between personal reports of maladaptive dyadic perfectionism and partner perceptions of negative communication patterns (partner effects).

Hypothesis three. Negative communication patterns reported by one partner will be negatively associated with their own report of perceived relationship quality (actor
effect) and their partner's report of perceived relationship quality (partner effect). As depicted in Figure 5, the APIM with women's and men's negative communication patterns as the exogenous variables and women's and men's perceptions of relationship quality as the endogenous variables, was used to evaluate the actor and partner effects specific to the third hypothesis.

Actor effects between negative communication patterns and perceived relationship quality were negative and significant for both women ( $p<.001$ ) and men $(p=.005)$; reports of greater negative communication patterns by one partner were associated with reductions in their own reports of relationship quality. The standardized beta coefficients indicate that as negative communication increased by one standard deviation, perceived relationship quality decreased by .36 standard deviations for women, and by .30 standard deviations for men. This model explains $13 \%$ of the variance in women's perceptions of relationship quality and $15 \%$ of the variance in men's perceptions of relationship quality.

Partner effects between negative communication patterns and perceived relationship quality were not significant for either women $(p=.217)$ or men $(p=.946)$, women's reports of negative communication patterns and women's perceptions of relationship quality did not differ significantly from the relationship between men's reports of negative communication patterns and men's perceptions of relationship quality. Similarly, there was no difference between the two partner effects $\left[\chi^{2}\right.$ D $(1)=.578, p=$ .447]; the relationship between women's reports of negative communication patterns and men's perceptions of relationship quality did not differ significantly from the corresponding relationship between men's reports of negative communication patterns and women's perceptions of relationship quality. Actor and partner effects between

Figure 5.
Negative Communication Patterns and Perceived Relationship Quality
Actor-Partner Interdependence Model with Standardized Estimates


Figure 5. The Actor-Partner Interdependence Model in which negative communication patterns represent the exogenous variables and perceived relationship quality represents the endogenous variables. Negative communication $=$ negative communication patterns; $r=$ residual (unexplained) portion of variance.
negative communication patterns and perceived relationship quality did not differ for women or for men.

Chi-square difference tests were used to assess whether the differences between actor and partner effects were statistically significant. The actor effect of women's reports of negative communication patterns on their own perceptions of relationship quality was significantly larger in size than the partner effect of women's reports of negative communication patterns on men's perceptions of relationship quality $\left[\chi^{2} \mathrm{D}(1)=\right.$ $4.622, p=.032]$. Similarly, the actor effect of men's reports of negative communication patterns and their own perceptions of relationship quality was significantly larger than the partner effect of men's reports of negative communication patterns on women's perceptions of relationship quality $\left[\chi^{2}{ }_{\mathrm{D}}(1)=7.633, p=.006\right]$. In summary, for both men and women, the significant actor effects between negative communication patterns and relationship quality were significantly larger than the non-significant partner effects between negative communication patterns and relationship quality. In other words, the associations between personal reports of negative communication patterns and personal perceptions of relationship quality were significantly larger than the associations between personal reports of negative communication patterns and a partner's perception of relationship quality.

## Hypothesized Mediation Models

Hypothesis four. Negative communication patterns reported by one partner will partially mediate the association between: (a) their own report of maladaptive dyadic perfectionism and their own report of perceived relationship quality (actor-actor mediated effects); (b) their own report of maladaptive dyadic perfectionism and their
partner's report of perceived relationship quality (actor-partner mediated effects); (c) their partner's report of maladaptive dyadic perfectionism and their own report of perceived relationship quality (partner-actor mediated effects); and (d) their partner's report of maladaptive dyadic perfectionism and their partner's report of perceived relationship quality (partner-partner mediated effects). The Actor-Partner Interdependence Mediation Model (APIMeM) was used to assess the fourth hypothesis, which evaluated mediation at the level of the partners, meaning individual and not dyadic effects. As depicted in Figure 6, maladaptive dyadic perfectionism represents the exogenous (predictor) variables, negative communication patterns represent the mediator variables and perceived relationship quality represents the endogenous (outcome) variables. Mediation analyses were tested in three steps: (1) the selection of a good fitting model, (2) the assessment of the direct effects and (3) the assessment of the indirect effects through bootstrapping (Ledermann \& Macho, 2009).

Selection of a model. The APIM used to assess the association between maladaptive dyadic perfectionism and perceived relationship quality included two actor and two partner effects. The actor effects between maladaptive dyadic perfectionism and perceived relationship quality were significant for both women $(p<.001)$ and men ( $p<$ .001). The partner effects for women's maladaptive dyadic perfectionism to men's perceptions of relationship quality of men $(p=.154)$ and men's maladaptive dyadic perfectionism to women's perceptions of relationship quality ( $p=.763$ ), were not significant.

The APIMeM presented in Figure 6 has two degrees of freedom $(d f)$.
Bodenmann, Ledermann, and Bradbury (2007) indicate that direct partner effects between exogenous (maladaptive dyadic perfectionism) and endogenous (perceived relationship

## Figure 6.

Maladaptive Dyadic Perfectionism, Negative Communication Patterns and Perceived Relationship Quality Actor-Partner Interdependence Mediation Model with Standardized Estimates


Figure 6. The Actor-Partner Interdependence Mediation Model in which maladaptive dyadic perfectionism represents the exogenous variables, negative communication patterns represent the mediator variables and perceived relationship quality represents the endogenous variables. Maladaptive DP = maladaptive dyadic perfectionism; negative comm = negative communication patterns; $e 1$ to $e 4=$ error variance.
quality) variables are statistically irrelevant in models with two degrees of freedom if the model fits the data well. Complete mediation is supported if the direct effects between the exogenous and endogenous variables are not significant, whereas partial mediation is supported if the direct effects between exogenous and endogenous variables are significant (e.g., Bodenmann, Ledermann, \& Bradbury, 2007; Ledermann, Bodenmann, Rudaz, \& Bradbury, 2010).

Based on the non-significant partner effects in the APIM and Bodenmann and colleagues indication that the direct partner effects between maladaptive dyadic perfectionism and perceived relationship quality can be considered statistically irrelevant, the non-significant direct partner effects between maladaptive dyadic perfectionism and perceived relationship quality were eliminated from the overall structural model to evaluate support for the assumption of complete mediation (Ledermann, Bodenmann, Rudaz, \& Bradbury, 2010). The significant direct actor effects between maladaptive dyadic perfectionism and perceived relationship quality were retained in the model to evaluate support for the assumption of partial mediation.

The final APIMeM model that was used to assess the complete mediation of partner effects between maladaptive dyadic perfectionism and perceived relationship quality, and the partial mediation of actor effects between maladaptive dyadic perfectionism and perceived relationship quality, showed an excellent fit to the data $\left[\chi^{2}(2)=1.136, p=.567 ; \mathrm{CFI}=1.000\right.$, RMSEA $\left.=.000(90 \% \mathrm{CI}: .000-.159)\right]$. This model explained $23 \%$ of the variance in women's perceptions of relationship quality and $24 \%$ of the variance in men's perceptions of relationship quality.

## Testing direct effects.

Associations between maladaptive dyadic perfectionism and negative communication patterns. As depicted in Figure 6, actor effects between maladaptive dyadic perfectionism and reports of negative communication patterns were positive and significant for women ( $p=.004$ ) and for men ( $p=.008$ ); higher levels of personal maladaptive dyadic perfectionism were associated with increased personal reports of negative communication patterns. The standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one standard deviation, reported negative communication increased by .26 standard deviations for women and by .25 standard deviations for men.

The partner effect between women's maladaptive dyadic perfectionism and men's reports of negative communication patterns was positive but not significant ( $p=.310$ ). However, the partner effect between men's maladaptive dyadic perfectionism and women's reports of negative communication patterns was significant ( $p=.018$ ). The standardized beta coefficients indicate that as men's maladaptive dyadic perfectionism increased by one standard deviation, women's reports of negative communication patterns increased by .22 standard deviations.

## Associations between negative communication patterns and perceived

 relationship quality. As depicted in Figure 6, actor effects between reported negative communication patterns and perceived relationship quality were negative and significant for both women ( $p=.016$ ) and men $(p=.015)$. The standardized beta coefficients indicate that for both men and women, as reports of negative communication patterns increased by one standard deviation, perceived relationship quality decreased by .25 standard deviations. The partner effect between women's reports of negativecommunication patterns to men's perceptions of relationship quality was negative but not significant ( $p=.537$ ). Similarly, the partner effect between men's reports of negative communication patterns to women's perceptions of relationship quality was negative but not significant $(p=.909)$. Therefore, one partner's report of negative communication patterns within the relationship was not significantly related to the other partner's perceptions of relationship quality.

Association between maladaptive dyadic perfectionism and perceived relationship quality. As depicted in Figure 6, actor effects between maladaptive dyadic perfectionism and perceived relationship quality were negative and significant for both women ( $p<$ $.001)$ and men $(p<.001)$. The standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one standard deviation, perceived relationship quality decreased by .33 standard deviations for women and by .32 standard deviations for men. Specifically, the standardized path from women's maladaptive dyadic perfectionism to women's perceptions of relationship quality decreased from -. 44 in the APIM to -. 33 in the present APIMeM model. Similarly, the standardized path from men's maladaptive dyadic perfectionism to men's perceptions of relationship quality decreased from -. 36 in the APIM to -.32 in the present APIMeM model. These findings indicate the presence of partial mediation of actor effects because the direct effects between maladaptive dyadic perfectionism and perceived relationship quality were significant but smaller in size once negative communication patterns (mediator variables) were included in the model. Significance tests to assess whether mediation was significant are presented below.

Testing indirect effects. Eight simple indirect effects were present in the APIMeM: two actor-actor $\left(\mathrm{MDP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{W}} \rightarrow \mathrm{RQw}_{\mathrm{W}} ; \mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}}^{\rightarrow} \mathrm{RQ}_{\mathrm{M}}\right)$, two actorpartner $\left(\mathrm{MDP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{W}}^{\rightarrow} \mathrm{RQ}_{\mathrm{M}} ; \mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}}^{\rightarrow}\right.$ RQ $\left.\mathrm{R}_{\mathrm{W}}\right)$, two partner-actor
$\left(\mathrm{MDP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{M}}^{\rightarrow}\right.$ RQ $\left.\mathrm{M}_{\mathrm{M}} ; \mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{W}}^{\rightarrow} \mathrm{RQ}_{\mathrm{W}}\right)$ and two partner-partner $\left(\mathrm{MDP}_{\mathrm{W}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}} \rightarrow\right.$ $\left.\mathrm{RQ}_{\mathrm{w}} ; \mathrm{MDP}_{\mathrm{M}} \rightarrow \mathrm{CC}_{\mathrm{w}} \rightarrow \mathrm{RQ}_{\mathrm{M}}\right)$. As already noted, the reduction in the direct actor paths between maladaptive dyadic perfectionism and perceived relationship quality for women and men suggest the presence of partial mediation. Significance tests were conducted to assess the significance of the partial mediation. Both the Sobel test (Sobel, 1982, 1986) and the bootstrap resampling approach can be used to assess mediation. In the current analyses, bootstrapping was used because it provides a better estimate of the confidence interval for indirect effects (Sadler, Ethier, \& Woody, 2011) and better power than the Sobel test (Fritz \& MacKinnon, 2007; Shrout \& Bolger, 2002).

Bias-corrected bootstrap values provided by AMOS were used to evaluate the eight indirect effects present in the APIMeM model (Sadler, Ethier, \& Woody, 2011). Of note, the Stochastic regression imputation method available in AMOS was used to impute missing values prior to performing the bootstrap analyses, as required by AMOS. The bias-corrected 95\% bootstrapping confidence intervals based on standardized indirect effects and the corresponding $p$-values are presented in Table 4. Bias-corrected bootstrapping confidence intervals were used to test the significance of the indirect effects because they are more reliable indices than percentile confidence intervals, which are also available in AMOS (Efron \& Tibshirani, 1993; MacKinnon, Lockwood, \& Williams, 2004).

Based on bias-corrected bootstrap findings, actor-actor mediated effects ( $\mathrm{MDP}_{\mathrm{w}} \rightarrow$ $\mathrm{CC}_{\mathrm{w}}^{\rightarrow} \mathrm{RQ}_{\mathrm{w}}$ and $\mathrm{MDP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}}^{\rightarrow} \mathrm{RQ}_{\mathrm{M}}$ ) and one partner-actor mediated effect ( $\mathrm{MDP}_{\mathrm{M}} \rightarrow$ $\mathrm{CC}_{\mathrm{W}}{ }_{\rightarrow} \mathrm{RQ}_{\mathrm{W}}$ ) were statistically significant; the bias-corrected $95 \%$ CI did not include zero (see Table 4). These findings indicate that (a) the association between women's maladaptive dyadic perfectionism and women's perceived relationship quality was

Table 4.
Direct and indirect effects in mediation models using bootstrapping (5000 Samples)

| Mediated Effect | IE | $S E$ | Bias-Corrected 95 \% CI |  | $p$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | LL | UL |  |
| APIMeM |  |  |  |  |  |
| Actor-actor |  |  |  |  |  |
| $\mathrm{DP}_{\mathrm{W}} \mathrm{CC}_{\mathrm{W}} \rightarrow \mathrm{RQw}_{\mathrm{w}}$ | -. 066 | . 046 | -. 191 | -. 003 | .037* |
| $\mathrm{DP}_{\mathrm{M}} \rightarrow \mathrm{CC}_{\mathrm{M}} \rightarrow \mathrm{RQ}_{\mathrm{M}}$ | -. 062 | . 036 | -. 157 | -. 009 | .015* |
| Actor-partner |  |  |  |  |  |
| $\mathrm{DP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{W}} \rightarrow \mathrm{RQ}_{\mathrm{M}}$ | -. 016 | . 030 | -. 093 | . 032 | . 434 |
| $\mathrm{DP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{M}}^{\rightarrow} \mathrm{RQ}_{\mathrm{W}}$ | -. 003 | . 032 | -. 074 | . 063 | . 865 |
| Partner-actor |  |  |  |  |  |
| $\mathrm{DP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{M}} \rightarrow \mathrm{RQ}_{\mathrm{M}}$ | -. 024 | . 032 | -. 112 | . 020 | . 265 |
| $\mathrm{DP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\mathrm{W}}^{\rightarrow} \mathrm{RQw}_{\mathrm{w}}$ | -. 055 | . 039 | -. 166 | -. 002 | .041* |
| Partner-partner |  |  |  |  |  |
| $\mathrm{DP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\mathrm{M}} \rightarrow \mathrm{RQ}_{\mathrm{W}}$ | -. 001 | . 017 | -. 049 | . 028 | . 727 |
| $\mathrm{DP}_{\mathrm{M}} \rightarrow \mathrm{CC}_{\mathrm{W}} \rightarrow \mathrm{RQ}_{\mathrm{M}}$ | -. 014 | . 025 | -. 086 | . 025 | . 324 |
| Hybrid mediation model |  |  |  |  |  |
| $\mathrm{DP}_{\mathrm{W}} \rightarrow \mathrm{CC}_{\rightarrow} \mathrm{RQ}_{\mathrm{w}}$ | -. 073 | . 046 | -. 202 | -. 009 | .025* |
| $\mathrm{DP}_{\mathrm{W}}^{\rightarrow} \mathrm{CC}_{\rightarrow} \mathrm{RQ}_{\mathrm{M}}$ | -. 083 | . 050 | -. 207 | -. 006 | .032* |
| $\mathrm{DP}_{\mathrm{M}} \rightarrow \mathrm{CC}_{\rightarrow} \mathrm{RQ}_{\mathrm{M}}$ | -. 092 | . 055 | -. 249 | -. 018 | .014* |
| $\mathrm{DP}_{\mathrm{M}}^{\rightarrow} \mathrm{CC}_{\rightarrow} \mathrm{RQ}_{\mathrm{W}}$ | -. 081 | . 044 | -. 199 | -. 016 | .016* |

Note. IE $=$ standardized indirect effect; $S E=$ standard error; $\mathrm{CI}=$ confidence interval; LL = lower limit; UL = upper limit; $\mathrm{DP}=$ maladaptive dyadic perfectionism; $\mathrm{CC}=$ negative communication patterns; $\mathrm{RQ}=$ perceived relationship quality; $\mathrm{W}=$ women; $\mathrm{M}=$ men; APIMeM = Actor-Partner Interdependence Mediation Model; Hybrid mediation model = hybrid Actor-Partner Interdependence and Common Fate Mediation Model.

* $p<.05$. (two-tailed test).
significantly mediated by women's reports of negative communication patterns, (b) the association between men's maladaptive dyadic perfectionism and men's perceived relationship quality was significantly mediated by men's reports of negative communication patterns, and (c) the association between men's maladaptive dyadic perfectionism and women's perceived relationship quality was significantly mediated by women's reports of negative communication patterns.

Thus, the fourth hypothesis was partially supported. Actor-actor mediated effects were significant; personal reports of negative communication patterns partially explained the association between personal maladaptive dyadic perfectionism and self-perceived relationship quality for both women and men. One partner-actor mediated effect was significant; women's personal reports of negative communication patterns partially explained the association between men's maladaptive dyadic perfectionism and women's perceived relationship quality. However, actor-partner mediated effects were not significant; partner reports of negative communication patterns did not significantly mediate the association between personal maladaptive dyadic perfectionism and selfreported relationship quality. Similarly, partner-partner mediated effects were not significant; partner reports of negative communication patterns did not significantly mediate the association between personal maladaptive dyadic perfectionism and partner perceptions of relationship quality.

Hypothesis five. Couple's negative communication patterns, assessed as a latent variable in which both partners' reports of negative communication patterns are reflected in the variable, will partially mediate the association between (a) maladaptive dyadic perfectionism in one partner and their own report of perceived relationship quality and (b) maladaptive dyadic perfectionism in one partner and their partner's report of
perceived relationship quality. The hybrid APIM and Common Fate Mediation Model was used to assess the fifth hypothesis, which evaluated the communication at the level of the dyads (Ledermann \& Kenny, 2011). In other words, negative communication patterns were assessed as a common fate, dyadic variable. As a reminder, common fate variables assume that both partners are impacted by a dyadic factor, such as communication, or an influential external source, such as quality of housing. As depicted in Figure 7, maladaptive dyadic perfectionism represents the exogenous variables, negative communication patterns represent the mediator variables and perceived relationship quality represents the endogenous variables.

Maladaptive dyadic perfectionism and perceived relationship quality were modeled as personal variables and negative communication patterns was modeled as a latent variable with two indicator variables, specifically, men's reports of negative communication patterns and women's reports of negative communication patterns. Maladaptive dyadic perfectionism was modeled as an individual level variable because it assesses each partner's personal disposition and consequently, cannot appropriately be modeled as a common fate variable. Researchers have conceptualized both relationship quality and communication patterns as common dyadic constructs modeled in Common Fate Models (CFMs; Matthews, Conger \& Wickrama, 1996), and personal variables modeled in APIMs (e.g., Campbell et al., 2001). In the current study, perceived relationship quality was more suitably modeled as a personal variable because the relationship quality measure assessed each partner's individual view of their relationship (e.g., How much do you trust your partner?) rather than the coupled quality of the relationship (e.g., We trust each other; Kenny \& Cook, 1999; Kenny, 1996; Ledermann \& Macho, 2009). Lastly, negative communication patterns was appropriately modeled as a

Figure 7.
Maladaptive Dyadic Perfectionism, Couples' Negative Communication and Perceived Relationship Quality Hybrid Actor-Partner Interdependence and

## Common Fate Mediation Model with Standardized Estimates



Figure 7. The hybrid Actor-Partner Interdependence and Common Fate Mediation Model in which maladaptive dyadic perfectionism and perceived relationship quality are assessed as observed variables and couples' negative communication is assessed as a latent variable. Maladaptive $\mathrm{DP}=$ maladaptive dyadic perfectionism; couples' neg comm = couples' negative communication patterns at the level of the dyads; $e 1$ to $e 4=$ error terms; $r c c=$ residual (unexplained) portion of variance.
common fate variable as both partners' roles in the communication pattern were assessed and communication between romantic partners involves and affects both partners in the relationship. SEM analyses, used to assess the hybrid model were conducted in two sets. First, the measurement model was assessed. Next, the overall mediation structural model was tested in three steps: (1) the selection of a good fitting model, (2) the assessment of the direct effects and (3) the assessment of the indirect effects through bootstrapping (Ledermann \& Macho, 2009; Sadler, Ethier, \& Woody, 2011).

Assessment of the measurement model. The measurement model, comprised of negative communication patterns as a latent variable with each indicator set to one and zero degrees of freedom, was a saturated model $\left[\chi^{2}(0)=.000\right]$; fit indices could not be computed (Kenny, Kashy, \& Cook, 2006). Standardized factor loadings of .70 or higher are necessary to adequately represent latent constructs and use CFM (Schumaker \& Lomax (2004). The factor loadings for women and men in the current sample were .80 and .71 , respectively, indicating that the proportion of variance explained by the latent variable was $64 \%$ for women and about $51 \%$ for men. The product of the two standardized factor loadings (.57), which represents the intradyadic correlation for negative communication patterns, indicates that it was robust and warranted the assessment of a common fate variable because it had a loading of at least .20 (Ledderman \& Kenny, 2011).

## Assessment of the mediation model.

Selection of the model. Based on the insignificant partner effects between maladaptive dyadic perfectionism and perceived relationship quality as demonstrated in the application of the APIM and APIMeM models, partner effects between maladaptive
dyadic perfectionism and perceived relationship quality were not included in the hybrid model. However, the direct actor effects between maladaptive dyadic perfectionism and perceived relationship quality were included in the hybrid model to assess whether the association between personal maladaptive dyadic perfectionism and self-perceived relationship quality was partially mediated by couples' negative communication patterns.

Findings indicate that the factor loading for women did not significantly differ from one, and therefore, did not differ from the factor loading for men on negative communication patterns. The chi-square difference comparison of the model with a free factor loading for women and the model with the factor loading for women fixed to one indicated that there was no significant difference $\left[\chi^{2}{ }_{D}(1)=.171, p>.05\right]$. As recommended by Ledermann and Kenny (2011), the more parsimonious model with all factor loadings fixed to one was used in the final model. Similarly, other researchers report that in specifying the CFM for distinguishable dyad members, factor loadings for all indicators are typically set to one (Cook, 1998, Gonzalez \& Griffin, 1999; Woody \& Sadler, 2005).

The final hybrid model (see Figure 7) with all factor loadings set to one and the covariance between indicators set to zero as recommended by Ledermann and Macho (2009), demonstrated a mediocre fit $\left[\chi^{2}(6)=9.610, p=.142 ; \mathrm{CFI}=.977\right.$, RMSEA $=.063$ ( $90 \%$ CI:.000-.133)]. The proportions of explained variance (squared standardized factor loadings for couples' negative communication patterns) were higher than $50 \%$ indicating that an adequate amount of the variance in the indicators (women's reports of negative communication patterns and men's reports of negative communication patterns) was due to the latent variable, i.e., couples' negative communication patterns.

## Testing direct effects.

Association between maladaptive dyadic perfectionism and negative communication patterns. As presented in Figure 7, the direct effects between maladaptive dyadic perfectionism and couples' negative communication patterns were positive and significant ( $p=.013$ for women, $p=.006$ for men); higher levels of maladaptive dyadic perfectionism were associated with increases in couples' negative communication when both partners reports of communication patterns were included in the assessment. The standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one standard deviation, negative communication increased by .27 standard deviations for women and by .29 standard deviations for men.

Association between negative communication and perceived relationship quality. The direct effects from negative communication patterns to perceived relationship quality were negative and significant for both women $(p=.009)$ and for men $(p=.003)$; increased negative communication patterns incorporating both partners' reports of communication, were associated with reduced ratings of relationship quality for both partners. The standardized beta coefficients indicate that as couples' negative communication increased by one standard deviation, perceived relationship quality decreased by .27 standard deviations for women and .31 standard deviations for men.

Association between maladaptive dyadic perfectionism and perceived relationship quality. The direct actor effects between maladaptive dyadic perfectionism and perceived relationship quality were negative and significant for both women ( $p<.001$ ) and men ( $p$ <.001). The standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one standard deviation, perceived relationship quality decreased by .33 standard deviations for women and by .30 standard deviations for men.

These standardized beta coefficients are smaller in size as compared to the corresponding values in the APIM without mediation, as assessed in hypothesis one. Specifically, for women, the standardized path from maladaptive dyadic perfectionism to perceived relationship quality decreased from -. 44 in the APIM to -.33 in the present hybrid model. Similarly, for men, the standardized path from maladaptive dyadic perfectionism to perceived relationship quality decreased from -.36 in the APIM to -.30 in the present hybrid model. These findings indicate the presence of partial mediation because the direct effects between maladaptive dyadic perfectionism and perceived relationship quality were significant but smaller in size when couples' negative communication patterns was included as the mediator variable.

Testing indirect effects. The bias-corrected $95 \%$ bootstrapping confidence intervals produced by AMOS were used to evaluate the significance of the indirect effects for the hybrid model. As demonstrated in Table 4 (page 73), all mediated effects were significant. The associations between (a) women's maladaptive dyadic perfectionism and women's perceived relationship quality, (b) women's maladaptive dyadic perfectionism and men's perceived relationship quality, (c) men's maladaptive dyadic perfectionism and men's perceived relationship quality, and (d) men's maladaptive dyadic perfectionism and women's perceived relationship quality were all mediated by negative communication patterns assessed as a common fate variable. Thus, the fifth hypothesis was supported. Negative communication patterns assessed as a common fate latent variable partially explains the association between personal maladaptive dyadic perfectionism and personal perceptions of relationship quality, and accounts for the indirect effect between personal maladaptive dyadic perfectionism and the partner's perceptions of relationship quality.

## Subsidiary Hypotheses

Hypothesis six. Intrapersonal perfectionism reported by one partner will moderate the association between their own report of maladaptive dyadic perfectionism and their own report of perceived relationship quality. Therefore, the association between increased maladaptive dyadic perfectionism and reduced relationship quality will be more robust among women and men who report higher levels of intrapersonal perfectionism compared to those who report lower levels of intrapersonal perfectionism (actor-moderated actor effects). The Actor-Partner Interdependence Moderator Model (Bodenmann, Ledermann, \& Bradbury, 2007; Campbell, Simpson, Kashy, \& Rholes, 2001; Cook \& Kenny, 2005) was used to evaluate the sixth hypothesis. As depicted in Figure 8, maladaptive dyadic perfectionism, self-oriented perfectionism, and the interaction between maladaptive dyadic perfectionism and self-oriented perfectionism represent the exogenous variables whereas perceived relationship quality represent the endogenous variables. The moderator model was evaluated in three steps: (1) the selection of an overall good fitting model, (2) the assessment of direct main actor effects and (3) the assessment of actor-moderated actor effects.

Selection of a model. As demonstrated in the API Moderator Model in Figure 8, for both women and men, perceived relationship quality was predicted by their personal reports of maladaptive dyadic perfectionism, self-oriented perfectionism, and the interaction between maladaptive dyadic perfectionism and self-oriented perfectionism. Each of the six predictor variables was permitted to covary. Double-headed arrows between predictor variables are not included in Figure 8 in order to enhance the overall clarity of the diagram. Only actor effects were included in the moderator model as only actor-moderated actor effects were hypothesized. For both women and men, maladaptive

Figure 8.
Maladaptive Dyadic Perfectionism, Intrapersonal Perfectionism and Perceived
Relationship Quality Actor-Partner Interdependence Moderation Model with

## Unstandardized Estimates



Figure 8. The Actor-Partner Interdependence Moderation Model in which maladaptive dyadic perfectionism, intrapersonal perfectionism and the interaction between maladaptive dyadic perfectionism and intrapersonal perfectionism variables represent the exogenous variables. Perceived relationship quality represents the endogenous variables. Maladaptive $\mathrm{DP}=$ maladaptive dyadic perfectionism; MDP x IP = interaction between maladaptive dyadic perfectionism and intrapersonal perfectionism; $r=$ residual (unexplained) portion of variance.

All exogenous variables were permitted to covary. Covariance arcs were removed from this figure to enhance the overall clarity of the model.
dyadic perfectionism and self-oriented perfectionism variables were centred to reduce the degree of multicollinearity between these predictors and the interaction variables (Aiken \& West, 1991). To center these variables, the grand mean, which was comprised of women's and men's scores, was subtracted from each predictor variable (Kenny \& Cook, 1999). The API Moderator Model provided an excellent fit for the data $\left[\chi^{2}(6)=3.484, p\right.$ $=.746 ; \mathrm{CFI}=1.000, \mathrm{RMSEA}=.000(90 \% \mathrm{CI} . .000-.087)]$.

Testing main actor effects. Unstandardized path coefficients were reported for the API Moderator Model as only unstandardized coefficients are interpretable in models that include interaction variables (Sadler, Ethier, \&Woody, 2011). The direct actor effects between maladaptive dyadic perfectionism and perceived relationship quality were negative and significant for women $(B=-.011, p=.001)$ and for men $(B=-.010, p=$ .008); higher levels of personal maladaptive dyadic perfectionism were associated with personal perceptions of reduced relationship quality. The direct actor effects between self-oriented perfectionism and perceived relationship quality were not significant for women $(B=.000, p=.858)$ or men $(B=.000, p=.992)$.

Testing moderator effects. The associations between the maladaptive dyadic perfectionism by self-oriented perfectionism interaction and perceived relationship quality were not significant for women $(B=.000, p=.721)$ or for men $(B=.000, p=$ .211). Thus, the sixth hypothesis was not supported; intrapersonal perfectionism, as assessed by self-oriented perfectionism, did not moderate the actor-moderated effect between maladaptive dyadic perfectionism and perceived relationship quality for women or men. In other words, partners who scored high on both maladaptive dyadic perfectionism and intrapersonal perfectionism did not report lower levels of perceived
relationship quality relative to partners who were high in maladaptive dyadic perfectionism, but not intrapersonal perfectionism.

Hypothesis seven. Maladaptive dyadic perfectionism reported by one partner will be positively associated with their own expectation that the romantic relationship will dissolve (actor effect). As depicted in Panel A of Figure 9, the Actor-Partner Interdependence Model (APIM) with women's and men's maladaptive dyadic perfectionism as the exogenous variables and women's and men's expected relationship dissolution within six months as the endogenous variables was used to evaluate the actor effects of the seventh hypothesis. As depicted in Panel B of Figure 9, a second APIM model with expected relationship dissolution within one year as the endogenous variables was used to assess this exploratory hypothesis. The two items constructed for the current study were used to assess expected relationship dissolution within six months and one year. Of note, partner effects were not specifically predicted; however, partner effects indicated by the APIM analyses are presented.

Actor effects between maladaptive dyadic perfectionism and expected relationship dissolution within six months and within one year were positive and significant for both women ( $p<.001$ ) and men ( $p<.001$ ); greater personal maladaptive dyadic perfectionism was associated with increased personal expectations that the romantic relationship would dissolve within six months and within one year. The standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one standard deviation, expectations for relationship dissolution within six months increased by .33 standard deviations for women and by .43 standard deviations for men. Similarly, the standardized beta coefficients indicate that as maladaptive dyadic perfectionism increased by one

Figure 9.

## Maladaptive Dyadic Perfectionism and Expected Relationship Dissolution

Actor-Partner Interdependence Model with Standardized Estimates

A) Expected relationship dissolution within six months

B) Expected relationship dissolution within one year

Figure 9. The Actor-Partner Interdependence Model in which maladaptive dyadic perfectionism represents the exogenous variables and expected relationship dissolution represents the endogenous variables. Maladaptive DP = maladaptive dyadic perfectionism; $r=$ residual (unexplained) portion of variance.
standard deviation, expectations for relationship dissolution within one year increased by .33 standard deviations for women, and by . 39 standard deviations for men.

Partner effects between maladaptive dyadic perfectionism and expected relationship dissolution within six months and within one year were not significant, indicating that one partner's maladaptive dyadic perfectionism was not significantly related to the other partner's expectation of impending relationship dissolution within six months or one year. Of note, because the overall APIM models in Panel A and Panel B are saturated models [ $\chi^{2}(0)=.000$ ], measures of fit cannot be computed (Kenny, Kashy, \& Cook, 2006). Hypothesis seven was supported as only actor effects were hypothesized. Specifically, women and men high in maladaptive dyadic perfectionism were more likely to expect that their relationship would dissolve compared to individuals who were not high in maladaptive dyadic perfectionism.

See Table 5 for a summary of all hypotheses and findings in the current study.

## Alternative SEM Models

It is important to stress that a well-fitting SEM model does not address how well alternate models, which could include different causal hypotheses or different variables, might fit the data. Therefore, as MacCallum, Browne, and Sugawara, (1996) observe, it is advisable to consider alternative models based on competing theories a priori, and to select the best fitting model among the alternatives. These recommendations were followed in the current analyses by proposing and assessing two alternative models: (1) an equivalent hybrid APIM and CF mediation model with different directional assumptions and (2) a hybrid APIM and CF mediation model that assess whether couples'

Table 5.
Summary table of hypotheses and findings

|  | Hypothesis | Statistical <br> Analysis | Findings | Hypothesis Support |
| :---: | :---: | :---: | :---: | :---: |
| 1. | Maladaptive DP in one partner will be negatively associated with their own report of perceived RQ (actor effect) and their partner's report of perceived RQ (partner effect) | APIM | Actor effects were negative and significant for men and women <br> Partner effects were not significant for men and women | Partial Support |
| 2. | Maladaptive DP in one partner will be positively associated with their own report of negative communication patterns (actor effect) and their partner's report of negative communication patterns (partner effect) | APIM | Actor effects were positive and significant for men and women <br> Partner effect between men's maladaptive DP and women's negative communication patterns was positive and significant <br> Partner effect between maladaptive DP of women negative communication patterns reported by men was not significant | Partial <br> Support |
| 3. | Negative communication patterns reported by one partner will be negatively associated with their own reports of perceived RQ (actor effect) and their partner's report of perceived RQ (partner effect) | APIM | Actor effects were negative and significant for men and women <br> Partner effects were not significant for men and women | Partial Support |


|  |  | Statistical <br> Hypothesis | Findings |
| :--- | :--- | :--- | :--- |


|  | Hypothesis | Statistical <br> Analysis | Findings | Hypothesis <br> Support |
| :--- | :--- | :--- | :--- | :--- |
| 6.Intrapersonal perfectionism <br> reported by one partner will <br> moderate the association <br> between their own <br> maladaptive DP and their <br> own report of perceived RQ <br> (actor-moderated actor <br> effects) | API <br> Moderation <br> Model | Actor-moderated actor <br> effects were not <br> significant for women <br> or men | Not <br> supported |  |
| 7. |  |  |  |  |
| Maladaptive DP reported by <br> one partner will be <br> positively associated with <br> their own expectation that <br> the romantic relationship <br> will dissolve (actor effect) | APIM | Actor effects were <br> positive and significant <br> for six months and one <br> year | Supported |  |

Note. $\mathrm{DP}=$ dyadic perfectionism; RQ = relationship quality; APIM $=$ Actor-Partner Interdependence Model; APIMeM = Actor-Partner Interdependence Mediation Model;

Hybrid Model = hybrid Actor-Partner Interdependence and Common Fate Mediation Model.
negative communication patterns mediate the association between adaptive dyadic perfectionism and perceived relationship quality.

## Testing Different Directional Assumptions

The alternative mediation model presented in Figure 10 evaluated whether perceived relationship quality mediated the association between maladaptive dyadic perfectionism and negative communication patterns using a hybrid APIM and CF Mediation Model. In this model, maladaptive dyadic perfectionism was represented as the exogenous (predictor) variables, perceived relationship quality was represented as the mediator variables and negative communication was represented as the endogenous (criterion) variables. SEM analyses, used to assess the alternative hybrid model were conducted in two sets. First, the measurement model was assessed. Next, the overall mediation structural model was tested in three steps: (1) the selection of a good fitting model, (2) the assessment of the direct effects and (3) the assessment of the indirect effects through bootstrapping (Ledermann \& Macho, 2009; Sadler, Ethier, \& Woody, 2011).

Assessment of the measurement model. The measurement model, comprised of negative communication as a latent variable with two indicators (i.e., women's and men's reports of negative communication within the relationship), was equivalent to the measurement model indicated for hypothesis five; thus, couples' negative communication was appropriately assessed as a latent common fate variable.

Selection of the model. Given that the direct actor effects between maladaptive dyadic perfectionism and communication were included in the hybrid model, a partial mediation model was assessed. The final hybrid model with all factor loadings set to one and the covariance between indicators set to zero, as recommended by Ledermann and

Figure 10.
Maladaptive Dyadic Perfectionism, Perceived Relationship Quality and Couples' Negative Communication Alternate Hybrid Actor-Partner Interdependence and Common Fate Mediation Model with Standardized Estimates


Figure 10. The alternate hybrid Actor-Partner Interdependence and Common Fate Mediation Model in which maladaptive dyadic perfectionism and perceived relationship quality are assessed as observed variables and couples' negative communication is assessed as a latent variable. Maladaptive $\mathrm{DP}=$ maladaptive dyadic perfectionism; couples' comm = couples' negative communication patterns at the level of the dyads; $e 1$ to $e 4=$ error terms; $r c c=$ residual (unexplained) portion of variance.

Macho (2009), demonstrated a poor fit $\left[\chi^{2}(6)=11.284, p=.080 ;\right.$ CFI $=.968$, RMSEA $=$ .089 ( $90 \% \mathrm{CI}: .000-.168$ )]. As the model did not fit the data well, it was not reasonable to assess the direct effects or the significance of the mediated effects. Taken together, the predicted structural model in which couples' negative communication patterns mediate the association between maladaptive dyadic perfectionism and perceived relationship quality is a better fit of the data than the alternative model in which perceived relationship quality mediates the association between maladaptive dyadic perfectionism and couples' negative communication patterns. Based on theoretical considerations and the evaluation of the alternative structural model, there is corroborating support for the hypothesized directional associations in the overall structural model assessed in the current study.

## Testing Adaptive Dyadic Perfectionism

A second alternative hybrid APIM and CF Mediation Model presented in Figure 11 evaluated whether couples' negative communication mediates the association between adaptive dyadic perfectionism, assessed by the High Standards subscale of the Dyadic Almost Perfect Scale (DAPS) and perceived relationship quality. In this model, adaptive dyadic perfectionism was represented as the exogenous (predictor) variables, negative couples' communication was represented as the mediator variable, and perceived relationship quality was represented as the endogenous (criterion) variables.

Assessment of the measurement model. Once again, the measurement model, comprised of couples' negative communication as a latent variable with two indicators (i.e., women's and men's reports of negative communication patterns), was equivalent to the measurement model indicated for hypothesis five; couples' negative communication was appropriately assessed as a latent common fate variable.

Figure 11.
Adaptive Dyadic Perfectionism, Couples' Negative Communication and Perceived Relationship Quality Alternate Hybrid Actor-Partner Interdependence and
Common Fate Mediation Model with Standardized Estimates


Figure 11. The alternate hybrid Actor-Partner Interdependence and Common Fate Mediation Model in which adaptive dyadic perfectionism and perceived relationship quality are assessed as observed variables and couples' negative communication is assessed as a latent variable. Adaptive DP = adaptive dyadic perfectionism; couples' comm = couples' negative communication patterns at the level of the dyads; $e 1$ to $e 4=$ error terms; $r \mathrm{cc}=$ residual (unexplained) portion of variance.

Selection of the model. Direct actor effects between adaptive dyadic perfectionism and perceived relationship quality were included in the alternative hybrid model to assess partial mediation. The final hybrid model with all factor loadings set to one and the covariance between indicators set to zero demonstrated a poor fit $\left[\chi^{2}(6)=\right.$ $11.116, p=.085 ; \mathrm{CFI}=.954, \mathrm{RMSEA}=.087(90 \% \mathrm{CI}: .000-.166)]$. As the model does not fit the data well, it is not reasonable to assess the direct effects or the significance of the mediated effects. Of interest however, the associations between adaptive dyadic perfectionism and perceived relationship quality for women and men, and the associations between adaptive dyadic perfectionism and negative couples' communication for women and men were not significant. Therefore, the hypothesized structural model in which couples' negative communication mediates the association between maladaptive dyadic perfectionism and perceived relationship quality is a better fit of the data than the alternative model which included adaptive dyadic perfectionism as the exogenous variables.

## CHAPTER IV

## Discussion

## Overview

The primary purpose of the current study was to assess whether negative communication patterns in romantic relationships mediate the association between maladaptive dyadic perfectionism and perceived relationship quality. In order to assess the interdependent nature of romantic relationships and to assess the actor and partner effects, data were collected from both partners in monogamous, heterosexual, long-term romantic relationships. The associations between pairs of variables in the overall mediation model, specifically between (a) maladaptive dyadic perfectionism and perceived relationship quality; (b) maladaptive dyadic perfectionism and negative communication patterns; and (c) negative communication patterns and perceived relationship quality, were assessed. Potential gender differences between romantic partners also were evaluated to better understand the associations between pairs of variables. One subsidiary objective of the current study was to assess whether intrapersonal perfectionism moderates the association between maladaptive dyadic perfectionism and perceived relationship quality. A second subsidiary goal was to evaluate whether maladaptive dyadic perfectionism was positively associated with expectations of impending relationship dissolution. Robins and Boldero's (2003) relational discrepancy theory, which describes discrepancies between actual and ideal self-guides in the context of romantic relationships informed the predictions of the current study.

## Associations between Maladaptive Dyadic Perfectionism, Negative Communication Patterns and Perceived Relationship Quality

Maladaptive dyadic perfectionism and perceived relationship quality. The
first hypothesis was that maladaptive dyadic perfectionism in one partner would be negatively associated with their own report of perceived relationship quality and with their partner's report of perceived relationship quality. Results indicated partial support for this hypothesis; individuals who believe that their partners are constantly falling short of their high expectations reported lower perceptions of relationship quality; however, their romantic partners did not report lower perceived relationship quality. Therefore, it seems that having a partner who falls short of one's high expectations erodes personal evaluations of relationship quality, but not a partner's perception of relationship quality.

The significant association between one's own maladaptive dyadic perfectionism and one's own perception of relationship quality provides support for the actor-oriented perspective (Kenny \& Cook, 1999). However, the non-significant partner effects between women's maladaptive dyadic perfectionism and men's perceived relationship quality and vice versa indicate that the current findings are not compatible with the couple-oriented perspective in which each individual's report of perceived relationship quality is predicted by both their own and their partner's maladaptive dyadic perfectionism (Kenny \& Cook, 1999). Of note, the association between women's maladaptive dyadic perfectionism and women's perceived relationship quality was significantly larger than the association between women's maladaptive dyadic perfectionism and men's perceived relationship quality. Similarly, the association between men's maladaptive dyadic perfectionism and men's perceived relationship quality was significantly larger than the association between men's maladaptive dyadic perfectionism and women's perceived
relationship quality. This provides additional support for the premise that personal perceptions of relationship quality are better predicted by personal maladaptive dyadic perfectionism than by a partner's maladaptive dyadic perfectionism. The current findings are consistent with previously reported actor-oriented findings in which each person's perfectionistic expectations of a romantic partner were linked to their own perceptions of relationship quality (Fons-Scheyd, 2008; Haring et al., 2003; Lopez et al., 2006; Shea, Slaney, \& Rice, 2006; Stoeber, 2012).

The current findings also indicated that there was no difference in the actor effects between maladaptive dyadic perfectionism and perceived relationship quality for men and women. It is difficult to assess whether non-significant gender differences in the current study are consistent with previous findings as previous researchers have sampled only one relationship partner, typically female participants, when evaluating maladaptive dyadic perfectionism and relationship quality. Nevertheless, when assessing only one partner, Shea (2006) reported that the discrepancy score of the Dyadic Almost Perfect Scale (DAPS) was more strongly associated with relationship satisfaction for women than it was for men. It is important for future researchers to continue to sample both relationship partners to assess potential gender differences and to better understand the interdependent nature of maladaptive dyadic perfectionism on relationship processes.

One of the challenges in identifying partner effects in the current study may be attributable to using the Dyadic Almost Perfect Scale (DAPS), a measure that assesses one individual's expectations of their romantic partner and their belief that their partner's performance is subpar, but does not assess an individual's belief that their partner expects perfectionism of them. Assessing an individual's perceptions that their partner expects them to be perfect may have produced significant partner effects. In fact, Stoeber (2012)
recently assessed actor and partner effects of partner-prescribed perfectionism, meaning perceived perfectionistic expectations from one's partner, and partner-oriented perfectionism, meaning perfectionistic expectations towards one's partner. This author found that individuals who believed that their partners expected them to be perfect experienced lower relationship satisfaction compared to individuals who did not believe that their partners expected them to be perfect. Taking these findings into consideration, perhaps an individual's perception that their partner believes he or she is always falling short may be more closely associated with their perceptions of relationship quality than is their partner's actual reported level of maladaptive dyadic perfectionism. Alternatively, perhaps individuals in long-term relationships with partners high in maladaptive dyadic perfectionism have chosen to accept and maintain a relationship with their partner, despite their partner's perfectionistic expectations of them. Acceptance of a partner's maladaptive dyadic perfectionism may mitigate partner reports of reduced relationship quality.

Greater understanding of dispositions such as dyadic perfectionism, which contribute to decreased relationship quality, is important in assisting clinicians with case formulations and treatment interventions. Based on the current study findings, psychotherapy that focuses on working through maladaptive dyadic perfectionists' chronic disappointment in their partners, perhaps by modifying their relationship expectations, may effectively improve their poor relationship quality.

## Maladaptive dyadic perfectionism and negative communication patterns.

The second prediction was that maladaptive dyadic perfectionism in one partner would be positively associated with their own report of negative communication patterns in the relationship, as well as their partner's report of negative communication patterns in the
relationship. Results indicated partial support for this hypothesis; all associations were significant with the exception of the association between women's maladaptive dyadic perfectionism and men's reports of negative communication patterns. Findings also indicated that there were no differences in the actor effects between maladaptive dyadic perfectionism and perceived relationship quality for men relative to women. Therefore, men and women high in maladaptive dyadic perfectionism were similarly inclined to report greater use of demand-withdraw and mutual avoidance-withholding patterns of communication in the relationship. The actor-oriented perspective between maladaptive dyadic perfectionism and negative communication patterns has not been previously assessed in published studies.

Interestingly, the significant partner effect between men's maladaptive dyadic perfectionism and women's reported negative communication patterns suggests that maladaptive dyadic perfectionism in men is closely associated with reports of greater use of negative communication patterns by both partners, whereas maladaptive dyadic perfectionism in women is associated only with their personal reports of negative communication patterns. Taken together, these findings suggest that compared to men, women may be more susceptible to believing that the communication patterns in their relationship are characterized by demand-withdraw and mutual avoidance-withholding behaviours when their partner is high in maladaptive dyadic perfectionism. Relative to men with partners high in maladaptive dyadic perfectionism, women with partners high in maladaptive dyadic perfectionism may report greater use of negative communication patterns because they are more aware or attuned to the interaction patterns in the relationship (Acitelli \& Holmberg, 1993). Along these lines, Denham and colleagues (2010) indicated that compared to fathers, mothers are more accurate decoders of
emotions, perhaps because women are better at deciphering facial expressions of emotions and consequently, more attuned to nonverbal cues.

The current findings represent a significant contribution to the literature, particularly given that there is little published research on dyadic perfectionism and communication patterns in romantic relationships. Based on these findings, it would be worthwhile for clinicians to assess whether individuals are high in maladaptive dyadic perfectionism prior to initiating treatment with couples who wish to improve their communication because awareness of partners' maladaptive dyadic perfectionism may help clinicians to identify and address probable negative communication patterns in the relationship.

Negative communication patterns and perceived relationship quality. Results indicated partial support for the third hypothesis which predicted that negative communication patterns reported by one partner would be associated with both their own and their partner's perceptions of relationship quality. Partners who reported greater use of demand-withdraw and mutual avoidance communication patterns were more likely to report poorer relationship quality, but their partners were not more likely to report poorer relationship quality. Thus, the actor-oriented perspective was supported, but the coupleoriented perspective, in which each partner's personal perception of relationship quality is significantly predicted by both personal and partner reports of negative communication patterns, was not supported.

The actor effects between negative communication patterns and perceived relationship quality found in the current study correspond to previous reports in the literature that consistently indicate that negative communication patterns, specifically demand-withdraw and mutual avoidance-withholding patterns, are associated with
reduced relationship satisfaction and increased relationship distress (e.g., Fletcher, 2002; Gordon, Baucom, Epstein, Burnett, \& Rankin, 1999; Heavey, Christensen, \& Malamuth, 1995; Kincaid \& Caldwell, 1995; Sher \& Weiss, 1991). Furthermore, the current findings suggest that the well-established demand-withdraw and mutual avoidance patterns of communication evidenced among married couples are also characteristic of unmarried couples.

It is surprising that the associations between one individual's report of negative communication patterns and their partner's report of relationship quality were not significant as both communication patterns and relationship quality have been conceptualized as dyadic constructs that presumably influence both partners in a romantic relationship (Matthews, Conger \& Wickrama, 1996). Perhaps the current sample of unmarried couples were not involved in their romantic relationships long enough to capture the dyadic nature of negative communication patterns or to develop an established negative pattern of communication that is associated with relationship quality for both partners. It may be that the well-established demand-withdraw and mutual avoidancewithholding communication patterns are characteristic of unmarried couples; however, the negative implications of these patterns on both partners' relationship quality may be less pronounced compared to the negative implications for both partners in married relationships.

## The Mediating Effect of Negative Communication Patterns in the Association between Maladaptive Dyadic Perfectionism and Perceived Relationship Quality

The fourth hypothesis assessed whether negative communication patterns partially mediated the association between maladaptive dyadic perfectionism and perceived relationship quality. Various combinations of actor and partner mediated effects were
hypothesized. Results indicated that actor-actor mediated effects were significant; one individual's account of both partners' demand-withdraw and mutual avoidancewithholding behaviours within the relationship partially explains the association between their own maladaptive dyadic perfectionism and their own perceived relationship quality. All other actor and partner mediated effects were not significant with the exception of women's reports of negative communication patterns mediating the association between men's maladaptive dyadic perfectionism and women's perceived relationship quality.

It seems reasonable that actor-actor mediated effects were significant because individuals who are inclined to believe that their partner's performance is subpar may also be inclined to perceive their own and their partner's communication behaviours as subpar, which consequently impacts their personal perceptions of relationship quality. As previously discussed, women's appraisals of negative communication patterns in the relationship may partially explain the association between their partners' maladaptive dyadic perfectionism and their personal perceptions of relationship quality because relative to men, women may be more attuned to their partners' communication behaviours and their partners' beliefs that their performance is inadequate.

Taken together, given that maladaptive dyadic perfectionists' reports of communication patterns may be negatively skewed, it would be worthwhile for clinicians to elicit a thorough description of dyadic perfectionists' communication patterns, perhaps by asking them to monitor and record their communication behaviours to gain an accurate depiction of their interaction patterns. This may help to assess whether it would be more fruitful to first focus on modifying communication patterns or whether it may be beneficial to first focus on individuals' inaccurate perceptions of communication and their tendency to chronically perceive their partners' communication as subpar. Nevertheless,
irrespective of whether maladaptive dyadic perfectionists accurately report negative communication patterns or not, addressing communication patterns in the relationship and/or perceptions of negative communication, may at least partly alleviate the perception of poor relationship quality.

Furthermore, it is possible that individuals who notice that their partners are high in maladaptive dyadic perfectionism are less inclined to remain in longer-term relationships with such partners. Therefore, perhaps most combinations of mediated effects were not significant because the current sample of long-term couples was comprised of individuals who were not particularly perceptive or cognisant of their partner's belief that they chronically fall short of expectations. It would be interesting to compare the various combinations of actor and partner mediated effects between maladaptive dyadic perfectionism and perceived relationship quality in shorter- and longer-term relationships to assess whether individuals high in maladaptive dyadic perfectionism are less likely to be in longer-term relationships. It also would be interesting to assess whether negative communication patterns mediate the association between an individual's perception that they always fall short of their partner's expectations and perceptions of relationship quality, irrespective of their partner's selfreported maladaptive dyadic perfectionism.

The fifth hypothesis was that negative communication patterns would partially mediate the association between maladaptive dyadic perfectionism and perceived relationship quality when couples' communication was assessed as a common fate latent variable, or in other words, when both partners' reports of communication constitute the assessment of couples' communication. The final hybrid model used to assess this hypothesis evaluated (a) whether negative couples' communication patterns partially
mediated the association between personal reports of maladaptive dyadic perfectionism and personal perceptions of relationship quality and (b) the indirect effect between maladaptive dyadic perfectionism in one partner and their partner's perceptions of relationship quality through couples' negative communication patterns.

This hypothesis was supported; negative communication when represented by both partners' appraisals of negative communication patterns, partly explains why a partner high in maladaptive dyadic perfectionism experiences poorer perceptions of relationship quality. Also, maladaptive dyadic perfectionism in one individual was associated with increased perceptions of negative communication patterns as represented by both partners' appraisals of communication, which in turn, was associated with partner perceptions of relationship quality. These findings indicate that maladaptive dyadic perfectionism in one partner erodes the other partner's perceptions of relationship quality through the couple's communication.

These findings suggest that assessing both partners' perceptions of the couple's communication is useful to capture the dyadic interdependent nature of communication, and to better understand how dyadic couples' communication explains the association between maladaptive dyadic perfectionism and perceived relationship quality for both partners. It is the couple's interdependent interaction pattern, rather than one partner's perception of the negative communication patterns in the relationship that explains why individuals high in maladaptive dyadic perfectionism and their partners experience reduced relationship quality. The current findings also support the use of the underutilized Common Fate Model in couples research (Ledermann \& Macho, 2009).

The present findings are consistent with previous findings in which maladaptive dyadic perfectionism is linked to negative relationship problem-solving behaviours (Fons-

Scheyd, 2008), including destructive and passive problem-solving responses that decrease communication and correlate with less optimal couple functioning (Rusbult, 1982). Along these lines, Flett, Hewitt, Shapiro, and Rayman (2001) found that sociallyprescribed perfectionism, i.e., the belief that other people require perfectionism of the self, was linked to negative problem-solving behaviours. This finding suggests that an individual's perception that their partner expects them to be perfect may be associated with greater use of negative communication patterns.

The discrepancy between (a) the significant mediated effects between maladaptive dyadic perfectionism in one partner and both partners' perceptions of relationship quality when couples' communication was assessed as a common fate latent variable and (b) the various combinations of non-significant actor and partner mediated effects between maladaptive dyadic perfectionism and relationship quality when negative communication patterns were assessed as individual variables, suggest that simply assessing one partner's report of negative communication patterns masks the finding that both partners experience reduced relationship quality when one partner is high in maladaptive dyadic perfectionism. Additionally, it is important to note that the various actor and partner mediated effects represent the effect of an individual's maladaptive dyadic perfectionism on their partner's outcome above and beyond the actor-actor mediated effects. Given the sufficient, but modest sample size, it is possible that the non-significant combinations of actor and partner mediated effects represent Type II error; a larger sample size may have had better power to identify the various combinations of actor and partner mediated effects. Nevertheless, taken together, the current findings suggest that working on the couple's negative communication patterns, therefore, working on both partners' negative communication behaviors, perhaps in couples treatment, may be particularly beneficial to
improve both partners' perceptions of relationship quality in couples in which one partner is high in maladaptive perfectionism.

## The Moderating Effect of Intrapersonal Perfectionism on the Association between

## Maladaptive Dyadic Perfectionism and Perceived Relationship Quality

One of the subsidiary hypotheses in the current study was that intrapersonal perfectionism would moderate the association between maladaptive dyadic perfectionism reported by one partner and their own perceived relationship quality. This hypothesis was not supported. Partners who were high in maladaptive dyadic perfectionism and who also set high expectations for themselves, were not significantly less satisfied with relationship quality than were partners high in maladaptive dyadic perfectionism who did not set high expectations for themselves. Given that six predictor variables were included in the moderation model, i.e., maladaptive dyadic perfectionism of women and men; intrapersonal perfectionism of women and men; and the interaction between maladaptive dyadic perfectionism and intrapersonal perfectionism of women and men, and each predictor variable was permitted to covary, the current sample was not large enough to properly assess this moderation model. Therefore, the current non-significant findings may not accurately represent the true association between maladaptive dyadic perfectionism, intrapersonal perfectionism and relationship quality, but instead may be a Type II error. It would be worthwhile to re-examine this moderation model with a larger sample size.

Alternatively, it is possible that intrapersonal perfectionism does not moderate the association between maladaptive dyadic perfectionism and perceived relationship quality. Along these lines, Sherry, Law, Hewitt, Flett, and Besser (2008) found that self-oriented perfectionism is not typically related to interpersonal problems, whereas other-oriented
and socially-prescribed perfectionism are considered relational subscales that correlate with maladaptive relationship outcomes.

## Maladaptive Dyadic Perfectionism and Expected Relationship Dissolution

The prediction that partners high in maladaptive dyadic perfectionism would be more likely to expect their romantic relationships to dissolve than are individuals low in maladaptive dyadic perfectionism was supported. These findings are consistent with Lopez and colleagues' (2006) findings in which dyadic perfectionism uniquely predicted relationship continuity after three months. Similarly, Slaney and colleagues (2006) reported that compared to adaptive dyadic or nondyadic perfectionists, maladaptive dyadic perfectionists demonstrated difficulties maintaining their close relationships. Stoeber (2012) also found that perfectionistic expectations of a partner were associated with lower personal expectations of long-term commitment.

As demonstrated in the current study, partners high in maladaptive dyadic perfectionism tend to use negative communication behaviours and experience poorer relationship quality, specifically, lower satisfaction, intimacy, trust, commitment, passion and love. It may be that the expectation of impending relationship dissolution in partners high in maladaptive dyadic perfectionism is attributable to their lower confidence or poorer ability to manage and overcome anticipated conflict between partners and/or to their experience of poorer relationship quality. Consistent with this rationale, Gottman and Krokoff (1989) observed that long-term partners who use withdrawal and avoidance behaviours may be at risk for relationship dissolution as they are unable to cultivate a sense of working though their conflicts together. Therefore, it would stand to reason that partners high in maladaptive dyadic perfectionism who expect their relationship to dissolve may be more likely to initiate break-ups with their romantic partners, and
accordingly, may be more susceptible to repeated relationship dissolutions. There is a large empirical literature that indicates that relationship dissolutions are among the most distressing experiences in life (e.g., Bowlby, 1980), and that relationship dissolutions are associated with significant anguish and possibly psychological disorders (e.g., Monroe, Rohde, Seeley, \& Lewinsohn, 1999; Tashiro \& Frazier, 2003). Given the potential adverse effects of relationship dissolutions on well-being, it would be worthwhile for future researchers to assess the role of maladaptive dyadic perfectionism on relationship maintenance, and subsequent psychological well-being.

## Descriptive Data: Understanding the Current Sample

Comparisons in important study variables by gender, population, relationship status and method of study participation are presented below. These comparisons help to contribute to the understanding of the present findings in the context of the current sample. Such group comparisons also may assist future researchers with methodological choices or empirical questions related to couples research.

Gender comparisons. In comparison to men, women reported greater use of positive communication patterns, marked by mutual discussions and expression of feelings between romantic partners. Tannen (1990) notes that women may be more inclined to report greater use of positive communication patterns in their romantic relationships because they are socialized to value compromise, preserve intimacy and encourage positive conflict resolution behaviours to a greater extent than are men. Therefore, the current gender differences may be, in part, artifacts of socialization. In the current study, women reported setting higher expectations for personal performance compared to men. They also set higher standards for their partners and were more likely to report that their partners consistently fell short of their high standards. These findings
are consistent with other reports that women are more perfectionistic in a number of domains, including orderliness, time management, hygiene (Stoeber \& Stoeber, 2009) and domestic chores (Slaney \& Ashby, 1996). Although women tend to be more perfectionistic in a number of domains, including setting high expectations for their partners, there was no difference in the actor effects between maladaptive dyadic perfectionism and perceived relationship for men or women. It seems that compared to men, women may be more likely to be high in maladaptive dyadic perfectionism; however, among maladaptive dyadic perfectionists, men's and women's perceptions of relationship quality are similarly impacted.

Population comparisons. In the present study, the majority of couples were recruited from the community but a fairly large university sample also was included. Thus, comparisons between the two samples were possible. Compared to women in couples recruited from the participant pool, women in couples recruited from the community reported higher standards for their partners and better communication between partners, including higher reports of constructive communication and lower reports of the demand-withdraw pattern of communication. Since women from the community were also somewhat older and had been in their relationships for a longer duration of time compared to women from the participant pool, they may have developed more adaptive and constructive methods to interact with their partners. However, men recruited from the community did not report more adaptive and constructive methods of communication despite the fact that they were older and had been in a relationship for a longer duration of time compared to men from the participant pool. It would be interesting to assess possible group differences in communication patterns among young, middle-aged and older adulthood.

Relationship status comparisons. Group differences between couples who were dating versus engaged, cohabiting, or both engaged and cohabiting were not evident in the current sample. Unmarried couples in monogamous, heterosexual relationships of six months duration or longer appear to be similar in their partner expectations, communication patterns and relationship quality, irrespective of relationship status. Shifting social demographics, including documented increases in the number of cohabiting couples and decreases in rates of marriage (Skinner, Bahr, Crane, \& Call, 2002) may be eroding the significance of relationship status categories. Consequently, relationship length may be more important than is relationship status in sampling couples for relationship research.

Participation method comparison. Women in couples who completed the study in-laboratory reported higher levels of constructive communication compared to the women in couples who completed the study online. Men in couples who completed the study in-laboratory also reported lower levels of negative communication patterns and higher levels of positive communication patterns compared to the men in couples who completed the study online.

Various factors may explain these differences in reported communication patterns. First, it is possible that participants who completed the measures in-lab were more motivated to present themselves in a positive light because they were less able to conceal their identity in-lab than were participants who completed the measures anonymously online. This supports the premise that socially-desirable response biases ought to be assessed in studies of relationship quality (Snyder, 1979), perhaps particularly when couples participate in person. Second, it is possible that higher functioning couples, who endorse more constructive communication behaviours, also are more inclined to agree to
less anonymous in-lab data collection procedures whereas lower functioning couples may prefer the greater anonymity afforded by online procedures. Third, perhaps couples who participated in-lab were more conscientious than were couples who participated online; conscientiousness may be associated with greater effort to use positive communication patterns within the relationship. It would be interesting to assess whether conscientiousness impacts the association between maladaptive dyadic perfectionism and communication patterns as some researchers have reported that conscientiousness reported by one individual is related to lower partner reports of negative communication patterns (Donnellan, Conger, \& Bryant, 2004), whereas other researchers have reported that conscientiousness is not related to constructive communication patterns (Heaven, Smith, Prabhakar, Abraham, \& Mete, 2005).

## Implications of the Current Study

Consistent with the ideas presented by Robins and Boldero (2003) in their discussion of relational discrepancy theory, the current findings indicate that discrepancies between actual and ideal self-guides are associated with behavioural consequences, i.e., negative communication patterns, as well as poorer perceptions of relationship quality. The evaluation of one mechanism - negative communication patterns - helps to elucidate the association between maladaptive dyadic perfectionism and perceived relationship quality, and represents a noteworthy contribution to the literature, particularly given that there is little published research on maladaptive dyadic perfectionism, couples' negative communication patterns and perceived relationship quality.

Taken together, the current findings suggest that for men and women high in maladaptive dyadic perfectionism, their reports of demand-withdraw and mutual
avoidance-withholding patterns of communication account for their tendency to experience reduced relationship quality. Interestingly, partners of individuals high in maladaptive dyadic perfectionism also are likely to experience reduced relationship quality when both partners believe that the couple's communication is characterized by negative interaction patterns. Therefore, partners of individuals high in maladaptive dyadic perfectionism do not necessarily experience reduced relationship quality, as evidenced by the non-significant partner effects between maladaptive dyadic perfectionism and perceived relationship quality; however, the couple's use of demandwithdraw and mutual avoidance-withholding communication patterns contributes to their experience of reduced relationship quality. Based on these findings, it seems that focusing on the couple's negative communication patterns in treatment may help to mitigate each partner's experience of poor relationship quality.

It stands to reason that maladaptive dyadic perfectionists who expect perfectionism of their partners and chronically judge their partners' performance to be inadequate are more likely to be critical and demanding of their partners. Along these lines, researchers have found that perfectionists are severely critical and demanding of themselves (e.g., Blatt \& Zuroff, 2002; Hewitt, Flett, \& Dyck, 1989; 1991) and that otheroriented perfectionism, i.e., expecting perfection of others, was associated with otherblame and criticism (Hewitt \& Flett, 1991b). As clearly demonstrated in the literature, critical and demanding communication behaviours used by one partner, in this case, partners who score high in maladaptive dyadic perfectionism, provoke defensiveness and withdrawal behaviours from the other partner, which in turn, may provoke maladaptive dyadic perfectionists to experience increased feelings of disappointment and stronger beliefs that their partner's performance does not meet their expectations. Consequently,
partners that are high in maladaptive dyadic perfectionism are likely to increase their critical and demanding style of communication (Caughlin \& Huston, 2002). It seems reasonable that dyadic perfectionists' unrelenting criticalness and ongoing demands for improvement in their partners' performance provokes and exacerbates a sense of inadequacy in their partners, and further withdrawal (Johnson, 2005). Interestingly, partners of individuals high in maladaptive dyadic perfectionism may be likely to develop a sense of learned helplessness in which they attribute their 'inadequate' behaviour in their romantic relationship to internal and stable causes (Anderson, Jennings, \& Arnoult, 1988; Anderson, Miller, Riger, Dill, \& Sedikides, 1994) because their performance is continuously perceived as subpar, irrespective of their actions. A sense of learned helplessness may consequently instill feelings of powerlessness as partners may believe that they do not have the capacity to provoke positive interpersonal outcomes in their romantic relationship through their actions. Therefore, partners of individuals high in maladaptive dyadic perfectionism may be susceptible to develop attributions of learned helplessness and feelings of powerlessness, which may engender an impassive attitude and withdrawal behaviours. Withdrawal behaviours are likely to sustain as partners may feel threatened or vulnerable to experiencing feelings of inadequacy each time their perfectionistic partner makes a request, nags, or demands change. It is essential that clinicians highlight this demand-withdraw interaction pattern and discuss each partner's role in creating and sustaining their problematic communication pattern. Addressing these communication patterns in couples in which one or both partners are high in maladaptive dyadic perfectionism may be one avenue to help improve both partners' relationship quality.

Furthermore, unrelenting demands formed by partners high in maladaptive dyadic perfectionism and inflexible withdrawal behaviours in their partners may provoke resignation and withdrawal among individuals high in maladaptive dyadic perfectionism, and consequently, create a mutually avoidant pattern of communication between partners. Consistent with this speculation, researchers have reported that the demand-withdraw pattern typically underlies the mutual avoidant and withholding pattern of communication (Johnson, 2005), which may explain why longer-term couples use avoidance-withholding patterns of communication more than do shorter-term couples (Bodenmann, Kaiser, Hahlweg, \& Fehm-Wolfsdorf, 1998; Smith, Heaven, \& Ciarrochi, 2008). In addition, couples with one or both partners high in maladaptive dyadic perfectionism may be more inclined to use mutual avoidance-withholding patterns of communication as perfectionists tend to withdraw from partners because of their sensitivity to criticism (Beck, 1976) and because of their need to conceal their own imperfections (Burns, 1980). Understanding that partners high in maladaptive dyadic perfectionism may demonstrate episodes of communication in which they are demanding and critical, but otherwise more generally adopt a rather withdrawn style may cue clinicians to assess for maladaptive dyadic perfectionism when couples present to treatment with this interaction style.

Clinicians also may wish to assess the foundations and underlying emotional experiences of individuals high in maladaptive dyadic perfectionism in order to better address the underlying motives and feelings that sustain their maladaptive dyadic perfectionism. For instance, neurotic perfectionists focus on actions that should be or should not be done (e.g., "I should not get angry") and failure to meet standards produces feelings of guilt, whereas narcissistic perfectionists focus on the self (e.g., "I should be perfect"), and failure to meet this standards produces feelings of shame and humiliation
(Sorotzkin, 1985). Perhaps standards expected of others also may be classified as neurotic and narcissistic dyadic perfectionism, with narcissistic dyadic perfectionism being more detrimental to relationship quality. Awareness of the origins of maladaptive dyadic perfectionism such as neurotic or narcissistic, may help to guide treatment and to accurately identify the underlying emotional experiences of individuals high in maladaptive dyadic perfectionism. Specifically, awareness of emotional experiences such as guilt or shame and unmet needs such as feelings of abandonment that underlie the maladaptive dyadic perfectionists' communication behaviours may help to de-escalate the negative cycles of interaction and promote their partner's engagement rather than withdrawal (Denton, Burleson, Clark, Rodriguez, \& Hobbs, 2007; Johnson, 2005). It may be particularly important for clinicians to assist dyadic perfectionists to express their underlying emotional experiences and feelings of vulnerability as fear of criticism likely minimizes these individuals' tendency towards self-disclosure and intimacy with partners (Burns, 1980). Furthermore, awareness of the underlying feelings of inadequacy among partners of individuals high in maladaptive dyadic perfectionism may help to 'soften' the maladaptive dyadic perfectionist such that they are better able to communicate from a position of personal vulnerability rather than simply nagging and criticizing their partner (Greenberg \& Goldman, 2008; Johnson, 2005).

Taken together, treatment that aims to modify the couple's negative communication patterns, comprised of both partners' communication behaviours, specifically the dyadic perfectionists' critical communication style and the partner's withdrawal, or mutually avoidant behaviours, may help to improve relationship quality in couples in which one or both partners are high in maladaptive dyadic perfectionism. Consistent with this premise, Gottman's empirical findings suggest that addressing
interaction patterns is among the most appropriate intervention targets in couples' therapy (Gottman, 1994). Emotionally focused couple therapy, which attends to unmet attachment needs, emotional processes and the expression and expansion of emotional experience (Johnson, 2005) is one valuable orientation to couples' therapy that informs treatment interventions pertinent to the communication patterns demonstrated in couples with at least one maladaptive dyadic perfectionist. Overall, empirical work that has focused on assessing the efficacy of emotionally focused couples therapy on martial distress indicates that it results in significantly improved dyadic adjustment relative to waiting list controls and to couples' pre-treatment dyadic adjustment scores (Denton, Burleson, Clark, Rodriguez, Hobbs, 2007; Dessaulles, 1991; Goldman \& Greenberg, 1992; James, 1991; Johnson \& Greenberg, 1985a; Johnson \& Greenberg, 1985b; Johnson \& Talitman, 1997; Walker, Johnson, Manion, \& Cloutier, 1996).

Furthermore, the current study assessed maladaptive dyadic perfectionism within the context of individuals' current relationships. It seems reasonable that partners high in maladaptive dyadic perfectionism may be inclined to believe that their partner's performance is subpar in their future relationships as well. In order to address maladaptive dyadic perfectionists' propensity to perceive partners as chronically falling short, it may be helpful to address the cognitions related to their expectations and evaluations of partner performance.

Cognitive behavioural couple therapy (CBCT) may be particularly helpful to address individuals' subjective evaluations of their partners' behaviours (Baucom \& Epstein, 1990; Epstein \& Baucom, 2002). Baucom and Epstein (1990) propose that changes in relationship cognitions increase overall perceptions of relationship quality. If dyadic perfectionists set unrealistically high partner standards, and perceive their partners
to be constantly failing to meet these expectations, their subjective evaluations of their partners will certainly be negative. Changing the extreme and unrealistic cognitions and standards that dyadic perfectionists hold for their partners and reframing perceptions that their partners do not meet their ideal standards could be a specific treatment goal for dyadic perfectionists who report relationship distress. Therefore, CBCT orientation to treatment seems promising to address, at a cognitive level, dyadic perfectionists' unrealistically high standards and their beliefs that their partners' performance falls short of their unrealistic standards.

## Limitations and Implications for Future Research

The current study is cross-sectional and therefore, the degree to which partners' maladaptive dyadic perfectionism impacts perceptions of relationship quality and the use of couples' negative communication patterns was not evaluated. A longitudinal study using an independent sample would be better suited to more accurately assess the causal assumptions that underlie the structural model, and would help to decipher whether maladaptive dyadic perfectionism predicts perceived relationship quality and negative communication patterns or whether perceived relationship quality predicts maladaptive dyadic perfectionism and negative communication patterns. Similarly, a longitudinal study would help to decipher whether negative communication patterns negatively impact perceived relationship quality or whether the reverse association is a more accurate interpretation. Gottman and Levenson (2000) found that negative verbal communication during conflict discussions predicted reduced relationship satisfaction and impending marital dissolution in their longitudinal study. Thus, their findings lend support to the causal assumption that underlies the association between couples' communication and relationship quality in the current overall structural model. In a longitudinal study,
researchers could independently assess each partner's level of maladaptive dyadic perfectionism, communication patterns and relationship quality at the onset of the relationship or during the early honeymoon phase of the relationship, and subsequently re-assess each partner after a pre-determined interval of time has elapsed.

The current sample size was sufficient to conduct the SEM analyses as it was larger than the median number of 101 dyads included in previously published studies that assessed both relationship partners (Kenny, Kashy, \& Cook, 2006). However, a larger sample size may have had the statistical power to provide more stable findings. A larger sample might also have permitted the inclusion of additional variables in the final structural mediational models such as neuroticism and social desirability, and allowed for potentially informative SEM comparisons between couples with different relationship status, such as dating versus engaged couples comparisons. Notably, however, McClelland (2000) recommends that rather than simply increasing sample size to improve statistical power, researchers should adopt strategies such as reducing redundancy among predictor variables, using more reliable and accurate measures, including covariates to reduce the mean square error, and using continuous instead of categorical scores. A number of these alternate strategies were employed in the current study to increase power. Specifically, reliable measures with good psychometric properties were used, interval data were used for all major variables and a hybrid mediational model combining the Actor-Partner Interdependence Model (APIM) and the Common Fate Mediation Model was used to reduce the total number of paths, which increases power.

With respect to the generalizability of findings, there are three caveats. First, the majority of couples in this study were Caucasian. Therefore, the findings cannot be
generalized to individuals from non-Caucasian racial and ethnic backgrounds. Studies in which more ethnically diverse samples are recruited would help to identify family and cultural variables that influence relationship quality in non-Caucasian couples. Second, snowball sampling, which was employed to increase participant numbers, may have inadvertently decreased the heterogeneity of the sample and minimized the generalizability of the findings. Third, sampling bias is likely inherent within couples research as higher functioning couples may be more inclined to participate in couples research than are lower functioning couples or couples who are in less satisfying relationships. Consistent with this perspective, Karney and colleagues (1995) reported that married couples who responded to invitations to participate in marital research had higher SES status; they had more years of education and were employed in higher status occupations than were couples who did not respond.

Based on theoretical considerations, previous longitudinal research findings (Gottman \& Levenson, 2000) and the evaluation of the alternative structural models which reversed causal assumptions, there is corroborating support for the hypothesized directional associations in the overall structural models in the current study. However, these findings do not address the possibility that alternative models, with different mediating variables, could provide similar or better fitting models than the model tested in the current study. Thus, future researchers should consider assessing various mediating variables. For instance, it would be interesting to evaluate the mediating roles of shame and disconnection in the association between maladaptive dyadic perfectionism and perceived relationship quality as feelings of shame may underlie the withdrawer's experience, whereas feelings of disconnection may underlie the demander's experience (Johnson, 2005). Future researchers might also consider modifying the Dyadic Almost

Perfect Scale (DAPS) to permit the assessment of the degree to which the respondent believes that their romantic partner expects them to be perfect.

Various factors may contribute to the development of relationship cognitions and expectations. According to social exchange theory, relationship outcomes are evaluated relative to a comparison level, which is subjectively defined as an individual's personal standards or expectations (Thibaut and Kelley, 1959). Bandura's social cognitive theory (1986) suggests that individuals are likely to develop their relationship expectations through observational learning - learning through the experiences of others, including others who appear in the media (Bandura \& Huston, 1961; Bandura, Ross, \& Ross, 1963). Preliminary empirical findings support the contention that young adults do turn to the media for information about romantic relationships. For instance, Bachen and Illouz (1996) found that $90 \%$ of young adults reported attending to movies, and $94 \%$ reported attending to television for information about love. Correspondingly, Shapiro and Kroeger (1991) found that partners who endorse unrealistic relationship beliefs also reported more consumption of romantic novels and comedy movies. Thus, future researchers might wish to evaluate the influence of media on the development of maladaptive dyadic perfectionism. Ecological stressors, such as the demands of work and partners' ability to meet personal and relationship needs are also factors that may impact personal reports of maladaptive dyadic perfectionism and perceived relationship quality.

Other variables, such as previous relationship experiences, also are likely to be important in the development of relationship attitudes on relationship quality. For instance, attachment orientations have been repeatedly shown to correlate with relationship outcomes; individuals with anxious and avoidant attachment orientations tend to report higher levels of relationship dysfunction (e.g., Mikulincer \& Shaver, 2007).

Fritts (2012) recently reported that insecure attachment orientations were associated with dyadic perfectionism. It would be interesting to evaluate whether attachment orientations moderate the association between maladaptive dyadic perfectionism and relationship outcomes, specifically, whether individuals high in maladaptive dyadic perfectionism and high in attachment-anxiety or attachment-avoidance report lower levels of perceived relationship quality compared to individuals high in dyadic perfectionism and low in attachment-anxiety or attachment-avoidance. Such evaluations could inform treatment providers' decisions to use cognitive-based interventions such as cognitive behavioural couples therapy versus attachment-based interventions such as emotionally focused couples therapy. Securely attached dyadic perfectionists may be more responsive to shorter-term cognitive behavioural couples therapy given that insecure attachment beliefs do not exacerbate their negative reports of relationship quality.

In closing, the current findings indicate that men and women who believe that their partners' performance consistently falls short of their high expectations experience poorer perceptions of relationship quality, characterized by trust, intimacy, satisfaction, commitment, passion and love, and increased reports of negative communication patterns, marked by demand-withdraw and mutually avoidant-withholding patterns of communication. Furthermore, the results suggest partners of individuals high in maladaptive dyadic perfectionism are vulnerable to experiencing poorer relationship quality when both partners believe that the couple's communication is characterized by negative interaction patterns. Therefore, it seems that negative communication patterns used by couples with at least one partner who is high in maladaptive dyadic perfectionism are detrimental to both partners' relationship quality.

The associations explored in the current study are in accordance with recommendations to assess models of relationship quality that include both higher-order distal variables, in this case maladaptive dyadic perfectionism, and lower-order proximal variables such as negative communication patterns in relationships (Bradbury \& Fincham, 1988; Karney \& Bradbury, 1995). The current findings indicate that both distal and proximal factors are associated with relationship quality among unmarried, long-term partners. One practical application of the current study results would be to assess and try to remediate maladaptive dyadic perfectionism and consequent negative communication patterns among unmarried couples who are experiencing poor relationship quality. Moreover, the current findings, which are based on long-term unmarried couples including engaged couples, could aid in the development of pre-marital couples education and counselling. Resolving relationship challenges associated with the impact of maladaptive dyadic perfectionism on negative communication patterns and relationship quality prior to marriage may facilitate better marriages and possibly, even reduce the prospect of relationship dissolution and divorce.

## References

Acitelli, L. K., \& Holmberg, D. (1993). Reflecting on relationships: The role of thoughts and memories. In S. W. Duck (Ed.). Advances in personal relationships. (pp.71100). London: Jessica Kingsley.

Adams, J. M., \& Jones, W. H. (1997). The conceptualization of marital commitment: An integrative analysis. Journal of Personality and Social Psychology, 72, 11771196. doi:10.1037/0022-3514.72.5.1177

Aiken, L. S., \& West, S. G. (1991). Multiple regression: Testing and interpreting interactions. Thousand Oaks, CA, US: Sage Publications, Inc.

Anderson, C.A., Jennings, D.L., \& Arnoult, L.H. (1988). Validity and utility of the attributional style construct at a moderate level of specificity. Journal of Personality and Social Psychology, 55(6), 979-990.

Anderson, C.A., Miller, R.S., Riger, A.L., Dill, J.C., \& Sedikides, C. (1994).Behavioral and characterological attributional styles as predictors of depression and loneliness: Review, refinements, and test. Journal of Personality and Social Psychology, 66(3), 549-558.

Arbuckle, J. L. (2011). IBM SPSS® Amos ${ }^{\text {TM }} 20$ User’s Guide. Crawfordville (Fl). Amos Development Corporation.

Argyle, M. (2001). The psychology of happiness (2nd ed.). New York, NY, US: Routledge.

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. doi:10.1037/0022-3514.63.4.596

Aron, A., \& Westbay, L. (1996). Dimensions of the prototype of love. Journal of Personality and Social Psychology, 70, 535-551. doi:10.1037/0022-3514.70.3.535

Ashby, J. S., \& Rice, K. G. (2002). Perfectionism, dysfunctional attitudes, and selfesteem: A structural equations analysis. Journal of Counseling \& Development, 80(2), 197-203.

Ashby, J. S., Rice, K. G., \& Kutchins, C. B. (2008). Matches and mismatches: Partners, perfectionism, and premarital adjustment. Journal of Counseling Psychology, 55, 125-132. doi:10.1037/0022-0167.55.1.125

Bachen, C.M., \& Illouz, E. (1996). Imagining romance: Young people's cultural models of romance and love. Critical Studies in Mass Communication, 13, 297-308.

Bagwell, C. L., Bender, S. E., Andreassi, C. L., Kinoshita, T. L., Montarello, S. A., \& Muller, J. G. (2005). Friendship quality and perceived relationship changes predict psychosocial adjustment in early adulthood. Journal of Social and Personal Relationships, 22, 235-254. doi:10.1177/0265407505050945

Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Englewood Cliffs, NJ: Prentice-Hall

Bandura, A., \& Huston, A. C. (1961). Identification as a process of incidental learning. The Journal of Abnormal and Social Psychology, 63, 311-318. doi:10.1037/h0040351

Bandura, A., Ross, D., \& Ross, S.A. (1963). Vicarious reinforcement and imitative learning. Journal of Abnormal and Social Psychology, 67(6), 601-607.

Baron, R. M., \& Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51, 1173-1182. doi: 10.1037/00223514.51.6.1173

Baucom, D. H., \& Epstein, N. (1990). Cognitive-behavioral marital therapy. Philadelphia, PA, US: Brunner/Mazel.

Baucom, D. H., Epstein, N., Sayers, S. L., \& Sher, T. G. (1989). The role of cognitions in marital relationships: Definitional, methodological, and conceptual issues. Journal of Consulting and Clinical Psychology, 57, 31-38. doi:10.1037/0022006X.57.1.31

Baumeister, R. F., \& Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117, 497-529. doi:10.1037/0033-2909.117.3.497

Berkman, L. F., \& Syme, S. L. (1994). Social networks, host resistance, and mortality: A nine year follow-up study of alameda county residents. New York, NY, US: Cambridge University Press.

Berns, S. B., Jacobson, N. S., \& Gottman, J. M. (1999). Demand-withdraw interaction in couples with a violent husband. Journal of Consulting and Clinical Psychology, 67, 666-674. doi:10.1037/0022-006X.67.5.666

Berscheid, E., \& Regan, P. (2005). The psychology of interpersonal relationships. Upper Saddle River, NJ: Pearson Education.

Blatt, S. J., \& Zuroff, D. C. (2002). Perfectionism in the therapeutic process. In G. L. Flett, \& P. L. Hewitt (Eds.), Perfectionism: Theory, research, and treatment. (pp. 393-406). Washington, DC, US: American Psychological Association. doi:10.1037/10458-016

Bodenmann, G., Kaiser, A., Hahlweg, K., \& Fehm-Wolfsdorf, G. (1998). Communication patterns during marital conflict: A cross-cultural representation. Personal Relationships, 5, 343-356. doi:10.1111/j.1475-6811.1998.tb00176.x

Bodenmann, G., Ledermann, T., \& Bradbury, T. N. (2007). Stress, sex, and satisfaction in marriage. Personal Relationships, 14, 551-569. doi:10.1111/j. 1475 6811.2007.00171.x

Bookwala, J., \& Franks, M. M. (2005). Moderating role of marital quality in older adults' depressed affect: Beyond the main-effects model. The Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 60(6), 338-341.

Bolger, N., \& Schilling, E. A. (1991). Personality and problems of everyday life: The role of neuroticism in exposure and reactivity to daily stressors. Journal of Personality, 59, 356-386. doi: 10.1111/j.1467-6494.1991.tb00253.x

Botwin, M. D., Buss, D. M., \& Shackelford, T. K. (1997). Personality and mate preferences: Five factors in mate selection and marital satisfaction. Journal of Personality, 65, 107-136. doi:10.1111/j.1467-6494.1997.tb00531.x

Bouchard, G., Lussier, Y., \& Sabourin, S. (1999). Personality and marital adjustment: Utility of the five-factor model of personality. Journal of Marriage \& the Family, 61, 651-660. doi:10.2307/353567

Bowlby, J. (1980). Attachment and loss. New York, NY, US: Basic Books.

Boyes, A. D., \& Latner, J. D. (2009). Weight stigma in existing romantic relationships. Journal of Sex \& Marital Therapy, 35, 282-293. doi:10.1080/00926230902851280

Bradbury, T. N., \& Fincham, F. D. (1988). Individual difference variables in close relationships: A contextual model of marriage as an integrative framework. Journal of Personality and Social Psychology, 54, 713-721. doi:10.1037/00223514.54.4.713

Bradbury, T. N., \& Karney, B. R. (1993). Longitudinal study of marital interaction and dysfunction: Review and analysis. Clinical Psychology Review, 13(1), 15-27.

Bretherton, I. (1990). Communication patterns, internal working models, and the intergenerational transmission of attachment relationships. Infant Mental Health Journal, 11, 237-252. doi:10.1002/1097-0355(199023)11:3<237::AID-IMHJ2280110306>3.0.CO;2-X

Burman, B., \& Margolin, G. (1992). Analysis of the association between marital relationships and health problems: An interactional perspective. Psychological Bulletin, 112, 39-63. doi:10.1037/0033-2909.112.1.39

Burns, D.D. (1980). The perfectionist's script for self defeat. Psychology Today, 14(6) 34-52.

Byrne, B.M. (2001). Structural equation modeling with AMOS: Basic concepts, applications and programming. Mahwah, N.J.: Lawrence Erlbaum Associates. Byrne, B.M. (1998). Structural Equation Modeling with LISREL, PRELIS and SIMPLIS: Basic Concepts, Applications and Programming. Mahwah, New Jersey: Lawrence Erlbaum Associates.

Campbell, L., Simpson, J. A., Kashy, D. A., \& Fletcher, G. J. O. (2001). Ideal standards, the self, and flexibility of ideals in close relationships. Personality and Social Psychology Bulletin, 27, 447-462. doi:10.1177/0146167201274006

Campbell, L., Simpson, J. A., Kashy, D. A., \& Rholes, W. S. (2001). Attachment orientations, dependence, and behavior in a stressful situation: An application of the actor-partner interdependence model. Journal of Social and Personal Relationships, 18, 821-843. doi:10.1177/0265407501186005

Carlson, B. E. (1987). Dating violence: A research review and comparison with spouse abuse. Social Casework, 68(1), 16-23.

Caughlin, J. P., \& Huston, T. L. (2002). A contextual analysis of the association between demand/withdraw and marital satisfaction. Personal Relationships, 9, 95-119. doi:10.1111/1475-6811.00007

Caughlin, J. P., Huston, T. L., \& Houts, R. M. (2000). How does personality matter in marriage? An examination of trait anxiety, interpersonal negativity, and marital satisfaction. Journal of Personality and Social Psychology, 78, 326-336. doi:10.1037/0022-3514.78.2.326

Christensen, A. (1987). Detection of conflict patterns in couples. In K. Hahlweg, \& M. J. Goldstein (Eds.), (pp. 250-265). New York, NY, US: Family Process Press.

Christensen, A. (1988). Dysfunctional interaction patterns in couples. In P. Noller, \& M. A. Fitzpatrick (Eds.), Perspectives on marital interaction. (pp. 31-52). Clevedon, England: Multilingual Matters.

Christensen, A., \& Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. Journal of Personality and Social Psychology, 59, 73-81. doi:10.1037/0022-3514.59.1.73

Christensen, A., \& Heavey, C. L. (1993). Gender differences in marital conflict: The demand/withdraw interaction pattern. In S. Oskamp, \& M. Costanzo (Eds.), Gender issues in contemporary society. (pp. 113-141). Thousand Oaks, CA, US: Sage Publications, Inc.

Christensen, A., \& Shenk, J. L. (1991). Communication, conflict, and psychological distance in nondistressed, clinic, and divorcing couples. Journal of Consulting and Clinical Psychology, 59, 458-463. doi:10.1037/0022-006X.59.3.458

Christensen, A., \& Sullaway, M. (1984). Communications patterns questionnaire. Unpublished questionnaire. Los Angeles: University of California.

Chung, M. C., Farmer, S., Grant, K., Newton, R., Payne, S., Perry, M., \& Stone, N. (2003). Coping with post-traumatic stress symptoms following relationship dissolution. Stress and Health: Journal of the International Society for the Investigation of Stress, 19, 27-36. doi:10.1002/smi. 956

Cook, W. L. (1998). Integrating models of interdependence with treatment evaluation in marital therapy research. Journal of Family Psychology, 12, 529-542. doi:10.1037/0893-3200.12.4.529

Cook, W. L., \& Kenny, D. A. (2005). The actor-partner interdependence model: A model of bidirectional effects in developmental studies. International Journal of Behavioral Development, 29, 101-109. doi:10.1080/01650250444000405

Cooper, M. L., \& Sheldon, M. S. (2002). Seventy years of research on personality and close relationships: Substantive and methodological trends over time. Journal of Personality, 70(6), 783-812.

Cornelius, T. L., \& Alessi, G. (2007). Behavioral and physiological components of communication training: Does the topic affect outcome? Journal of Marriage and Family, 69, 608-620. doi:10.1111/j.1741-3737.2007.00395.x

Costa Jr., P. T., \& McCrae, R. R. (1992). Revised NEO Personality Inventory and fivefactor inventory professional manual. Odessa, FL: Psychological Assessment Resources.

Costa Jr., P. T., Terracciano, A., \& McCrae, R. R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. Journal of Personality and Social Psychology, 81, 322-331. doi: 10.1037/00223514.81.2.322

Craske, M. G., Burton, T., \& Barlow, D. H. (1989). Relationships among measures of communication, marital satisfaction and exposure during couples treatment of agoraphobia. Behaviour Research and Therapy, 27, 131-140. doi:10.1016/0005-7967(89)90071-5

Crowne, D. P., \& Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. Journal of Consulting Psychology, 24, 349-354. doi:10.1037/h0047358

Davila, J., Karney, B. R., Hall, T. W., \& Bradbury, T. N. (2003). Depressive symptoms and marital satisfaction: Within-subject associations and the moderating effects of gender and neuroticism. Journal of Family Psychology, 17, 557-570. doi:10.1037/0893-3200.17.4.557

Davis, M. H., \& Oathout, H.A. (1987). Maintenance of satisfaction in romantic relationships: Empathy and relational competence. Journal of Personality and Social Psychology, 53, 397-410. doi: 10.1037/0022-3514.53.2.397

Deci, E. L., \& Ryan, R. M. (1985). The general causality orientations scale: Selfdetermination in personality. Journal of Research in Personality, 19, 109-134. doi:10.1016/0092-6566(85)90023-6

Denham, S. A., Brown, C. A., \& Domitrovich, C. E. (2010). 'Plays nice with others'": Social-emotional learning and academic success. Early Education and Development, 21, 652-680. doi: 10.1080/10409289.2010.497450

Denton, W.H., Burleson, B.R., Clark, T.E., Rodriguez, C.P., Hobbs, B.V. (2007). A randomized trial of emotion-focused therapy for couples in a training clinic. Journal of Marital \& Family Therapy, 26, 65-76. doi: 10.1111/j.17520606.2000.tb00277.x

Dessaulles, A. (1991). The treatment of clinical depression in the context of marital distress (Doctoral dissertation). Retrieved from http://ruor.uottawa.ca/en/handle/10393/7468. (1993-72857-001)

Dessaulles, A., Johnson, S.M., \& Denton, W.H. (2003). Emotion-focused therapy for couples in the treatment of depression: A pilot study. The American Journal of Family Therapy, 31, 345-353. doi: 10.1080/01926180390232266

Donnellan, M.B., Conger, R. D., \& Bryant, C. M. (2004). The Big Five and enduring marriages. Journal of Research in Personality, 38, 481-504. doi:10.1016/j.jrp.2004.01.001

Eddy, J. M., Heyman, R. E., \& Weiss, R. L. (1991). An empirical evaluation of the dyadic adjustment scale: Exploring the differences between marital "satisfaction" and "adjustment". Behavioral Assessment, 13(3), 199-220.

Efron, B., \& Tibshirani, R. J. (1993). An introduction to the bootstrap. Boca Raton, FL: Chapman \& Hall.

Eldridge, K. A., \& Christensen, A. (2002). Demand-withdraw communication during couple conflict: A review and analysis. In P. Noller, \& J. A. Feeney (Eds.), Understanding marriage: Developments in the study of couple interaction. (pp. 289-322). New York, NY, US: Cambridge University Press. doi:10.1017/CBO9780511500077.016

Enders, C.K., \& Bandalos, D.L. (2001). The relative performance of full information maximum likelihood estimates for missing data in structural equation models. Structural Equation Modeling.

Epstein, N., \& Baucom, D.H. (2002). Enhanced cognitive-behavioral therapy for couples: A contextual approach. Washington, DC: American Psychological Association.

Evans, D. R., Pellizzari, J. R., Culbert, B. J., \& Metzen, M. E. (1993). Personality, marital, and occupational factors associated with quality of life. Journal of Clinical Psychology, 49, 477-485. doi:10.1002/1097 4679(199307)49:4<477::AID-JCLP2270490404>3.0.CO;2-N

Eysenck, S. B., Eysenck, H. J., \& Barrett, P. (1985). A revised version of the psychoticism scale. Personality and Individual Differences, 6, 21-29. doi:10.1016/0191-8869(85)90026-1

Family Law Act, R.S.O. 1990, c F.3. Canadian Legal Information Institute. 20 July 2009.
Faul, F., Erdfelder, E., Buchner, A., \& Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. Behavior Research Methods, 41, 1149-1160.

Feeney, J. A. (1999c). Adult romantic attachment and couple relationships. In J. Cassidy \& P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (pp. 355-377). New York, NY, US: Guilford Press.

Fehr, B., \& Russell, J. A. (1991). The concept of love viewed from a prototype perspective. Journal of Personality and Social Psychology, 60, 425-438. doi:10.1037/0022-3514.60.3.425

Field, A. (2005). Discovering Statistics Using SPSS. (2nd ed.). London: Sage Publications. Feiring, C. (1996). Concept of romance in 15-year-old adolescents. Journal of Research on Adolescence, 6(2), 181-200.

Fincham, F. D., \& Beach, S. R. H. (2006). Relationship satisfaction. New York, NY, US: Cambridge University Press.

Fincham, F. D., \& Beach, S. R. H. (2010). Marriage in the new millennium: A decade in review. Journal of Marriage and Family, 72, 630-649. doi:10.1111/j.17413737.2010.00722.x

Fincham, F. D., Beach, S. R. H., \& Kemp-Fincham, S. I. (1997). Marital quality: A new theoretical perspective. In R. J. Sternberg, \& M. Hojjat (Eds.), Satisfaction in close relationships. (pp. 275-304). New York, NY, US: Guilford Press.

Fincham, F. D., \& Bradbury, T. N. (1987). The assessment of marital quality: A reevaluation. Journal of Marriage \& the Family, 49, 797-809. doi:10.2307/351973

Fincham, F. D., \& Bradbury, T. N. (1987). Cognitive processes and conflict in close relationships: An attribution-efficacy model. Journal of Personality and Social Psychology. Special Issue: Integrating Personality and Social Psychology, 53, 1106-1118. doi:10.1037/0022-3514.53.6.1106

Fincham, F. D., \& Bradbury, T. N. (1987). The impact of attributions in marriage: A longitudinal analysis. Journal of Personality and Social Psychology, 53, 510-517. doi:10.1037/0022-3514.53.3.510

Fincham, F. D., Bradbury, T. N., Arias, I., Byrne, C. A., \& Karney, B. R. (1997). Marital violence, marital distress, and attributions. Journal of Family Psychology, 11, 367-372. doi:10.1037/0893-3200.11.3.367

Fincham, F. D., \& Rogge, R. (2010). Understanding Relationship Quality: Theoretical Challenges and New Tools for Assessment. Journal of family Theory \& Review, 2, 227-242. doi: 10.1111/j.1756-2589.2010.00059.x

Fitzpatrick, M. A. , \& Badzinski, D. M. (1994). All in the family: Interpersonal communication in kin relationships. In M. L. Knapp \& G. R. Miller (Eds.), Handbook of interpersonal communication (pp. 726-771). Thousand Oaks, CA: Sage

Fletcher, G. (2002). The new science of intimate relationships. Malden: Blackwell Publishing. doi:10.1002/9780470773390

Fletcher, G. J. O., \& Simpson, J. A. (2000). Ideal standards in close relationships: Their structure and functions. Current Directions in Psychological Science, 9, 102-105. doi:10.1111/1467-8721.00070

Fletcher, G. J. O., Simpson, J. A., \& Thomas, G. (2000). Ideals, perceptions, and evaluations in early relationship development. Journal of Personality and Social Psychology, 79, 933-940. doi:10.1037/0022-3514.79.6.933

Fletcher, G. J. O., Simpson, J. A., \& Thomas, G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. Personality and Social Psychology Bulletin, 26, 340-354. doi:10.1177/0146167200265007

Fletcher, G. J. O., Simpson, J. A., Thomas, G., \& Giles, L. (1999). Ideals in intimate relationships. Journal of Personality and Social Psychology, 76, 72-89. doi:10.1037/0022-3514.76.1.72

Flett, G. L., \& Hewitt, P. L. (2002a). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett \& P. L. Hewitt (Eds.), Perfectionism: Theory, research, and treatment (pp. 5-31). Washington, DC: American Psychological Association. doi:10.1037/10458-001

Flett, G. L., \& Hewitt, P. L. (Eds.). (2002b). Perfectionism: Theory, research, and treatment. Washington, DC: American Psychological Association. doi:10.1037/10458-000

Flett, G. L., \& Hewitt, P. L. (2005). The perils of perfectionism in sports and exercise. Current Directions in Psychological Science, 14, 14-18. doi:10.1111/j.09637214.2005.00326.x

Flett, G. L., Hewitt, P. L., \& Dyck, D. G. (1989). Self-oriented perfectionism, neuroticism and anxiety. Personality and Individual Differences, 10, 731-735. doi:10.1016/0191-8869(89)90119-0

Flett, G. L., Hewitt, P. L., Shapiro, B., \& Rayman, J. (2001). Perfectionism, beliefs, and adjustment in dating relationships. Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues, 20, 289-311. doi:10.1007/s12144-001-1013-4

Fogarty, T. F. (1976). Marital crisis. In P.G. Guerin (Ed.), Family therapy: Theory and practice (pp. 325-334). New York, NY: Gardner Press.

Fons-Scheyd, A. L. (2008). Further validation of a measure of dyadic perfectionism. Dissertation Abstracts International Section A: Humanities and Social Sciences, 68(7-A), 2826.

Fowers, B. J., Montel, K. H., \& Olson, D. H. (1996). Predicting marital success for premarital couple types based on PREPARE. Journal of Marital and Family Therapy, 22, 103-119. doi:10.1111/j.1752-0606.1996.tb00190.x

Fritts, B. E. (2012). An examination of relationship quality from an attachment perspective: Empathy and relationship perfectionism as mediating factors (Doctoral dissertation, University of Missouri). Retrieved from https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/14175/FrittsExaRel Qua.pdf?sequence=1

Fritz, M. S., \& MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. Behavior Research Methods, 18, 233-239. doi: 10.1111/j.14679280.7007.01882.x

Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., \& Neubauer, A. L. (1993). A comparison of two measures of perfectionism. Personality and Individual Differences, 14, 119-126. doi:10.1016/0191-8869(93)90181-2

Frost, R. O., Marten, P., Lahart, C., \& Rosenblate, R. (1990). The dimensions of perfectionism. Cognitive Therapy and Research, 14, 449-468. doi:10.1007/BF01172967

Funk, J. L., \& Rogge, R. D. (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the couples satisfaction index. Journal of Family Psychology, 21, 572-583. doi:10.1037/08933200.21.4.572

Futris, T. G., Campbell, K., Nielsen, R. B., \& Burwell, S. R. (2010). The communication patterns questionnaire - short form: A review and assessment. The Family Journal, 18, 275-287. doi:10.1177/1066480710370758

Gaines, S. O., Work, C., Johnson, H., Youn, M. S. P., \& Lai, K. (2000). Impact of attachment style and self-monitoring on individuals' responses to accommodative dilemmas across relationship types. Journal of Social and Personal Relationships, 17, 767-789. doi:10.1177/0265407500176004

Glick, P. C., \& Lin, S. (1986). More young adults are living with their parents: Who are they? Journal of Marriage \& the Family, 48, 107-112. doi:10.2307/352233

Goldman, A., \& Greenberg, L. (1992). Comparison of integrated systemic and emotionally focused approaches to couples therapy. Journal of Consulting and Clinical Psychology, 60, 962-969. doi: 10.1037/0022-006X.60.6.962

Gonzalez, R., \& Griffin, D. (1999). The correlational analysis of dyadic-level data in the distinguishable case. Personal Relationships, 6, 449-469. doi:10.1111/j.14756811.1999.tb00203.x

Gordon, K. C., Baucom, D. H., Epstein, N., Burnett, C. K., \& Rankin, L. A. (1999). The interaction between marital standards and communication patterns: How does it contribute to marital adjustment? Journal of Marital and Family Therapy, 25, 211-223. doi:10.1111/j.1752-0606.1999.tb01123.x

Gottman, J. M. (1979). Detecting cyclicity in social interaction. Psychological Bulletin, 86, 338-348. doi:10.1037/0033-2909.86.2.338

Gottman, J. M. (1994). What predicts divorce?: The relationship between marital processes and marital outcomes. Hillsdale, NJ: Erlbaum.

Gottman, J. M. (1999). Couple's handbook: Marriage Survival Kit Couple's Workshop. Seattle, WA: Gottman Institute.

Gottman, J. M., \& Krokoff, L. J. (1989). Marital interaction and satisfaction: A longitudinal view. Journal of Consulting and Clinical Psychology, 57, 47-52. doi: 10.1037/0022-006X.57.1.47

Gottman, J. M., \& Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology, and health. Journal of Personality and Social Psychology, 63, 221-233. doi:10.1037/0022-3514.63.2.221

Gottman, J. M., \& Levenson, R. W. (2000). The timing of divorce: Predicting when a couple will divorce over a 14-year period. Journal of Marriage \& the Family, 62, 737-745. doi:10.1111/j.1741-3737.2000.00737.x

Gottman, J., Markman, H., \& Notarius, C. (1977). The topography of marital conflict: A sequential analysis of verbal and nonverbal behavior. Journal of Marriage \& the Family, 39, 461-477. doi:10.2307/350902

Gottman, J. M., \& Notarius, C. I. (2002). Marital research in the 20th century and a research agenda for the 21st century. Family Process, 41, 159-197. doi:10.1111/j.1545-5300.2002.41203.x

Griffin, D., \& Gonzalez, R. (1995). Correlational analysis of dyad-level data in the exchangeable case. Psychological Bulletin, 118, 430-439. doi:10.1037/00332909.118.3.430

Greenspon, T. S. (2000). "Healthy perfectionism" is an oxymoron! Reflections on the psychology of perfectionism and the sociology of science. Journal of Secondary Gifted Education, 11(4), 197-208.

Grzegorek, J. L., Slaney, R. B., Franze, S., \& Rice, K. G. (2004). Self-criticism, dependency, self-esteem, and grade point average satisfaction among clusters of perfectionists and nonperfectionists. Journal of Counseling Psychology, 51, 192200. doi:10.1037/0022-0167.51.2.192

Guay, S., Boisvert, J.-M., \& Freeston, M. H. (2003). Validity of Three Measures of Communication for Predicting Relationship Adjustment and Stability Among a Sample of Young Couples. Psychological Assessment, 15, 392-395. doi:10.1037/1040-3590.15.3.392

Guerrero, L., Anderson, P., \& Afifi, W. (2011). Close Encounters: Communications in Relationships. California: SAGE Publications.

Habke, A. M., \& Flynn, C. A. (2002). Interpersonal aspects of trait perfectionism. In G. L. Flett, \& P. L. Hewitt (Eds.), Perfectionism: Theory, research, and treatment (pp. 151-180). Washington, DC: American Psychological Association. doi: 10.1037/10458-006

Habke, A. M., Hewitt, P. L., \& Flett, G. L. (1999). Perfectionism and sexual satisfaction in intimate relationships. Journal of Psychopathology and Behavioral Assessment, 21, 307-322. doi:10.1023/A:1022168715349

Hahlweg, K., Kaiser, A., Christensen, A., Fehm-Wolfsdorf, G., \& Groth, T. (2000). Selfreport and observational assessment of couples' conflict: The concordance between the communication patterns questionnaire and the KPI observation system. Journal of Marriage \& the Family, 62, 61-67. doi:10.1111/j.17413737.2000.00061.x

Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. Psychology: A Journal of Human Behavior, 15, 27-33.

Haring, M., Hewitt, P. L., \& Flett, G. L. (2003). Perfectionism, coping, and quality of intimate relationships. Journal of Marriage and Family, 65, 143-158. doi:10.1111/j.1741-3737.2003.00143.x

Hassebrauck, M., \& Fehr, B. (2002). Dimensions of relationship quality. Personal Relationships, 9, 253-270. doi: 10.1111/1475-6811.00017

Heaven, P. C. L., Smith, L., Prabhakar, S. M., Abraham, J., \& Mete, M. E. (2006). Personality and conflict communication patterns in cohabiting couples. Journal of Research in Personality, 40, 829-840. doi:10.1016/j.jrp.2005.09.012

Heavey, C. L., Christensen, A., \& Malamuth, N. M. (1995). The longitudinal impact of demand and withdrawal during marital conflict. Journal of Consulting and Clinical Psychology, 63, 797-801. doi:10.1037/0022-006X.63.5.797

Heavey, C. L., Layne, C., \& Christensen, A. (1993). Gender and conflict structure in marital interaction: A replication and extension. Journal of Consulting and Clinical Psychology, 61, 16-27. doi:10.1037/0022-006X.61.1.16

Hendrick, S. S. (1988). A generic measure of relationship satisfaction. Journal of Marriage \& the Family, 50, 93-98. doi:10.2307/352430

Hewitt, P. L., \& Flett, G. L. (2002). Perfectionism and stress processes in psychopathology. In G.L. Flett \& P. L. Hewitt (Eds.), Perfectionism: Theory, research, and treatment (pp. 255-284). Washington, DC: American Psychological Association.

Hewitt, P. L., \& Flett, G. L. (1991). Dimensions of perfectionism in unipolar depression. Journal of Abnormal Psychology, 100, 98-101. doi:10.1037/0021-843X.100.1.98

Hewitt, P. L., \& Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. Journal of Personality and Social Psychology, 60, 456-470. doi:10.1037/0022-3514.60.3.456

Hewitt, P. L., Flett, G. L., \& Mikail, S. F. (1995). Perfectionism and relationship adjustment in pain patients and their spouses. Journal of Family Psychology, 9, 335-347. doi:10.1037/0893-3200.9.3.335

Heyman, R. E., Sayers, S. L., \& Bellack, A. S. (1994). Global marital satisfaction versus marital adjustment: An empirical comparison of three measures. Journal of Family Psychology, 8, 432-446. doi:10.1037/0893-3200.8.4.432

Higgins, E. T. (1989a). Continuities and discontinuities in self-regulatory and selfevaluative processes: A developmental theory relating self and affect. Journal of Personality, 57, 407-444. doi: 10.1111/j.1467-6494.1989.tb00488.x

Higgins, E. T. (1989b). Risks and trade-offs in self-regulatory and self-evaluative processes: A developmental model. In M. R. Gunnar \& A. Stoufe (Eds)., Minnesota Symposium on Child Psychology (pp. 101-138). Hillsdale, NJ: Erlbaum.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. Psychological Review, 94, 319-340. doi:10.1037/0033-295X.94.3.319

Hollender, M. H. (1965). Perfectionism. Comprehensive Psychiatry, 6, 94-103. doi:10.1016/S0010-440X(65)80016-5

Holmes, J. G., \& Boon, S. D. (1990). Developments in the field of close relationships: Creating foundations for intervention strategies. Personality and Social Psychology Bulletin.Special Issue: Illustrating the Value of Basic Research, 16, 23-41. doi:10.1177/0146167290161003

Hsueh, A. C., Morrison, K. R., \& Doss, B. D. (2009). Qualitative reports of problems in cohabiting relationships: Comparisons to married and dating relationships. Journal of Family Psychology, 23, 236-246. doi:10.1037/a0015364

Hu, L., \& Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling, 6, 1-55. doi: 10.1080/10705519909540118

Huston, T. L., \& Burgess, R. L. (1979). Social exchange in developing relationships: An overview. In R. L.Burgess \& T. L.Huston (Eds.), Social exchange in developing relationships. (pp. 3-28). New York : Academic.

James, P. S. (1991). Effects of a communication training component added to an emotionally focused couples therapy. Journal of Marital and Family Therapy, 17(3), 263-275.

Johnson, S. M. (2005). Becoming an emotionally focused couple therapist. New York, NY: Routledge.

Johnson, S. M., \& Greenberg, L. S. (1985a). Emotionally focused couples therapy: An outcome study. Journal of Marital and Family Therapy, 11(3), 313-317.

Johnson, S. M., \& Greenberg, L. S. (1985b). Differential effects of experiential and problem-solving interventions in resolving marital conflict. Journal of Consulting and Clinical Psychology, 53, 175-184. doi: 10.1037/0022-006X.53.2.175

Johnson, S. M., \& Talitman, E. (1997). Predictors of success in emotionally focused marital therapy. Journal of Marital and Family Therapy, 23(2), 135-152.

Kamp Dush, C. M., \& Amato, P. R. (2005). Consequences of relationship status and quality for subjective well-being. Journal of Social and Personal Relationships, 22, 607-627. doi:10.1177/0265407505056438

Karney, B. R., \& Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, methods, and research. Psychological Bulletin, 118, 3-34. doi:10.1037/0033-2909.118.1.3

Karney, B. R., \& Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. Journal of Personality and Social Psychology, 72, 1075-1092. doi:10.1037/0022-3514.72.5.1075

Kearns, J. N., \& Fincham, F. D. (2005). Victim and perpetrator accounts of interpersonal transgressions: Self-serving or relationship-serving biases? Personality and Social Psychology Bulletin, 31, 321-333. doi:10.1177/0146167204271594

Kelly, C., Huston, T. L., \& Cate, R. M. (1985). Premarital relationship correlates of the erosion of satisfaction in marriage. Journal of Social and Personal Relationships, 2, 167-178. doi:10.1177/0265407585022004

Kelly, E. L., \& Conley, J. J. (1987). Personality and compatibility: A prospective analysis of marital stability and marital satisfaction. Journal of Personality and Social Psychology, 52, 27-40. doi:10.1037/0022-3514.52.1.27

Kenny, D. A. (2008). Reflections on mediation. Organizational Research Methods, 11, 353-358. doi: 10.1177/1094428107308978

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

Kenny, D. A., \& Acitelli, L. K. (2001). Accuracy and bias in the perception of the partner in a close relationship. Journal of Personality and Social Psychology, 80, 439448. doi: 10.1037/0022-3514.80.3.439

Kenny, D. A., \& Cook, W. (1999). Partner effects in relationship research: Conceptual issues, analytic difficulties, and illustrations. Personal Relationships. Special Issue: Methodological and Data Analytic Advances, 6, 433-448.
doi:10.1111/j.1475-6811.1999.tb00202.x
Kenny, D. A., Kashy, D. A., \& Cook, W. L. (2006). Dyadic data analysis. New York, NY, US: Guilford Press.

Kenny, D. A., \& la Voie, L. (1985). Separating individual and group effects. Journal of Personality and Social Psychology, 48, 339-348. doi:10.1037/0022-3514.48.2.339

Kiecolt-Glaser, J. K., \& Newton, T. L. (2001). Marriage and health: His and hers. Psychological Bulletin, 127, 472-503. doi:10.1037/0033-2909.127.4.472

Kincaid, S. B., \& Caldwell, R. A. (1995). Marital separation: Causes, coping, and consequences. Journal of Divorce \& Remarriage, 22, 109-128. doi:10.1300/J087v22n03_07

Kivlighan, D. M. (2007). Where is the relationship in research on the alliance? two methods for analyzing dyadic data. Journal of Counseling Psychology, 54, 423433. doi:10.1037/0022-0167.54.4.423

Kline, R. B. (2011). Principles and practice of structural equation modeling (3rd ed.). New York, NY, US: Guilford Press.

Klinetob, N. A., \& Smith, D. A. (1996). Demand-withdraw communication in marital interaction: Tests of interpersonal contingency and gender role hypotheses. Journal of Marriage \& the Family, 58, 945-957. doi:10.2307/353982

Kobak, R., Ruckdeschel, K., \& Hazan, C. (1994). From symptom to signal: An attachment view of emotion in marital therapy. In S. M. Johnson, \& L. S. Greenberg (Eds.), The heart of the matter: Perspectives on emotion in marital therapy. (pp. 46-71). Philadelphia, PA, US: Brunner/Mazel.

Kurdek, L. A. (1997). Relation between neuroticism and dimensions of relationship commitment: Evidence from gay, lesbian, and heterosexual couples. Journal of Family Psychology, 11, 109-124. doi:10.1037/0893-3200.11.1.109

Ledermann, T., \& Bodenmann, G. (2006). Moderator- und mediatoreffekte bei dyadischen daten: Zwei erweiterungen des akteur-partner-interdependenzmodells. / moderator and mediator effects in dyadic research: Two extensions of the actor-partner interdependence model. Zeitschrift Für Sozialpsychologie, 37, 27-40. doi:10.1024/0044-3514.37.1.27

Ledermann, T., Bodenmann, G., Rudaz, M., \& Bradbury, T. N. (2010). Stress, communication, and marital quality in couples. Family Relations: An Interdisciplinary Journal of Applied Family Studies, 59, 195-206. doi: 10.1111/j.1741-3729.2010.00595.x

Ledermann, T., \& Kenny, D.A. (2011). The common fate model for dyadic data: Variations of a theoretically important but underutilized model. Journal of Family Psychology, 26, 140-148. doi:10.1037/a0026624

Ledermann, T., \& Macho, S. (2009). Mediation in dyadic data at the level of the dyads: A structural equation modeling approach. Journal of Family Psychology, 23, 661670. doi:10.1037/a0016197

Ledermann, T., Macho, S., \& Kenny, D. A. (in press). Assessing mediation in dyadic data using the Actor-Partner Interdependence Model. Structural Equation Modeling. Retrieved from http://www.modeling.uconn.edu/handouts/D1S3_Lederman_APIMeM_UConn_2 011.pdf

Locke, H. J., \& Wallace, K. M. (1959). Short marital-adjustment and prediction tests: Their reliability and validity. Marriage \& Family Living, 21, 251-255. doi:10.2307/348022

Lopez, F. G., Fons-Scheyd, A., Bush-King, I., \& McDermott, R. C. (2011). A latent class analysis of dyadic perfectionism in a college sample. Measurement and Evaluation in Counseling and Development, 44, 32-51. doi:10.1177/0748175610391610

Lopez, F. G., Fons-Scheyd, A., Morua, W., \& Chaliman, R. (2006). Dyadic perfectionism as a predictor of relationship continuity and distress among college students. Journal of Counseling Psychology, 53, 543-549. doi: 10.1037/0022-0167.53.4.543

Lund, M. (1985). The development of investment and commitment scales for predicting continuity of personal relationships. Journal of Social and Personal Relationships, 2, 3-23. doi:10.1177/0265407585021001

MacCallum, R.C., Browne, M.W., \& Sugawara, H. M. (1996). Power Analysis and Determination of Sample Size for Covariance Structure Modeling. Psychological Methods, 1 , 130-49. doi: 10.1037/1082-989X.1.2.130

MacKinnon, D. P., Lockwood, C. M., \& Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. Multivariate Behavioral Research, 39, 99-128. doi:10.1207/s15327906mbr3901_4

Margolin, G., John, R. S., \& Gleberman, L. (1988). Affective responses to conflictual discussions in violent and nonviolent couples. Journal of Consulting and Clinical Psychology, 56, 24-33. doi:10.1037/0022-006X.56.1.24

Markman, H. J., Silvern, L., Clements, M., \& Kraft-Hanak, S. (1993). Men and women dealing with conflict in heterosexual relationships. Journal of Social Issues, 49(3), 107-125.

Martin, J. L., \& Ashby, J. S. (2004b). Perfectionism and fear of intimacy: Implications for relationships. Family Journal: Counseling and Therapy for Couples and Families, 12, 368-374. doi: 10.1177/1066480704267279

Matthews, L. S., Conger, R. D., \& Wickrama, K. A. S. (1996). Work-family conflict and marital quality: Mediating processes. Social Psychology Quarterly, 59, 62-79. doi:10.2307/2787119

McClelland, G. H. (2000). Increasing statistical power without increasing sample size. American Psychologist, 55, 963-964. doi:10.1037/0003-066X.55.8.965

Mikulincer, M., Florian, V., Cowan, P. A., \& Cowan, C. P. (2002). Attachment security in couple relationships: A systemic model and its implications for family dynamics. Family Process, 41, 405-434. doi:10.1111/j.1545-5300.2002.41309.x

Mikulincer, M., \& Shaver, P. R. (2007). Attachment in adulthood: Structure, dynamics, and change. New York: Guilford Press.

Möller, A. T., Rabe, H. M., \& Nortje, C. (2001). Dysfunctional beliefs and marital conflict in distressed and non-distressed married individuals. Journal of RationalEmotive \& Cognitive-Behavior Therapy, 19, 259-270. doi: 10.1023/A:1012565031864

Monroe, S. M., Rohde, P., Seeley, J.R., \& Lewinsohn, P. M. (1999). Life events and depression in adolescence: Relationship loss as a prospective risk factor for first onset of major depressive disorder. Journal of Abnormal Psychology, 108, 606614. doi:10.1037/0021 843X.108.4.606

Montgomery, M. J. (2005). Psychosocial intimacy and identity: From early adolescence to emerging adulthood. Journal of Adolescent Research, 20, 346-374. doi:10.1177/0743558404273118

Murray, S.L., Holmes, J. G., \& Griffin, D.W. (1996). The Benefits of Positive Illusions: Idealization and the Construction of Satisfaction in Close Relationships. Journal of Personality and Social Psychology, 70, 79-98. doi: 10.1037/0022-3514.70.1.79

Muthén, L. K., \& Muthén, B.O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. Structural Equation Modeling, 9, 599-620. doi: 10.1207/S15328007SEM0904_8

Myers, D. G. (1999). Close relationships and quality of life. In D. Kahneman, E. Diener \& N. Schwarz (Eds.), Well-being: The foundations of hedonic psychology. (pp. 374-391). New York, NY, US: Russell Sage Foundation.

Noller, P., \& Feeney, J. A. (1998). Communication in early marriage: Responses to conflict, nonverbal accuracy, and conversational patterns. In T. N. Bradbury (Ed.), The developmental course of marital dysfunction. (pp. 11-43). New York, NY, US: Cambridge University Press. doi:10.1017/CBO9780511527814.003

Noller, P., Feeney, J. A., Bonnell, D., \& Callan, V. J. (1994). A longitudinal study of conflict in early marriage. Journal of Social and Personal Relationships, 11, 233252. doi:10.1177/0265407594112005

Noller, P., \& White, A. (1990). The validity of the communication patterns questionnaire. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 2, 478-482. doi:10.1037/1040-3590.2.4.478

Norton, R. (1983). Measuring marital quality: A critical look at the dependent variable. Journal of Marriage \& the Family, 45, 141-151. doi:10.2307/351302

Pacht, A. R. (1984). Reflections on perfection. American Psychologist, 39, 386-390. doi:10.1037/0003-066X.39.4.386

Periasamy, S., \& Ashby, J. S. (2002). Multidimensional perfectionism and locus of control: Adaptive vs. maladaptive perfectionism. Journal of College Student Psychotherapy, 17, 75-86. doi:10.1300/J035v17n02_06

Peterson, L. (1983). Social functioning assessment of aftercare psychiatric patients in socialization therapy. Psychological Reports, 53(3), 1123-1130.

Preacher, K., \& Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. Behavior Research Methods, 40, 879-891. doi: 10.3758/BRM.40.3.879

Punyanunt-Carter, N. M. (2004). Reported affectionate communication and satisfaction in marital and dating relationships. Psychological Reports, 95, 1154-1160. doi:10.2466/PR0.95.7.1154-1160

Ranieri, W. F., Steer, R. A., Lavrence, T. I., Rissmiller, D. J., Piper, G. E., \& Beck, A. T. (1987). Relationships of depression, hopelessness, and dysfunctional attitudes to suicide ideation in psychiatric patients. Psychological Reports, 61(3), 967-975.

Rasmussen, S. A., \& Eisen, J. L. (1992). The epidemiology and clinical features of obsessive compulsive disorder. Psychiatric Clinics of North America, 15(4), 743758.

Rempel, J. K., Holmes, J. G., \& Zanna, M. P. (1985). Trust in close relationships. Journal of Personality and Social Psychology, 49, 95-112. doi:10.1037/0022-3514.49.1.95

Reynolds, W. M. (1982). Development of reliable and valid short forms of the MarloweCrowne Social Desirability Scale. Journal of Clinical Psychology, 38, 119-125. doi:10.1002/1097-4679(198201)38:1<119::AID-JCLP2270380118>3.0.CO;2-I

Rhéaume, J., Freeston, M. H., Ladouceur, R., Bouchard, C., Gallant, L., Talbot, F., \& Vallières, A. (2000). Functional and dysfunctional perfectionists: Are they different on compulsive-like behaviors? Behaviour Research and Therapy, 38, 119-128. doi:10.1016/S0005-7967(98)00203-4

Rice, K. G., \& Ashby, J. S. (2007). An efficient method for classifying perfectionists. Journal of Counseling Psychology, 54, 72-85. doi:10.1037/0022-0167.54.1.72

Rice, K. G., Ashby, J. S., \& Slaney, R. B. (1998). Self-esteem as a mediator between perfectionism and depression: A structural equations analysis. Journal of Counseling Psychology, 45, 304-314. doi:10.1037/0022-0167.45.3.304

Rice, K. G., \& Slaney, R. B. (2002). Clusters of perfectionists: Two studies of emotional adjustment and academic achievement. Measurement and Evaluation in Counseling and Development, 35(1), 35-48.

Rippetoe, P. A., \& Rogers, R. W. (1987). Effects of components of protection-motivation theory on adaptive and maladaptive coping with a health threat. Journal of Personality and Social Psychology, 52, 596-604. doi:10.1037/0022-3514.52.3.596

Roberts, L. J. (2000). Fire and ice in marital communication: Hostile and distancing behaviors as predictors of marital distress. Journal of Marriage \& the Family, 62, 693-707. doi:10.1111/j.1741-3737.2000.00693.x

Robins, G., \& Boldero, J. (2003). Relational discrepancy theory: The implications of selfdiscrepancy theory for dyadic relationships and for the emergence of social structure. Personality and Social Psychology Review, 7, 56-74. doi:10.1207/S15327957PSPR0701_4

Rosen, A. M., Murkofsky, C. A., Steckler, N. M., \& Skolnick, N. J. (1989). A comparison of psychological and depressive symptoms among restricting anorexic, bulimic anorexic, and normal-weight bulimic patients. International Journal of Eating Disorders, 8, 657-663. doi: 10.1002/1098-108X(198911)8:63.0.CO;2-B

Roth, P. (1994). Missing data: A conceptual review for applied psychologists. Personnel Psychology, 47, 537-560.

Rubin, Z. (1973). Liking and loving: An invitation to social psychology. Oxford, England: Holt, Rinehart \& Winston.

Rusbult, C. E., Johnson, D.J., \& Marrow, G. D. (1986). Impact of couple patterns of problem solving on distress and nondistress in dating relationships. Journal of Personality and Social Psychology, 50, 744-753. doi:10.1037/0022-3514.50.4.744

Rusbult, C. E., Zembrodt, I. M., \& Gunn, L. K. (1982). Exit, voice, loyalty, and neglect: Responses to dissatisfaction in romantic involvements. Journal of Personality and Social Psychology, 43, 1230-1242. doi: 10.1037/0022-3514.43.6.1230

Russell, R. J. H., \& Wells, P. A. (1994). Personality and quality of marriage. British Journal of Psychology, 85(2), 161-168.

Ryff, C. D. (1995). Psychological well-being in adult life. Current Directions in Psychological Science, 4, 99-104. doi:10.1111/1467-8721.ep10772395

Sadler, P., Ethier, N., \& Woody, E. (2011). Tracing the interpersonal web of psychopathology: Dyadic data analysis methods for clinical researchers. Journal of Experimental Psychopathology, 2, 95-138. doi: 10.5127/jep. 010310

Schaap, C. (1982). Huwelijkssatisfactie en niet-verbale communicatie. / marital satisfaction and nonverbal communication. Nederlands Tijdschrift Voor De Psychologie En Haar Grensgebieden, 37(7), 445-457.

Schaap, C., Buunk, B., \& Kerkstra, A. (1988). Marital conflict resolution. In P. Noller, \& M. A. Fitzpatrick (Eds.), Perspectives on marital interaction. (pp. 203-244). Clevedon, England: Multilingual Matters.

Schafer, J. L., \& Graham, J. W. (2002). Missing data: Our view of the state of the art. Psychological Methods, 7, 147-177. doi:10.1037/1082-989X.7.2.147

Schlomer, G. L., Bauman, S., \& Card, N. A. (2010). Best practices for missing data management in counseling psychology. Journal of Counseling Psychology, 57, 110. doi:10.1037/a0018082

Schulman, M. L. (1974). Idealization in engaged couples. Journal of Marriage and the Family, 36(1), 139-147.

Schumacker, R. E., \& Lomax, R. G. (2004). A Beginner's Guide to Structural Equation Modeling (2nd Ed.). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Sedikides, C., Oliver, M. B., \& Campbell, W. K. (1994). Perceived benefits and costs of romantic relationships for women and men: Implications for exchange theory. Personal Relationships, 1, 5-21. doi: 10.1111/j.1475-6811.1994.tb00052.x

Shapiro, J., \& Kroeger, L. (1991). Is life just a romantic novel? The relationship between attitudes about intimate relationships and the popular media. American Journal of Family Therapy, 19, 226-236. doi: 10.1080/01926189108250854

Shea, A. J. (2000). Associations between perfectionism and relationship satisfaction. Dissertation Abstracts International Section B: The Sciences and Engineering, 60(7-B), 3579 .

Shea, A. J., Slaney, R. B., \& Rice, K. G. (2006). Perfectionism in intimate relationships: The dyadic almost perfect scale. Measurement and Evaluation in Counseling and Development, 39(2), 107-125.

Sher, T. G., \& Weiss, R. L. (1991). Negativity in marital communication: Where's the beef? Behavioral Assessment, 13, 1-5. doi:10.1007/BF00960735

Sherry, S. B., Law, A., Hewitt, P. L., Flett, G. L., \& Besser, A. (2008). Social support as a mediator of the relationship between perfectionism and depression: A preliminary test of the social disconnection model. Personality and Individual Differences, 45, 339-344. doi:10.1016/j.paid.2008.05.001

Shrout, P. E., \& Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. Psychological Methods, 7, 422445. doi:10.1037/1082-989X.7.4.422

Skinner, K. B., Bahr, J. B., Crane, D. R., \& Call, V. A., (2002). Cohabitation, marriage, and remarriage: A comparison of relationship quality over time. Journal of Family Issues, 23, 74-90. doi: 10.1177/0192513X02023001004

Slaney, R. B., \& Ashby, J. S. (1996). Perfectionists: Study of a criterion group. Journal of Counseling \& Development, 74(4), 393-398.

Slaney, R.B., Mobley, M., Trippi J., Ashby, J.S., \& Johnson, D.P. (1996). The Almost Perfect Scale - Revised. Unpublished manuscript, The Pennsylvania State University.

Slaney, R. B., Pincus, A. L., Uliaszek, A. A., \& Wang, K. T. (2006). Conceptions of perfectionism and interpersonal problems: Evaluating groups using the structural summary method for circumplex data. Assessment, 13, 138-153. doi:10.1177/1073191105284878

Slaney, R. B., Rice, K. G., \& Ashby, J. S. (2002). A programmatic approach to measuring perfectionism: The almost perfect scales. In G. L. Flett, \& P. L. Hewitt (Eds.), Perfectionism: Theory, research, and treatment. (pp. 63-88). Washington, DC, US: American Psychological Association. doi:10.1037/10458-003

Slaney, R. B., Rice, K. G., Mobley, M., Trippi, J., \& Ashby, J. S. (2001). The revised almost perfect scale. Measurement and Evaluation in Counseling and Development, 34(3), 130-145.

Smith, L, Heaven, P. C. L., \& Ciarrochi, J. (2008). Trait emotional intelligence, conflict communication patterns, and relationship satisfaction. Personality and Individual Differences, 44, 1314-1325. doi:10.1016/j.paid.2007.11.024

Snyder, D. K. (1979). Multidimensional assessment of marital satisfaction. Journal of Marriage \& the Family, 41, 813-823. doi:10.2307/351481

Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), Sociological methodology, 1982 (pp. 290312). Washington, DC: American Sociological Association.

Sobel, M. E. (1986). Some new results on indirect effects and their standard errors in covariance structure models. Sociological Methodology, 13, 290-312. doi:10.2307/270723

Sorotzkin, B. (1985). The quest for perfection: Avoiding guilt or avoiding shame? Psychotherapy: Theory, Research, 22, 564-571. doi:10.1037/h0085541

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. Journal of Marriage \& the Family, 38, 15-28. doi:10.2307/350547

Sprecher, S. (2001). Equity and social exchange in dating couples: Associations with satisfaction, commitment, and stability. Journal of Marriage and Family, 63, 599613. doi:10.1111/j.1741-3737.2001.00599.x

SPSS Inc. (2012). SPSS (Version 20.0) [Computer Program]. Chicago: SPSS.
Stafford, L. (2008). Social Exchange Theories. In L.A. Baxter \& D.O. Braithwaite (Eds.), Engaging theories in interpersonal communication: Multiple perspectives (pp.377-389). Thousand Oaks.

Steiger, J. H. (2007). Understanding the limitations of global fit assessment in structural equation modeling. Personality and Individual Differences, 42 (5), 893-98.

Sternberg, R. J. (1986). A triangular theory of love. Psychological Review, 93, 119-135. doi:10.1037/0033-295X.93.2.119

Sternberg, R. J., \& Hojjat, M. (Eds.). (1997). Satisfaction in close relationships. New York: Guilford Press.

Stöber, J. (1998). The frost multidimensional perfectionism scale revisited: More perfect with four (instead of six) dimensions. Personality and Individual Differences, 24, 481-491. doi:10.1016/S0191-8869(97)00207-9

Stoeber, J. (2012). Dyadic perfectionism in romantic relationships: Predicting relationship satisfaction and longterm commitment. Personality and Individual Differences, 53, 300-305. doi: 10.1016/j.paid.2012.04.002

Stoeber, J., \& Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. Personality and Social Psychology Review, 10, 295-319. doi:10.1207/s15327957pspr1004_2

Stoeber, J., \& Stoeber, F. S. (2009). Domains of perfectionism: Prevalence and relationships with perfectionism, gender, age, and satisfaction with life. Personality and Individual Differences, 46, 530-535. doi: 10.1016/j.paid.2008.12.006

Stumpf, H., \& Parker, W. D. (2000). A hierarchical structural analysis of perfectionism and its relation to other personality characteristics. Personality and Individual Differences, 28, 837-852. doi:10.1016/S0191-8869(99)00141-5

Suddarth, B. H., \& Slaney, R. B. (2001). An investigation of the dimensions of perfectionism in college students. Measurement and Evaluation in Counseling and Development, 34(3), 157-165.

Tabachnick, B.G., \& Fidell, L.S. (2001). Using multivariate analysis. Boston: Allyn and Bacon.

Tannen, D. (1990). Gender differences in topical coherence: Creating involvement in best friends' talk. Discourse Processes, 13, 73-90. doi: 10.1080/01638539009544747

Tashiro, T.,\& Frazier, P. (2003). "I'll never be in a relationship like that again": Personal growth following romantic relationship breakups. Personal Relationships, 10, 113-128. doi: 10.1111/1475-6811.00039

Thibaut, J. W., \& Kelley, H. H. (1959). The social psychology of groups. Piscataway, NJ, US: Transaction Publishers.

Twenge, J. M., \& King, L. A. (2005). A good life is a personal life: Relationship fulfillment and work fulfillment in judgments of life quality. Journal of Research in Personality, 39, 336-353. doi:10.1016/j.jrp.2004.01.004

Vogel, D. L., Wester, S. R., \& Heesacker, M. (1999). Dating relationships and the demand/withdraw pattern of communication. Sex Roles, 41, 297-306. doi:10.1023/A:1018862414176

Walker, J. G., Johnson, S., Manion, I., \& Cloutier, P. (1996). Emotionally focused marital intervention for couples with chronically ill children. Journal of Consulting and Clinical Psychology, 64, 1029-1036. doi: 10.1037/0022-006X.64.5.1029

Watson, D., \& Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. Psychological Bulletin, 96, 465-490. doi:10.1037/00332909.96.3.465

Westen, D. (1995). A clinical-empirical model of personality: Life after the mischelian ice age and the NEO-litic era. Journal of Personality.Special Issue: Levels and Domains in Personality, 63, 495-524. doi:10.1111/j.1467-6494.1995.tb00504.x

White, J. K., Hendrick, S. S., \& Hendrick, C. (2004). Big five personality variables and relationship constructs. Personality and Individual Differences, 37, 1519-1530. doi:10.1016/j.paid.2004.02.019

Wiebe, R. E., \& McCabe, S. B. (2002). Relationship perfectionism, dysphoria, and hostile interpersonal behaviors. Journal of Social and Clinical Psychology, 21, 67-91. doi:10.1521/jscp.21.1.67.22406

Woody, E., \& Sadler, P. (2005). Structural equation models for interchangeable dyads: Being the same makes a difference. Psychological Methods, 10, 139-158. doi:10.1037/1082-989X.10.2.139

Yelsma, P. (1984). Marital communication, adjustment and perceptual differences between "happy" and "counseling" couples. American Journal of Family Therapy, 12, 26-36. doi:10.1080/01926188408250156

Yum, Y. (2004). Culture and self-construal as predictors of responses to accommodative dilemmas in dating relationships. Journal of Social and Personal Relationships, 21, 817-835. doi:10.1177/0265407504047839

Zook, A., \& Sipps, G. J. (1985). Cross-validation of a short form of the marlowe-crowne social desirability scale. Journal of Clinical Psychology, 41, 236-238. doi:10.1002/1097-4679(198503)41:2<236::AID-JCLP2270410217>3.0.CO;2-H

## Appendices

## Appendix A

## Rationale for the Current Sample

In the current study, long-term romantic relationships refer to unmarried adult couples who were continuously involved in monogamous, heterosexual dating, engaged, or cohabitating relationships, without children, for a minimum of six months. For cohabitating couples, only partners who had lived together for less than three years were included in the study.

Monogamous couples were included to minimize the extent to which couples were involved in less committed, or casual relationships in which recurrent communication patterns had not developed. Adult couples (partners both 20 years of age or older) were recruited because romantic relationships are more serious, intimate, and committed in adulthood (e.g., Montgomery, 2005) compared to late adolescence, when relationships are typically short-term, and initiated to have fun and fulfil companionship needs (e.g., Feiring, 1996). Couples with children were excluded to control for the impact of child-rearing stressors and postpartum blues or depression on relationship quality.

Couples are often described as being in a "dating relationship" but this is rarely defined clearly, and there is little standardization across studies with respect to criteria used to identify couples in long-term dating relationships. The early stages of romantic relationships (e.g., first three months), are often referred to as the "honeymoon phase." This is a time when partner inequalities are less likely to influence relationship quality in adverse ways (e.g., Sprecher, 2001). The honeymoon phase is marked by romantic
idealization, a "tendency to describe the relationship [and one's partner] in unrealistically positive terms" (Fowers, Montel, \& Olson, 1996, p.7). Idealization typically declines as greater contact with the partner occurs over the course of the relationship. Idealization is maintained by "blocked communication" - the avoidance of potentially conflictual topics in order to maintain agreement (Schulman, 1974). To minimize the degree to which the honeymoon period of romantic idealization and blocked communication patterns impact relationship quality, only couples who had been continuously involved in their relationship for at least six months were included in the current study.

Variability in the relationship status of unmarried couples is usually disregarded in the literature. However, Kamp Dush and Amato (2005) conceptualized married, cohabitating, and dating relationships on a continuum of commitment in which married individuals demonstrate the greatest commitment and steadily dating partners who do not live together demonstrate the lowest commitment. These researchers also reported that cohabiting couples differ from married couples in their degree of relationship commitment. In their comparison between dating, cohabitating, and married relationships, Hsueh, Rahbar Morrison, and Doss (2009) found that dating and cohabitating couples reported similar incidences of global problems, perhaps indicating that greater similarities between dating and cohabitating couples exist compared to cohabitating and married couples.

The Ontario Family Law Act (2009) recognizes cohabitating partners as commonlaw spouses if they have been continuously living together for more than three years or if they have a child in common. Therefore, after three years of cohabitation, couples share legal status similar to married partners. Given the widespread and increasing rate of cohabitation, cohabitating couples were included in the current study. However,
common-law spouses, who may be more similar to married couples than to dating, engaged, or cohabitating couples, were not be included. in the current study. Excluding common-law spouses minimized the impact of extraneous variables specific to married couples (e.g., legal binding, economic attachment; Carlson, 1987) that may confound communication and relationship quality scores. The increasing rate of cohabitation and the increasing rate of young adults who are not yet married or who never marry (e.g., Glick and Lin, 1986b) suggest that it is important to understand unmarried couples, as adults are becoming involved in these relationships for longer periods of time. It is important to recognize that in excluding common-law partners, the study did not sample couples who had lived together for long periods of time and would therefore have more firmly established communication patterns. Engaged couples were also included in the current study because perfectionistic expectations of a partner may be particularly salient during marriage preparation and wedding planning, a stressful life event. Taking the above issues and practical considerations into account, it seemed reasonable to assess dating, cohabiting, and engaged couples, and to exclude common-law and married couples.

## Appendix B

## Community Advertisement: Poster

# Want free movie passes or free gas? 

Are you in a long-term dating, engaged, or cohabitating relationship?<br>Have you been dating for at least 6 months?

Couples who mutually agree to participate in an
online study receive a
Famous Players and Cineplex Odeon Movie Package:
2 Admissions, 2 Soft Drinks \& Popcorn
or

## \$20 Shell Canada Gift Card

## Contact Anna at relationship.study@yahoo.ca to participate

Please discuss your willingness to participate with your partner
Both partners should mutually agree to participate.
Compensation provided upon study completion of both romantic partners
This study has been cleared by the Research Ethics Board at the University of Windsor


Community Advertisement: Flyer

| Are you in an unmarried relationship for at least 6 months? | Are you in an unmarried relationship for at least 6 months? |
| :---: | :---: |
| Couples who mutually agree to participate in an online study will receive a | Couples who mutually agree to participate in an online study will receive a |
| Free Movie Package for Two 2 Admissions, 2 Soft Drinks \& Popcorn or Free Gas <br> \$20 Shell Canada Gift Card | Free Movie Package for Two 2 Admissions, 2 Soft Drinks \& Popcorn or Free Gas \$20 Shell Canada Gift Card |
| Contact Anna at relationship.study@yahoo.ca | Contact Anna at relationship.study@yahoo.ca |
| Please discuss your willingness to participate with your partner <br> Both partners should agree to participate <br> Compensation provided upon study completion of both partners | Please discuss your willingness to participate with your partner Both partners should agree to participate Compensation provided upon study completion of both partner |
| Are you in an unmarried relationship for at least 6 months? | Are you in an unmarried relationship for at least 6 months? |
| Couples who mutually agree to participate in an online study will receive a | Couples who mutually agree to participate in an online study will receive a |
| Free Movie Package for Two 2 Admissions, 2 Soft Drinks \& Popcorn or <br> Free Gas <br> \$20 Shell Canada Gift Card | Free Movie Package for Two <br> 2 Admissions, 2 Soft Drinks \& Popcorn or <br> Free Gas <br> \$20 Shell Canada Gift Card |
| Contact Anna at relationship.study@yahoo.ca | Contact Anna at relationship.study@yahoo.ca |
| Please discuss your willingness to participate with your partner Both partners should agree to participate | Please discuss your willingness to participate with your partner Both partners should agree to participate |

## Community Advertisement: Facebook and Email Advertisement

## Greetings!

Do you want free movie passes or free gas? Are you in a long-term unmarried relationship? Have you been dating, engaged, or cohabiting for at least 6 months? Couples who mutually agree to participate in an online study will receive a Famous Players Cineplex Odeon Movie Package (2 Admissions, 2 Soft Drinks, and Popcorn) or a $\$ 20$ Shell Canada Gift Card. Your participation will help me with my dissertation and is greatly appreciated!

To participate, please email me at relationship.study@yahoo.ca. Please discuss your willingness to participate with your partner. Both partners must mutually agree to participate. Any information that you provide in connection with this study will remain confidential.

Please feel free to forward my email to others who may be interested in participating in this research.

Thank you!
Anna

## Appendix C

## Community and Participant Pool Sample Characteristics

## Couples Recruited from the Community

The mean age in the community sample was 26.1 years $(S D=3.7$ years; range $=$ 20-38); 26.7 years for the male participants $(S D=4.19$; range $20-38)$ and 25.6 years for the female participants $(S D=3.01$; range $=20-37)$. Community couples had been in a continuous relationship for an average of 4.2 years $(S D=2.7$; range $=6$ months -11.6 years). Thirty community couples (44.1\%) were dating, 6 (8.8\%) were engaged but not cohabiting, 23 (33.8\%) were cohabiting but not engaged, and 9 (13.2\%) were both engaged and cohabiting. On average, cohabiting couples had lived together for 13.8 months ( $S D=10.3$ months; range $=1-35$ months $)$. Eleven of the community couples (16.2\%) were involved in a long distance relationship.

## Couples Recruited from the Participant Pool

The mean age for participant pool respondents was 22.4 years $(S D=2.6$; range $=$ 20-31); 22.9 years for male participants $(S D=2.7$; range $=20-31)$ and 21.9 years for the female participants $(S D=2.4$; range $=20-30)$. Participant pool couples had been in a continuous relationship for an average of 2.4 years $(S D=1.4$; range $=6$ months -6.2 years). Twenty-seven ( $60 \%$ ) were dating, 1 ( $2.2 \%$ ) was engaged but not cohabiting, 13 (28.9\%) were cohabiting but not engaged, and 4 (8.9\%) were both engaged and cohabiting. On average, cohabiting couples had lived together for 13.1 months ( $S D=8.2$; range $=1-28$ months). Seven (15.6\%) of the participant pool couples were involved in a long distance relationship.

## Appendix D

## Psychology Participant Pool Description

## Title

Perceptions of Long-term romantic relationships


#### Abstract

If you are eligible to volunteer to participate in this study, you will complete a number of online questionnaires. To participate in the current study, your romantic partner will need to complete the online study as well. To participate, email me at relationship.study@yahoo.ca. You will be provided with login information necessary for you and your partner to complete the study. Please complete the questionnaires separately from your partner and do not discuss your responses until he or she has completed the study as well.

\section*{Description}


The purpose of this study is to evaluate thoughts, feelings, and behaviours among long-term romantic partners.

Duration. 50 minutes per partner
Points. 1point. Your partner will receive a $\$ 10$ gift card to Tim Horton's.
Testing dates. Flexible; questionnaire package will be completed online. The online study must be completed within one week of receiving the study login information. Couples may choose to complete the online study at the University of Windsor. Couples who complete the study on campus will be entered to win a $\$ 25$ gift card to Cara Restaurants (i.e., Swiss Chalet, Montana's, Harvey's, Milestones, or Kelsey's). Please inform the researcher by email if you and your partner wish to participate in person, at the University of Windsor.

Restrictions. To participate in the current study, adults must be at least 20 years of age and currently involved in a monogamous, heterosexual, continuous romantic relationship, without children, for a minimum of six months. Only cohabiting couples who have lived together for fewer than three years are permitted to participate.

## Appendix E

## Email Response to Potential Participants

Hello inserted First Name,
Thank you so much for your interest in my study. My name is Anna Arcuri and I am currently conducting a research study entitled Perceptions of Long-term Romantic Relationships. This study has been cleared by the Research Ethics Board (REB) at the University of Windsor. If you are eligible to participate, you and your partner will independently complete a series of online questionnaires that inquire about thoughts, feelings, and behaviours related to your current romantic relationship.

For you to participate in this study, please visit the study website at website was provided.
LOGIN NAME: was provided
LOGIN PASSWORD: was provided
RESEARCH IDENTIFICATION NUMBER: was provided
For your partner to participate in this study, your partner must visit website was provided.

## LOGIN NAME: was provided

LOGIN PASSWORD: was provided
RESEARCH IDENTIFICATION NUMBER: was provided
Please complete the online questionnaires within the next 7 days. Please complete the questionnaires separately from your partner and do not discuss your responses until he or she has completed the study as well. Your partner will be asked to select the preferred method of compensation and provide an address where compensation will be mailed upon study completion. The total length of time for participation is approximately 50 minutes per partner. Any information that you provide in connection with this study will remain confidential.

If you and your partner wish to complete the online study at the University of Windsor, you will be entered into a draw to win a $\$ 25$ gift card to Cara Restaurants (i.e., Swiss Chalet, Montana's, Harvey's, Milestones, or Kelsey's) in addition to your compensation. Please notify me if you wish to complete this study at the University of Windsor and we can arrange an appointment.

Please contact me if you have any questions or concerns. Feel free to forward my email to others who may be interested in participating in this research.

Thank you for your time! Your participation will help me with my dissertation and is greatly appreciated!

Anna

## Appendix F

## Community Sample: Letter of Information for Consent; Partner 1

## LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

## Title of Study: Perceptions of Long-term Romantic Relationships

You are asked to participate in a research study within the Department of Psychology at the University of Windsor. This study is being conducted by Anna Arcuri, M.A. under the supervision of Dr. Cheryl D. Thomas and Dr. Josee Jarry, in partial fulfilment of the requirements for the Ph.D. degree. This study is supported by a grant from the Social Sciences and Humanities Research Council (SSHRC) and has been reviewed and cleared by the Research Ethics Board (REB) at the University of Windsor.

If you have any questions or concerns about the research, please feel free to contact Anna Arcuri at arcuri@uwindsor.ca; Dr. Cheryl Thomas at cdthomas@uwindsor.ca or 519.253.3000 Ext. 2252; or Dr. Josee Jarry at jjarry@uwindsor.ca or 519.253.3000 Ext. 2237.

## PURPOSE OF THE STUDY

The purpose of this study is to evaluate thoughts, feelings, and behaviours among longterm romantic partners.

## PROCEDURES

If you are eligible to volunteer to participate in this study, you will complete a number of online questionnaires that inquire about your current romantic relationship. Your partner will also complete a number of online questionnaires. The total length of time for participation is approximately 50 minutes per partner. Please complete the questionnaires separately from your partner and do not discuss your responses until he or she has completed the study as well. If you wish, you may discuss your responses with your partner after you both complete the study.

## POTENTIAL RISKS AND DISCOMFORTS

There are no known or expected physical, psychological, emotional, financial, or social risks associated with participating in this study. However, some questions inquire about your romantic relationship and experiences that some people may find mildly distressing. Participation in this study may impact the way you or your partner think and feel about your relationship. You are free to withdraw from the study at any point, if you wish. If you do experience mild distress, please visit http://www.cmha/ca/bins/index.asp for a list of Canadian Mental Health Association offices or visit http://www.caspacps.ca/crisiscentres.asp for a list of distress lines across Canada. Please visit
http://www.ksre.ksu.edu/library/famlf2/mf2297.pdf for couples' resources about relationships.

## POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The information gathered may further the understanding of the study of romantic relationships among long-term, unmarried partners. Findings may contribute to the development of pre-marital couples education counselling and the prevention of potential divorce. Participation in this study may also positively impact the way you or your partner think or feel about your relationship.

## COMPENSATION FOR PARTICIPATION

After your partner completes the online study, he or she will be asked to select either a Famous Players Cineplex Odeon Movie Package (2 Admissions, 2 Soft Drinks, and Popcorn) or a $\$ 20$ Shell Canada Gift Card and provide an address where compensation will be mailed.

## CONFIDENTIALITY

Any information that you provide in connection with this study that could identify you will remain confidential and will be disclosed only with your permission. You will not be asked to provide your name to complete the study and a research identification number has been provided to you to ensure that confidentiality of the data is maintained. Only summaries of group data are released; individual responses are not reported. Ethical research practice requires data records to be kept in a secure database for five years subsequent to the completion of the study.

## PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences. You may also refuse to answer any questions you don't want to answer and still remain in the study. You do have the option of removing the data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

## FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

A summary of the results of this study can be accessed on the University of Windsor, Research Ethics Board site (http://uwindsor.ca/reb) in October 2013.

## SUBSEQUENT USE OF DATA

This data may be used in subsequent studies.

## RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics @uwindsor.ca.

## SIGNATURE OF RESEARCH PARTICIPANT

I understand the information provided for the study Perceptions of Long-term
Romantic Relationships as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given the opportunity to print this form. By selecting "I Agree" I consent to participate in this study.

These are the terms under which I will conduct research.

[^1]
## Appendix G

## Community Sample: Letter of Information for Consent; Partner 2

## LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

## Title of Study: Perceptions of Long-term Romantic Relationships

You are asked to participate in a research study within the Department of Psychology at the University of Windsor. This study is being conducted by Anna Arcuri, M.A. under the supervision of Dr. Cheryl D. Thomas and Dr. Josee Jarry, in partial fulfilment of the requirements for the Ph.D. degree. This study is supported by a grant from the Social Sciences and Humanities Research Council (SSHRC) and has been reviewed and cleared by the Research Ethics Board (REB) at the University of Windsor.

If you have any questions or concerns about the research, please feel free to contact Anna Arcuri at arcuri@uwindsor.ca; Dr. Cheryl Thomas at cdthomas@uwindsor.ca or 519.253.3000 Ext. 2252; or Dr. Josee Jarry at jjarry @ uwindsor.ca or 519.253.3000 Ext. 2237.

## PURPOSE OF THE STUDY

The purpose of this study is to evaluate thoughts, feelings, and behaviours among longterm romantic partners.

## PROCEDURES

If you are eligible to volunteer to participate in this study, you will complete a number of online questionnaires that inquire about your current romantic relationship. Your partner will also complete a number of online questionnaires. The total length of time for participation is approximately 50 minutes per partner. Please complete the questionnaires separately from your partner and do not discuss your responses until you have completed the study. If you wish, you may discuss your responses with your partner after you both complete the study.

## POTENTIAL RISKS AND DISCOMFORTS

There are no known or expected physical, psychological, emotional, financial, or social risks associated with participating in this study. However, some questions inquire about your romantic relationship and experiences that some people may find mildly distressing. Participation in this study may impact the way you or your partner think and feel about your relationship. You are free to withdraw from the study at any point, if you wish. If you do experience mild distress, please visit http://www.cmha/ca/bins/index.asp for a list of Canadian Mental Health Association offices or visit http://www.caspacps.ca/crisiscentres.asp for a list of distress lines across Canada. Please visit http://www.ksre.ksu.edu/library/famlf2/mf2297.pdf for couples' resources about
relationships.

## POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The information gathered may further the understanding of the study of romantic relationships among long-term, unmarried partners. Findings may contribute to the development of pre-marital couples education counselling and the prevention of potential divorce. Participation in this study may also positively impact the way you or your partner think or feel about your relationship.

## COMPENSATION FOR PARTICIPATION

After you complete the online study, you will be asked to select either a Famous Players Cineplex Odeon Movie Package (2 Admissions, 2 Soft Drinks, and Popcorn) or a $\$ 20$ Shell Canada Gift Card and provide an address where compensation will be mailed.

## CONFIDENTIALITY

Any information that you provide in connection with this study that could identify you will remain confidential and will be disclosed only with your permission. You will not be asked to provide your name to complete the study and a research identification number has been provided to you to ensure that confidentiality of the data is maintained. Only summaries of group data are released; individual responses are not reported. Ethical research practice requires data records to be kept in a secure database for five years subsequent to the completion of the study.

## PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences. You may also refuse to answer any questions you don't want to answer and still remain in the study. You do have the option of removing the data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

## FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

A summary of the results of this study can be accessed on the University of Windsor, Research Ethics Board site (http://uwindsor.ca/reb) in October 2013.

## SUBSEQUENT USE OF DATA

This data may be used in subsequent studies.

## RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without
penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics @uwindsor.ca.

## SIGNATURE OF RESEARCH PARTICIPANT

I understand the information provided for the study Perceptions of Long-term Romantic Relationships as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given the opportunity to print this form. By selecting "I Agree" I consent to participate in this study.

These are the terms under which I will conduct research.

[^2]
## Appendix H

## Participant Pool: Letter of Information for Consent; Student Form

## LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

## Title of Study: Perceptions of Long-term Romantic Relationships

You are asked to participate in a research study within the Department of Psychology at the University of Windsor. This study is being conducted by Anna Arcuri, M.A. under the supervision of Dr. Cheryl D. Thomas and Dr. Josee Jarry, in partial fulfilment of the requirements for the Ph.D. degree. This study is supported by a grant from the Social Sciences and Humanities Research Council (SSHRC) and has been reviewed and cleared by the Research Ethics Board (REB) at the University of Windsor.

If you have any questions or concerns about the research, please feel free to contact Anna Arcuri at arcuri@uwindsor.ca; Dr. Cheryl Thomas at cdthomas@uwindsor.ca or 519.253.3000 Ext. 2252; or Dr. Josee Jarry at jjarry @ uwindsor.ca or 519.253.3000 Ext. 2237.

## PURPOSE OF THE STUDY

The purpose of this study is to evaluate thoughts, feelings, and behaviours among longterm romantic partners.

## PROCEDURES

If you are eligible to volunteer to participate in this study, you will complete a number of online questionnaires that inquire about your current romantic relationship. Your partner will also complete a number of online questionnaires. The total length of time for participation is approximately 50 minutes per partner. Please complete the questionnaires separately from your partner and do not discuss your responses until he or she has completed the study as well. If you wish, you may discuss your responses with your partner after you both complete the study.

## POTENTIAL RISKS AND DISCOMFORTS

There are no known or expected physical, psychological, emotional, financial, or social risks associated with participating in this study. However, some questions inquire about your romantic relationship and experiences that some people may find mildly distressing. Participation in this study may impact the way you or your partner think and feel about your relationship. You are free to withdraw from the study at any point, if you wish. If you do experience mild distress, please visit http://www.cmha/ca/bins/index.asp for a list of Canadian Mental Health Association offices or visit http://www.caspacps.ca/crisiscentres.asp for a list of distress lines across Canada. Please visit http://www.ksre.ksu.edu/library/famlf2/mf2297.pdf for couples' resources about
relationships. Free services for students are also available on campus at: Student Counselling Centre, room 293 on the 2nd floor of the CAW Student Centre; 519.253.3000 Ext. 4616. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The information gathered may further the understanding of the study of romantic relationships among long-term, unmarried partners. Findings may contribute to the development of pre-marital couples education counselling and the prevention of potential divorce. Participation in this study may also positively impact the way you or your partner think or feel about your relationship.

## COMPENSATION FOR PARTICIPATION

You may be eligible to receive 1 bonus credit for classes involved with the Psychology Research Participant Pool. There is no financial compensation for your participation in this research.

## CONFIDENTIALITY

Any information that you provide in connection with this study that could identify you will remain confidential and will be disclosed only with your permission. You will not be asked to provide your name to complete the study and a research identification number has been provided to you to ensure that confidentiality of the data is maintained. Only summaries of group data are released; individual responses are not reported. Ethical research practice requires data records to be kept in a secure database for five years subsequent to the completion of the study.

## PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences. You may also refuse to answer any questions you don't want to answer and still remain in the study. You do have the option of removing the data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

## FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

A summary of the results of this study can be accessed on the University of Windsor, Research Ethics Board site (http://uwindsor.ca/reb) in October 2013.

## SUBSEQUENT USE OF DATA

This data may be used in subsequent studies.

## RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without
penalty. If you have questions regarding your rights as a research subject, contact: Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics @uwindsor.ca.

## SIGNATURE OF RESEARCH PARTICIPANT

I understand the information provided for the study Perceptions of Long-term Romantic Relationships as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given the opportunity to print this form. By selecting "I Agree" I consent to participate in this study.

These are the terms under which I will conduct research.

[^3]
## Appendix I

## Participant Pool: Letter of Information for Consent; Partner Form

## LETTER OF INFORMATION FOR CONSENT TO PARTICIPATE IN RESEARCH

## Title of Study: Perceptions of Long-term Romantic Relationships

You are asked to participate in a research study within the Department of Psychology at the University of Windsor. This study is being conducted by Anna Arcuri, M.A. under the supervision of Dr. Cheryl D. Thomas and Dr. Josee Jarry, in partial fulfilment of the requirements for the Ph.D. degree. This study is supported by a grant from the Social Sciences and Humanities Research Council (SSHRC) and has been reviewed and cleared by the Research Ethics Board (REB) at the University of Windsor.

If you have any questions or concerns about the research, please feel free to contact Anna Arcuri at arcuri@uwindsor.ca; Dr. Cheryl Thomas at cdthomas@uwindsor.ca or 519.253.3000 Ext. 2252; or Dr. Josee Jarry at jjarry @uwindsor.ca or 519.253.3000 Ext. 2237

## PURPOSE OF THE STUDY

The purpose of this study is to evaluate thoughts, feelings, and behaviours among longterm romantic partners.

## PROCEDURES

If you are eligible to volunteer to participate in this study, you will complete a number of online questionnaires that inquire about your current romantic relationship. Your partner will also complete a number of online questionnaires. The total length of time for participation is approximately 50 minutes per partner. Please complete the questionnaires separately from your partner and do not discuss your responses until he or she has completed the study as well. If you wish, you may discuss your responses with your partner after you both complete the study.

## POTENTIAL RISKS AND DISCOMFORTS

There are no known or expected physical, psychological, emotional, financial, or social risks associated with participating in this study. However, some questions inquire about your romantic relationship and experiences that some people may find mildly distressing. Participation in this study may impact the way you or your partner think and feel about your relationship. You are free to withdraw from the study at any point, if you wish. If you do experience mild distress, please visit http://www.cmha/ca/bins/index.asp for a list of Canadian Mental Health Association offices or visit http://www.caspacps.ca/crisiscentres.asp for a list of distress lines across Canada. Please visit http://www.ksre.ksu.edu/library/famlf2/mf2297.pdf for couples' resources about
relationships.

## POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The information gathered may further the understanding of the study of romantic relationships among long-term, unmarried partners. Findings may contribute to the development of pre-marital couples education counselling and the prevention of potential divorce. Participation in this study may also positively impact the way you or your partner think or feel about your relationship.

## COMPENSATION FOR PARTICIPATION

You will receive a $\$ 10$ gift card to Tim Horton's for participation in this research. You will be asked to provide a mail address where the compensation will be provided upon study completion.

## CONFIDENTIALITY

Any information that you provide in connection with this study that could identify you will remain confidential and will be disclosed only with your permission. You will not be asked to provide your name to complete the study and a research identification number has been provided to you to ensure that confidentiality of the data is maintained. Only summaries of group data are released; individual responses are not reported. Ethical research practice requires data records to be kept in a secure database for five years subsequent to the completion of the study.

## PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences. You may also refuse to answer any questions you don't want to answer and still remain in the study. You do have the option of removing the data from the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

## FEEDBACK OF THE RESULTS OF THIS STUDY TO THE SUBJECTS

A summary of the results of this study can be accessed on the University of Windsor, Research Ethics Board site (http://uwindsor.ca/reb) in October 2013.

## SUBSEQUENT USE OF DATA

This data may be used in subsequent studies.

## RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. If you have questions regarding your rights as a research subject, contact:

Research Ethics Coordinator, University of Windsor, Windsor, Ontario N9B 3P4; Telephone: 519-253-3000, ext. 3948; e-mail: ethics@uwindsor.ca.

## SIGNATURE OF RESEARCH PARTICIPANT

I understand the information provided for the study Perceptions of Long-term
Romantic Relationships as described herein. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given the opportunity to print this form. By selecting "I Agree" I consent to participate in this study.

## SIGNATURE OF INVESTIGATOR

These are the terms under which I will conduct research.

[^4]
## Appendix J

## Screening Questions

1. Are you older than 20 years of age?
[ ] Yes
[ ] No
2. Are you currently involved in a heterosexual romantic relationship?
[ ] Yes
[ ] No
3. Are you married?
[ ] Yes
[ ] No
4. Are you involved in a monogamous romantic relationship?
[ ] Yes
[ ] No
5. Do you have children?
[ ] Yes
[ ] No
6. Have you been continuously involved in your relationship with your current romantic partner for more than 6 months?
[ ] Yes
[ ] No
7 (a). Are you currently living with your current romantic partner? (If yes, answer question 7b)
[ ] Yes
[ ] No
7 (b). Have you lived together for more than 3 years?
[ ] Yes
[ ] No

## Appendix K

## Reminder Email for Study Completion

Hello inserted First Name,
You are receiving this email because I realized that you or your partner has not yet completed the online study entitled Perceptions of Long-term Romantic Relationships.

This is just a reminder email should you and your partner still be interested in participating. Below is the information that you will need to participate.

Thanks again for your interest in my project!

Anna

Note. Original Email with study website, login, and password information was forwarded.

## Appendix L

Bivariate correlations between dyad partners (along the diagonal), women (above diagonal) and men (below the diagonal)

| $(N=113)$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Discrepancy | . $34 * *$ | . 10 | -.45** | . 25 ** | . $38 * *$ | . $34 * *$ | . $45^{* *}$ | . 07 |
| 2. High standards | . 01 | .28** | . 03 | . 06 | -. 13 | -. 00 | . 02 | . 31 ** |
| 3. Constructive communication | -.35** | . 03 | . 68 ** | -.65** | $-.56 * *$ | -. $71 * *$ | . $36 * *$ | -. 07 |
| 4. Demand-withdraw | . $25^{* *}$ | -. 00 | -. 75 ** | .56** | .48** | . $94 * *$ | $-.28 * *$ | . 17 |
| 5. Mutual avoidance | . 28 ** | -. 16 | $-.59 * *$ | . $57 * *$ | -. 34 | . $75 * *$ | -.40** | . 01 |
| 6. Negative communication | . 29 ** | -. 06 | $-.78 * *$ | . 96 ** | .78** | .57** | -.36 ** | . 13 |
| 7. Relationship quality | . $40 * *$ | . 10 | . $36 * *$ | -.28** | .47** | -.37** | .56** | . 01 |
| 8. Self-oriented perfectionism | . 14 | . $38 * *$ | -. 06 | . 05 | -. 02 | . 03 | -. 01 | -. 00 |

Note. Discrepancy = maladaptive dyadic perfectionism; negative communication $=$ demand-withdraw and mutual avoidancewithholding communication patterns.
** $p<.01$. (two-tailed test).

## Appendix M

Means and Standard Deviations Based on Recruitment Method

| Variable | Community$(N=68)$ |  | Participant Pool$(N=45)$ |  | $\begin{gathered} \begin{array}{c} t- \\ \text { statistic } \end{array} \\ \hline t(113) \end{gathered}$ | Cohen's <br> $d$$d$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M | $S D$ | M | $S D$ |  |  |
| Relationship quality |  |  |  |  |  |  |
| Partner 1: Females | 113.39 | 11.00 | 112.16 | 13.41 | -0.53 | 0.10 |
| Partner 2: Males | 113.95 | 10.83 | 113.32 | 10.68 | -0.30 | 0.06 |
| Discrepancy |  |  |  |  |  |  |
| Partner 1: Females | 35.79 | 13.93 | 36.20 | 14.17 | 0.16 | 0.03 |
| Partner 2: Males | 29.21 | 10.09 | 33.01 | 12.83 | 1.76 | 0.33 |
| High standards |  |  |  |  |  |  |
| Partner 1: Females | 32.46 | 5.84 | 29.68 | 6.05 | 2.45* | 0.47 |
| Partner 2: Males | 30.62 | 7.11 | 29.02 | 8.33 | -1.20 | 0.21 |
| Constructive communication |  |  |  |  |  |  |
| Partner 1: Females | 13.82 | 8.69 | 10.43 | 9.22 | -1.99* | 0.38 |
| Partner 2: Males | 12.24 | 8.93 | 8.79 | 10.37 | -1.88 | 0.36 |
| Demand-withdraw |  |  |  |  |  |  |
| Partner 1: Females | 19.93 | 8.71 | 23.60 | 8.74 | 2.19* | 0.42 |
| Partner 2: Males | 21.69 | 10.03 | 23.56 | 9.92 | . 972 | 0.19 |
| Mutual avoidance |  |  |  |  |  |  |
| Partner 1: Females | 7.63 | 4.83 | 8.16 | 4.13 | 0.60 | 0.12 |
| Partner 2: Males | 8.06 | 4.42 | 8.70 | 4.31 | 0.76 | 0.15 |
| Negative communication |  |  |  |  |  |  |
| Partner 1: Females | 27.56 | 11.85 | 31.76 | 11.27 | 1.88 | 0.36 |
| Partner 2: Males | 29.75 | 13.15 | 32.26 | 12.75 | 1.00 | 0.19 |
| Self-oriented perfectionism |  |  |  |  |  |  |
| Partner 1: Females | 73.95 | 14.25 | 71.34 | 15.62 | -0.92 | 0.17 |
| Partner 2: Males | 67.94 | 14.28 | 69.53 | 13.87 | 0.59 | 0.11 |

Note. Discrepancy = maladaptive dyadic perfectionism; negative communication = demand-withdraw and mutual avoidance-withholding communication patterns.

* $p<.05$. (two-tailed test).


## Appendix $\mathbf{N}$

## Means and Standard Deviations Based on Relationship Status

\(\left.$$
\begin{array}{lccccccccc}\hline & \begin{array}{c}\text { Dating } \\
(N=57)\end{array} & \begin{array}{c}\text { Engaged } \\
(N=7)\end{array} & \begin{array}{c}\text { Cohabiting } \\
(N=36)\end{array} & \begin{array}{c}\text { Engaged \& } \\
\text { Cohabiting } \\
(N=13)\end{array}
$$ \& F -ratio <br>
\hline Variable \& M \& S D \& M \& S D \& M \& S D \& M \& S D \& F <br>

(113)\end{array}\right]\)|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Relationship quality |  |  |  |  |  |  |  |  |
| $\quad$ Partner 1: Females | 112.46 | 12.23 | 118.86 | 3.98 | 112.51 | 13.75 | 112.69 | 7.62 |
| $\quad$ Partner 2: Males | 113.22 | 11.44 | 120.57 | 5.38 | 112.55 | 11.12 | 115.31 | 7.27 |
| Discrepancy |  |  |  |  |  |  |  |  |
| $\quad$ Partner 1: Females | 36.91 | 13.23 | 30.14 | 6.79 | 36.21 | 16.62 | 34.15 | 12.08 |
| $\quad$ Partner 2: Males | 30.39 | 10.14 | 31.00 | 14.98 | 31.9 | 13.22 | 28.62 | 9.67 |
| High standards |  |  |  |  |  |  |  | 0.30 |
| $\quad$ Partner 1: Females | 32.04 | 5.61 | 30.14 | 6.20 | 30.52 | 6.62 | 31.31 | 6.60 |
| $\quad$ Partner 2: Males | 31.45 | 6.87 | 28.43 | 6.95 | 28.04 | 8.73 | 29.77 | 7.26 |
|  |  |  |  |  |  |  |  | 1.61 |

| Constructive communication |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\quad$ Partner 1: Females | 12.62 | 9.27 | 11.00 | 8.70 | 12.73 | 9.36 | 11.92 | 7.93 | 0.09 |
| Partner 2: Males | 10.79 | 9.23 | 13.14 | 9.12 | 10.41 | 10.83 | 11.23 | 8.95 | 0.16 |
| Demand-withdraw |  |  |  |  |  |  |  |  |  |
| Partner 1: Females | 21.30 | 8.46 | 24.00 | 9.81 | 21.08 | 10.20 | 21.23 | 6.66 | 0.22 |
| Partner 2: Males | 22.91 | 9.15 | 26.29 | 14.73 | 21.19 | 11.07 | 21.69 | 7.63 | 0.59 |
| Mutual avoidance-withholding |  |  |  |  |  |  |  |  |  |
| $\quad$ Partner 1: Females | 7.89 | 4.57 | 6.57 | 4.28 | 7.69 | 4.78 | 8.69 | 4.27 | 0.34 |
| Partner 2: Males | 8.28 | 4.58 | 7.00 | 3.56 | 8.18 | 4.34 | 9.54 | 4.03 | 0.56 |
| Negative communication |  |  |  |  |  |  |  |  |  |
| $\quad$ Partner 1: Females | 31.19 | 12.34 | 33.29 | 15.39 | 29.38 | 14.64 | 31.23 | 10.47 | 0.06 |
| Partner 2: Males | 29.19 | 11.43 | 30.57 | 13.70 | 28.78 | 13.05 | 29.92 | 9.32 | 0.25 |
| Self-Prescribed Perfectionism |  |  |  |  |  |  |  |  |  |
| Partner 1: Females | 73.24 | 13.64 | 81.86 | 15.07 | 69.74 | 16.24 | 75.38 | 14.43 | 1.56 |
| Partner 2: Males | 70.30 | 13.54 | 72.43 | 16.84 | 65.35 | 13.67 | 67.87 | 15.89 | 1.10 |

Discrepancy = maladaptive dyadic perfectionism; negative communication $=$ demand-withdraw and mutual avoidance-withholding communication patterns.

## Appendix 0

## Means and Standard Deviations Based on Participation Method

|  | In-lab <br> $(N=30)$ |  | Online <br> $(N=83)$ |  | $t$ - <br> statistic | Cohen's <br> $d$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | $M$ | $S D$ | $M$ | $S D$ | $t(113)$ | $d$ |
| Relationship quality |  |  |  |  |  |  |
| $\quad$ Partner 1: Females | 113.68 | 8.09 | 112.61 | 13.13 | 0.42 | 0.10 |
| Partner 2: Males | 114.81 | 7.32 | 113.30 | 11.73 | 0.66 | 0.15 |
| Discrepancy |  |  |  |  |  |  |
| $\quad$ Partner 1: Females | 36.87 | 13.73 | 35.62 | 14.11 | 0.42 | 0.09 |
| Partner 2: Males | 29.53 | 10.13 | 31.15 | 11.81 | -0.67 | 0.15 |
| High standards |  |  |  |  |  |  |
| Partner 1: Females | 31.41 | 5.01 | 31.33 | 6.42 | 0.06 | 0.01 |
| Partner 2: Males | 32.20 | 5.36 | 29.18 | 8.17 | 1.88 | 0.44 |
| Constructive communication |  |  |  |  |  |  |
| Partner 1: Females | 15.31 | 7.42 | 11.45 | 9.35 | $2.04^{*}$ | 0.46 |
| Partner 2: Males | 12.40 | 9.16 | 10.31 | 9.79 | 1.02 | 0.22 |
| Demand-withdraw |  |  |  |  |  |  |
| Partner 1: Females | 19.27 | 8.73 | 22.16 | 8.84 | -1.54 | 0.33 |
| Partner 2: Males | 20.07 | 8.91 | 23.29 | 10.26 | -1.52 | 0.34 |
| Mutual avoidance |  |  |  |  |  |  |
| Partner 1: Females | 8.07 | 5.01 | 7.76 | 4.40 | 0.32 | 0.07 |
| Partner 2: Males | 8.17 | 3.91 | 8.37 | 4.54 | -0.22 | 0.05 |
| Negative communication |  |  |  |  |  |  |
| Partner 1: Females | 27.33 | 12.41 | 29.92 | 11.51 | -1.03 | 0.22 |
| Partner 2: Males | 28.24 | 11.67 | 31.65 | 13.38 | -1.24 | 0.27 |
| Self-oriented perfectionism |  |  |  |  |  |  |
| Partner 1: Females | 78.59 | 15.98 | 70.85 | 13.88 | $2.51^{*}$ | 0.52 |
| Partner 2: Males | 69.87 | 14.82 | 68.12 | 13.86 | 0.59 | 0.12 |

Note. Discrepancy = maladaptive dyadic perfectionism; negative communication = demand-withdraw and mutual avoidance-withholding communication patterns.

* $p<.05$. (two-tailed test).


## Vita Auctoris

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[^0]:    ${ }^{1}$ A non-significant chi-square statistic suggests a very good fit. RMSEA values below .06 indicate a good fit (Hu \& Bentler, 1999) and a stringent upper limit of .07 shows mediocre fit (Steigner, 2007). SRMR values less than .05 indicate well-fitting models (Byrne, 1998; Diamantopoulos and Siguaw, 2000) and values up to .08 are considered acceptable ( Hu and Bentler, 1999).

[^1]:    $\bigcirc$ I agree
    I disagree

[^2]:    I agree
    O I disagree

[^3]:    I agree
    O I disagree

[^4]:    C I agree
    O I disagree

