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An Examination of Daily Humour Styles and Relationship **Satisfaction in Dating Couples**

Sara Caird, The University of Western Ontario

Supervisor: Dr. Rod A. Martin, The University of Western Ontario A thesis submitted in partial fulfillment of the requirements for the Doctor of Philosophy degree in Psychology

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AN EXAMINATION OF DAILY HUMOUR STYLES AND RELATIONSHIP SATISFACTION IN DATING COUPLES

(Thesis format: Monograph)

by

Sara M. Caird

Graduate Program in Psychology

A thesis submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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Abstract

Humour can be both beneficial and harmful to romantic relationships. Research indicates that affiliative humour is associated with higher levels of relationship satisfaction, whereas aggressive humour is associated with lower levels of relationship satisfaction. However, past research is limited by its reliance on cross-sectional designs and general measures of humour use. Furthermore, little research has examined potential mediators that may account for the observed relationships between humour styles and relationship satisfaction. The current daily diary studies were the among the first to examine daily within-person associations between humour styles (specifically in the context of romantic relationship), relationship satisfaction, and positive and negative interactions within relationships, and to explore how these relationships are mediated by emotions and intimacy. **Method:** Samples of 193 and 200 university students involved in dating relationships completed online daily diaries that assessed humour styles in their relationships, relationship satisfaction, and interactions in their relationships, as well as emotions and intimacy in their relationships (Study 2 only). **Results:** Self-reported and perceived partner affiliative humour were associated with greater relationship satisfaction, whereas perceived partner aggressive humour was associated with reduced relationship satisfaction. Affiliative humour was a stronger predictor of relationship satisfaction than aggressive humour. The relationship between self-reported aggressive humour and relationship satisfaction was moderated by overall aggressive humour use across the study period, such that people who rarely used aggressive humour experienced positive relationships between aggressive humour and satisfaction, and people who often used aggressive humour experienced a negative relationship between the two variables. Positive relationship interactions were positively associated with affiliative humour, whereas negative

interactions were positively associated with aggressive humour. Furthermore, playfulness in

romantic relationships predicted higher daily use of affiliative humour. Finally, the

relationships between affiliative humour (both self-reported and perceived partner) and

relationship satisfaction were mediated by intimacy and positive emotion. **Conclusions:**

These results suggest that both self-reported and perceived partner humour styles play a role

in predicting relationship satisfaction within individuals on a day-to-day basis, and that these

associations are partially explained by increased intimacy and positive emotions.

Keywords: Humour Styles; Humour; Relationship Satisfaction; Daily Diary

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Chapter 1: Introduction

Humour is a social phenomenon that plays an important role in interpersonal relationships. Humour can strengthen bonds between individuals, but can also be used to demonstrate aggression and control others. Depending on the content, humour can promote or detract from relationship satisfaction. Different humour styles are associated with romantic relationship satisfaction. For instance, affiliative humour is linked to greater relationship satisfaction, whereas aggressive humour is often associated with lower levels of relationship satisfaction. The purpose of this dissertation is to explore daily associations between humour styles and relationship satisfaction within individuals over time, and to explore variables that may influence and account for these associations.

Theoretical Background

Before reviewing past research on humour and romantic relationships, it is important to understand theories of humour as a mode of communication in general, as well as functional theories of humour in interpersonal relationships. These theories are useful in conceptualizing past research and the current investigation.

Humorous communication. Humour is a form of interpersonal communication that can be used to convey implicit messages in an indirect manner and influence people in various ways (Mulkay, 1988). Humour is a unique mode of communication that differs from more serious methods of communication. Humorous communication generally incorporates elements of playfulness, mirth, and cognitive incongruity. These features may make humour an attractive mode of communication in romantic relationships. Playfulness and mirth may enhance enjoyment in romantic relationships, whereas the cognitive incongruity inherent in

humour may make it an attractive means to convey negative or relationship-threatening information.

First and foremost, humour is a playful form of communication. To highlight the playfulness of humour, Apter (1982), distinguished between *telic* and *paratelic* states, or modes of functioning. In the telic state, people are serious and engaged in goal-orientated behaviours. Conversely, in the paratelic state, individuals are not focused on serious concerns, but are enjoying the present moment and engaging in activities for their own sake. Apter suggested that individuals alternate between these two states multiple times each day, and that humour occurs in the paratelic state of mind. In support of Apter's theory, research has found that people are more likely to notice and enjoy humour, smile, and laugh more frequently in the paratelic or playful state (Martin, 1984; Ruch, 1994). Playfulness in romantic relationships has been associated with higher levels of relationship satisfaction, and individuals who are more playful also tend to be more humorous (Aune & Wong, 2002).

Consistent with the idea that humour is a playful method of communication, humour often also involves a shared emotional experience of mirth (Owren & Bachorowski, 2003; Russell et al., 2003; Shiota et al., 2004). Research indicates that humour leads to increases in positive affect and mood (Bachorowski & Owren, 2001; Foley et al., 2002; Neuhoff & Schaefer, 2002), which lowers anxiety and increases one's sense of well-being (Szabo, 2003). Because laughter in one individual can elicit mirth in another individual (e.g., Owren & Bachorowski, 2003), engaging in humour may be a means through which individuals can improve their conversational partners' mood and well-being, and enhance relationship interactions.

Another unique aspect of humorous communication is the involvement of cognitive incongruity, which has been described as the simultaneous activation of two or more selfconsistent, but normally incompatible or contradictory, frames of reference (Koestler, 1964). Mulkay (1988) argued that humour is a non bona fide mode of communication that functions differently than serious or bona fide communication. During bona fide communication, people seek to be clear and avoid ambiguity in their communications, whereas during non bona fide communication, people are able to embrace ambiguity and inconsistencies. The fact that humour is ambiguous and non-literal allows it to be open to multiple interpretations (Carrell, 1997). Indeed, the cognitive incongruity inherent in humour means that people can essentially say two different things at the same time, and individuals can use humour to send ambiguous messages. Speaking in a way that elicits multiple interpretations can be beneficial for some communicative purposes, and researchers have suggested that humour surpasses serious communication in achieving some communicative goals (Glucksberg, 1998; Kruez, Long, & Church, 1991) For instance, the ambiguous nature of humour may make it an attractive option for conveying threatening or sensitive information because humorous statements may be easier to retract (Brown & Levinson, 1987; Glucksberg, 1998; Johnson, 1990; Trees & Manusov, 1998). If a humorous statement is ill-received, individuals can say that they were "only joking."

In summary, humour is a unique mode of communication. Humour is playful, involves the pleasant emotional experience of mirth, and allows individuals to present contradictory ideas and interpret statements in more than one way. Positive and good-natured humour may be useful in romantic relationships because it enhances play and positive emotions, whereas the ambiguous nature of humour may facilitate communication.

Social functions of humorous communication. An understanding of the social functions of humour is also relevant to the current investigation. A number of researchers have suggested that humour serves serious communicative functions (e.g., Baxter, 1992; Bippus, 2000b; Bippus, 2003; Lynch, 2002; Martineau, 1972; Meyer, 2000; Mulkay, 1988; Spradley & Mann, 1975; Ziv, 2010), and scholars from the fields of anthropology (Radcliffe-Brown, 1952), sociology (Spradley & Mann, 1975), communication (Hay, 2000), and linguistics (Norrick & Spitz, 2008) have also proposed various functions of humour. Although humour scholars from a variety of disciplines have put forth different functional theories of humour, most theorists stress the dual nature of humorous communication. This is sometimes referred to as the "paradox of humour" (Lynch, 2002; Martin, 2007) or a "doubleedged sword" (Lyttle, 2007; Meyer, 2000; Rogerson-Revell, 2007). As Martineau (1972) stated, humour can be thought of as a social "lubricant" that helps initiate social interactions and keep them running smoothly. He noted that this is most often the intention and function of humour. However, humour can also be a social "abrasive" that creates interpersonal friction (Martineau, 1972).

A significant body of sociological research has documented the dual nature of humour in social groups (e.g., Coser, 1960; Radcliffe-Brown, 1952; Smith & Powell, 1988; Spradley & Mann, 1975). However, a discussion of the functions of humour at the dyadic level is more relevant to the examination of humour in romantic relationships.

Interpersonal communications scholars, Graham, Papa, and Brooks (1992) identified 24 functions of humour and created The Uses of Humour Index (UHI) to measure these different functions in relationships. Their analyses of this measure identified three main factors. The first factor, *positive affect*, refers to humour that makes light of situations, helps

strengthen bonds, and is used to be playful. The second factor, *expressiveness*, refers to humour used to disclose difficult information, express feelings, personality, likes and dislikes, and avoid social disclosure. The last factor, *negative affect*, refers to humour used to demean and belittle others, say negative things about others, or humble or rebuke others. In their conceptualization of the function of humour in interpersonal communication, they stress the positive and negative side of humour, along with its information sharing qualities.

In considering the functions of humour specifically in romantic relationships, psychologists de Koning and Weiss (2002) noted that humour could be used to express hostility within the marriage, assert one partner's wishes, lighten serious conversations, view marital problems in a different way, and defuse volatile or tense situations. Their research suggested that humour in a marriage could be divided into positive humour, negative humour, instrumental humour, and couples humour. Positive humour and couples humour highlight the bonding functions of humour, and were related to intimacy levels and marital satisfaction. Conversely, negative humour, referring to humour used to put down the partner, was inversely related to intimacy for wives, and partner negative humour was negatively related to marital satisfaction for both husbands and wives. Instrumental humour, or humour used by couples to avoid conflict, ease tension, and smooth over negative feelings, was not related to intimacy or marital satisfaction, but was related to a negative conflict resolution strategy, demand-withdrawal, for husbands. Negative humour was also related to demandwithdrawal, for both husbands and wives. Humour used for its positive and bonding functions was associated with better quality relationships, whereas demeaning and aggressive humour was linked to lower levels of relationship satisfaction.

Summary. At a societal level, humour serves to unite and divide groups (Meyer, 2000). At a dyadic interpersonal level, humour can be used to enhance positive affect, share information, and demean or belittle others (Graham et al., 1992). Within romantic relationships humour can be used to mitigate or avoid conflict (Bippus, 2003; de Koning & Weiss, 2002), increase feelings of intimacy (Barelds & Barelds-Dijkstra, 2010; Bippus, 2000; de Koning & Weiss, 2002), and hurt or control one's partner (Young & Bippus, 2001). These various functions of humour may help explain why it is associated in both positive and negative ways with romantic relationship satisfaction.

Humour styles framework. Clearly humour can be used in both positive and negative manners. The research to be reported in this dissertation focuses on humour use, both positive and negative, in romantic relationships. Therefore, a measurement of humour that incorporates both beneficial and harmful aspects of humour is necessary. The Uses of Humour Index (UHI; Graham et al., 1992) and the Relational Humour Inventory (RHI; de Koning & Weiss, 2002), described previously, divide humour into its proposed functions. Although early research with the UHI and the RHI seemed promising, these measures have not been widely used in subsequent research.

Over the past decade, the Humour Styles Questionnaire (HSQ; Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003) has become the most widely used framework for conceptualizing beneficial and detrimental uses of humour in relation to psychosocial wellbeing. Since its development in 2003, the Humour Styles Questionnaire (HSQ; Martin et al., 2003) has been used in over 100 studies. The HSQ's popularity and wide acceptance are due to the fact that it provides a useful conceptual framework of the everyday functions of humour. The 2 x 2 conceptualization first makes a distinctions between humour that

enhances the self or others, and then distinguishes between humour that is benevolent and kind versus humour that is potentially detrimental to the speaker or their relationships. The HSQ also accounts for a greater proportion of variance in psychosocial well-being than several other self-report humour scales (Martin et al., 2003). The HSQ has provided researchers with widely accepted definitions of different forms of humour, and has greatly added to the development and understanding of humour in relationship to psychosocial well-being. In the present studies, I used modified versions of the HSQ focusing specifically on humour arising within a dating relationship.

Martin and colleagues (2003) described two humour styles that are relatively benign and benevolent (affiliative and self-enhancing humour), and two styles that are potentially hurtful, either to the self (self-defeating humour), or to one's relationship with others (aggressive humour). Affiliative humour refers to non-hostile and tolerant humour that enhances relationships. Examples include funny stories, witty remarks, and amusing physical behaviours. Self-enhancing humour refers to the tendency to use humour to cope with unpleasant or stressful situations, maintain a humorous outlook on life, and regulate emotions. This type of humour serves to enhance the self, in a manner that is not harmful to others. In contrast, aggressive humour describes humour that enhances the speaker at the expense of a target. Aggressive humour is used to criticize or manipulate others, and includes sarcasm, excessive teasing, and socially inappropriate humour (e.g., sexist or racist jokes). Finally, self-defeating humour describes excessively self-disparaging humour and a tendency to amuse others at one's own expense. That is, individuals who use self-defeating humour may be attempting to enhance their relationships at their own expense.

These four styles of humour are differentially associated with relationship relevant variables. In general, the positive humour styles (particularly affiliative humour) are associated with more positive relationship outcomes, whereas the negative humour styles (particularly aggressive humour) are associated with more negative relationship outcomes (see Martin, 2007).

In the following section, I attempt to provide a thorough review of past research on humour and romantic relationships. To provide a context for the current investigation, I begin with studies that did not utilize the humour styles framework. I then introduce my conceptual model of the functions of humour in romantic relationships, from which I derived the hypotheses for my two studies. Finally, I discuss past research on humour styles and romantic relationships.

Past Research on Humour and Romantic Relationships

Researchers have investigated associations between humour and a number of relationship relevant constructs, including interpersonal attraction (McGee & Shevlin, 2009), mate selection (Sprecher & Regan, 2002), relationship satisfaction (Rust & Goldstein, 1989), attachment styles (Kazarian & Martin, 2004), intimacy (Hampes, 1992), and conflict resolution (Campbell, Martin, & Ward, 2008). Overall, these studies have provided support for the view that humour plays a role (both positive and negative) in romantic relationships.

Research taking a unidimensional approach to humour. Although recent theories have proposed both positive and negative functions of humour, a significant body of (mostly earlier) research conceptualized and operationally defined humour as a unidimensional phenomenon, which was typically conceptualized in positive terms. For example, the Humour Orientation Scale (Booth-Butterfield & Booth-Butterfield, 1991) predominately

assesses affiliative humour, whereas the Coping Humour Scale (Martin & Lefcourt, 1983) assesses self-enhancing humour. When measurements focus exclusively on the positive aspects of humour, it is not surprising that humour is positively related to desirable interpersonal outcomes.

Some of this past research has shown that humour may play a role in the initial formation of relationships. For example, several studies conducted across a variety of cultures have found that individuals perceive a sense of humour as a highly desirable characteristic in a potential mate (Daniel, O'Brien, McCabe, & Quinter, 1985; Goodwin & Tang, 1991; Lippa, 2007; Sprecher & Regan, 2002). Research findings also indicate that humour may enhance attraction (Bressler & Balshine, 2006; Miller, 2003). For example, humorous individuals are rated by their peers as more attractive (Wanzer, Booth-Butterfield, & Booth-Butterfield, 1996) and suitable for romantic relationships (McGee & Shevlin, 2009). Humour may also be used to signal attraction. Individuals are more likely to express humour, respond positively to humour through laughter, and consider others to be funny when they are already attracted to their conversational partners (Li, Griskevicius, Durante, Pasisz, & Aumer, 2009).

Humour also plays a role in established romantic relationships, and research suggests that it may help to maintain intimate relationships (Alberts, Yoshimura, Rabby, & Loschiavo, 2005; Bippus, 2000; Haas & Stafford, 2005). Indeed, couples report that humour is an important element of their romantic relationships. For instance, 92% of married couples thought humour played an important role in their marriages (Ziv, 1988), and wives and husbands, respectively, considered humour to be the 4th and 6th most important ingredient of a happy marriage (Lauer, Lauer, & Kerr, 1990). Additionally, appreciation of partners'

humour is correlated with relationship satisfaction (Ziv & Gadish, 1989), and dissatisfied couples tend to dislike their partners' sense of humour (Rust & Goldstein, 1989).

Humour has also been studied in relation to conflict interactions. Although initial observational work reported a low incidence of humour during conflict (Alberts, 1990), recent work relying on couples' perceptions of humour (as opposed to outside observers') found that humour was identified by at least one partner every 49 seconds (Bippus, Young, & Dunbar, 2011). Earlier observational studies investigating conflict resolutions among married couples found that positive and reciprocal humour use during conflict discussions were associated with affection (Gottman, 1994) and positive affect during conflict (Driver & Gottman, 2004). Furthermore, satisfied couples had higher levels of humour and laughter during problem discussions than dissatisfied couples (Carstensen, Gottman, & Levenson, 1995).

However, a recent study by Bippus, Young, and Dunbar (2011) found that humour use during conflict had differential effects for speakers and receivers. The more humour individuals used themselves during conflict, the more satisfied they were with their relationships, and the less they believed the conflict had escalated. Conversely, the more listeners perceived their relationship partners as using humour, the less satisfied they were with their relationships, and the less they believed they had made progress during the discussions. Whereas speakers' humour was positively associated with their personal relationship satisfaction, perceived speakers' humour was negatively associated with their partners' relationship satisfaction. These results point to the importance of assessing both partners' humour use, as actor humour and partner humour had opposite effects on relationship satisfaction and conflict resolution.

Research distinguishing various types of humour. As summarized in the previous section, many studies that used unidimensional conceptualizations of humour concluded that humour was valuable to romantic relationships. These results are not surprising, given that most researchers focused on positive forms of humour (i.e., affiliative and self-enhancing humour). When researchers began to separate humour into positive and negative facets, however, a more complicated picture of humour in romantic relationships emerged.

Several researchers have identified negative forms of humour use in relationships (Bippus, 2000; de Koning & Weiss, 2002; Krokoff, 1991; Martin et al., 2003). In open-ended interviews, 12% of married individuals described negative aspects of humour in their relationships, particularly using humour as a way of avoiding conflict. Many couples also described aggressive humour with their partners, suggesting that they used humour to jokingly tell their partners what they disliked about them or their relationship (Ziv, 1988). Research has demonstrated that individuals who are dissatisfied with their relationships are more likely to use hostile humour to joke about their partners in a negative way, whereas satisfied couples are more likely to use benign forms of humour (Alberts, Yoshimura, Rabby, & Loschiavo, 2005). Similarly, members of satisfied couples were found to tease each other in more prosocial ways than did less satisfied couples (Keltner et al., 1998).

In their review of the literature, Butzer and Kuiper (2008) identified three styles of humour used in romantic relationships: Positive humour, negative humour, and avoiding humour (used to reduce or avoid conflict). In their study, university students involved in dating relationships read vignettes describing either a pleasant situation or a conflict situation with their partners, and were asked to indicate how much they would use positive, negative, and avoiding humour in these scenarios. Individuals who were satisfied with their

relationships reported that they would use more positive humour, and less negative and avoiding humour in both the pleasant and conflict conditions. Conversely, individuals who were less satisfied with their relationships reported higher usage of negative humour in both conflict and pleasant situations.

A recent study conducted by Hall and Sereno (2010) examined the relationship between offensive joking (e.g., sexist, racist, and religion demeaning jokes) and relationship satisfaction and found that offensive humour predicted relationship dissatisfaction. However, when both members believed they were similar in their negative humour use, the offensive joking predicted relationship satisfaction. The authors concluded that negative humour use held little to no influence on relational outcomes. However, it is important to note that the offensive humour used in this study was not necessarily targeting relationship partners.

As noted earlier, de Koning and Weiss (2002) demonstrated that negative humour directed at partners (e.g., using humour to put partners down) was associated with reduced marital satisfaction among husbands and wives. Conversely, positive humour and couples humour was associated with greater marital satisfaction and intimacy.

Based on this short review, it is clear that positive and negative uses of humour are associated with relationship outcome variables in distinct ways. Positive forms of humour are associated with higher levels of relationship satisfaction, and negative or aggressive forms of humour are associated with lower levels of relationship satisfaction.

The 3 Factor Model of Humour and Relationship Satisfaction. Before discussing research that has utilized the HSQ, it is important to provide an overview of the 3 Factor Model of Humour and Relationship Satisfaction (3FM; Caird, 2013), as several of the research questions addressed in the present studies were derived from this conceptual model.

In this section, I discuss the 3FM, which I developed in an earlier paper (Caird, 2012), and briefly discuss research questions based on the model. The specific research questions addressed in the present studies will be summarized in a later section.

The 3FM (see Figure 1) attempts to explain how humour used in relationships can be either beneficial or detrimental to relationship satisfaction, and outlines three factors that influence whether humour used in romantic relationship will have beneficial or detrimental effects on relationship satisfaction. The 3FM stated that situational contexts, speaker's motives for using humour (as assessed by self-reported humour style), and receivers' perceptions about the speakers' motives for using humour (as assessed by perceived-partner humour style) would influence whether humour enhances or detracts from relationship satisfaction. Furthermore, I proposed that individual difference variables, such as conflict styles and attachment styles, would further influence humour's contribution to relationship satisfaction.

The first factor in the model is the situational context. Situational contexts may play a role in determining the types of humour that individuals engage in and their reasons for using humour, as well as receiver's perceptions about the speaker's humour use. In positive situations, speakers should be more likely to use positive humour styles, which in turn, may enhance relationship satisfaction. However, in negative or conflict scenarios, individuals may be more likely to use and perceive negative humour styles, which may be detrimental to relationship satisfaction. I also proposed that speakers should use more affiliative humour in social support scenarios. In the current investigation, I examined if individuals were more likely to use positive forms of humor in the context of pleasant interactions (e.g., being affectionate, doing special things for one another). I also examined if individuals were more

likely to use negative styles of humor when involved in negative interactions with their partner (e.g., unresponsiveness, criticism, relationship doubts).

The second factor is the speaker's intentions for using humour. Although these intentions are not necessarily conscious, speakers may use humour in affiliative, aggressive, self-enhancing, or self-defeating manners. Speakers' intentions for humour are influenced by their relationship context and are associated with receivers' perceptions about humour use. Speakers' intentions for using humour may be associated with their own, and their partners' relationship satisfaction. In the current investigation, I examined if speakers' self-reported humour styles (a representation of speakers' intent for humour) predicted their own relationship satisfaction.

This model does not assume a direct correspondence between speakers' intentions for using humour and receivers' perceptions about the speakers' humour use. In some cases, individuals may believe their humour is affiliative, whereas their partners may view the same remark as aggressive. Receivers' perceptions about why their partners used humour is the third factor in the model. If receivers believe their partners used humour for positive reasons (i.e., affiliative and self-enhancing humour) they may be more likely to feel positive about their relationships. Conversely, the perception of aggressive and self-defeating humour may be detrimental to relationship satisfaction. In the current investigations, I examined if participants' perceptions of their partners' humour styles predicted participants' own relationship satisfaction.

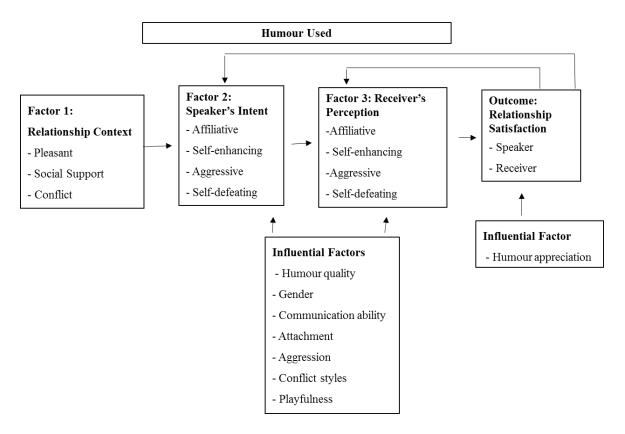


Figure 1. Three-factor model of humour and relationship satisfaction.

As depicted in Figure 1, I proposed that a number of individual difference variables would influence the relationship between humour use and relationship satisfaction. For example, good quality or funny humour should be linked to more positive outcomes than poor quality humour, and communication abilities may influence how closely speakers' intent and receiver perceptions of humour use correlate. Relationship variables, such as attachment dimensions, playfulness, and conflict styles may also influence how humour is used and perceived in romantic relationships, and its associations with relationship satisfaction. Due to practical constraints, I was unable to examine all of this variables in the current investigations. I chose to focus on examining if attachment dimensions, playfulness, and conflict styles influenced humour styles.

The current investigations examined how conflict styles might influence the types of humour that individuals use in their relationships. Past research found that self-reported conflict styles were associated with self-reported humour styles. Those who reported integrating conflict styles (high concern for both self and other) endorsed higher levels of self-enhancing and affiliative humour, and lower levels of aggressive humour. Conversely, those who reported dominating conflict styles (high concern for self, low concern for other) reported higher levels of aggressive humour (Cann et al., 2008), and those who endorsed obligating conflict styles (low concern for self, high concern for other) reported higher levels of self-defeating humour. An avoiding conflict style (low concern for both self and other) was also positively associated with self-defeating humour (Cann, Norman, Welbourne, & Calhoun, 2008).

Building upon this cross-sectional research linking particular conflict styles to humour styles, I examined if conflict styles moderate the associations between negative

interactions and humour styles. For instance, those whose conflict style involves escalating conflicts may have a stronger association between negative interactions and aggressive humour use. Conversely, those who are fairly compliant during conflict may utilize more self-defeating humour during conflict than those who are less compliant.

I also examined if attachment dimensions influenced the types of humour used by individuals. In past research, attachment anxiety (i.e., concerns about abandonment and rejection; Brennan, Clark, & Shaver, 1998) was related to lower levels of self-enhancing and affiliative humour and higher levels of self-defeating humour (Cann et al., 2008; Kazarian & Martin, 2004; Miczo, Averbeck, & Mariani, 2009; Winterheld, Simpson, & Orina, 2013). Attachment avoidance (i.e., reluctance to be involved in closer relationships and be dependent on others; Brennan et al., 1998) was related to lower levels of affiliative humour and higher levels of aggressive humour (Cann et al., 2008; Miczo et al., 2009; Winterheld et al., 2013). This past research has demonstrated cross-sectional correlations between attachment dimensions and humour styles. The current research investigated if attachment dimensions were associated with humour use on a daily basis.

I also proposed that a general tendency to be playful would predict the use of affiliative and self-enhancing humour (Caird, 2011). Adult play includes the use of goodnatured humour (Baxter, 1992), and is associated with greater relationship satisfaction and intimacy (Aune & Wong, 2002; Baxter, 1992; Betcher, 1981). Unsurprisingly, past research finds that playfulness is associated with greater use of positive humour (Aune & Wong, 2002; Miczo et al., 2009). The current research investigated if trait playfulness predicted affiliative and self-enhancing humour use on a daily basis.

Thus, the present research investigated several aspects of the 3FM. Specifically, I examined if situational contexts (positive or negative relationship interactions), conflict styles, attachment dimensions, and playfulness predict daily humour use. I also explored how actors' humour use and their perceptions of their partners' humour use are related to relationship satisfaction. These predictions will be discussed in more detail in latter sections. First, I will summarize additional research that has employed the HSQ to study humour in romantic relationships.

Research employing the Humour Styles Questionnaire. Before delving into research conducted with the HSQ, it is important to consider how studies tend to utilize this measure, as this has important implications for the current investigation. The HSQ was originally developed as a self-report measure of humour use in general, and not specifically for examining dyadic relationships. Researchers interested in relationships often assess both partners' humour styles. Most commonly, participants are asked to complete the original HSQ for themselves (self-report of humour styles) and to complete it for their partners (perception of partners' humour styles). In some studies, both members of couples participate, and partners provide self-reports of their own humour styles (partner self-reported humour styles). Throughout my discussion of past work, I attempt to highlight methodological considerations that are relevant to the current investigation. For instance, because the 3FM distinguishes between actors' own humour use and their perceptions of their partners' humour use, I differentiate between research that uses participants' self-

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¹ Studies 1 and 2 use modified versions of the HSQ to assess relationship-specific humour styles.

reported humour styles, participants' perceptions of their partner's humour styles, and partners self-reported humour styles

Self-reported humour styles. With respect to self-reported humour styles, research is somewhat inconclusive. Cann and colleagues (2011) found that self-reported humour styles (using the original HSQ) were not correlated with participants' relationship satisfaction or supportiveness, depth, and conflict in relationships. However, Puhlik-Doris (2004) found that participants' self-reported affiliative and self-enhancing humour were positively associated with relationship satisfaction, and that aggressive humour was positively related to relationship dissatisfaction.

Saroglou, Lacour, and Emeure (2010) examined the self-reported humour of married and divorced individuals, measuring humour styles by combining items from the HSQ, the Humorous Behaviour Q-Sort Deck (Craik, Lampert, & Nelson, 1996), and the Coping Humour Scale (Martin & Lefcourt, 1983). They found that married men and women self-reported using more affiliative humour than their divorced counterparts, and that married men (but not women) self-reported using less aggressive and self-defeating humour than their divorced counterparts. Among married men, self-reported self-enhancing humour was associated with greater marital satisfaction. For divorced men, self-reported affiliative humour was positively correlated with retrospective ratings of relationship satisfaction, whereas self-reported aggressive humour was negatively correlated with retrospective accounts of relationship satisfaction. For women, self-reported humour use appeared less relevant to relationship satisfaction. Among married women, there were no significant correlations between their own humour use and their relationship satisfaction. Among divorced women, only self-reported aggressive humour was significantly linked to

retrospective accounts of relationship satisfaction, such that women who reported higher use of aggressive humour reported lower retrospective ratings of marital satisfaction.

Perception of partners' humour styles. The majority of work on humour styles and relationship satisfaction obtained measurements of participants' perceptions of their partners' humour styles by slightly modifying the HSQ to ask about partners' humour use, instead of participants' own humour use. Cann and colleagues (2009) found that participants' perceptions of partners' affiliative and aggressive humour were associated with participants' relationship satisfaction. However, in a later study (Cann, Zapata, & Davis, 2011), they found that perceived partner humour styles were not associated with relationship satisfaction. However, perceived partners' affiliative and aggressive humour predicted higher and lower ratings of relationship support and depth, respectively, and perceptions of partners' self-enhancing humour was associated with less relationship conflict.

Puhlik-Doris (2004) also examined how perceptions of partners' humour styles were associated with participants' relationship satisfaction and dissatisfaction. She found that when participants perceived their partners as using higher amounts of affiliative humour, they were more satisfied with their relationships, and when partners were perceived as using lower levels of affiliative and self-enhancing humour, participants reported greater relationship dissatisfaction. Furthermore, perceptions of partners' aggressive humour use were correlated with greater relationship dissatisfaction.

In their study of married and divorced individuals, Saroglou and colleagues (2010) found that married men and women perceived their partners as using higher levels of affiliative humour than did their divorced counterparts. Women's ratings of men's humour were more strongly tied to women's marital status than were men's ratings of women's

humour. Married women reported that their husbands used higher levels of self-enhancing humour, and lower levels of aggressive and self-defeating humour compared to their divorced counterparts.

Partner reported humour styles. In studies that obtain measurements from both members of couples, researchers are able to examine how partners' self-reported humour is related to participants' self-reported relationship satisfaction. In one study, partners' self-reported humour styles did not predict participants' relationship satisfaction, or support, depth, and conflict in relationships (Cann et al., 2011). Similarly, Puhlik-Doris (2004) found no correlation between one partner's self-reported humour styles and the other partner's relationship satisfaction.

Other research suggests that partners' self-reported humour styles are related to participants' relationship satisfaction, although these findings are most salient among divorced individuals who were asked to retrospectively report on relationship satisfaction during their past marriages. Divorced men's retrospective ratings of relationship satisfaction were positively and negatively correlated with ex-wives self-reported self-enhancing and aggressive humour, respectively. Among divorced women, ex-husbands' self-reported affiliative humour was positively associated with retrospective relationship satisfaction, whereas ex-husband's self-reported aggressive humour was negatively associated with retrospective relationship satisfaction. Few correlations existed for still-married individuals. Among still-married men, wives' self-reported humour styles were not associated with men's relationship satisfaction. Among still-married women, only husband's self-reported self-enhancing humour was correlated with greater relationship satisfaction (Saroglou et al., 2010).

Observational studies. Although most work on humour styles and romantic relationships consists of questionnaire-based correlational studies, a few studies have employed observational and experimental methodologies. Observational studies (Campbell, Martin, & Ward, 2008; Winterheld et al., 2013) have focused on couples' spontaneous use of humour during laboratory-based conflict discussions and supportive interactions. In these studies, couples' interactions are videotaped, and trained observers code humour based on coding schemes derived from the HSQ. These studies shed light on the relative importance of actor and partner humour styles in relation to romantic relationships.

Winterheld, Simpson, and Orina (2013) examined relationships between observed affiliative, aggressive, and self-defeating humour use, self-reported attachment orientations, and observed responses to humorous behaviour, care-seeking behaviour, distress, and satisfaction with the conflict resolution. They found that actor attachment orientations were associated with actor humour use. Attachment avoidance was associated with greater aggressive humour and lower affiliative humour use, whereas attachment anxiety was associated with more self-defeating humour use during conflict discussions. These results indicate that participants' own humour use was related to their attachment orientations. Moreover, affiliative humour was associated with positive partner responses, specifically, more laughter, less anger, and greater satisfaction with conflict discussions. Actor affiliative humour use was also associated with actors' satisfaction with conflict discussions. Thus, for affiliative humour there were associations with actor and partner relationship variables. Actor aggressive humour was negatively associated with partners' satisfaction with conflict resolution, and greater partner-rated anger, but only when care-seeking behaviours were high.

The researchers also found that individuals used humour differently, depending on their partners' attachment orientations and observed care-seeking behaviour.

Campbell, Martin, and Ward (2008) also observed dating couples engaged in a conflict discussion, and focused exclusively on aggressive and affiliative humour use by coding humour used by each member of the couple and obtaining self-reports of relationship satisfaction. They found that individuals with higher relationship satisfaction had partners who used more affiliative and less aggressive humour during conflict discussion. In this study, one partner's observed humour use was associated with the other partner's relationship satisfaction. No significant associations were found between participants' own humour use and their own relationship satisfaction. Moreover, high levels of partners' affiliative humour were associated with greater feelings of closeness, perceived conflict resolution, and less self-reported distress following the discussion, but no actor effects were significant for affiliative humour. Conversely, high levels of aggressive humour among partners were related to lower levels of conflict resolution, and greater use of aggressive humour by actors was associated with greater distress following the discussions. Thus, for aggressive humour, both actor and partner effects emerged.

Taken together, these studies suggest that individuals' affiliative humour use during conflict tends to be most consistently associated with positive relationship outcomes for their partners rather than for themselves, and, similarly, that individuals' aggressive humour is most consistently associated with poorer outcomes for their partners rather than for themselves.

Observed humour styles have also been studied in the context of social support, as opposed to conflict, interactions. In their observational study of romantic partners, Howland

and Simpson (2014) examined associations between support-providers' use of affiliative and aggressive humour, observed supportiveness, and support-receivers' mood. They found that affiliative humour use by support-providers was associated with decreases in support-recipients' negative mood, and greater observed supportiveness. Conversely, support-providers' aggressive humour use was associated with lower observed supportiveness, and increases in recipients' negative mood following the interaction. This research suggests that humour plays a role in providing support, and that actors' use of affiliative and aggressive humour is correlated with partners' mood in the expected directions.

Experimental studies. Whereas observational studies have focused on established romantic relationships, experimental research in the field of humour styles and romantic relationship has focused only on attraction. Similar to the findings of earlier studies that examined sense of humour and attractiveness, humour styles have been demonstrated to influence mate attractiveness. Two studies have utilized vignettes to examine how humour styles influenced attraction to potential short- and long-term romantic partners (Cowan & Little, 2013; Didonato, Bedminster, & Machel, 2013). One study found that humour styles influenced suitability ratings for long-term relationships, but not for casual encounters. Both men and women were more interested in long-term potential partners who used affiliative humour (Didonato et al., 2013). Conversely, Cowan and Little (2015) found that affiliative humour was more attractive than aggressive humour in short- and long-term relationship contexts, but the distinction between affiliative and aggressive humour was especially important for long-term relationships. These studies focus on partner effects, or perceived partner humour use, and indicate that affiliative humour use is attractive in long-term relationships partners.

Questions Emerging from Past Research

Several important questions emerge from the review of past work. Specifically, the relative importance of self-reported, perceived partner, and partner reported humour, the relative importance of affiliative and aggressive humour, and potential mechanisms involved in the associations between humour styles and relationship satisfaction.

Importance of self-reported, perceived partner, and partner humour styles. One interesting question that emerges from the work on humour styles and romantic relationships is the relative importance of individuals' own use of humour, their partners' use of humour, or their perceptions of their partners' use of humour, in determining relationship satisfaction. As demonstrated in the previous section, some research finds that perceptions of partners' humour are correlated with participants' relationship satisfaction, whereas partner-reported humour styles are not (Cann et al., 2011). However, other researchers have found that both self-reported and perceived partner humour styles are correlated with participants' relationship satisfaction (Puhlik-Doris, 2004; Saroglou et al., 2010).

The importance of self-reported, perceived partner, and partner self-reported humour styles for actor's relationship satisfaction is an interesting avenue for exploration because it relates to the whether actor variables or partner variables are more strongly tied to relationship satisfaction. Furthermore, in the case of partner variables, there is a question of whether partners' own ratings of their characteristics or behaviours, or actors' perceptions of their partners' characteristics and behaviours are more predictive of relationship satisfaction. Although a great body of research examining personality characteristics finds that actor effects are more strongly correlated to relationship satisfaction than partner effects (e.g., Barelds, 2005; Dyrenforth, Kashy, Donnellan, & Lucas, 2010) little work has examined how

perceptions of partners' personality is tied to relationship satisfaction (Furler, Gomez, & Grob, 2014). Recent research has found that partner perceived personality traits are consistently associated with relationship satisfaction (Orth, 2013). Furthermore, Furler and colleagues (2014) found that partner-perceived personality showed the most prominent and consistent effects with both partners' relationship satisfaction, when compared to self-perceived personality (which was correlated with relationship satisfaction, but explained only a small proportion of variance), and self-perceived personality (which was not associated with partner relationship satisfaction). They concluded that the way romantic partners perceive one another is very important for relationship satisfaction, and they stressed the importance of assessing partner-perceptions of personality and predictors of relationship satisfaction.

To date, no research has directly compared the predictive abilities of self-reported versus perceived partner humour styles in association with relationship satisfaction.

However, one study directly compared the predictive abilities of self-reported aggressive humour use or partner-perceived aggressive humour use in determining partner embarrassment. Using data from both partners and the original HSQ, Hall (2010) determined that when both self-reported aggressive humour and perceived partner aggressive humour were accounted for, only perceived partner aggressive humour predicted feeling embarrassed about partners' humour use in public. Men's self-reported aggressive humour did not predict women's embarrassment, and women's self-reported aggressive humour did not predict men's embarrassment. In this study, perceptions of partners' humour were more important than how partners evaluated their own humour use. Partners were also fairly accurate in their perceptions of one another's humour, with correlations ranging from .58 to .63.

Importance of affiliative and aggressive humour. Social theories of humour suggest that humour acts as both a social "lubricant" and a "social abrasive" but that the relationship facilitating functions of humour are more common (Martineau, 1972). Indeed, past research focusing on romantic relationships (de Koning & Weiss, 2002) found that positive functions of humour (e.g., closeness) are nearly twice as common as negative functions (e.g., aggression). The majority of past work indicates that affiliative humour is a more strongly and more consistently associated with relationship satisfaction than aggressive humour (Caird & Martin, 2014; Cann et al., 2011; Hall, 2013). Although we have evidence that affiliative humour is more common in relationships, and social theories of humour suggest that bonding functions of humour are more frequent than dividing functions, we do not know if affiliative humour is more strongly related to satisfaction than aggressive humour. To answer this question, direct comparisons of the predictive abilities of affiliative and aggressive humour on relationship satisfaction are needed.

Mechanisms behind humour's association with relationship satisfaction. In considering the existing literature of humour styles and romantic relationships, affiliative humour emerges as a fairly consistent predictor of relationship satisfaction, followed by aggressive humour. Functional theories of humour suggest several ways in which humour could influence relationship satisfaction. For instance, affiliative humour is believed to promote bonding, positive affect, and intimacy between partners, which in turn may increase feelings of satisfaction. In contrast, aggressive humour can be used to express hostility towards relationship partners, producing an increase in negative affect which in turn may reduce feelings of satisfaction. It is possible that humour is associated with relationship satisfaction, in part, because of its social functions. For example, affiliative humour may be

linked to relationship satisfaction because this type of humour promotes bonding between couples. These sorts of hypotheses about mechanisms point to the importance of examining potential mediating variables linking particular humour styles to relationship satisfaction outcomes.

Only two studies have directly investigated variables that mediate links between humour and relationship satisfaction (Aune & Wong, 2002; Hall, 2013). Aune and Wong (2002) proposed a theoretical model of play in adult romantic relationships, whereby humour orientation (similar to affiliative humour) predicts playfulness, which in turn predicts positive emotion, which in turn predicts relationship satisfaction. They concluded that humour use was associated with more satisfactory relationships because it elicits positive emotions. Hall (2013) examined if positive functions of humour mediate links between humour styles and relationship satisfaction. He found that the association between affiliative humour and relationship satisfaction was mediated by the fun and enjoyment produced by humour. Taken together, these studies suggest that positive emotions would mediate the link between affiliative humour and relationship satisfaction. Although these studies provide a useful starting point, more investigations of potential mechanisms behind the link between humour styles and relationship satisfaction are warranted.

Summary of Past Research

Earlier research on humour in romantic relationships tended to use unidimensional and purely positive conceptualizations of humour, and these studies suggested that humour was an important element in romantic relationship (e.g., Lauer, Lauer, & Kerr, 1990; Ziv & Gadish, 1989). However, subsequent researchers noted that humour could be used in negative as well as positive ways and began to investigate both positive and negative humour

use in romantic relationships (e.g., Butzer & Kuiper, 2008; de Koning & Weiss, 2002). When positive and negative aspects of humour were considered, a more complex pattern of findings emerged. Studies found that positive humour was linked to positive relationship variables and negative humour was linked to negative relationship variables (Butzer & Kuiper, 2008), but other research questioned the significance of negative or offensive humour (Hall & Sereno, 2010).

Contemporary research on humour use in romantic relationships has tended to utilize the HSQ to capture positive and negative forms of humour. Research on humour styles and relationship satisfaction is somewhat inconsistent. There are contradictory findings regarding the predictive abilities of self-reported, perceived partner, and partner-reported humour styles. Some research suggests that self-reported humour styles are not associated with relationship satisfaction (Cann et al., 2011), but other research demonstrated links between all four self-reported humour styles and relationship satisfaction (Puhlik-Doris, 2004; Saroglou et al., 2010). As for perceptions of partner humour, affiliative and aggressive humour appear most relevant to relationship satisfaction (e.g., Cann et al., 2011; Puhlik-Doris, 2004). Finally, partner-reported affiliative and aggressive humour styles linked to relationship satisfaction in only one study (Saroglou et al., 2010).

As a whole, past studies on humour styles in romantic relationships have generally demonstrated links between affiliative humour and positive relationship outcome variables. Associations between aggressive humour use and negative relationship outcome are also fairly consistent. Findings regarding self-enhancing humour and self-defeating humour are somewhat less consistent. Because affiliative and aggressive humour are the most interpersonal humour styles, some researchers have chosen to focus exclusively on these two

humour styles (Campbell et al., 2008; Cowan & Little, 2013; Didonato et al., 2013; Howland & Simpson, 2014).

Limitations of Past Research

Before outlining my research questions and hypotheses, it is important to consider the limitations of past research, as these limitations have guided the methodology of the current investigations.

Trait measurement approach to humour styles. It is important to note that most correlational research (e.g., Cann et al., 2008; Cann et al., 2011) that has examined humour styles in romantic relationships used trait measurements of humour styles (i.e., the HSO; Martin et al., 2003) rather than a relationship-specific measure. The original HSQ measures humour use across a variety of relationships and situations, not in romantic relationships specifically. In research that focuses on specific relationships (e.g., romantic relationships), this use of trait-styles measurements is problematic because people may use humour differently in their romantic relationships than in other relationships. For example, a wife may see that her husband engages in aggressive humour with his male friends, and report that he engages in a high amount of aggressive humour. However, if the husband never uses humour to criticize or put down his wife, his wife's relationship satisfaction may not be affected by his use of aggressive humour. Aggressive humour that is directed towards relationship partners should impact relationship satisfaction far more than aggressive humour directed towards others. Similarly, individuals may use high levels of affiliative humour with friends, but have a relatively little humorous interaction with their partners. Although they may use affiliative humour in other relationships, this affiliative humour would not lead to increased bonding with their partners. To truly understand humour used in the context of

romantic relationships, it is important to only measure the humour used between the two relationship partners.

Cross-sectional designs. A further limitation of past research into humour and relationship satisfaction is the reliance on cross-sectional designs, which focus on between-person correlations at one point in time. In cross-sectional studies, a group of people complete trait measures of a variety of variables, on one occasion. Thus, cross-sectional methods provide researchers with a single snapshot of how overall levels of certain variables are related, and comparisons are made between people. In the case of humour and relationships, with cross-sectional designs we can conclude that people who report using more affiliative humour also tend to be more satisfied with their relationships, in comparison to those who use lower levels of affiliative humour.

In contrast to cross-sectional research, process-oriented research collects data at multiple time points (e.g., daily) to examine day-to-day changes within individuals. Because participants are asked to reflect on a shorter time span (e.g., the past 24 hours), repeated-measures designs also minimizes the bias of retrospective reporting (Bolger, Davis, & Rafaeli, 2003).

Curran and Bauer (2011) argued for the importance of within-person work in the field of psychology, because conceptually, patterns found at the between-person level may differ from those found at the within-person level, in both direction and magnitude (Bolger & Laurenceau, 2013). To demonstrate the potential differences between within- and between-person effects, Curran and Bauer (2011) point to the relationship between life expectancies and body mass index. "On average, species that are characterized by larger body mass tend to have longer life expectancies than species with smaller body mass. So whales tend to live

longer than cows, who tend to live longer than ducks. However, on average, individual members within a species who are characterized by larger body mass tend to have shorter life expectancies relative to members of their own species. So fat ducks tend to have shorter life expectancies than skinny ducks" (p. 588). This example illustrates that it is a mistake to assume that patterns found at the between-persons level also exist at the within-persons level.

The ongoing, dynamic nature of relationship satisfaction and humour use over time calls for research methodologies involving repeated measures of state-like variables and within-person analyses. Relationship satisfaction may fluctuate from day to day (Ruppel & Curran, 2012). Similarly, individuals may use more of a given style of humour one day, but less the next. In daily diary studies, repeated measures obtained from a sample of individuals are used to model distinct processes for each individual. Thus, it is possible to determine if associations between humour styles and relationship satisfaction that were previously found in between-person designs are also observed within individuals over time.

Relationship Focused Humour Styles and Relationship Satisfaction: A Repeated Measures Design

My Master's research (Caird, 2011; Caird & Martin, 2014) addressed the aforementioned limitations in the humour styles and romantic relationship literature by modifying the HSQ to examine humour use within the context of dating relationships, and by collecting information on humour styles and relationship satisfaction and dissatisfaction at seven different time points, through the use of online daily diaries.

In this previous study, I utilized a relationship-specific measure of humour styles to examine relationship satisfaction/dissatisfaction among university students involved in committed dating relationships. I modified the HSQ by shortening it from 32 to 12 items

(choosing items with the highest factor loadings on each subscale), changing the instructions to ask about humour used with dating partners in particular, and modifying the items to ask about humour use with boyfriends/girlfriends, instead of with people in general.

In order to examine dynamic correlations between humour styles and relationship satisfaction and dissatisfaction, I used online diaries to assess participants' use of humour styles and relationship satisfaction over the previous three days, a total of seven times. This approach allowed me to investigate associations at both the between- and within-persons level. At the within-persons level, increases in participants' self-reported daily affiliative humour use (relative to their own norms) were positively associated with increases in relationship satisfaction and decreases in relationship dissatisfaction (relative to their norms). Daily increases in self-enhancing humour were also associated with daily increases in relationship satisfaction, and daily increases in self-defeating humour were associated with increases in relationship dissatisfaction. Aggressive humour was not related to relationship satisfaction at the within-persons level.

At the between-persons level, participants' overall self-reported affiliative humour use across the study period positively predicted relationship satisfaction and negatively predicted relationship dissatisfaction. Conversely, participants' overall aggressive and self-defeating humour across the study period negatively predicted relationship satisfaction and positively predicted relationship dissatisfaction. Self-enhancing humour was not a significant predictor of relationship satisfaction at the between-persons level.

In summary, my method of data collection allowed me to compare findings at the between- and within- person levels. The findings for affiliative humour were mirrored at both levels. Those who use higher affiliative humour in comparison to others were more satisfied

with their relationships, and individuals were more satisfied with their relationships on days when they used more affiliative humour. However, aggressive humour was only associated with relationship satisfaction at the between-persons level. Thus, it appears that the negative association between aggressive humour and relationship satisfaction demonstrated in past cross-sectional research (e.g., Cann et al., 2009; Puhlik-Doris, 2004) does not extend to the within-persons level. Conversely, self-enhancing humour was only associated with relationship satisfaction at the within-persons level, and self-defeating humour was associated with relationship satisfaction only at the between-persons level, and with relationship dissatisfaction at both levels.

In addition to examining between and within-person associations, daily diary studies also enable researchers to explore cross-level interactions between both levels of analyses. For example, I was able to investigate if overall affiliative humour used across the study period (between-persons Level 2 variable created by averaging each person's daily humour scores) moderated the daily relationship between affiliative humour and relationship satisfaction (within-person, Level 1 variables). I found evidence for one cross-level interaction. Recall that I did not find a within-person association between self-defeating humour and relationship satisfaction. However, when overall levels of self-defeating humour were examined as a moderator of the daily relationship between the two variables, the results demonstrated distinct daily associations for those who use high versus low levels of self-defeating humour overall. For individuals who rarely used self-defeating humour across the study period, there was a weak but positive association between the daily use of self-defeating humour and relationship satisfaction. Conversely, for those who habitually used self-defeating humour, there was a strong negative association between the daily use of self-

defeating humour and relationship satisfaction. Consequently, Caird and Martin (2014) suggested that when people rarely engage in self-defeating humour, the occasional use of it may simply represent playful self-deprecating humour that fosters their relationships with others. In contrast, among individuals who habitually use humour to put themselves down, relationship difficulties may cause them to use self-disparaging humour as a way of gaining approval and ingratiating themselves with their partners. Thus, self-defeating humour may be a problem when used habitually, but not when used infrequently.

The Present Research

The overall goal of the current research was to extend my previous work by improving the methodology and delving deeper into the relationship between humour styles and relationship satisfaction. This was accomplished through two daily diary studies, referred to as Study 1 and Study 2. 2

One objective of the current investigation was to examine day-to-day, within-person associations between humour styles and relationship satisfaction. In addition to investigating daily self-reported humour styles, I examined participants' perceptions of their partners' humour styles and partners' self-reported humour style in relation to daily relationship satisfaction, and cross-level interactions between daily humour use and overall humour use. I also examined if positive and negative relationship interactions, attachment dimensions, conflict styles, and playfulness predicted daily humour use in relationships. Finally, intimacy and positive emotion were examined as variables that might mediate the links between

² Studies 1 and 2 differed in the research questions addressed and the methodology used.

affiliative humour and relationship satisfaction, and negative emotion was examined as a potential mediator of the link between aggressive humour and relationship satisfaction.

Objectives and Predictions of the Present Research

The overall purpose of the current research was to examine predictions made by the 3FM. Using daily diary methodology, Studies 1 and 2 examined between- and within-person associations between humour use and relationship satisfaction. Studies 1 and 2 also investigated if daily relationship interactions, attachment dimensions, conflict styles, and playfulness predicted daily humour styles. Finally, Study 2 examined the mechanisms behind the associations between humour styles and relationship satisfaction through the use of within-person mediation analyses.

In the present studies, university students from the research participation pool who were in dating relationships completed a series of online diaries that assessed humour styles, relationship satisfaction, and other variables of interest. Studies 1 and 2 were designed to address the following research questions:

- 1) Are humour styles (self-reported and perceived partner) associated with relationship satisfaction at the within-persons level?
- 2) Is perceived partner humour a better predictor of relationship satisfaction than selfreported humour?
- 3) Is affiliative humour a better predictor of relationship satisfaction than aggressive humour?
- 4) Does overall humour use moderate associations between daily humour use and relationship satisfaction?
- 5) Does partner self-reported humour predict participant relationship satisfaction?

- 6) Do positive and negative relationship interactions predict humour styles?
- 7) Do conflict styles moderate the association between humour use and negative relationship interactions?
- 8) Do attachment dimensions predict humour styles?
- 9) Does playfulness predict daily humour use?
- 10) Do intimacy and positive and negative emotions mediate links between humour styles and relationship satisfaction?

Research Question 1: Are humour styles (self-reported and perceived partner) associated with relationship satisfaction at the within-persons level? I predicted that on days participants use more positive humour styles with their partners, they would be more satisfied, and on days they use more negative humour styles, they would be less satisfied with their relationships.

I also examined the relative importance of participants' perceptions of their partners' humour use. Although research by Cann and colleagues (2011) suggested that individuals' perceptions of their partners' humour use was a better predictor of relationship satisfaction than participants' own humour use, I predicted that both participant and partner humour styles would predict relationship satisfaction (with the exception of aggressive humour). I expected that measuring humour used specifically in the context of the dating relationship would allow me to find associations between self-reported humour use and relationship satisfaction. In contrast, for aggressive humour, I predicted that perceived partner aggressive humour would be a better predictor of relationship satisfaction than self-reported aggressive humour.

Research Question 2: Is perceived partner humour a better predictor of relationship satisfaction than self-reported humour? I expected that both self-reported and perceived partner humour styles would be associated with participants' daily relationship satisfaction, and that, for the most part, neither self-reported nor perceived partner humour styles would be a stronger predictor. However, I expected that perceived partner aggressive humour would be a better predictor of relationship satisfaction than self-reported aggressive humour. Being targeted by partners' aggressive humour should have a negative impact on relationship satisfaction, whereas individuals using aggressive humour may believe their remarks are benign.

Research Question 3: Is affiliative humour a better predictor of relationship satisfaction than aggressive humour? I also compared the predictive strength of affiliative and aggressive humour have generally been found to be the most important predictors of relationship satisfaction. I hypothesized that affiliative humour (both self-reported and perceived partner) would be a stronger predictor of relationship satisfaction than aggressive humour. In romantic relationships, the uniting and bonding functions of humour should outweigh the aggressive and distancing aspects of humour.

Research Question 4: Do overall humour styles moderate associations between daily humour use and relationship satisfaction? I also explored cross-level interactions between overall use of humour (i.e., average of humour styles across the study period) and daily humour use in determining relationship satisfaction. I predicted that those who used a high amount of affiliative humour across the study period would show a stronger association between daily affiliative humour and relationship satisfaction. People who use significant

amounts of affiliative humour with their dating partners may do so because they feel that it benefits their relationships. Thus, they may experience a stronger daily association between affiliative humour and relationship satisfaction than those who use less affiliative humour overall. The same prediction was made for perceived partner affiliative humour.

I also predicted that those who used higher levels of aggressive humour across the study period would experience stronger negative relationships between daily aggressive humour and relationship satisfaction. Although some studies have failed to demonstrate a link between aggressive humour and relationship satisfaction, I expected that my relationship-specific measure of aggressive humour would be related to satisfaction. However, it may be that only high levels of aggressive humour are indicative of relationship satisfaction. Thus, I predicted that when overall aggressive humour use (self-reported and perceived partner) was high across the study period, the negative correlation between daily aggressive humour and relationship satisfaction would be stronger. Similarly to self-defeating humour, aggressive humour may only be problematic if used habitually. A small amount of aggressive humour may simply represent attempts to be funny, as opposed to attempts to make fun of or demean others.

I predicted that when overall self-enhancing humour use was high, there would be a stronger positive slope between participants' daily self-enhancing humour and their relationship satisfaction. When self-enhancing humour is used more frequently, individuals may become practiced at using this self-focused humour style to improve their mood and cope with stressors.

Finally, I predicted that overall self-defeating humour would moderate the slope between self-reported and perceived partner daily use of self-defeating humour and daily relationship satisfaction. The results of two previous diary studies of humour styles suggested that only relatively high levels of self-defeating humour are problematic to relationships and well-being (Caird & Martin, 2014; Edwards, 2013).

For perceived partner humour styles, I only made predictions for affiliative and aggressive humour. I expected that when participants perceived their partners as using high affiliative humour overall, there would be a stronger slope between daily partner affiliative humour and relationship satisfaction. I expected the opposite pattern for aggressive humour.

Research Question 5: Does partner self-reported humour predict participant relationship satisfaction? I also predicted that partner self-reported humour styles (between-person variable) would be associated with participants' daily relationship satisfaction, such that affiliative humour use by partners predicted relationship satisfaction, and aggressive humour use by partners predicted relationship dissatisfaction.

Research Question 6: Do positive and negative relationship interactions predict humour styles? Both studies examined if daily situational contexts (frequencies of pleasant and negative interactions) predict the daily use of humour in relationships. I expected that positive interactions would predict increases in daily affiliative humour (self-reported and perceived partner) and decreases in aggressive humour use (self-reported and perceived partner). I hypothesized that negative interactions among dating partners would predict a higher level of aggressive and self-defeating humour (partner and perceived partner) and lower levels of affiliative humour (self-reported and perceived partner).

Research Question 7: Do conflict styles moderate the association between humour use and negative relationship interactions? I also examined whether conflict styles moderate the association between daily self-reported humour use and negative relationship interactions. For this research question, I only examined self-reported humour because I did not assess partners' conflict styles. I expected that those who are high on conflict engagement (i.e., escalating conflicts) would have stronger slopes between aggressive humour use and negative relationship interactions. People who are high on conflict engagement tend to escalate conflict by making hurtful remarks, and they may use aggressive humour to put-down their partners during conflict. I also predicted that those who seek to resolve conflicts in a positive and open manner (i.e., positive problem solvers) would use a higher amount of affiliative humour. These individuals may use affiliative humour to improve their own and their partners' mood, and enhance the likelihood of successful conflict resolution. For those who report high levels of conflict withdrawal (i.e., conflict avoidance), I expected stronger slopes between negative interactions and all four styles of humour, as any of these humour styles could be used to avoid conflict. Finally, for those who endorsed high levels of compliance during conflict (i.e., giving in to others demands), I expected stronger slopes between negative relationship interactions and self-defeating humour, as this humour style could be used to admit fault and end conflict.

Research Question 8: Do attachment dimensions predict humour styles? I also examined whether attachment dimensions predict daily humour use. Past research has indicated that individuals who feel secure in their relationships (i.e., lower levels of anxiety and avoidance) tend to use more adaptive and less maladaptive humour (Cann, Norman, Welbourne, & Calhoun, 2008; Saroglou & Scariot, 2002). I examined if the Level 2 variables

anxiety and avoidance are associated with the daily use of humour styles. I predicted that avoidant individuals would use higher amounts of aggressive humour and lower levels of affiliative humour. Aggressive humour could be used to keep relationship partners at a distance and avoid closeness, whereas affiliative humour may be avoided due to its bonding functions. I also predicted that anxiously attached individuals would use higher levels of self-defeating humour, as individuals who are anxious about their relationships tend to hold negative self-views (Simpson & Rholes, 2012), and may use humour to communicate their negative self-views.

Research Question 9: Does playfulness predict daily humour use? Studies 1 and 2 examined if playfulness predicts positive forms of humour. In Study 1, both affiliative and self-enhancing humour were examined, and I predicted that they would be positively associated with a trait measure of playfulness. In Study 2, I predicted that couples play (play specifically with romantic partners) would be positively associated with affiliative humour use.

Research Question 10: Do intimacy and positive and negative emotions mediate links between humour styles and relationship satisfaction? The present research was the first study to investigate mediational analyses of humour and relationship satisfaction at the within-person level. Several mechanisms may be responsible for the association between humour use and relationship satisfaction. This research question focused on affiliative and aggressive humour and was addressed in Study 2. First I explored whether intimacy accounts for the link between affiliative humour and relationship satisfaction. Affiliative humour is conceptualized as humour that brings people closer together. It is possible that humour enhances intimacy, which in turn is associated with higher levels of relationship satisfaction.

I also predicted that emotions would mediate the link between humour styles and relationship satisfaction. Consistent with Aune and Wong (2002), I predicted that affiliative humour (participant and perceived partner) would predict positive emotion, which in turn would predict relationship satisfaction. Conversely, I posited that aggressive humour (participant and perceived partner) would predict negative emotion, which in turn, would predict lower relationship satisfaction.

Chapter 2: Study 1

The main goal of Study 1 was to replicate and extend the results of my previous study (Caird & Martin, 2014). I hoped to replicate my previous findings by demonstrating associations between self-reported humour styles and relationship satisfaction, and I attempted to extend these results by examining associations between participants' perceptions of their partners' humour styles and relationship satisfaction. I also examined if participants' self-reported humour styles or their perceptions of their partners' humour styles are better predictors of relationship satisfaction. I also investigated if affiliative humour is a better predictor of relationship satisfaction than aggressive humour. I also examined if positive and negative relationship interactions, conflict styles, attachment dimensions, and playfulness predict humour styles in romantic relationships.

Method

Participants

A total of 193 participants (51 men and 142 women) enrolled in the Psychology Department Research Pool at the University of Western Ontario volunteered to participate in the present study.³ Participants were enrolled in an introductory psychology course and were participating in research for partial course credit. Participants received two course credits for their participation, one half-credit after they completed the introductory session, and one and one-half after they completed the online daily diaries. Participants ranged in age from 17 to

³ As described by Nezlek (2008), estimating power for multilevel designs is significantly more complex than estimating power for single level designs. In a simulation study designed to examine sufficient sample sizes for multilevel models, regression coefficients, variance components, standard errors of regression coefficients, and standard errors of the second level variances were all estimated without bias when the number of level 2 observations was higher than 100 (Maas & Hox, 2006). Because I was testing complex models (e.g., cross-level moderations), a sample size of 193 was deemed sufficient to provide unbiased estimates.

44 years (M = 19.03, SD = 3.30). All participants were involved in a dating relationship of three or more months at the beginning of the study. The average length of dating relationships was 18.60 months (SD = 23.08). Most participants were involved in heterosexual relationships, but five female participants had female partners.

The sample was primarily comprised of European-Canadians (56.4%), Asian-Canadians (24.5%), and South Asian-Canadians (4.9%). English was the first language of 68% of participants. Participants for whom English was not their first language had been speaking English for an average of 9.47 years (SD = 5.38).

Participants' partners were also invited to participate in the study by completing a short online questionnaire. The partner online questionnaire was emailed out to 139 individuals for whom participants agreed to provide contact information, and was completed by 107 of these individuals. Of the responders, 69.2% were men.

Materials

Introductory Session.

Demographic Questionnaire. This questionnaire (see Appendix G) required participants to enter their age, gender, gender of their partner, and the length and long-distance status of their relationship. Participants were also asked how often they communicated with their partner, their ethnicity, whether their first language was English, and how long they had been speaking English.

Experiences in Close Relationships Scale – Short Form (ECR-S; Wei, Russell, Mallinckrodt, & Vogel, 2007). This scale was developed as a 12-item short form of the Experiences in Close Relationship Scale (Brennan et al., 1998). This scale assesses the attachment dimensions of anxiety and avoidance in adult relationships. An example of an

item on the Anxiety scale is "I need a lot of reassurance that I am loved by my partner". An example of an item on the Avoidance scale is "I try to avoid getting too close to my partner". Participants are asked to indicate their agreement with each item on a 7-point scale (1 = strongly disagree, 7 = strongly agree). The psychometric properties of this measure appear to be comparable or equivalent to the original 36 item version of the scale, with a stable factor structure, and acceptable internal consistency, test-retest reliability, and construct validity (Wei et al., 2007). In previous research, this scale had alpha coefficients of .78 and .84 for anxiety and avoidance, respectively (Wei et al., 2007). In the present study, the alpha coefficients for Anxiety and Avoidance were .70, and .76, respectively.

Relationship Assessment Scale (RAS; Hendrick, 1988). The RAS, a 7-item measure, was designed to assess relationship satisfaction in romantic relationships. Participants indicate their agreement with each statement using a 7-point scale (1 = not at all/poor, 7 = a great deal/extremely well). An example item is "How well does your partner meet your needs?" Past research has demonstrated that this measure has sound psychometric properties, including good convergent validity, test-retest reliability, and consistent measurement properties across diverse samples (Hendrick & Hendrick, 1998). In the present study, the alpha coefficient was .83.

Short Measure of Adult Playfulness (SMAP; Proyer, 2012). The SMAP was designed as a 5-item measure of adult playfulness. Participants indicate their agreement with each statement using a 4-point scale (1 = strongly disagree, 4 = strongly agree). An example item is, "Good friends describe me as a playful person." This scale has good psychometric properties, including a stable one-dimensional solution, satisfactory internal consistency

(alpha coefficients of .80 to .89) and test-retest reliability, and good convergent and discriminant validity (Proyer, 2012). In the current sample, the alpha coefficient was .83.

Conflict Resolution Styles Inventory (CRSI; Kurdek, 1994). This 16-item scale assesses four personal conflict resolution styles of individuals, within their romantic relationships: Conflict Engagement, Positive Problem Solving, Withdrawal, and Compliance. Each style is measured by four items in which participants are asked to indicate their agreement on a 5-point scale (1 = Never, 5 = Always). This measure has high internal consistency (alphas coefficient from .77 to .89), is stable over a 1 year period, is correlated with relationship satisfaction, and predicts declines in relationship satisfaction and divorce (Kurdek, 1994). In the present study, the alpha coefficients for the four scales were .69 (Compliance), .74 (Withdrawal), .75 (Positive Problem Solving), and .82 (Conflict Engagement).

Online Daily Diaries.

Daily Humour Styles Questionnaire – Participant (DHSQ-P). Puhlik-Doris (2004) modified the Humour Styles Questionnaire (Martin et al., 2003) to use in a daily diary study. Caird and Martin (2014) modified her scale to make the questions more specific to dating relationships. The Participant version of the questionnaire (DHSQ-P) asks participants to report how they used humour with their partners in the past 24 hours, with the exception of the Self-Enhancing Humour scale, which is not partner-specific (see Appendix H). The Self-Enhancing Humour scale was not made to be relationship specific because self-enhancing humour is thought to be a more private and internal experience than the other humour styles, and the items are not easily amendable to modifications that would make them relationship-specific. Each of the four scales is comprised of three items. Example items include, "I told

my partner a joke or said something funny to make him laugh" (Affiliative Humour), "I found that my humorous outlook on life kept me from getting overly upset about things" (Self-Enhancing Humour), "I teased my partner when he made a mistake" (Aggressive Humour), and "I let my partner laugh at me or make fun of me more than I should have" (Self-Defeating Humour). Participants were asked to indicate how frequently they engaged in these forms of humour over the past 24 hours, using a 5-point scale (1 = not at all, 2 = once, 3 = twice, 4 = 3-5 times, 5 = more than 5 times). As a modified measure, the psychometric properties of the DHSQ-P remain unclear. Past research using the DHSQ-P has yielded mean alpha coefficients for Affiliative, Self-Enhancing, Aggressive, and Self-Defeating humour of .88, .73, .76, and .77, respectively (Caird & Martin, 2014). Internal consistencies were obtained by calculating the alpha coefficient for each diary day and averaging across the diary days. In the current study, the mean alpha coefficients for Affiliative, Self-Enhancing, Aggressive, and Self-Defeating Humour were .90, .85, .75, and .75, respectively.

Perceived Partner version of the DHSQ questionnaire (DSHQ-PP), which was created for the present study, measures participants' perceptions of their partners' use of the four humour styles, within the context of the dating relationship, within the past 24 hours (see Appendix I). Wording from the DHSQ-P was altered to reflect participants' perceptions of partners' humour use, instead of participants' own humour use. An example item is "My partner laughed and joked around with me" (Affiliative Humour). In the current study, the mean alpha coefficients for Affiliative, Self-Enhancing, Aggressive, and Self-Defeating Humour were .91, .89, .77 and .76, respectively.

Checklist was designed to assess separately positive, negative, and supportive behaviours that occur in close relationships. Participants are asked to indicate if an event occurred within the past 24 hours by checking "yes" or "no". Each participant checked whether or not she had enacted a behaviour towards her partner, and whether her partner had enacted the same behaviour towards her. Example items include "My partner did something special for me" (Positive), "I was inattentive and unresponsive towards my partner" (Negative), and "My partner helped me with a practical problem" (Supportive). Unfortunately, one item on the positive behaviour checklist was not included in the current study, and the total number of items was 19 as opposed to 20. The missing item was "My partner made me feel wanted". For the purposes of this study participant and partner enacted behaviours were summed into one category. Thus, three checklists (Positive, Negative, and Supportive interactions) were produced. Only Positive and Negative interactions were explored in the current study.

Daily Relationship Satisfaction (DRS). One item was used to assess daily relationship satisfaction (see Appendix J). Participants were asked to reflect upon the past 24 hours, and indicate how satisfied they were with their relationship using a 7-point scale (1 = not very much or just a little, 7 = very much or a lot). Although the psychometric properties of this measure are unclear, one-item measures of relationship satisfaction have been used successfully in previous daily diary studies (e.g., Gable et al., 2003).

Partner Measures.

Relationship Assessment Scale (RAS; Hendrick, 1988). This measure is described above. In the partner sample, the alpha coefficient was .82.

Humour Styles Ouestionnaire- Self (HSQ-S). This was modified from the HSQ created by Martin and colleagues (2003). The original HSQ was designed with four 8-item scales that assess different styles of humour (i.e., affiliative, self-enhancing, aggressive, and self-defeating), and it possesses sound psychometric properties, including adequate internal consistencies and test-retest reliabilities, and evidence of convergent and discriminant validity for the four scales (Martin et al., 2003). For the purposes of the present study, the total number of items was reduced from 32 to 12. The items included were parallel to the items included in the DHSQ-A. However, participants' partners were asked to think about how they express humour with their partners, in general, as opposed to in the last 24 hours (see Appendix L). Example items included "I laugh and joke around with my partner (Affiliative Humour), "I find my humorous outlook on life keeps me from getting overly upset or depressed about things" (Self-Enhancing Humour), "I tease my partner when he/she makes a mistake" (Aggressive Humour), and "I let my partner laugh at me or make fun of me more than I should" (Self-Defeating Humour). Partners were asked to indicate their agreement with each statement on a 7-point scale (1 = totally disagree, 7 = totally agree). In previous research, alpha coefficients for the four scales ranged from .77 to .81 (Martin et al., 2003). As a modified measure, the psychometric properties of the DHSQ-S are unclear. In the present study, the alpha coefficients for Affiliative, Self-Enhancing, Aggressive, and Self-Defeating Humour were .81, .88, .35, and .67, respectively. Because of the low reliability for aggressive humour, this sub-scale was not used in subsequent analyses.

Procedure

This study consisted of an initial group testing session and an online diary component that was designed to be completed over 9 days. Students signed up for the study through the Psychology Department Research Pool. During the initial introduction session, participants completed a battery of self-report measures in groups of 1 to 12. This testing session was held in a small and quiet classroom on campus. I welcomed participants and introduced them to the study. Participants were provided with information sheets, which outlined testing procedures, and they provided written informed consent before beginning the study. Participants were invited to ask questions at any point during this session.

During the initial testing session, participants completed the Demographic Questionnaire, ECR-S, RAS, SMAP, and CRSI, in the stated order. Participants also completed the first of the daily dairies in terms of their humour and relationship experiences over the preceding 24 hours. The testing sessions lasted 30 minutes. Following the initial session, participants received debriefing forms, and were reminded that they would receive their first online diaries the following evening.

For the online diary component, participants completed a series of nine online diaries.

Every afternoon, links to the daily diaries were sent to the participants in an email message, and they were asked to go to the secure website to complete the diary each evening.

Participants were asked to complete each diary at approximately the same time each night. If participants missed a diary, they received an email reminder the following afternoon, with a

⁴ Participants also completed a daily diary during the initial testing session, bringing the total number of daily diaries to 10.

link to complete a diary for the current (not the missed) day. In these cases, the date of completion was pushed back by one day, until all diaries were collected. If participants missed two or more diaries, they were no longer sent web links to the online diaries and were unable to complete the study. However, their data were still used in the study if they completed at least three days and they received the credits that they had earned up to the end of their participation. Of the 195 participants who attended the initial testing session, 156 completed all 10 diaries. The mean number of daily diaries completed was 8.54, and 187 participants completed three or more diaries.

Diaries were designed to take less than 10 minutes to complete. After submitting the final online diary, participants were emailed detailed feedback information, thanked for their participation, and given their additional research credits.

Data from participants' partners were also solicited. Participants were asked to provide the first name and email address of their dating partners. However, participants were informed that providing this information was optional. If partner information was provided, partners were sent an email containing some brief information about the study, and a web link to an online questionnaire for them to complete, if interested. Participation was entirely voluntary and no compensation was given to partners.

Data Preparation

The online diary data were inspected for noncompliance. Attrition and poor quality data are more common in diary studies than in typical studies (Nezlek 2012, pg. 46). The main criterion for eliminating daily diary data was rapid completion time. I removed 109 diaries that were completed in less than 2 minutes, because I estimated that participants

would need approximately three minutes to accurately complete the online diary.⁵ When more than one diary was completed in a 24 hour period, I kept the last diary that was completed, and removed the others (n = 70); I hypothesized that earlier diaries would represent attempts to think retrospectively, whereas the latest diary would reflect the last 24 hours. I also removed diaries where participants indicated that they had not communicated in person or via technology (e.g., videoconferencing, text messaging, telephone) with their partners during the past 24 hours (n = 13). Of the 1675 original daily diary responses, 192 diary responses (11.46%) were eliminated from the analyses. This degree of data removal is not uncommon in diary studies (Nezlek, 2012).

Results and Discussion

Descriptive Statistics

Means and standard deviations for the variables at both Level 1 (within-persons) and Level 2 (between-persons) are displayed in Tables 1 and 2. Participants' scores on the daily relationship satisfaction and the measure of partner relationship satisfaction were highly negatively skewed. In hierarchical linear modeling, skewed outcome variables are problematic.⁶ Prior to analyses, these measures were therefore transformed using a log 10

⁵ To estimate this time frame, 8 individuals were asked to familiarize themselves with the online diary questions. This familiarization process was used because study participants would quickly become acquainted

with the diary items, and would likely become quicker over time, at answering the online diaries. The individuals were instructed to complete the online diary in a rapid manner, while still attending to the items. The mean completion time was 2.9 minutes.

⁶ Skewed dependent variables can lead to violations of assumptions for HLM. First, skewed dependent variables can produce heterogeneity of variance, violating the assumption of homoscedasticity. Skewed dependent variables can also produce error terms that are not normally distributed, violating the assumption of normality. Sarkisian (2015) notes that it is especially important to ensure that your dependent variable is as close to normal as possible.

Table 1

Descriptive Statistics for Level 1 Variables

Variable	Mean (SD)	Skewness	Kurtosis
Participant Affiliative (P-AF)	10.51 (3.57)	48	82
Participant Self-Enhancing (P-SE)	6.80 (3.04)	.64	27
Participant Aggressive (P-AG)	5.39 (2.53)	1.13	.80
Participant Self-Defeating (P-SD)	4.52 (2.19)	1.74	2.91
Perceived Partner Affiliative (PP-AF)	10.70 (3.73)	55	84
Perceived Partner Self-Enhancing (PP-SE)	6.24 (3.01)	.80	13
Perceived Partner Aggressive (PP-AG)	5.39 (2.60)	1.17	.80
Perceived Partner Self-Defeating (PP-SD)	4.50 (2.20)	1.73	2.78
Positive Interactions (I-POS)	4.35 (1.98)	23	90
Negative Interactions (I-NEG)	1.26 (1.58)	1.36	1.40
Relationship Satisfaction (RS)	6.08 (1.16)	-1.56	2.58
Relationship Satisfaction Transformed (RS –Tr)	.62 (.23)	52	89

Note. SD = standard deviation.

Table 2

Descriptive Statistics for Level 2 Variables

	M (SD)	Skew.	Kurt.
Participant variables			
Attachment Anxiety (ECR-ANX)	20.29 (5.78)	.38	04
Attachment Avoidance (ECR-AVO)	13.37 (5.23)	.63	26
Conflict Engagement (CRSI-Eng)	8.44 (3.54)	.74	13
Conflict Withdrawal (CRSI-With)	9.15 (3.43)	.69	02
Conflict Positive Problem Solve (CRSI-Solve)	15.82 (2.70)	80	1.03
Conflict Compliance (CRSI-Comp)	8.34 (2.96)	.61	.17
Adult Playfulness (SMAP)	15.66 (3.30)	86	.25
Relationship Satisfaction (RAS)	40.75 (5.60)	93	.25
Relationship Satisfaction Transformed (RAS-Tr)	.65 (.31)	.77	.46
Partner variables			
Self-Rated Affiliative (SR-AF)	18.86 (2.47)	-1.83	3.96
Self-Rated Self-Enhancing (SR-SE)	14.36 (3.82)	49	16
Self-Rated Self-Defeating (SR-SD)	11.61 (3.88)	09	80
Relationship Satisfaction (P-RAS)	6.17 (.80)	-1.28	1.42
Relationship Satisfaction Transformed (P-RAS-Tr)	.43 (.17)	45	54

Note. M = mean, SD = standard deviation, Skew. = skewness, Kurt. = kurtosis.

transformation to produce a more normal distribution. Because the skews were negative, the relationship satisfaction measures were reflected before and after the log transformations.

Overview of Analyses

Our data set contained measures at two levels: the within-person day level (Level 1) and the between-person level (Level 2). Data were analyzed using HLM 7 (Raudenbush, Bryk, & Congdon, 2011). Diary days (Level 1) were nested within individuals (Level 2). All models were estimated using full maximum likelihood procedures. Centering refers to choosing a zero point for predictor variables, and is used to aid in interpretation of statistical analyses (Aiken & West, 1991). Level 1 predictor variables were group-mean centered (i.e., person-mean centered). Group-mean centering of level 1 variables means that the mean or average of each individual across the study period is subtracted from their daily score on the variable. With this type of centering, a significant positive slope between affiliative humour and relationship satisfaction would imply that on days people use more humour than they normally do, they experience higher levels of relationship satisfaction. Level 2 variables were grand-mean centered. That is, the mean from the entire sample was subtracted from each individual's score on the given level 2 variable. With this type of centering, a significant slope between playfulness (level 2 variable, grand-mean centered), and relationship satisfaction would imply that those who are more playful (compared to others in the study) have higher levels of relationship satisfaction. Grand-mean centering is often used for Level 2 variables. Outcome variables were uncentered, reflecting common practice. Because some

data were skewed,⁷ results for robust standard errors are reported. Inferences based on robust standard errors are less dependent on assumptions of normality, but reduce statistical power (Hox, 2010, p. 261). ⁸

I used a bottom-up approach to build my models, starting with the most simplistic model and adding additional parameters in a series of steps. I tested each step to determine if it represented a significant change from the previous one. If not, I retained the estimations from preceding models. First, I ran unconditional models to examine the distribution of within- and between-person variance for each outcome variable. In unconditional models, the intercept of the outcome variable is entered as the only predictor. In the second step, I added Level 1 measures as predictors of the outcome variables. In this step, error terms (i.e., random effects) were modeled, but were removed from the models if they were non-significant. In the third step, I added Level 2 variables (when relevant to the research question). Again, error terms were modeled, but were removed if they were non-significant. Lastly (and when relevant), cross-level interactions between Level 1 and Level 2 variables were modeled. If significant, cross-level interactions were examined to determine

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⁷ Although I transformed relationship satisfaction because it was commonly used as a dependent variable, I did not transform other skewed variables. I wanted to transform as few variable as possible, to aid in the interpretation of my results. Because several variables were still non-normally distributed, I opted to use robust standard errors.

⁸ Long and Ervin (2000) suggest that a level 2 sample size of 100 is required for robust standard errors to work well, and multilevel simulation with non-normal data confirm these recommendations (Hox & Maas, 2001). I have sufficient participants (i.e., 193) for robust standard errors to work well.

⁹ Non-significant random error terms were removed because including all possible variance terms in a model can result in overparameterized models with estimation problems (Hox, 2010, pg. 58).

¹⁰ In my analyses, the absence of a variable component for a given variable indicates that the random error term has been removed due to non-significance. For example, in Table 6, the random error terms for self-enhancing, aggressive, and self-defeating humour have been removed.

the direction of the effects. To do so, I graphed the final equation in HLM 7, dividing participants into high (75th percentile) and low levels (25th percentile) of the Level 2 variable of interest.

As an example, the final model for participants' humour styles predicting relationship satisfaction is displayed below.

Level-1 Model

$$RS-Tr_{ti} = \pi_{0i} + \pi_{1i}*(P-AF_{ti}) + \pi_{2i}*(P-SE_{ti}) + \pi_{3i}*(P-AG_{ti}) + \pi_{4i}*(P-SD_{ti}) + e_{ti}$$

Level-2 Model

$$\pi_{0i} = \beta_{00} + r_{0i}$$

$$\pi_{1i} = \beta_{10} + r_{1i}$$

$$\pi_{2i} = \beta_{20}$$

$$\pi_{3i} = \beta_{30}$$

$$\pi_{4i} = \beta_{40}$$

The relationship satisfaction of a participant i on day t (RS- Tr_{ti}) can be modeled as a function of the mean relationship satisfaction score for individual i, plus the slopes of affiliative humour (π_{Ii}) multiplied by the participant's daily score for affiliative humour (P- AF_{ti}), plus the regression coefficient for self-enhancing humour (π_{Ii}) multiplied by their score on self-enhancing humour (P- SE_{ti}), plus the slope for aggressive humour (π_{Ii}) multiplied by their score on aggressive humour (P- AG_{ti}), plus the slope for self-defeating humour (π_{Ii}) multiplied by their daily self-defeating humour score (P- SD_{ti}), plus a residual term (e_{ti}) that reflects the difference between the participant's daily satisfaction score from their mean satisfaction score.

In the level 2 equation, the relationship satisfaction score for individual i is modeled as a function of the grand-mean relationship satisfaction score (β_{00}), plus the individual's specific deviation from the grand mean (r_{0i}). The slope for affiliative humour is modeled as the average effect of affiliative humour on relationship satisfaction across all participants (β_{10}), plus the variance component, or deviation of the participants slope from the overall group slope (random effect, r_{1i}). The slope for self-enhancing humour is modeled by a single estimate (i.e., fixed effect) that expresses the average effect of self-enhancing humour on relationship satisfaction across all participants (β_{20}). The slopes for aggressive and self-defeating humour are also modeled with single estimates that express the average effects of aggressive and self-defeating humour, respectively, on relationship satisfaction across all participant (i.e., β_{30} , β_{40}). A combined equation can be obtained by substituting the equations of the Level 2 model into the Level 1 model.

Research Question 1: Are Humour Styles Associated with Relationship Satisfaction at the Within-Persons Level?

I hypothesized that on days participants used more positive styles of humour, they would be more satisfied with their relationships, and that on days they used more negative humour styles, they would be less satisfied with their relationships. To examine these hypotheses, I built a model where all four participants' self-reported humour styles were entered as predictors of relationship satisfaction. The unconditional model yielded an intraclass correlation of .55, indicating that 55% of the variance in relationship satisfaction was at Level 2 (between-persons) and 45% of variance was at Level 1 (within-persons across

diary days)¹¹. As shown in Table 3, the daily use of affiliative humour predicted daily increases in relationship satisfaction, and the daily use of self-defeating humour predicted daily decreases in relationship satisfaction.¹²

I ran a similar set of models, but with daily perceptions of partners' humour entered as predictors of participants' daily relationship satisfaction. As shown in Table 4, participants' perceptions of their partners' affiliative and self-enhancing humour predicted increases in relationship satisfaction, and perceived partners' aggressive humour predicted decreases in relationship satisfaction.

In sum, on days when participants used more affiliative humour with their partners than usual, they were more satisfied with their relationships, whereas on days they used more self-defeating humour with their partners, they were less satisfied with their relationships. On days participants perceived their partners to be using higher amounts of affiliative and self-enhancing humour than typical, they reported higher relationship satisfaction, whereas on days they perceived their partners as directing more aggressive humour towards them, they reported lower levels of relationship satisfaction.

The association found between self-reported affiliative humour and relationship satisfaction complements Caird and Martin's (2014) observation of within-person associations between affiliative humour use and relationship satisfaction. However, this research expands on Caird and Martin's findings by demonstrating a link between

¹¹ Levels 1 and 2 both have error variance associated with them.

¹² In interpreting the slopes involving the transformed variables (i.e., Level 1 Relationship Satisfaction, Level 2 Relationship Satisfaction, Partner Relationship Satisfaction), it is important to note the low range of the outcome variables (0 to .85, .65 to 1.52, and 0 to .66, respectively). The low range of these variables means that the coefficient values of the slopes will be relatively small.

Table 3

Participants' Daily Humour Styles Predicting Daily Relationship Satisfaction

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	.617 (.014)***
Affiliative	.026 (.002)***13
Self-enhancing	.003 (.002)
Aggressive	-0.002 (.003)
Self-defeating	008 (.003)**
Variance components	Variance (SD)
Intercept	.032 (.179)***
Affiliative	.000 (.021)***
Residual	.018 (.135)

Note. *** p < .001, ** p < .01.

¹³ It would be ideal to include estimates of effects sizes, especially given the transformation of the dependent variable. However, effect sizes in MLM analyses are complicated and are not comparable to effect sizes used in ANOVA and multiple regression analyses (Peugh, 2010). Nezlek (2012) urges researchers to be cautious when estimating effects sizes in MLM, noting that residual variance estimates in MLM are not the same as error variance in OLS analyses.

Table 4

Perception of Partners' Humour Styles Predicting Relationship Satisfaction

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	.617 (.014)***
Affiliative	.026 (.002)***
Self-enhancing	.004 (.002)*
Aggressive	006 (.003)*
Self-defeating	002 (.003)
Variance components	Variance (SD)
Intercept	.032 (.180)***
Affiliative	.000 (.019)***
Aggressive	000 (.018)***
Self-defeating	.000 (.015)***
Residual	.017 (.131)
Note: *** $n < .001$. ** $n < .01$. * $n < .05$.	

Note. *** p < .001, ** p < .01, * p < .05.

participants' perceptions of their partners' affiliative humour and participants' relationship satisfaction. In this study, both participants' affiliative humour use, and their perceptions of their partners' affiliative humour use predicted relationship satisfaction.

This study failed to demonstrate a significant link between daily self-reported aggressive humour use and relationship satisfaction, as did Caird and Martin (2014). Researchers have suggested that partner humour use in romantic relationships is more relevant to relationships than self-reported humour use (Campbell et al., 2008; Cann et al., 2011). For aggressive humour, in particular, partner humour use may be more relevant to an individual's relationship satisfaction than self-reported humour. Individuals may feel that the aggressive humour directed towards their partners is beneficial for the relationship, or fun to engage in for the sake of play and pleasure. They may not believe their own aggressive humour is hurtful or problematic. However, their partners (i.e., the target of the joke) may be hurt by these humorous, yet aggressive, remarks, and consequently experience declines in relationship satisfaction.

Contrary to my expectation and the findings of Caird and Martin (2014), participants' own self-enhancing humour was not associated with relationship satisfaction. The different measures may account for the inconsistent results between these two daily diary studies.

Caird and Martin's (2014) measure of relationship satisfaction was different from the present studies and divided relationship satisfaction into satisfaction and dissatisfaction.

As with aggressive humour, partners' use of self-enhancing humour appears to be more relevant in determining relationship satisfaction. This result is somewhat surprising.

Self-enhancing humour is used to enhance the self, maintain a positive outlook on life, and cope with stressors. On the one hand, self-enhancing humour (in between-person research) is

associated with better relationship outcome variables (e.g., Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003; Yip & Martin, 2006). If we expect within-person findings to mirror between-person findings, we would expect that daily self-enhancing humour use would be correlated with relationship satisfaction. On the other hand, self-reported self-enhancing humour might not be expected to correlate with relationship satisfaction at the day to day, within-persons level. When participants are reflecting on how they used humour with their partners, the daily use of self-enhancing humour (e.g., "I coped with a problem or difficulty by thinking about some amusing aspect of the situation") may correlate with stressors in romantic relationships.

Although in the long-term, using humour to cope with stressful relationship interactions may be beneficial, in the short term, we would not expect a positive correlation between self-enhancing humour and relationship satisfaction. However, when partners use self-enhancing humour to cope with difficulties (including relationship difficulties), individuals may perceive this as a character strength of their partners that facilitates problem solving, and thus evaluate their relationships with their partners more positively.

Self-defeating humour was the only humour style for which only self-reported humour (and not perceived partner humour) predicted relationship satisfaction. This finding contradicts the notion that partner's humour styles are more relevant in predicting relationship satisfaction. If participants are the target of their own humour (i.e., self-reported self-defeating humour), being the butt of jokes and being laughed at by their partners may correspond with negative feelings about their relationships and lower levels of relationship satisfaction. However, in the case of the perceived partners' self-defeating humour, individuals may enjoy their partners' use of self-defeating humour, and this humour may

promote their own relationship satisfaction through the bonding and enjoyment functions of humour. As with aggressive humour, we might expect the target of the joke (whether the self, in the case of self-defeating humour, or the other, in the case of aggressive humour) to experience declines in relationship satisfaction, whereas the other partner may be unaffected by the humour use, or even see it as fun and intimacy promoting.

Research Question 2: Is Perceived Partner Humour a Better Predictor of Relationship Satisfaction than Self-Reported Humour?

I also analyzed whether participants' own humour use, or their perception of their partners' humour use was a better predictor of relationship satisfaction. This was accomplished by using HLM to compare the coefficients using a test of fixed effects, an approach outlined by Nezlek (2011, pg. 92). This comparison of coefficients is examined by a test of fixed effects, or a test of constraints on a model. The equality of two slopes is compared by constraining the slopes to be equal in absolute value. If the slopes have similar signs (i.e., both negative or positive) values of 1 and -1 are used. If the slopes have different signs, values of 1 are used. These values are chosen because a test of constraints test whether the weighted sum is significantly different from 0. If constraining to two coefficients to be the same does not affect the fit of the model, then there is no basis to conclude that the slopes are different. This test of constraints is analyzed with a chi-square test with one degree of freedom. In these analyses, all slopes were entered with random variance.

First, I compared whether participant or perceived partner affiliative humour was a better predictor of participants' relationship satisfaction. A model with participant and partner affiliative humour entered as predictors of relationship satisfaction revealed slopes of .010 and .019, respectively, and both were highly significant (p < .001). To formally test the

relative predictive strength of these two variables, I constrained the two slopes to be equal. Constraining the two slopes to be equal did not affect the overall predictive strength of the model, χ^2 (1) = 3.092, p > .05, indicating that the slopes did not differ significantly from each other.

Next, I tested if the predictive strength of participant self-enhancing humour and perceived partner self-enhancing humour differed significantly from one another. Constraining the two slopes to be equal did not affect the overall predictive strength of the model, χ^2 (1) = 2.762, p > .05, indicating that the slopes did not differ significantly from each other.

I also compared the slopes of participant aggressive and perceived partner aggressive, using the same approach. A model with participant and partner aggressive humour entered as predictors of relationship satisfaction revealed slopes of .011 and .004, but only the slope for participant aggressive humour was significant. However, constraining the two slope to be equal did not affect the overall predictive strength of the model, χ^2 (1) = 1.258, p > .05, indicating that the slopes did not differ significantly from each other. Finally, I compared the slopes of participant and perceived partner self-defeating humour. Again, the slopes did not differ significantly from each other.

Thus, I did not find evidence to suggest that either participant humour or perceptions of partner humour hold stronger association with relationship satisfaction. These results are inconsistent with Cann and colleagues' (2011) finding that only perceptions of a partner's humour styles were related to relationship satisfaction. It may be that using a relationship-specific measure allowed me to find that participants' own humour (when used in their relationships) was related to their own relationship satisfaction.

These results may seem inconsistent with the previously discussed results for each of the four humour styles. However, differences in modelling likely account for these inconsistencies. When all four humour styles for self-reported humour are entered at once, the model simultaneously accounts for how all of the four humour styles predict relationship satisfaction. When making direct comparisons using contrast coding, only the two predictors that are being compared are entered into the equation.

Research Question 3: Is Affiliative Humour a Better Predictor of Relationship Satisfaction than Aggressive Humour?

I was also interested in whether affiliative or aggressive humour was a better predictor of relationship satisfaction. I predicted that affiliative humour would boast stronger associations with relationship satisfaction than would aggressive humour. First I compared the slopes of participant affiliative and aggressive humour. A model with participant affiliative and aggressive humour entered as predictors of relationship satisfaction revealed slopes of .027 and -.004, respectively, but only participant affiliative humour was a significant predictor. Constraining the two slopes to be equal did affect the overall predictive strength of the model, χ^2 (1) = 28.86, p < .001. Thus, participants' use of affiliative humour was a better predictor of relationship satisfaction than participants' use of aggressive humour.

I also compared the slopes of perceived partner affiliative and aggressive humour. A model with partner affiliative and aggressive humour predicting relationship satisfaction revealed slopes of .027 and -.005, respectively, and both of these predictions were significant. Constraining the two slopes to be equal did affect the overall predictive strength of the model, χ^2 (1) = 23.96, p < .001. Thus, the slopes differed significantly from each other,

with perceived partners' affiliative humour predicting participants' relationship satisfaction more strongly than the perceived partner use of aggressive humour.

Thus, as predicted, these analyses indicate that affiliative humour (actor and perceived partner) is a stronger predictor of relationship satisfaction than aggressive humour (actor and perceived partner). In the context of romantic relationships, positive interpersonal uses of humour, that enhance intimacy and promote enjoyment, were more relevant to relationship satisfaction than aggressive uses of humour.

Research Question 4: Do Overall Humour Styles Moderate Associations between Daily Humour Styles and Relationship Satisfaction?

I also analyzed if overall levels of humour use across the study period (mean humour use) moderated relationships between daily humour styles and relationship satisfaction. As predicted, mean levels of participant affiliative humour use across the study period influenced the relationship between daily participant affiliative humour and relationship satisfaction. Those with a stronger tendency to engage in affiliative humour reported greater increases in relationship satisfaction on days that they used more affiliative humour than usual, in comparison to those who tended to use less affiliative humour across the study period (see Table 5 and Figure 2). Also as predicted, mean perceived partner affiliative humour moderated the relationship between partner affiliative humour and relationship satisfaction (see Table 6 and Figure 3), such that the relationship between the variables was stronger for those who viewed their partners as using more affiliative humour overall.

Table 5

Cross-level Moderation for Participant Affiliative Humour

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	.617 (.014)***
Daily affiliative	.026 (.002)***
Mean affiliative	.003 (.001)***
Variance components	Variance (SD)
Intercept	.032 (.180)***
Daily affiliative	.000 (.021)**
Residual	.073 (.270)
M	44

Note. *** p < .001, ** p < .01.

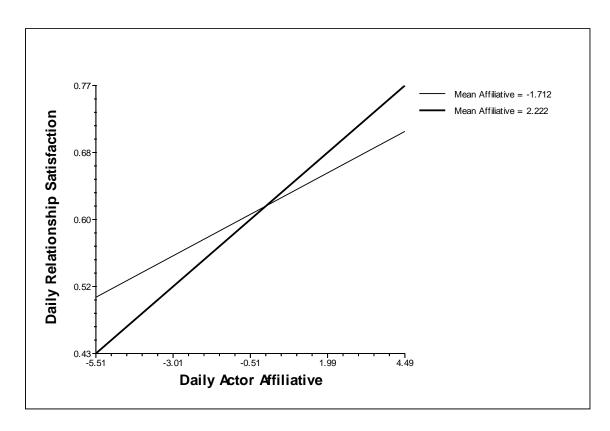


Figure 2. Mean affiliative humour use moderates slope between daily participant affiliative humour and relationship satisfaction.

Table 6

Cross-Level Moderation for Perceived Partner Affiliative Humour

Final Model
β (SE)
.617 (.014)***
.027 (.002)***
.002 (.001)**
Variance (SD)
.032 (.180)
.003 (.018)***
.018 (.136)

Note. *** p < .001, ** p < .01.

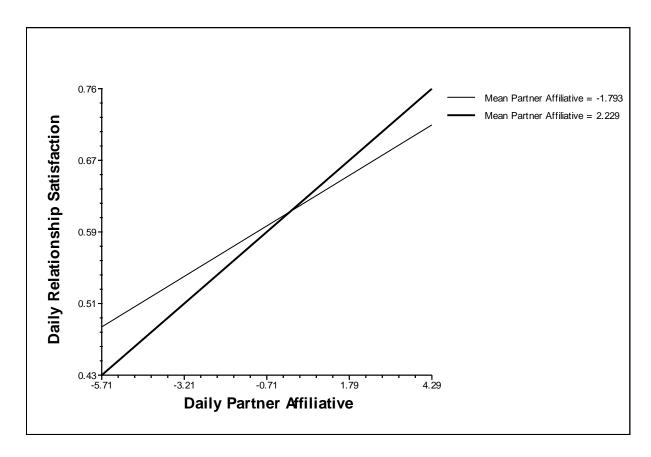


Figure 3. Mean partner affiliative humour moderates the slope between daily partner affiliative humour and relationship satisfaction.

Contrary to my predictions, mean levels of aggressive humour did not influence associations between daily aggressive humour (actor and perceived partner) and relationship satisfaction.

Although no predictions were made, cross-level interactions for self-enhancing humour were also modeled. A significant cross-level interaction was observed for participant self-enhancing humour, such that participants who used higher levels of self-enhancing humour over the course of the study period reported stronger associations between self-enhancing humour and relationship satisfaction (see Table 7 and Figure 4).

Finally, the prediction that overall participant self-defeating humour would moderate the slope between daily self-defeating humour and relationship satisfaction was not supported.

The moderation effects for overall humour styles found in the present study are not consistent with the moderations between participant humour use and relationship satisfaction found by Caird and Martin (2014). In that previous study, there was a cross-level interaction for self-defeating humour alone. Although methodological differences may account for these inconsistent findings, these results are puzzling and indicate the need for future research.

Research Question 5: Does Partner Self-Reported Humour Predict Participant Relationship Satisfaction?

I also examined if partners' ratings of their own humour styles predicted participants' relationship satisfaction by creating a model with participants' daily relationship satisfaction (Level 1 variable) as the outcome variable and partners' self-rated humour styles (Level 2) as predictors. Only partners' self-reported affiliative humour was associated with participants' relationship satisfaction (see Table 8).

Table 7

Cross-Level Moderation for Participant Self-Enhancing Humour

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	.617 (.014)***
Daily self-enhancing	.013 (.003)***
Mean self-enhancing	.003 (.001)*
Variance components	Variance (SD)
Intercept	.031 (.178)
Daily self-enhancing	.000 (.020)***
Residual	.023 (150)
M + *** - 001 ** - 01	w 05

Note. *** p < .001, ** p < .01, * p < .05.

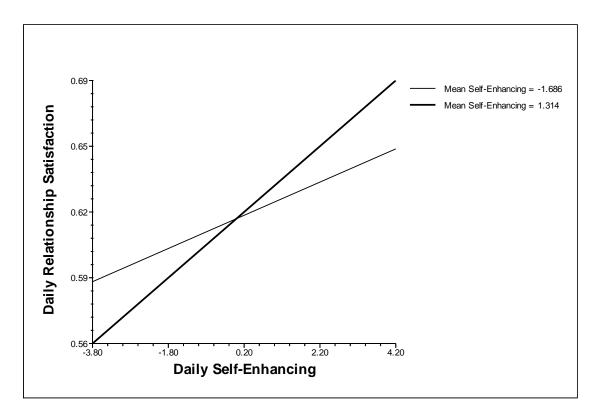


Figure 4. Mean self-enhancing humour moderates the relationship between daily self-enhancing humour and relationship satisfaction.

Table 8

Partners' Ratings of Their Humour Styles Predicting Participants' Relationship Satisfaction

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	.647 (.015)***
Affiliative	.026 (.007)***
Self-enhancing	.008 (.004)
Self-defeating	008 (.004)
Variance components	Variance (SD)
Intercept	.022 (.149)***
Residual	.025 (.157)
<i>Note.</i> *** <i>p</i> < .001, ** <i>p</i>	<.01, * <i>p</i> < . 05.

Unfortunately, the relationship between partner aggressive humour and relationship satisfaction was not examined because of the low reliability of this scale. It should be noted that this analysis is interpreted somewhat differently than the previous analyses. In this case, the predictors were Level 2 variables that were grand-mean centered. Because of the grand-mean centering, these variables represent between-person differences in humour styles (not within-subject fluctuations in humour use across the diary period). Thus, partners who self-reported using more affiliative humour in their relationships had partners (i.e., the study participants) who were more satisfied.

Research Question 6: Do Positive and Negative Relationship Interactions Predict Humour Styles?

To examine the associations between daily relationship interactions and participants' use of humour, I created two separate models, one predicting positive interactions and the other predicting negative interactions, from the four daily humour styles. In the analysis with positive interactions as the outcome variable, affiliative humour was a positive predictor and aggressive humour was a negative predictor (see Table 9). In the analysis with negative interactions as the outcome variable, affiliative humour was a significant negative predictor, and aggressive and self-defeating humour were both significant positive predictors (see Table 10).

I conducted the same analyses for perceived partner humour styles predicting daily positive and negative interactions. As shown in Table 11, the daily occurrence of positive relationship interactions was associated with partners' affiliative, self-enhancing, and aggressive humour use. As shown in Table 12, participants' daily perceptions of their

Table 9

Participant Humour Styles Predicting Positive Interactions

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	4.307 (.097)***
Affiliative	.286 (.021)***
Self-enhancing	005 (.020)
Aggressive	.087 (.030)***
Self-defeating	.022 (.030)
Variance components	Variance (SD)
Intercept	1.550 (1.245)***
Affiliative	.025 (.159)***
Residual	1.763 (1.328)
Note. *** n < .001.	

Note. *** *p* < .001.

Table 10

Participant Humour Styles Predicting Negative Interactions

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	1.308 (.076)***
Affiliative	-0.111 (.016)***
Self-enhancing	.016 (.018)
Aggressive	.161 (.027)***
Self-defeating	.089 (.034)**
Variance components	Variance (SD)
Intercept	.851 (.922)***
Affiliative	.009 (.095)***
Aggressive	.021 (.145)***
Residual	1.464 (1.210)
<i>Note.</i> *** <i>p</i> < .001, ** <i>p</i> < .01, * <i>p</i> < .05.	

Table 11

Perceived Partner Humour Styles Predicting Positive Interactions

Parameters	Participant Humour
Regression coefficients	β (SE)
Intercept	4.308 (.097)***
Affiliative	.255 (.021)***
Self-enhancing	.055 (.023)*
Aggressive	.079 (.021)***
Self-defeating	.026 (.028)
Variance components	Variance (SD)
Intercept	1.547 (1.244)***
Affiliative	.026 (.161)***
Self-defeating	.010 (.098)*
Residual	1.730 (1.315)
<i>Note.</i> *** <i>p</i> < .001, ** <i>p</i> < .01, * <i>p</i> < .05.	

Table 12

Perceived Partner Humour Styles Predicting Negative Interactions

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	1.289 (.074)***
Affiliative	136 (.019)***
Self-enhancing	.014 (.018)
Aggressive	.176 (.026)***
Self-defeating	.076 (.030)*
Variance components	Variance (SD)
Intercept	.849 (.921)***
Affiliative	.019 (.136)***
Self-defeating	.026 (.161)***
Residual	1.396 (1.182)
<i>Note.</i> *** <i>p</i> < .001, ** <i>p</i> < .01, * <i>p</i> < .05.	

partners' affiliative humour predicted lower levels of negative interactions, and daily perceptions of partners' aggressive and self-defeating humour predicted higher levels of negative interactions

I expected that positive interactions would be associated with increases in daily affiliative humour (self-reported and perceived partner) and decreases in aggressive humour use (self-reported and perceived partner). This hypothesis was partially supported. As predicted, participants' affiliative humour and perceived partners' affiliative humour positively predicted positive relationship interactions. Unexpectedly, however, participants' aggressive humour and perceived partners' aggressive humour were also positively associated with positive relationship interactions. On days when participants reported more positive relationship interactions than usual, they also reported higher levels of aggressive humour use than usual. One explanation for this unexpected finding is that relationship partners may not censor their humour use when they are having fun with one another and the relationship is functioning well. Furthermore, in the context of pleasant interactions, participants may not be as likely to view aggressive humour as truly aggressive.

I also hypothesized that negative interactions among dating partners would be associated with higher levels of aggressive and self-defeating humour (self-reported and perceived partner) and lower levels of affiliative humour (self-reported and perceived partner). This hypothesis was supported. On days when participants experienced more negative interactions in their relationships (than usual), they reported higher levels of aggressive and self-defeating humour use, and lower levels of affiliative humour use (than usual).

Research Question 7: Do Conflict Styles Moderate the Association between Humour Use and Negative Relationship Interactions?

To investigate whether conflict styles would moderate slopes between humour styles and negative relationship interactions, I ran a series of models. In each model, the humour style of interest was the outcome variable, negative relationship interactions were entered as a predictor variable, and the conflict style of interest was added as a potential level-2 moderator of the slope between negative interactions and humour use. To reduce the number of models run, I only examined participant humour. Thus, a total of 16 models were run (4 humour styles multiplied by 4 conflict styles).

As predicted, individuals who reported a greater tendency to escalate conflict had stronger positive associations between negative relationship interactions and aggressive humour use (see Table 13 and Figure 5). It appears that people who reported launching personal attacks and insults during conflicts with their partners were more likely to use aggressive humour during negative relationship interactions. Aggressive humour may be a way for participants with a conflict escalation style to express hostility towards their partners.

I also predicted that those who endorsed a positive problem solving conflict style would use greater levels of affiliative humour in the context of negative relationship interactions. This hypothesis was not supported. Positive problem solving during conflict (e.g., focusing on the problem at hand and compromising) did not moderate the daily association between affiliative humour and negative relationship interactions.

Table 13

Conflict Engagement Moderates Slope between Negative Interactions and Aggressive

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	5.405 (.140)***
Negative interactions	.277 (.050)***
Engagement	.030 (.014)*
Variance components	Variance (SD)
Intercept	3.309 (1.819)***
Negative interactions	.186 (.432)***
Residual	2.811 (1.677)
Note. *** $p < .001$, ** $p < .01$, * $p < .05$.	

Humour

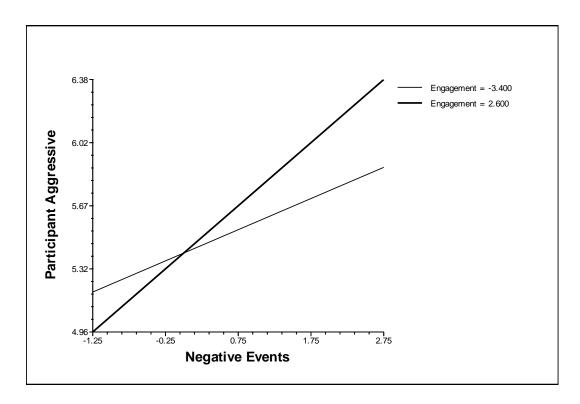


Figure 5. Conflict engagement moderates slope between negative interactions and aggressive humour.

For those who reported high levels of conflict avoidance, I expected stronger slopes between negative interactions and all four styles of humour, as any of these humour styles could be used to avoid conflict. This hypothesis was only partially supported, as only aggressive and self-defeating humour were moderated by conflict withdrawal (see Tables 14 and 15, and Figures 6 and 7). People who reported a tendency to avoid conflict used more aggressive and self-defeating humour on days when they reported higher levels of negative relationship interactions, in comparison to those who scored low on this conflict style. It appears that aggressive and self-defeating humour may be tactics used to avoid conflict.

Finally, for those who endorsed high levels of compliance during conflict (i.e., giving in to others' demands), I expected stronger slopes between negative relationship interactions and self-defeating humour, as this humour style could be used to admit fault and end conflict. This hypothesis was not supported. A compliant conflict style did not moderate the slope between negative relationship interactions and self-defeating humour.

One unexpected finding was that the slope between affiliative humour use and negative relationship interactions was moderated by conflict engagement; those who reported a tendency to escalate conflicts experienced weaker negative slopes between affiliative humour and negative interactions (see Table 16 and Figure 8).

Taken together, these results offer modest support for the prediction that certain conflict styles moderate links between humour styles and negative relationship interactions.

Of the four conflict styles, only conflict engagement and withdrawal moderated slopes between humour styles and relationship interactions.

Table 14

Conflict Withdrawal Moderates Slope between Aggressive Humour and Negative

Interactions

3 (SE) 5.405 (.140)*** 278 (.049)*** 038 (.014)**
278 (.049)***
, ,
028 (014)**
036 (.014)
Variance (SD)
3.308 (1.819)***
175 (.419)***
2.815 (1.678)

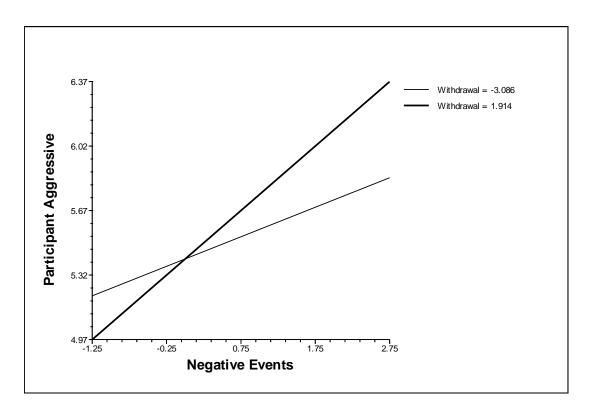


Figure 6. Conflict withdrawal moderates slope between negative interactions and aggressive humour.

Table 15

Conflict Withdrawal Moderates Slope between Self-Defeating Humour and Negative
Interactions

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	4.575 (.124)***
Negative Interactions	.185 (.039)***
Withdrawal	.022 (.010)*
Variance components	Variance (SD)
Intercept	2.595 (1.611)***
Negative Interactions	.088 (.296)***
Residual	2.105 (1.451)
Note. *** $p < .001$, ** $p < .01$, * $p < .05$.	

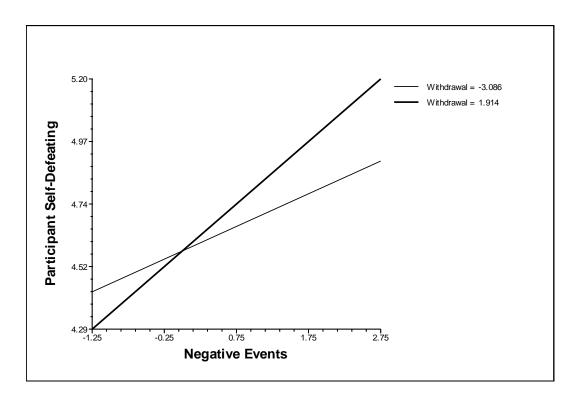


Figure 7. Conflict withdrawal moderates slope between negative interactions and self-defeating humour.

Table 16

Conflict Engagement Moderates Slope between Affiliative Humour and Negative Interactions

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	10.419 (.200)***
Aggressive	395 (.127)**
Engagement	.025 (.012)*
Variance components	Variance (SD)
Intercept	6.783 (2.604)***
Aggressive	.146 (.382)***
Residual	5.657 (2.378)
<i>Note.</i> *** $p < .001, ** p <$	< .01, * p < .05.

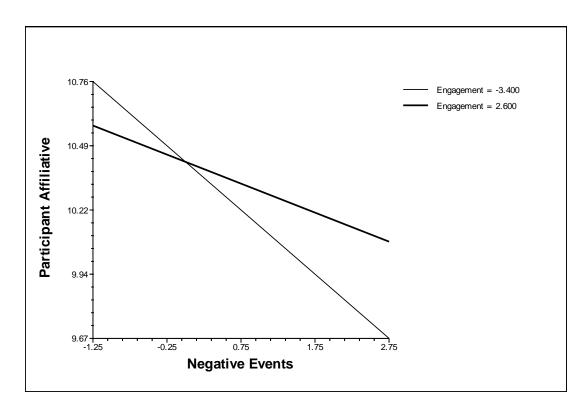


Figure 8. Conflict engagement moderates slope between negative interactions and affiliative humour.

The design of this study was not particularly well-suited to measure how humour was used by couples during conflict. Humour styles and relationship interactions were assessed every 24 hours, so I was unable to look at how humour was used specifically during conflict. Observational studies of humour use during conflict discussion would provide a better indication of whether conflict styles influence how individuals use humour during conflict.

Research Question 8: Do Attachment Dimensions Predict Humour Styles?

I also examined whether attachment dimensions predict the daily use of humour styles. Contrary to my predictions, neither attachment anxiety nor avoidance predicted any of participants' four humour styles. Similarly, neither anxiety nor avoidance predicted participants' perceptions of their partners' four humour styles. This was surprising, given that past studies have found associations between humour styles and attachment dimensions (Cann et al., 2008; Winterheld et al., 2013).

This lack of findings is not easily explained by the distinction between within-person and between-person effects. Attachment was measured at only one time point, as it is a construct that is not expected to change on a day to day basis. Although humour styles were measured on a day to day basis, the analyses for attachment predicting humour styles did not reflect day to day association between attachment and humour styles.

These contradictory findings may possibly be explained by the different measures used to measure humour styles and attachment dimensions. Cann and colleagues (2008) used a longer measure of attachment dimensions (Experiences in Close Relationship Scale – Revised; Fraley & Shaver, 2000) and the HSQ (Martin et al., 2003), whereas Winterheld and colleagues (2013) utilized the Adult Attachment Questionnaire (Simpson, Rholes, & Phillips, 1996), and an observational coding system of humour based on the HSQ. I utilized the

Experience in Close Relationship Scale – Short Form (Wei et al., 2007), which is a shorter version of the ECR-R, and assessed daily humour used in the context of romantic relationships. More research is needed to clarify associations between humour styles and adult attachment dimensions.

Research Question 9: Does Playfulness Predict Daily Humour Use

Contrary to my prediction, overall playfulness did not predict participants' use of affiliative humour. Indeed, the general tendency to engage in play was not predictive of any humour style. This was very surprising, given that past research demonstrated associations between play and humour (Aune & Wong, 2002). However, there are various methodological differences between the present study and Aune and Wong's (2002) study. First, Aune and Wong's design was cross-sectional in nature, examining humour at one point in time. It is possible for humour to be associated with play at the between-persons level, but for playfulness to not predict the daily use of humour styles within romantic relationships. Second, Aune and Wong utilized the Humour Orientation Scale (Booth-Butterfield & Booth-Butterfield, 1991), which assesses the use of humour as a communicative device. Differences in the humour measures may account for the lack of associations found between playfulness and daily humour use. However, this seems unlikely as humour orientation is associated with affiliative humour (r = .63; Cann et al., 2009). Finally, Aune and Wong utilized a measure of adult play designed to assess playfulness specifically in romantic relationships, whereas I used a measure that assessed playfulness in general. As with humour styles, assessing play specifically in the context of romantic relationships may be important in determining whether or not playfulness is linked to humour use in romantic relationships. More research is needed to clarify the relationship between playfulness and humour styles.

Summary

Study 1 demonstrated that both participant and perceived partner daily humour styles predicted daily relationship satisfaction. Participants' affiliative and self-defeating humour were positively and negatively associated with relationship satisfaction. Participants' perceptions of their partners' affiliative and self-enhancing humour were positively associated with relationship satisfaction, and participants' perceptions of their partners' aggressive humour were negatively associated with relationship satisfaction.

I found no evidence that participant humour or perception of partners' humour styles were better predictors of relationship satisfaction. My comparison did indicate, however, that affiliative humour was a better predictor of relationship satisfaction than aggressive humour.

I found some evidence that overall use of humour styles across the study period moderated daily associations between humour styles and relationship satisfaction. However, these results were not consistent with my past research (Caird & Martin, 2014).

I also found that humour styles predicted positive and negative interactions in relationships. However, I did not expect that aggressive humour would be positively associated with positive interactions. I found some evidence that conflict styles moderate slopes between negative relationship interactions and humour use. Specifically, conflict engagement moderated slopes between aggressive and affiliative humour and negative relationship interactions, and conflict withdrawal moderates slopes between aggressive and self-defeating humour and negative relationship interactions. Contrary to my expectations, the trait variables of attachment anxiety, attachment avoidance, and playfulness did not predict daily humour styles.

Chapter 3: Study 2

This study was designed as a follow-up and extension of Study 1. Study 2 explored several of the research questions addressed in Study 1, but focused exclusively on affiliative and aggressive humour use in romantic relationships. Study 2 also expanded upon Study 1 by examining whether the link between daily affiliative humour and relationship satisfaction was mediated by positive emotions and intimacy, and whether the link between aggressive humour and relationship satisfaction was explained by negative emotions.

The methodology used in Study 2 differed from Study 1 in several ways. Most importantly, numerous changes were made to the daily diary measures. A new measure, the Daily Humour Styles in Relationship Questionnaire (DHSRQ), was created for Study 2. The DHSRQ is based on the DHSQ used in Study 1, which was based on the Humour Styles Questionnaire (HSQ: Martin et al., 2003). The DHSQ, used in Study 1, assessed respondents' daily use of affiliative, aggressive, self-defeating, and self-enhancing styles of humour in their romantic relationships. The DHSRQ measures only affiliative and aggressive humour, the humour styles that past research has found to be most relevant to the study of romantic relationships (e.g., Caird & Martin, 2014). Reducing the subscales from four to two allowed for a more detailed assessment of affiliative and aggressive humour. I was able to include more items for each style, while keeping the measure short. Items were based on the definition of humour styles and the HSQ (Martin et al., 2003), as well as the Relational Humour Inventory (de Koning & Weiss, 2002). I expected that by including additional items, the measure would better reflect the use of affiliative and aggressive humour among romantic partners.

The DHSRQ also differs from the DHSQ in terms of scaling. The DHSQ produced skewed data; on average, participants endorsed using high levels of affiliative humour and low levels of aggressive humour. I modified the scaling in the DHSRQ to ask participants to think about their humour use in relation to other couples, expecting that this change would produce more normally distributed data. In marketing research, the use of relative or comparative measures has gained popularity (e.g., Horen & Pieters, 2012; Roy & Butaney, 2014), and research suggests that relative or comparative measures of variables, such as consumer satisfaction, offer predictive advantages over non-comparative measures of the same variables (e.g., Keiningham et al., 2015; Olsen, 2002).

I also modified the scale from a 5- to 7- point scale. I expected that asking participants to think in a relative sense and including additional scale points would reduce the likelihood of highly skewed data.

I also made changes to the daily measure of relationship satisfaction. In Study 1, I utilized a one item measure of relationship satisfaction. Although one item measures have been used successfully in other diary studies (e.g., Ruppel & Curran, 2012), one item measures are not ideal from a statistical perspective (Loo, 2002). In Study 2, I used a four item measure of relationship satisfaction.¹⁴

Study 2 extends Study 1 by examining potential mediators of the humour -satisfaction relationship. Overall, past research consistently finds associations between affiliative humour and relationship satisfaction and aggressive humour (particularly perceived partner

¹⁴ Shrout and Lane (2013) recommend including at least three items for each construct being measured in a diary study.

aggressive humour) and relationship satisfaction. Study 2 seeks to replicate and explain these relationships by examining the mechanisms by which humour styles and relationship satisfaction are associated. Functional theories of humour and past research suggest affiliative humour promotes intimacy, bonding, and positive emotion, whereas aggressive humour can be used to express hostility and promote negative affect in targets of aggressive humour. It is possible that these functions of humour are the mechanisms by which humour is associated with relationship satisfaction. That is, these functions of humour may mediate links between humour styles and relationship satisfaction. Study 2 was designed to assess if daily fluctuations in positive and negative emotion or intimacy experienced in relationships mediate the daily link between humour and relationship satisfaction. This is the first study to assess potential mediators of the relationship between humour styles and relationship satisfaction using daily diary methodology.

Research Questions and Hypotheses

Research Question 1: Are humour styles associated with relationship satisfaction at the within-persons level? I predicted that participants' daily use of affiliative humour and their perceptions of their partners' affiliative humour would be positively associated with daily relationship satisfaction. Conversely, I predicted that participants' daily use of aggressive humour with their partners and participants' perceptions of their partners' aggressive humour would be negatively related to daily relationship satisfaction. Although in Study 1, I did not find that perceptions of partners' aggressive humour were related to relationship satisfaction, I expected that I would find significant association with the new measure of aggressive humour used in this study. Although it may be difficult to measure, and may be rare within the context of romantic relationships, I hypothesized that aggressive

and hostile humour directed at partners would be associated with decreases in participants' relationship satisfaction.

Research Question 2: Is perceived partner humour a better predictor of relationship satisfaction than self-reported humour? Consistent with the results of Study 1, I predicted that participants' own use of affiliative humour and their perceptions of their partners' use of this humour would not differ in terms of their predictive abilities. However, I expected that participants' perceptions of their partners' aggressive humour would be a stronger predictor of their relationship satisfaction than would their own aggressive humour.

Research Question 3: Is affiliative humour a better predictor of relationship satisfaction than aggressive humour? Lastly, as found in Study 1, I predicted that affiliative humour use (both participants' and perceptions of partners') would be a better predictor of relationship satisfaction than would aggressive humour use.

Research Question 4: Do overall humour styles moderate associations between daily humour styles and relationship satisfaction? Consistent with Study 1, I expected that overall levels of affiliative humour use across the study period would moderate the relationship between daily affiliative humour (participant and perceived partner) and relationship satisfaction. Despite null findings in Study 1, I predicted that mean aggressive humour use (participant and perceived partner) would moderate the relationship between daily aggressive humour and relationship satisfaction, such that individuals with higher overall levels of aggressive humour would experience a more negative relationship between aggressive humour and relationship satisfaction.

Research Question 5: Does partner self-reported humour predict participant's relationship satisfaction? Study 1 found partner affiliative humour was associated with participants' relationship satisfaction. In Study 1, I was unable to examine the relationship between partner aggressive humour and relationship satisfaction due to low reliability of the measure. However, I expected that both partner affiliative and aggressive humour would be related to participants' daily relationship satisfaction using the new measure.

Research Question 6: Do positive and negative relationship interactions predict humour styles? As found in Study 1, I predicted that daily affiliative humour would be positively associated with positive relationship events and negatively associated with negative events relationship events.

I also predicted that aggressive humour would be negatively related to positive relationship events, despite my contrary findings in Study 1. I expected that my new measure of aggressive humour would allow me to find a relationship between higher levels of aggressive humour use between partners and lower levels of positive relationship interactions. As found in Study 1, I predicted that aggressive humour would be positively associated with negative relationship interactions.

Research Question 9: Does playfulness predict daily humour use? Although my results in Study 1 did not support this hypothesis, I predicted that a general tendency to be playful would predict the daily use of affiliative humour. In Study 1, my measure of playfulness, the Short Measure of Adult Playfulness, measured playfulness as a personality trait. In Study 2, I measured participants' playfulness, specifically within their romantic relationship. I expected that the general tendency to be playful with one's partner would predict one's daily use of affiliative humour.

Research Question 10: Do intimacy and positive and negative emotions mediate links between humour styles and relationship satisfaction? I predicted that daily intimacy and positive emotions would mediate the daily relationship between affiliative humour (self-reported and perceived partner) and relationship satisfaction. Conversely, I posited that aggressive humour (participant and perceived partner) would predict negative emotion, which in turn, would predict lower relationship satisfaction. A more detailed account of the rationale for these predictions was presented in Chapter 1.

Method

Participants

A total of 200 undergraduates (146 women and 54 men) enrolled in the Psychology Department Research Pool at the University of Western Ontario volunteered to participate in the present study. Participants received two course credits for their participation, one-half after they completed the introductory session, and one and one-half when they completed the online daily diaries. Participants ranged in age from 17 to 33 years (M = 18.72, SD = 2.13). All participants were involved in a dating relationship of three or more months at the beginning of the study. Most participants (n = 196) were involved in a heterosexual relationship. Four female participants had female partners. The length of dating relationships ranged from 3 to 132 months (M = 19.45, SD = 19.35).

mediation), a sample size of 200 was deemed sufficient to provide unbiased estimates.

¹⁵ As described by Nezlek (2008), estimating power for multilevel designs is far more complex than estimating power for single level designs. In a simulation study designed to examine sufficient sample sizes for multilevel models, regression coefficients, variance components, standard errors of regression coefficients, and standard errors of the second level variances were all estimated without bias when the number of level 2 observations was higher than 100 (Maas & Hox, 2006). Because I was testing complex models (e.g., within-subject

The sample was primarily comprised of European-Canadians (57%), Asian-Canadians (25%), and South Asian-Canadians (6.5%). English was the first language of 74% of participants. Participants for whom English was not their first language had been speaking English between 1 to 19 years (M = 10.29, SD = 4.91).

Participants' partners were also invited to participate in the study, by completing a short online questionnaire. Eighty-three partners completed the online questionnaire. Of the responders, 72.3% were men.

Materials

Introductory session.

Demographic Questionnaire. This questionnaire was described in Study 1.

Couples Play (CP). This measure is a modified version of Aune and Wong's (2002) questionnaire, designed to measure adult play in intimate relationships. In modifying this questionnaire, I reduced the items from 25 to 9. I removed items that explicitly assessed humour and selected items with high face validity. I also selected three reverse-scored items, to maintain an approximately equal proportion of positively scored items to reverse scoreditems as the original measure. This 9-item measure (see Appendix R) asks participants to indicate their agreement with each statement using a 7-point scale (1 = strongly disagree, 7 = strongly agree). An example item is "We play together in many different ways". The psychometric properties of this modified scale are largely unknown. The alpha coefficient in the current study was .79.

Online daily diaries.

Daily Humour Styles in Relationship Questionnaire - Participant (DHSRQ-P). The Daily Humour Styles in Relationship Questionnaire (DHSRQ) was designed for the current

study to provide an accurate account of humour use in romantic relationships on a daily basis. The DHSRQ-P assesses participants' use of affiliative and aggressive humour with their partners over the past 24 hours (see Appendix S). Example items that assessed affiliative humour are "I made my partner laugh by doing or saying something funny", and "I referred to my partner with a cute/silly nickname". Examples of items that assessed aggressive humour were "My partner was bothering me so I made a joke about it", and "My aggressive humour seemed to make my partner uncomfortable".

Each item that comprised the two subscales was examined in terms of its overall contribution to the scale's internal validity. Each item was found to contribute in a meaningful way to the subscales. For affiliative humour, item-total correlations ranged from .41 to .81. For aggressive humour, item-total correlations ranged from .39 to .64. All 18 items were therefore retained in the measure. Internal consistencies were obtained by calculating the alpha coefficient for each diary day and averaging across the diary days. The mean alpha coefficients for actor affiliative and aggressive humour were .92 and .88, respectively. However, as this scale was designed for the current study, the overall psychometric properties are unclear.

Daily Humour Styles in Relationship Questionnaire – Perceived Partner (DHSRQ-PP). This scale includes the same items as the DHSRQ-P, but the wording was modified so it assessed the participants' perceptions of their partners' humour use within the relationship (see Appendix T). Example items include, "My partner told me a joke or said something funny to make me laugh" and "My partner told aggressive jokes that made me uncomfortable". For affiliative humour, item-total correlations ranged from .44 to .84. For

aggressive humour, item-total correlations ranged from .40 to .70. The average alpha coefficients for affiliative and aggressive humour were .93 and .89, respectively.

Frequency of Emotion Index (FEI; Simpson, 1990). This scale is an abbreviated version of the FEI, and it assesses positive (intense and mild) and negative (intense and mild) emotions experienced in relationships. For the current study, the measure was reduced from 28 to 12 items. I selected three emotion words for each of the four categories. I selected the emotion words that seemed common in everyday speech, and attempted to reduce overlap between similar emotions (see Appendix U). On this scale, participants are asked to indicate how often they experienced emotions in their current relationship, in the past 24 hours, using a 7-point scale (1 = not at all, 7 = extremely). For the purpose of this study, I combined the intense and mild emotions. Examples of positive emotions were "Happy" and "Calm", and examples of negative emotions were "Sad" and "Angry". In past research, the full version of the scale demonstrated satisfactory internal consistency and test-retest reliability (Bierhoff & Müller, 1999). In the current sample, the average alpha coefficients for positive and negative emotions were .90 and .83, respectively.

Daily Intimacy in Relationships (DIR). This measure is based on the intimacy subscale of Sternberg's Triangular Love Scale (Sternberg, 1986). I reduced the number of items from 15 to 5, by selecting item that assessed different facets of intimacy (i.e., comfort, trust, understanding, closeness, and personal disclosure), and had high face validity. I also modified the scale to assess the past 24 hours (see Appendix V). Participants indicate how much they agree with each statement using a 7-point scale (1 = strongly disagree, 7 = strongly agree). An example item is "Today, I felt close to my partner." The original version of this scale generally demonstrates good internal consistency, test-retest reliabilities, and

convergent and predictive validity (Hendrick & Hendrick, 1989; Sternberg, 1993). However, as a modified questionnaire, the psychometric properties are unclear. In the current sample, the average alpha coefficient was .91.

Relationship Assessment Scale – Short Form (RAS; Hendrick, 1988). The RAS was modified to measure relationship satisfaction within the past 24 hours. The scale was shortened from seven to five items. I excluded two items that did not seem well suited to a daily measure, and asked participants to consider how well the relationship met their original expectations, or how often they regretted entering into the relationship (see Appendix W). Participants indicate their agreement with each statement using a 7-point scale (1 = not at all/poor, 7 = a great deal/extremely well). An example item was "Today, how well did your partner meet your needs?" The average alpha coefficient across the study period was .92.

Partner Measures.

Humour Styles in Relationship – Partner Version (HSR-P). Partners of participants were asked to rate their own affiliative and aggressive humour use within their relationships. The instructions of the DHSRQ-P were modified to capture trait-levels of humour use in the relationship, as opposed to a daily measure (see Appendix X). Example items include "I tell my partner jokes and say funny things to make him laugh" (Affiliative Humour), and "I sometimes make jokes at my partner's expense" (Aggressive Humour). Partners respond using a 7 point scale ($1 = not \ very \ much$, $7 = a \ great \ deal$). The alpha coefficients for

¹⁶ The means for affiliative and aggressive humour scored with the HSR-P were higher than the means obtained by the DHSQ. The HSR-P did not use a relative scale, whereas the DHSQ did.

affiliative and aggressive humour were .76 and .89, respectively. Other psychometric properties of this modified questionnaire are unclear

Procedure

Like Study 1, this study consisted of an initial introduction session and an online diary component that was designed to be completed within 9 days.

Students signed up for the study through the Psychology Department Research Pool. During the initial introduction session, participants completed a battery of self-report measures in groups of 1 to 12. This testing session was held in a small and quiet classroom on campus. Participants were welcomed and introduced to the study by one of two female researchers. Participants were provided with an information sheet, which outlined testing procedures, and provided written informed consent before beginning the study. Participants were invited to ask questions at any point during this session.

During the initial testing session, participants completed the Demographic Questionnaire and CP, in the stated order. Participants also completed the first of the daily dairies. The testing session lasted 30 minutes. Following the initial session, participants received a debriefing form, and were reminded that they would receive their first online diary the following evening. The procedure for the nine online daily diaries was the same as in Study 1. Data were solicited from participants' partners, in the same manner described in Study 1.

Of the 200 participants who attended the initial testing session, 183 completed all 10 diaries and 195 completed 3 or more diaries. The mean number of completed diaries was 9.66 out of 10.

Data Preparation

Data from the initial testing session were inspected for noncompliance during data entry. Research assistants were instructed to watch for random responding, rapid completion times, and inconsistent answers. No data were removed because of noncompliance in the initial testing session.

The online diary data were also inspected for noncompliance. The main criterion for eliminating daily diary data was rapid completion time. Diaries that were completed in less than three minutes were eliminated from the data set. ^{17,18} Of the 1,931 original daily dairies, 272 were eliminated because of this criterion. An additional 61 diaries days were removed because participants had no communication with their partners that day. Overall, 333 diary days (16%) were eliminated from the data set.

Results and Discussion

Descriptive Statistics

Means and standard deviations of the variables at both Level 1 (within-persons) and Level 2 (between-persons) are displayed in Table 17. Participants' scores on the daily relationship satisfaction measure were highly negatively skewed. This measure was therefore transformed using a log 10 transformation to produce a more normal distribution. Because the skew was negative, the relationship satisfaction measure was reflected before and after

 $^{^{17}}$ To estimate this cut-off time, I instructed 6 individuals to become familiar with the items (as participants would become more familiar with the items each time they completed the diary). The individuals were asked to complete the diary quickly, but to still attend to the items and answer accurately. The mean completion time was 3.3 minutes.

¹⁸ This cut-off time was longer than the 2 minute cut off time in Study 1 because there were 58 items in Study 2, compared to 44 items in Study 1.

this log transformation. To calculate the between-person correlations between variables, daily measures were averaged for each participant across the diary period. The correlations between study variables are shown in Table 18.

Overview of Analyses

Data analyses followed the same procedures described in Study 1.

Research Question 1: Are Humour Styles Associated with Relationship Satisfaction at the Within-Persons Level?

First, I assessed whether participant and perceived partner affiliative and aggressive humour predicted relationship satisfaction. The unconditional model revealed an intraclass correlation coefficient (ICC) of .58, meaning that 58% of the total variance in relationship satisfaction existed between individuals, and 42% of the variance existed at the daily diary level. Thus, significant variance was seen between groups (i.e., between individuals) and within individuals for daily relationship satisfaction. As expected (see Table 19), the HLM analysis revealed that the daily use of participant and perceived partner affiliative humour were associated with higher levels of daily relationship satisfaction. In contrast, only perceived partner aggressive humour was associated with lower levels of relationship satisfaction. Contrary to my predictions, but consistent with Study 1, participants' own aggressive humour was not associated with their relationship satisfaction.

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¹⁹ Error exists at levels 1 and 2.

Table 17

Descriptive Statistics for Study 2 Variables

	Mean	Standard Deviation
Level 1 variables		
Participant Affiliative (P-AF)	40.13	13.33
Participant Aggressive (P-AG)	17.28	9.45
Perceived Partner Affiliative (PP-AF)	40.75	13.64
Perceived Partner Aggressive (PP-AG)	16.92	9.57
Intimacy (DIR)	27.50	7.02
Positive Interactions (I-POS)	4.68	2.18
Negative Interactions (I-NEG)	1.08	1.41
Positive Emotions (PosEmo)	31.07	7.78
Negative Emotions (NegEmo)	12.35	7.18
Relationship Satisfaction (RS)	23.02	5.22
Relationship Satisfaction Transformed (RS –Tr)	1.80	0.42
Level 2 variables		
Couples Play (CP)	49.60	7.21
Partner Variables (Level 2)		
Self-Rated Affiliative Humour (PSR-AF)	50.55	7.62
Self-Rated Aggressive Humour (PSR-AG)	31.63	12.82

Table 18

Bivariate Correlations between Level 1 Variables

	1	2	3	4	5	6	7	8	9
1. RS-Tr	-								
2. P-AF	.54***	-							
3. P-AG	14***	.21***	-						
4. PP-AF	.56***	.92***	.19***	-					
5. PP-AG	14	.22***	-93***	.21***	-				
6. DIR	.79***	.61***	09***	.62***	09***	-			
7. P-Emo	.71***	.62***	06*	.67***	08**	.76***	-		
8. N-Emo	46***	21***	.33***	21***	.49***	49***	50***	-	
9. I-POS	.48***	.50***	.02	.47***	.05	.47***	.45***	.17***	-
10. I-NEG	35***	12***	.33***	14***	.32***	36***	33***	.52***	06*

Note. RS-TRANS = relationship satisfaction transformed, P-AF = participant affiliative humour, P-AG = participant aggressive humour, PP-AF = perceived partner affiliative humour, PP-AG = perceived partner aggressive humour, DIR = daily intimacy, P-EMO = positive emotion, N-EMO = negative emotion, I-POS = positive interactions, I-NEG = negative interactions, *** p < .001, ** p < .01, ** p < .05.

Research Question 2: Is Perceived Partner Humour a Better Predictor of Relationship Satisfaction than Self-Reported Humour?

As in Study 1, I used contrast coding to compare the strength of the coefficients for participant versus perceived partner humour styles. As predicted, neither participant nor perceived partner affiliative humour was a better predictor of relationship satisfaction, χ^2 (1) = .23, p > .05. Contrary to my expectations, neither participant aggressive or perceived partner aggressive humour were a better predictor of relationship satisfaction, χ^2 (1) = 1.02, p > .05. This is surprising, given that in the previous model (see Table 19), participant aggressive humour was not associated with relationship satisfaction whereas perceived partner aggressive humour was. Differences in modelling likely account for this discrepancy. In the original model (see Table 19), affiliative and aggressive humour for participant and perceived partners were entered, and the model simultaneously accounts for all the variables. When making direct comparisons using contrast coding, only the two predictors (participant and perceived partner aggressive humour) are entered into the equation.

Research Question 3: Is Affiliative Humour a Better Predictor of Relationship Satisfaction than Aggressive Humour?

I also compared the slopes of affiliative and aggressive humour. As expected, participants' use of affiliative humour predicted relationship satisfaction more strongly than did participants' use of aggressive humour, χ^2 (1) = 63.92, p < .001. Similarly, perceived partner use of affiliative humour predicted participants' relationship satisfaction more strongly than did the perceived use of aggressive humour, χ^2 (1) = 46.88, p < .001.

Table 19

Participant and Perceived Partner Humour Styles Predicting Relationship Satisfaction

Parameters	Final model		
Regression coefficients	β (SE)		
Intercept	1.788 (.024)***		
Participant Affiliative	.008 (.002)***		
Participant Aggressive	002 (.001)		
Perceived Partner Affiliative	.009 (.002)***		
Perceived Partner Aggressive	005 (.002)**		
Variance components	Variance (SD)		
Residual	.052 (.228)		
Intercept	.107 (.327)***		
Participant Aggressive	.000 (.006)**		
<i>Note.</i> *** <i>p</i> < .001, ** <i>p</i> < .01, * <i>p</i> < .05.			

Overall, when it comes to affiliative humour the participants' use of affiliative humour and their perceptions of their partners' affiliative humour use predicted participants' relationship satisfaction equally well. However, only participants' perceptions of partners' aggressive humour were related to a decrease in participants' relationship satisfaction.

Research Question 4: Do Overall Humour Styles Moderate Associations between Daily Humour Styles and Relationship Satisfaction?

Using the approach described in Study 1, I analyzed if overall levels of humour use across the study period (mean humour use) moderated relationships between daily humour styles and relationship satisfaction. In total, 4 models were run, and in all four I expected that overall humour styles would moderate slopes between daily humour styles and relationship satisfaction. However, I only found one moderation effect (see Table 20 and Figure 9). When participants used relatively low levels of aggressive humour across the diary period, their daily use of aggressive humour was positively associated with relationship satisfaction. In contrast, participants who used high levels of aggressive humour throughout the study had a fairly flat, but slightly negative association between relationship satisfaction and daily aggressive humour use. Thus, only participants' habitual use of aggressive humour seems problematic to their own relationship satisfaction, and the occasional use of aggressive humour may represent good-natured teasing. This interaction may help explain why associations between participant aggressive humour and relationship satisfaction have been inconsistent in past research.

Table 20

Cross-level Moderation for Participants' Aggressive Humour

Parameters	Final Model		
Regression coefficients	β (SE)		
Intercept	1.787 (.024)***		
Daily participant aggressive	.002 (.002)		
Mean participant aggressive	000 (.000)*		
Variance components	Variance (SD)		
Residual	.073 (.270)		
Intercept	.103 (.321)***		
Daily participant aggressive	.008 (.000)**		
Note. *** $p < .001$, ** $p < .01$, * $p < .05$.			

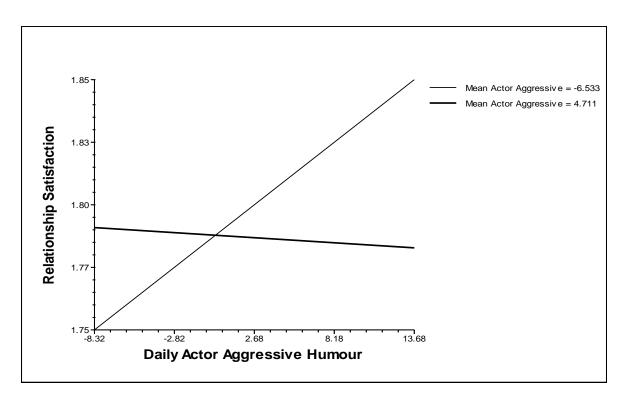


Figure 9. Mean participant (i.e., actor) aggressive humour moderates the relationship between daily participant aggressive humour and relationship satisfaction.

Contrary to my predictions, mean levels of participants' affiliative humour use across the study period did not influence the relationship between daily affiliative humour and relationship satisfaction. Similarly, mean perceived partner aggressive humour did not influence the slope between daily partner aggressive humour and relationship satisfaction. Mean levels of partner aggressive humour also did not moderate the slope between daily partner aggressive humour and relationship satisfaction.

Research Question 5: Does Partner Self-Reported Humour Predict Participant Relationship Satisfaction?

I also examined if partners' ratings of their own humour styles predicted participants' relationship satisfaction by creating a model with participants' daily relationship satisfaction as the outcome variable and partners' self-rated affiliative and aggressive humour (Level 2) as predictors. As predicted, both partner self-reported affiliative and aggressive humour predicted participants' relationship satisfaction (see Table 21). Partners who self-reported using more affiliative and less aggressive humour in their relationships had partners (i.e., the study participants) who were more satisfied on a day-to-day basis.

Research Question 6: Do Positive and Negative Relationship Interactions Predict Humour Styles?

First I evaluated whether positive and negative relationship interactions predicted the daily use of humour in relationship, controlling for the influence of the other humour style. In these models, the outcome variable was the humour style of interest, and the other humour style was entered as a level 1 predictor to control for its influence. As predicted, positive interactions predicted higher levels of affiliative humour use by

Table 21

Partners' Ratings of their Humour Predict Participants' Daily Relationship Satisfaction

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	.156 (.068)*
Affiliative	.025 (.008)**
Aggressive	030 (.006)***
Variance components	Variance (SD)
Intercept	.330 (.575)***
Residual	.487 (.698)
<i>Note.</i> *** <i>p</i> < .001, ** <i>p</i>	<.01, * <i>p</i> < . 05.

participants, and negative interactions predicted lower levels of affiliative humour use (see Table 22). Also as expected, negative relationship interactions predicted higher levels of aggressive humour. Contrary to my expectations, positive interactions in the relationship did not predict aggressive humour use amongst participants (see Table 23).

Next I investigated if positive and negative relationship interactions predicted how participants viewed their partners' humour use. As expected, positive interactions predicted higher levels of perceived partner affiliative humour and negative interactions were associated with lower levels of perceived partner affiliative humour (see Table 24). Also, as expected, negative interactions predicted higher levels of perceived partner aggressive humour. However, contrary to my expectations, positive interactions were not negatively associated with perceived partner aggressive humour (see Table 25). Unlike Study 1, Study 2 did not find that positive interactions predicted higher levels of aggressive humour use (participant or perceived partner).

Research Question 9: Does Playfulness Predict Daily Humour Use?²⁰

I predicted that couples play would predict participants' daily use of affiliative humour, and their perceptions of their partners' affiliative humour. To test this hypothesis, I ran two separate models. In the first model, daily participant affiliative humour was entered as the outcome variable, and couples play was entered as a level 2 predictor (grand-mean centred). As shown in Table 26, couples play was positively associated with participants' daily use of affiliative humour. In the second model, daily perceptions of partners' affiliative humour was entered as the outcome variable, and

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²⁰ Research questions 7 and 8 were not addressed in Study 2.

Table 22

Positive and Negative Relationship Interactions Predict Participants' Daily Affiliative

Humour

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	39.89 (.74)***
Positive interactions	2.37 (.16)***
Negative interactions	-1.25 (.23)***
Aggressive humour	0.37 (.05)***
Variance components	Variance (SD)
Residual	46.71 (6.83)
Intercept	104.47 (10.22)***
Positive interactions	1.70 (1.30)***
Negative interactions	2.80 (1.67)**
Aggressive humour	0.18 (.43)*
Note *** $n < 0.01$ ** $n < 0.1$	* n < 05

Table 23

Positive and Negative Relationship Interactions Predicting Participants' Aggressive

Humour

Parameters	Final Model	
Regression coefficients	β (SE)	
Intercept	17.66 (.56)***	
Positive interactions	-0.08 (.12)	
Negative interactions	1.40 (.19)***	
Affiliative humour	.16 (.02)***	
Variance components	Variance (SD)	
Residual	28.20 (5.31)	
Intercept	58.96 (7.67)***	
Negative interactions	2.37 (1.54)***	
Affiliative humour	.04 (.19)***	
Note. *** $p < .001$, ** $p < .01$, * $p < .05$.		

Table 24

Positive and Negative Relationship Interactions Predicting Perceived Partner Affiliative

Humour

E) 5 (.76)*** 6 (.15)*** 5 (.25)***
(.15)***
5 (25)***
J (.43)
(.05)***
ance (SD)
3 (7.28)
88 (10.39)***
(1.04)*
(1.74)***
(.40)***
)

Table 25

Positive and Negative Relationship Interactions Predicting Perceived Partner Aggressive

Humour

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	17.17 (.56)***
Positive interactions	00 (1.12)
Negative interactions	1.32 (.19)***
Affiliative humour	.16 (.02)***
Variance components	Variance (SD)
Residual	28.28 (5.32)
Intercept	59.97 (7.74)
Positive interactions	.53 (.73)**
Negative interaction	2.05 (1.43)*
Affiliative humour	.04 (.20)**
NT and about	0.4 .1: 0.7

couples play was entered as a level 2 predictor (grand-mean centred). As shown in Table 27, participants' perceptions of their partners' daily affiliative humour were also significantly associated with couples play. In Study 1, I used a general measure of play and did not find associations with affiliative humour. Using a relationship specific measure of play enabled me to demonstrate associations between affiliative humour and play.

Research Question 10: Do Intimacy and Positive and Negative Emotions Mediate Links between Humour Styles and Relationship Satisfaction?

Mediation was tested using the approach outlined by Bauer, Preacher, and Gil (2006) that evaluates mediation within a level 1 model. To conduct these analysis, data for each diary day are repeated twice, "stacking the data", and indicator variables are used to isolate the mediated relationship and test it. This analysis estimates the relationship between a predictor and a mediator, while simultaneously estimating the relationship between the predictor and the mediator and the mediator to the outcome variable. Syntax for restructuring the data in SPSS, syntax for fitting the model, and information about what elements of the SPSS output were necessary for calculating the indirect and total effects were obtained from Mathiowetz and Bauer (2008). Independent and mediator variables were person-centered and the SPSS MIXED procedure was used to run the multilevel mediation model. After the model is run, relevant values from the SPSS output are then entered into an Excel worksheet

²¹ See Bolger and Laurenceau (2013) for a discussion of within-subject mediation analysis.

Table 26

Participant Affiliative Humour Predicts Couples Play

Final Model
β (SE)
39.90 (.61)***
.82 (.08)***
Variance (SD)
83.91 (9.16)
63.83 (7.99)***

Table 27 Perceived Partner Affiliative Humour Predicts Couples Play

Parameters	Final Model
Regression coefficients	β (SE)
Intercept	40.48 (.63)***
Couples play	0.82 (.09)***
Variance components	Variance (SD)
Residual	89.07 (9.44)
Intercept	67.77 (8.23)***
Note. *** $p < .001$, ** $p < .001$	0.01, *p < .05.

(Mathiowetz, 2008) that calculates indirect effects for lower level mediation models using the equations provided by Bauer and colleagues (2006). If the 95% confidence intervals do not include 0, the size of the mediated effect is significantly different from zero, and the mediated effect is considered significant.

Intimacy. I predicted that daily intimacy would mediate the link between affiliative humour and relationship satisfaction. The results of the mediation analyses revealed a partial mediation effect for both participant and perceived partner affiliative humour (see Figures 10 and 11). For participant affiliative humour, the 95% confidence interval for the random indirect effect and random direct effects ranged from .004 to .015, and .009 to .021, respectively. For partner affiliative humour, the 95% confidence interval for the random indirect effect and random direct effects ranged from .005 to .012, and .002 to .026, respectively. These results provide support for the notion that affiliative humour is associated with relationship satisfaction, at least in part because it promotes intimacy and bonding.

Emotions. I predicted that emotions experienced in the context of a dating relationship would mediate the link between humour styles and relationship satisfaction. I found support for my hypothesis. Positive emotion partially mediated the link between participant affiliative humour and relationship satisfaction, on a daily basis (see Figure 11). The 95% confidence interval for the random indirect effect and random direct effects ranged from .007 to .010, and .014 to .017, respectively. Positive emotion also partially mediated the link between perceived partner affiliative humour and relationship satisfaction (see Figure 12). The 95% confidence interval for the random indirect effect and random direct effects ranged from .006 to .011, and .007 to .021, respectively.

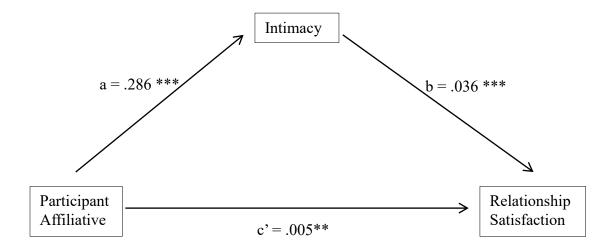


Figure 10. Intimacy partially mediates the relationship between participant affiliative humour and relationship satisfaction.

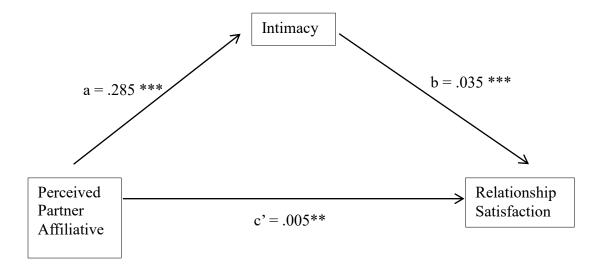


Figure 11. Intimacy partially mediates the relationship between perceived partner affiliative humour and relationship satisfaction.

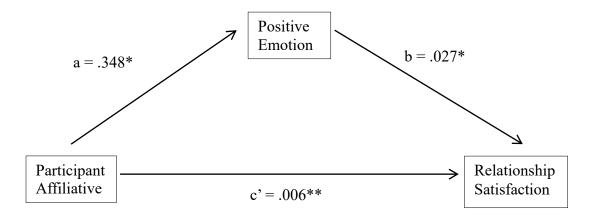


Figure 12. Positive emotion partially mediates association between participant affiliative humour and relationship satisfaction.

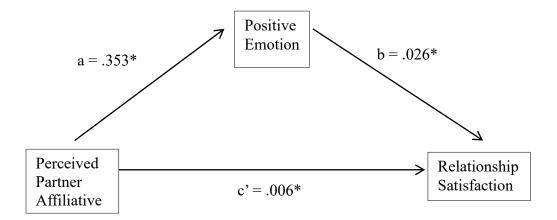


Figure 13. Positive emotion partially mediates the association between perceived partner affiliative humour and relationship satisfaction.

These results provide support for the notion that affiliative humour use is associated with relationship satisfaction at least in part because it elicits positive emotions.

I also predicted that negative emotion would mediate the links between perceived partner aggressive humour and relationship satisfaction. However, this hypothesis was not supported. I did not find a direct association between participant aggressive humour and relationship satisfaction, so this relationship was not tested for a mediation effect.

Chapter 4: General Discussion

The current research made a number of significant contributions to the study of humour styles in romantic relationships. The overall goal of this research was to further explore the relationship between humour styles and relationship satisfaction among dating couples. Using a daily diary methodology, I explored how relationship satisfaction and humour styles fluctuate within individuals over time, as well as variables that predict humour use. I also explored if emotions and intimacy mediate the relationships between humour styles and relationship satisfaction. Ten research questions guided the current investigation, and the major results pertaining to each of these questions are discussed in more detail below.

Research Question 1: What Within- and Between- Person Associations Exist between Humour Styles and Relationship Satisfaction?

The majority of past humour research focused on between-person correlations between humour styles and relationship satisfaction. Therefore, process-oriented research was needed to determine if the same correlations that exist at the between-person level also exist at the within-person level. My two studies found that both participants' self-reported humour and their perceptions of their partners' humour styles predicted participants' relationship satisfaction. On days when participants reported they used more affiliative and less self-defeating humour with their partners, they reported higher satisfaction with their relationships. On days when participants saw their partners as using more affiliative and self-enhancing humour, and less aggressive humour, they were more satisfied with their relationships. Thus, on days that couples engage in more goodnatured joking with one another, and when individuals see their partners using humour to

cope with stress and difficulties, individuals feel more positive about their relationships. Conversely, on days when individuals use humour to put themselves down, or feel that their partners are using humour to make fun of them or put them down, they feel less positive about their relationships.

These unique within-person findings add to our understanding of humour styles and romantic relationships. As discussed, past research focuses on cross-sectional correlations and between-person effects. The within-person effects found in this research correspond with some between-person effects found in past literature (Saroglou et al., 2010), but do not correspond with Cann and colleagues' (2011) complete lack of between-person associations between self-reported humour styles and relationship satisfaction.

Contrary to my hypotheses, but in line with past diary research (Caird & Martin, 2014), neither study found that participants' aggressive humour was associated with relationship satisfaction. On days when participants made fun of or put down their partners using humour, they were not less satisfied with their relationships. Thus, individuals do not appear to use aggressive humour to indicate their displeasure with their partners or their relationships. Conversely, past cross-sectional work has demonstrated a relationship between men's own use of aggressive humour and their relationship satisfaction (Sarolgou et al., 2010). It is possible that the relationship between self-reported aggressive humour and relationship satisfaction only exists at the between-person level, and not the within-person level (although most studies have not found this association).

As I noted in a previous paper (Caird, 2013), relationship partners may disagree about the intentions behind humour. For aggressive humour in particular, the individual making the joke may perceive it as good-natured teasing, whereas the partner (or target of the joke) may perceive the joke as hurtful and aggressive, and may consequently experience declines in relationship satisfaction. This distinction between being the creator or the target of aggressive humour points to the importance of examining both partner humour use and perceptions of partners' humour use. Although they did not examine specific humour styles, Bippus, Young, and Dunbar (2011) used stimulated recall methodology to study humour use during conflict. In their study, after each couple was videotaped engaging in a conflict interaction, each member of the couple was separately shown the video, and asked to identify times that they or their partners used humour during the conversation. The authors found that humour use during conflict had differential effects for speakers and receivers. The more humour individuals used themselves during conflict, the more satisfied they were with their relationships, and the less they believed the conflict had escalated. Conversely, the more listeners perceived their relationship partners as using humour, the less satisfied they were with their relationships, and the less they believed they had made progress during the discussions. We might expect these differences to be even more pronounced in the case of aggressive humour, where one partner is the target of the joke. Indeed, Studies 1 and 2 demonstrated that when people see their partners using humour to make fun of them, they are less satisfied with their relationships, but their own use of aggressive humour is not associated with their relationship satisfaction. Observational research that examines the specific humour styles used during couples' interactions, and each partner's reactions to the

humour, would help to further clarify how aggressive humour is associated with relationship satisfaction.

Research Question 2: Is Perceived Partner Humour a Better Predictor of Relationship Satisfaction than Self-Reported Humour?

I was also interested in determining whether perceived partner humour or selfreported humour were better predictors of relationship satisfaction, as past research found conflicting results (e.g., Caird & Martin, 2014; Cann et al., 2011). Determining the relative importance of individuals' own humour use, their perceptions of their partners' humour use, or their partners' self-reported humour use would add to our understanding of humour in romantic relationships. Although in Studies 1 and 2, perceived partner aggressive humour predicted relationship satisfaction and participant aggressive humour did not, when directly compared, neither participant nor perceived partner humour styles were better predictors of relationship satisfaction. Therefore, Studies 1 and 2 support the idea that mainly perceived partner aggressive humour is associated with relationship satisfaction, and that self-reported aggressive humour is less important. However, it is puzzling that even though perceived partner aggressive humour is a predictor of relationship satisfaction and self-reported aggressive humour is not, that the two do not differ significantly from each other. Overall, my results suggest that perceptions of partners' aggressive humour use is a more consistent predictor of relationship satisfaction than participants' own aggressive humour use and complement past between-person associations between perception of partners' aggressive humour and relationship satisfaction.

Research Question 3: Is Affiliative Humour a Better Predictor of Relationship Satisfaction than Aggressive Humour?

Social theories of humour suggest that humour acts as both a social "lubricant" and a "social abrasive" but that the relationship facilitating functions of humour are more common (Martineau, 1972). Indeed, past research focusing on romantic relationships (de Koning & Weiss, 2002) found that positive functions of humour (e.g., closeness) are nearly twice as common as negative functions (e.g., aggressive). As expected, affiliative humour (both participant and perceived partner) was a better predictor of relationship satisfaction than was aggressive humour. These findings are in line with theories that suggest that the bonding functions of humour operate more strongly in social relationships than the more negative functions of humour.

Research Question 4: Do Overall Humour Styles Moderate Associations between Daily Humour Styles and Relationship Satisfaction?

To better understand within-person associations between humour styles and relationship satisfaction, I examined if overall humour use moderated the associations. That is, does the amount of humour individuals use with their partners in general (i.e., over the course of the study period), influence how humour relates to satisfaction on a day-to-day level? An understanding of cross-level interactions would deepen our understanding of within-person relationship by providing some indication of how day-to-day associations (within-person) vary as a function of overall humour use (between-person variable). In Study 1, overall affiliative humour use (both participant and perceived partner) moderated slopes between daily affiliative humour and relationship satisfaction, such that when a great deal of affiliative humour was used across the study

period, there were stronger positive associations between daily affiliative humour and relationship satisfaction. However, these results were not confirmed in Study 2.

In Study 2, participants' overall aggressive humour emerged as the only cross-level moderator. When overall aggressive humour use was high across the study period, there was a slightly negative slope between daily self-reported aggressive humour and relationship satisfaction. However, when overall aggressive humour use was low across the study period, there was a positive association between the two variables. Thus, among individuals who report using relatively low levels of aggressive humour compared to others, an increased use of aggressive humour on a given day is actually positively associated with relationship satisfaction. This moderating effect may explain why I did not find the predicted within-person association between self-reported aggressive humour and relationship satisfaction. My results suggest that daily aggressive humour use is only negatively associated with relationship satisfaction if people habitually use it with their partners. However, this moderation effect was not found in Study 1.

As reviewed above, Studies 1 and 2 had different moderation effects. The different daily measurement of humour styles used in the two studies may account for these differences. The humour measure used in Study 2 provided a more comprehensive measure of affiliative and aggressive humour and asked participants to think about their humour use in relation to other couples. I also used a different measure of relationship satisfaction in each of the studies. In Study 1, daily relationship satisfaction was assessed by only one item, whereas in Study 2, daily relationship satisfaction was assessed by four items. These different measurements may help account for the discrepant findings. Certainly, further exploration of cross-level moderations is warranted.

Research Question 5: Does Partner Self-Reported Humour Predict Participant Relationship Satisfaction?

As predicted, Study 2 found that partner self-reported affiliative and aggressive humour predicted participants' relationship satisfaction. Partners who self-reported using more affiliative and less aggressive humour in their relationships had partners (i.e., the study participants) who were more satisfied on a day-to-day basis. Unfortunately, Study 1 could not examine partner aggressive humour due to low reliability. Therefore, in Study 1, only partner self-reported affiliative humour was associated with relationship satisfaction.

These results help shed light on the question of whether actors' self-reported humour styles, actors' perceptions of their partners' humour style, or partners' self-reported humour styles are more predictive of actors' relationship satisfaction. In Studies 1 and 2, all sources of humour styles were associated with actors' relationship satisfaction, and when actor self-report versus perceived partner humour styles were directly compared for their predictive abilities, neither emerged as stronger predictors. Partner-humour styles could not be pitted against the other sources of humour style because partner humour styles were level 2 variable, whereas the other rating of humour styles existed at level 1.

Research Question 6: Do Positive and Negative Relationship Interactions Predict Humour Styles?

Both studies also explored variables that predict the daily use of humour styles. In an earlier paper (Caird, 2013), I posited that situational features of romantic relationships may influence the types of humour that people use, and that individual difference

variables (such as attachment and conflict styles) may be associated with humour styles. As for situational contexts, positive and negative relationship interactions predicted the types of humour used in romantic relationships, usually in the expected ways. On days that relationships are going well (more positive interactions), couples laugh and joke more with one another. On days when couples have more difficulties in their relationships, they tend to use more hostile and aggressive humour and less good-natured humour. In Study 1, but not Study 2, I found that positive relationship interactions were positively associated with aggressive humour (participant and perceived partner). That is, on days participants experienced a higher level of affection in their relationships, they also experienced more aggressive humour in their relationships. One explanation for this unexpected finding is that relationship partners may not censor their humour when they are having fun with one another and the relationship is functioning well. In this positive context, aggressive humour use may not seem risky or offensive and may function more like affiliative humour. Furthermore, in the context of pleasant interactions, participants may not be as likely to view aggressive humour as truly aggressive. For example, a tease that is well received when partners are being affectionate with one another may be poorly received (and deemed aggressive) if the couple is engaged in a disagreement or argument. Future research should attempt to clarify if aggressive humour is associated with positive relationship interactions (as found in Study 1), and if so, how aggressive humour in the context of positive relationship interactions is associated with relationship satisfaction. Observational and experimental methods may be particularly useful. Experimental studies could investigate how identical humorous but aggressive remarks are interpreted by couples in both pleasant and conflict interactions, whereas observational studies could

use video recall methodologies to inquire about couples' reasons for, and reactions to, aggressive humour use.

Research Question 7: Do Conflict Styles Moderate the Association between Humour Use and Negative Relationship Interactions?

In Study 1, I found that certain conflict styles (engagement and withdrawal) moderated the slopes between humour styles and negative relationship interactions. The findings for aggressive humour were most interesting. The slopes between aggressive humour and negative relationship interactions were stronger for those who were high on conflict engagement and conflict withdrawal. That is, people who dislike conflict and avoid it, as well as people who inflame conflicts, tended to direct more hostile humour towards their partners on days they experienced relationship difficulties. Although conflict was not directly assessed in the measure of negative events, we would expect more conflict and arguments between partners on days they experienced such negative interactions as inattentiveness, criticism, jealousy, and relationship doubts. If we make the connection between negative interactions and conflict, these results suggest that aggressive humour may be used as a strategy both to intensify and to escape conflict. Humour has been found to interrupt the flow of conversations, change the topic, and prevent or end conflict (Norrick & Spitz, 2008, 2010), and shared laughter has been associated with topic termination (Holt, 2010). People who prefer to avoid conflict may use humour to do so. However, aggressive humour is probably not the best humour style to avoid conflict. It is perhaps more likely that aggressive humour would escalate conflict, the opposite of what conflict avoiding individuals would prefer. As for people who tend to be highly emotional and reactive during conflict, aggressive humour may be a way to inflict further injury on their partners. Several researchers have found that sarcasm, a form of aggressive humour, enhances the perceived criticalness of statements (Bowes & Katz, 2011; Colston, 1997; Toplak & Katz, 2000), and leads to more negative responses than direct hostility (McNulty & Russell, 2010).

Observational studies of couples attempting to resolve a conflict would be beneficial in investigating how conflict styles influence humour use. It would be particularly informative to measure humour styles through observational coding, but also to examine speakers' intention behind their humour use (e.g., affiliative or aggressive) and receivers' perceptions regarding the humour (e.g., affiliative or aggressive). These methods would allow researchers to determine how much outside observers', speakers', and listeners' accounts of humour correspond and which of these sources of information is most relevant in determining relationship outcomes.

Research Question 8: Do Attachment Dimensions Predict Humour Styles?

Attachment dimensions were only examined in Study 1. Surprisingly, I found no evidence that attachment dimensions were associated with humour use.²²

Research Question 9: Does Playfulness Predict Daily Humour Use

Playfulness was also associated with participants' daily use of affiliative humour. Individuals who enjoy having fun and engaging in spontaneous play with their partners also tend to experience more good-natured humour and joking in their relationships (on a daily basis). This augments past research that has shown cross-sectional correlations between playfulness and positive humour (Aune & Wong, 2002), by demonstrating that

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²² These lack of findings are discussed in more detail in Study 1 Results and Discussion.

playfulness predicts more affiliative humour on a daily basis. Interestingly, this association was only significant when playfulness was measured specifically in the context of romantic relationships (Study 2), as opposed to being conceptualized as a general trait (Study 1). Just as looking at relationship specific humour use allowed me to find associations between self-reported humour styles and relationship satisfaction, using a relationship-specific measure of playfulness allowed me to find the hypothesized relationship between playfulness and affiliative humour. Using relationship specific measures when studying humour and specific relationships (as opposed to general trait measurements) may provide researchers with a better understanding of humour styles in romantic relationships.

Research Question 10: Do Intimacy and Positive and Negative Emotions Mediate Links between Humour Styles and Relationship Satisfaction?

Arguably the most significant contribution of the present research was the partial mediations found in Study 2. To my knowledge, Study 2 was the first to investigate mediators of humour styles and relationship satisfaction at the within-persons level, and one of the first studies to look at mediators of humour styles and relationship satisfaction (at any level). Investigations into potential mediators of humour are important because they shed light on potential mechanisms driving the well-established relationship between affiliative humour and relationship satisfaction.

Based on past work, I expected that affiliative humour would enhance relationship intimacy, which in turn would lead people to feel more positive about their relationships.

As expected, I found that intimacy partially mediated the association between affiliative humour (participant and perceived partner) and relationship satisfaction at the within-

person level. Daily increases in affiliative humour were associated with daily increases in relationship intimacy, which were associated with daily increases in relationship satisfaction. Thus, intimacy plays an important role in accounting for the relationship between affiliative humour and relationship satisfaction and accounts for a significant proportion of the direct relationship between affiliative humour and relationship satisfaction.

I also explored if an increase in positive emotions was responsible for the association between affiliative humour and relationship satisfaction. As expected, positive emotions partially mediated the link between affiliative humour (participant and perceived partner) and relationship satisfaction. When people share affiliative humour, they have increased positive emotions, which in turn might increase their level of satisfaction. This within-person mediation complements past cross-sectional research, specifically research that indicated humour use was associated with more satisfactory relationships because it elicited positive emotions (Aune & Wong, 2002) and produced fun and enjoyment (Hall, 2013).

These findings extend past research that demonstrates associations between intimacy, positive emotions, and humour (e.g., Aune & Wong; Barelds & Barelds-Dijkstra, 2010; de Koning & Weiss, 2002; Fraley & Aron, 2004) and provides support for functional theories of humour which suggest that affiliative humour promotes bonding, intimacy, and positive emotions (e.g., de Koning & Weiss, 2002; Norrick, 2010; Ziv, 2010).

Taken together, these results indicate that positive emotions and intimacy play a large role in explaining the relationship between affiliative humour and relationship

satisfaction, but that there is still some direct relationship between affiliative humour and relationship satisfaction unaccounted for by these variables. Other potential mechanisms may help explain the link between humour and relationship satisfaction. Future research should continue to investigate other potential mediators of the relationship between affiliative humour and relationship satisfaction. For instance, the balance between positive and negative affect in romantic relationships has been shown to predict relationship satisfaction and divorce (e.g., Gottman, Coan, Carrere, & Swanson, 1998), and it is likely that this balance could be influenced by affiliative and aggressive humour. Affiliative humour could represent or lead to positive interactions, whereas aggressive humour could be associated with negative interactions. Observational studies that assessed both positive and negative affect and humour styles would be useful in investigating this question. Attraction is another potential mediator of the relationship between affiliative humour and relationship satisfaction. A significant body of research suggests that individuals are more attracted to humorous individuals (e.g., McGee & Shevlin, 2009; Wilbur & Campbell, 2011). Although this past research is cross-sectional in nature, this association could also exist at the within-person level. It could be that individuals are more attracted to their partners on days their partners use a greater amount of affiliative humour, and that this increase in attractiveness is responsible for daily increases in relationship satisfaction.

I expected that negative emotions would mediate the association between perceived partner aggressive humour and relationship satisfaction, as teasing and aggressive humour are associated with negative emotions in listeners or targets (e.g., Keltner, Capps, Kring, Young, & Heerey, 2001; Keltner, Young, Heerey, Oemig, &

Monarch, 1998; Kruger, Gordon, & Kuban, 2006), and these negative emotions may lead to declines in relationship satisfaction. However, I did not find support for this hypothesis. Although perceived partner aggressive humour was negatively associated with relationship satisfaction, this association does not appear to be mediated by negative emotion. To my knowledge, no other studies have investigated potential mediators of the link between aggressive humour and relationship satisfaction (an association that is not consistently found in cross-sectional research). If future research replicates my findings that perceived partner aggressive humour is associated with lower relationship satisfaction, researchers should begin to investigate other potential mechanisms behind this association. For instance, proposed negative functions of humour include the expression of hostility and aggression (Bergen, 1998) and exerting control over others (Martineau, 1972). A study that assesses participants' daily perceptions of their partners' expressions of hostility/aggression, and attempts to control them, could determine if these variables mediate the relationship between perceived partner aggressive humour and relationship satisfaction. That is, individuals may see their partners' aggressive humour as aggression, and this perception of aggression in their partners could reduce their relationship satisfaction. Alternatively, individuals may see their partners' aggressive humour as an attempt to manipulate or influence them, and their reactions to this perceived manipulation may cause them to feel less satisfied with their relationships.

Limitations

It is important to consider the limitations of this study when considering its implications for the field. One limitation of the current research was the reliance on daily data from only one member of the couple. Dating relations are interdependent

(Campbell & Kashy, 2002), and participants' relationship satisfaction could be influenced by their own (actor effect) or their partners' (partner effect) use of humour. Ideally, I would have obtained daily diaries from both members of the couple, but practical considerations prevented me from doing so. Instead, I investigated participants' perceptions of their partners' humour, which some have argued is more predictive of participants' relationship satisfaction than partners' self-reported humour (Cann et al., 2011). However, a study that investigates self-reported humour, perceived partner humour, and partner-reported humour would be ideally suited to determine the relative importance of these variables.

Another limitation of the current research was the homogenous sample of Canadian university students. Most participants were involved in heterosexual dating relationships, and the majority of participants were European-Canadian and female. Because of the narrow range of participants in this study, it is unwise to generalize my results to broader populations. Future research should investigate if similar results are obtained with older, married individuals, individuals in same-sex relationships, and individuals from different cultural groups. Moreover, future studies should attempt to sample a balanced number of males and females.

Another limitation with my sample was the high degree of relationship satisfaction reported by participants. The majority of participants appeared to be highly satisfied with their romantic relationships. Therefore, it is unclear whether the results from my study would apply to relationships characterized by lower levels of relationship satisfaction. The restricted range of relationship satisfaction in my samples is also undesirable from a statistical standpoint, as restricted range can lead to attenuated

findings. It is possible that having a broader range of relationship satisfaction in my samples would have resulted in stronger results.

It is also important to note that the methodological design of my studies does not allow me to infer causality. The degree to which humour may influence relationship satisfaction, or relationship satisfaction may influence humour use, remains unknown. Experimental designs that manipulate the use of humour may allow researchers to make claims about causality. However, this research would be difficult to conduct. Humour styles assess people's spontaneous use of humour, so manipulating humour styles would be difficult. One possible avenue would be to use video recordings of hypothetical relationship partners using humour with one another, and to ask participants to imagine themselves in the role of one of the partners. In different conditions, participants would be the receivers or producers of either affiliative or aggressive humour. Hypothetical relationship satisfaction could be assessed before and after participants viewed the videos, and if there were differences between the groups, we could conclude that the different styles of humour led to these differences. Experimental studies of humour styles and relationship satisfaction would be very beneficial to the field.

Conclusions and Future Directions

The current studies made a number of significant contributions to the literature. Whereas past research has focused on cross-sectional correlations, I demonstrated within-person associations between self-reported humour and perceived partner humour and relationship satisfaction. We now have evidence that associations between affiliative humour and relationship satisfaction that exist at the between-persons level also exist at the within-person level. My research adds to the literature by demonstrating that, on a

day-to-day basis, good-natured joking and relationship satisfaction fluctuate together within individuals. This research also provides evidence that both self-reported and perceived partner humour styles are significant predictors of relationship satisfaction. This contradicts Cann and colleagues' (2011) finding that only perceived partner humour styles were associated with relationship quality variables. Analyzing my variables across time and using a relationship-specific measure of humour styles may have enabled me to find links between self-reported humour and relationship satisfaction that Cann and colleagues (2011) did not.

I also demonstrated that intimacy and positive emotions mediate the link between affiliative humour and relationship satisfaction, providing a better understanding of the potential mechanisms in the link between affiliative humour and relationship satisfaction, and providing support for functional theories of humour. Furthermore, I created a concise daily measure of affiliative and aggressive humour use in romantic relationships that can be utilized in future cross-sectional and process-oriented research.

This research demonstrated the importance of daily diary studies in the field of humour research. Researchers should continue to investigate the day-to-day relationships between humour styles and relationship-relevant variables. Future research on the complex role of aggressive humour in relationships seems especially warranted. One particularly noteworthy aspect of the findings of this research is that the predicted patterns were generally found for affiliative humour (e.g., mediation, within-person associations), but generally more complex and somewhat puzzling patterns were found for aggressive humour. For instance, the predicted mediation effect for aggressive humour was not found, there was an interesting cross-level interaction between overall

participant aggressive humour use and daily self-reported humour use in predicting relationship satisfaction, and in Study 1, positive events were positively associated with aggressive humour. There is still much to learn about aggressive humour in romantic relationships. For instance, it is important to understand where individuals draw the line between good-natured teasing and aggressive humour, and what constitutes aggressive humour for different individuals or couples. Again, observational work that collects outside observers' ratings of aggressive humour, as well as speakers' and receivers' perceptions of humour would be very useful. The context of aggressive humour use may also be particularly important. Experimental research could help researchers determine if jokes that are considered affiliative in some contexts (e.g., pleasant playful interactions) are deemed aggressive in other contexts (e.g., an argument).

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Appendices

Appendix A: Study 1 Ethics Approval



Department of Psychology The University of Western Ontario

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Use of Human Subjects - Ethics Approval Notice

Review Number	12 09 18	Approval Date	12 09 21
Principal Investigator	Rod Martin/Sara Caird	End Date	13 04 30
Protocol Title	Humor use in romantic relationships		
Sponsor	n/a		

This is to notify you that The University of Western Ontario Department of Psychology Research Ethics Board (PREB) has granted expedited ethics approval to the above named research study on the date noted above.

The PREB is a sub-REB of The University of Western Ontario's Research Ethics Board for Non-Medical Research Involving Human Subjects (NMREB) which is organized and operates according to the Tri-Council Policy Statement and the applicable laws and regulations of Ontario. (See Office of Research Ethics web site: http://www.uwo.ca/research/ethics/)

This approval shall remain valid until end date noted above assuming timely and acceptable responses to the University's periodic requests for surveillance and monitoring information.

During the course of the research, no deviations from, or changes to, the protocol or consent form may be initiated without prior written approval from the PREB except when necessary to eliminate immediate hazards to the subject or when the change(s) involve only logistical or administrative aspects of the study (e.g. change of research assistant, telephone number etc). Subjects must receive a copy of the information/consent documentation.

Investigators must promptly also report to the PREB:

- a) changes increasing the risk to the participant(s) and/or affecting significantly the conduct of the study;
- b) all adverse and unexpected experiences or events that are both serious and unexpected;
- c) new information that may adversely affect the safety of the subjects or the conduct of the study.

If these changes/adverse events require a change to the information/consent documentation, and/or recruitment advertisement, the newly revised information/consent documentation, and/or advertisement, must be submitted to the PREB for approval.

Members of the PREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussion related to, nor vote on, such studies when they are presented to the PREB.

Clive Seligman Ph.D.

Chair, Psychology Expedited Research Ethics Board (PREB)

The other members of the 2012-2013 PREB are: Mike Atkinson (Introductory Psychology Coordinator), Rick Goffin, Riley Hinson Albert Katz (Department Chair), Steve Lupker, and TBA (Graduate Student Representative)

Appendix B: Letter of Information – Participant – Study 1

Project Title: Humour Use in Romantic Relationships

Investigators: Sara Caird (Ph.D. Candidate) and Dr. Rod Martin

This study will take place in one 30 minute session and for 90 minutes over the next 9 days (10 minutes on each of 9 days). The total time required should be no more than 2 hours total. You will receive 2 credits for your participation.

The first part of this study is a group session that will last no more than 30 minutes. During this session, you will be asked to fill out questionnaires about your romantic relationship, you personality, and you and your partner's use of humour. You will receive .5 credits for your participation in this group testing session. If you feel uncomfortable answering specific questions, you do not have to provide a response for those questions. You can withdraw from this session at any point, for any reason, without loss of the promised .5 research credit.

During this group testing session, you will be asked to provide the name and email address of your dating partner. We would like to contact your partner by email and ask them to fill out a short series of questions about your relationship and humour use. You are not obligated to provide your partner's email and your partner is in no way obligated to fill out the questionnaire.

The second part of this study involves completing 9 brief online diaries over a secure website. The diaries include questions on humour usage in your relationship, interactions with your partner, and your relationship satisfaction. You do not need to answer questions that you are uncomfortable with.

You will be asked to complete an online diary every evening (from 6pm to 12am) for the next 9 days. Please do your best to complete the online diaries at the same time each evening. You will receive a series of emails containing website links to access the online diaries. After you submit the 9th diary, you will receive 1.5 research credits. However, you may leave the study at any time and receive the research credits earned to that point, in 30 minute intervals (i.e., .5 credit intervals). If you miss a diary, you will receive up to 2 reminder emails. If you do not complete a diary after you receiving the second email, you will no longer be eligible to participate in the study, but will receive the research credits earned to that point in time, in 30 minute intervals.

Four months from now, you will receive an email asking you whether or not you are still involved in the same romantic relationship.

The information obtained in this study will be kept confidential and will be used for research purposes only. The only place your name will appear is on the consent form and on the list of participants for the online diaries, and these are kept separate from the questionnaire data. You and your partner's responses will be completely confidential; we

will not inform your partner of your responses or vice versa. The online questionnaires are completed over a secure site and your information will be identified by a unique participant number, not your name.

There are no known risks to participating in this study. You will have a chance to ask the researcher any questions you may have. You will receive brief written feedback at the end of the first session and more detailed feedback will be provided after you finish the online diaries.

Appendix C: Letter of Information – Partner (Email Message) – Study 1

Subject: UWO Psychology Study - Humour Use in Close Relationships

Dear < Partner Name>,

<Name of Partner> is participating in a study on humour use in close relationships at Western University. He/she has given their consent for us to contact you about this study, and ask you to complete a series of questions about your relationship with him/her. Completing these questions will take less than 10 minutes and your participation would be greatly appreciated. You do not have to complete the questionnaire and you may leave questions unanswered. By submitting this questionnaire, you have consented to participate in this study.

The information obtained in this study will be kept confidential and will be used for research purposes only. The only place your name will appear is on a list of participants. This list is kept separate from the questionnaire data. You and your partner's responses will be completely confidential; we will not inform him/her of your responses or vice versa. The online questionnaires are completed over a secure site and all computer files are password protected.

There are no known risks to participating in this study. You can email Sara Caird if you have any questions about your participation.

To complete the questionnaire, please click on the link below (or copy and paste into your web browser):

<weblink>

You will be asked to enter a password number. Your password number is: XXXX

Thank you for your help with this study!

Sara Caird Ph.D. Candidate Psychology Department Western University

Appendix D: Consent Form – Part 1 – Study 1

Project Title: Humour Use in Romantic Relationships

Investigators: Sara Caird (Ph.D. Candidate) and Dr. Rod Martin

I have read the Letter of Information, have had the nature of the study explained to me, and all questions have been answered to my satisfaction. I agree to participate.

articipant's Name (print)
articipant's UWO Email (print clearly in capital letters)
gnature
ate
esearcher's Name Sara Caird
esearcher's Signature
you are willing, please indicate your partner's first name and email address.
rst Name of Partner
artner's Email Address (print clearly in capital letters)

Appendix E: Feedback Sheet - Part 1 – Study 1

Project Title: Humour Use in Romantic Relationships

Investigators: Sara Caird (Ph.D. Candidate) and Dr. Rod Martin

This study is being conducted by Sara Caird (Ph.D. Candidate), under the supervision of Dr. Rod Martin. The purpose of this study is to examine whether humour usage is related to relationship satisfaction and stability among romantic couples.

The quality of one's interpersonal relationships is an important contributor to psychological well- being. Though researchers generally agree that a sense of humour is an important component in a successful relationship, little research has been conducted examining how humour may impact intimate relationships, and most research has focused on married couples. This study will help clarify the role that humour plays in romantic relationships and could provide some useful information to mental health professionals.

Thank you for participating in the first section of this study! Your involvement is greatly appreciated. If you have any questions, please do not hesitate to contact Sara Caird or Dr. Rod Martin.

If you have questions about your rights as a research participant, you should contact the Director of the Office of Research Ethics.

If you are interested in the general results of this study, they should be available by August 2013. Feel free to contact Sara Caird for feedback about the results.

If you are interested in learning more about this topic, please refer to the following references:

Campbell, L., Martin, R. A., & Ward, J, R. (2008). An observational study of humour use while resolving conflict in dating couples. *Personal Relationships*, *15*, 41-55.

Martin, R.A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in the uses of humour and their relation to psychological well-being: Development of the Humour Styles Questionnaire. *Journal of Research in Personality*, *37*, 48-75.

Appendix F: Feedback Sheet – Part 2 (Email Message) - Study 1

Subject: Humour and Dating Relationship Study – Feedback Sheet

Dear < Participant Name>,

Thank you for completing the online diaries! You will now receive 1.5 credits, for a total of 2 credits.

This study is being conducted by Sara Caird (Ph.D. Candidate), under the supervision of Dr. Rod Martin. The purpose of this study is to examine whether humour usage is related to relationship satisfaction and stability among young dating couples.

Past research indicates that humour can be both beneficial and detrimental to romantic relationships. Positive forms of humour (e.g., use of humour to cope with stress and enhance social relationships) tend to be positively associated with relationship quality, whereas negative forms of humour (e.g., sarcasm, put-downs) tends to be negatively associated with relationship quality.

Your participation in this study allowed us to track how fluctuations in couples use of positive and negative humour in their relationships was associated with fluctuations in relationship satisfaction and relationship events. Additionally, the questionnaires you completed during Part 1, allowed us to examine how individual difference variables (e.g., playfulness, attachment styles, and conflict styles) may influence the relative success of humorous communication in romantic relationships.

We hypothesized that on days when individuals and their partners used more positive humour in their relationships, they would experience greater relationship satisfaction than their averages across the study period. We expected an opposite pattern for negative humour use. Additionally, we believed that individuals who endorsed more negative relationship events (e.g., arguments) would be more likely to use aggressive and self-defeating forms of humour than individuals who endorsed more positive relationship events.

Thank you for participating in this study! Your involvement is greatly appreciated. If you have any questions, please do not hesitate to contact Sara Caird or Dr. Rod Martin.

If you have questions about your rights as a research participant, you should contact the Director of the Office of Research Ethics.

If you are interested in the general results of this study, they should be available by August 2013. Feel free to contact Sara Caird.

If you are interested in learning more about this topic, please refer to the following references:

- Campbell, L., Martin, R. A., & Ward, J, R. (2008). An observational study of humour use while resolving conflict in dating couples. *Personal Relationships*, *15*, 41-55.
- Cann, A., Zapata, C. L., & Davis, H. B. (2011). Humour styles and relationship satisfaction in dating couples: Perceived versus self-reported humour styles as predictors of satisfaction. *Humour: International Journal of Humour Research*, 24, 1-20.
- Saroglou, V., Lacour, C., & Emeure, M. (2010). Bad humour, bad marriage: Humour styles in divorced and married couples. *Europe's Journal of Psychology*, *3*, 94-121.

Appendix G: Demographic Questionnaire

<u>Instructions</u>: Please tell us a bit about yourself by completing the following questionnaire.

1.	Research pool ID code:	
2.	Age: years	
3.	Gender:	
4.	Romantic partner's <u>first name only</u> :	
5.	Gender of current romantic partner:	
6.	Length of current relationship: year(s) and months	
7.	Is your current relationship long-distance? (circle one) Yes	No
8.	How often do you communicate with your partner? (Communication can be face-to-face, telephone, Skype, Facebook, etc.). □ Every day or more □ 5-6 days/week □ 4-5 days/week □ 2-3 days/week □ Once/week □ Less than once/week	text, email,
9.	Ethnicity (group that you <i>most</i> identify with; please check one) □ European-Canadian (White) □ Native-Canadian (e.g., Native Indian) □ African/Caribbean-Canadian (Black) □ South Asian-Canadian (e.g., East Indian, Pakistani, etc.) □ Asian-Canadian (e.g., Chinese, Vietnamese, Korean, etc.) □ Latin American-Canadian (e.g. Hispanic) □ Other (please specify)	
10.	Were you born in Canada? (check one) no If "No": How long have you lived in Canada?	•
11.	Is English your first language? (check one) no ☐ yes ☐ If "No": How long have you been speaking English?	(years

Appendix H: Daily Humour Styles Questionnaire - Participant

Below is a list of statements describing ways people may express humour. Please read each statement and indicate how often you have engaged in each of these forms of humour with your boyfriend/girlfriend DURING THE PAST 24 HOURS. Answer by circling one of the options below each statement.

1. I told my pa not at all	ortner a joke or once	said something twice	funny to make 3-5 times	him/her laugh. more than 5 times						
	2. I found that my humorous outlook on life kept me from getting overly upset or depressed about things.									
not at all	once	twice	3-5 times	more than 5 times						
3. I teased my	partner when h	ne/she made a m	nistake.							
not at all	once	twice	3-5 times	more than 5 times						
4. I let my part not at all	tner laugh at mo	e or make fun o twice	of me more than 3-5 times	I should have. more than 5 times						
5. I laughed an	nd joked around	l with my partn	er.							
not at all	once	twice	3-5 times	more than 5 times						
6. I coped with situation.	a problem or	difficulty by thi	nking about so	me amusing aspect of the						
not at all	once	twice	3-5 times	more than 5 times						
7. My partner funny.	seemed offende	ed or hurt by so	mething I said	or did while trying to be						
not at all	once	twice	3-5 times	more than 5 times						
8. I said funny	things to put n	nyself down.								
not at all	once	twice	3-5 times	more than 5 times						
9. I was able to	o think of witty	things to say to	amuse my pai	tner.						
not at all	once	twice	3-5 times	more than 5 times						
10. I was amus	sed about some	thing funny wh	en I was all by	myself.						
not at all	once	twice	3-5 times	more than 5 times						
11. I used hum	nour to put dow	n my partner in	a teasing way.							
not at all	once	twice	3-5 times	more than 5 times						
	nake my partne nesses, blunder	_	me more by say	ying something funny about						
not at all	once	twice	3-5 times	more than 5 times						

Appendix I: Daily Humour Styles Questionnaire – Perceived Partner

Below is a list of statements describing ways people may express humour. Please read each statement and indicate how often your partner engaged in each of these forms of humour with you DURING THE PAST 24 HOURS. Answer by circling one of the options below each statement.

1. My partner	told me a joke (or said somethi	ng funny to me	laugh.
not at all	once	twice	3-5 times	more than 5 times
2. My partner'depressed abo		tlook on life ke	pt him/her fron	n getting overly upset or
not at all	once	twice	3-5 times	more than 5 times
3. My partner	teased me when	n I made a mist	ake.	
not at all	once	twice	3-5 times	more than 5 times
4. My partner	let me laugh at	him/her more t	han he/she sho	uld have.
not at all	once	twice	3-5 times	more than 5 times
5. My partner	laughed and jol	ked around witl	n me.	
not at all	once	twice	3-5 times	more than 5 times
6. My partner of the situation	-	roblem or diffic	ulty by thinkin	g about some amusing aspect
not at all	once	twice	3-5 times	more than 5 times
7. I was offend	ded or hurt by s	omething my p	artner said or d	id while trying to be funny.
not at all	once	twice	3-5 times	more than 5 times
8. My partner	said funny thin	gs to put himse	lf/herself down	
not at all	once	twice	3-5 times	more than 5 times
9. My partner	was able to thir	nk of witty thin	gs to say to am	use me.
not at all	once	twice	3-5 times	more than 5 times
•	partner was fee he situation to m	· ·		tried to think of something
not at all	once	twice	3-5 times	more than 5 times
11. My partne	r used humour	to put me down	in a teasing wa	ay.
not at all	once	twice	3-5 times	more than 5 times
• •	r tried to make weaknesses, blu			y saying something funny
not at all	once	twice	3-5 times	more than 5 times

Appendix J: Daily Relationship Satisfaction

<u>Instructions</u>: Please indicate how satisfied you have been with your romantic relationships during the last 24 hours, using the following scale.

1	2	3	4	5	6	7
Not very much or just a little						Very much or a lot

1. Reflecting on the past 24 hours, how satisfied are you with your relationship with your partner?

1 2 3 4 5 6 7

Appendix K: Communication

1. Did you communicate with your partner during the past 24 hours (Note:
communication includes face-to-face, phone, text, email, Skype, etc.). Please circle a
response below.
No, not at all Yes
2. Which types of communication did you have with your partner over the past 24 hours?
Please circle all that apply):
Face-to-face
Video conferencing
Telephone
Email
Text message
Other form of communication

Appendix L: Partner Humour Styles Questionnaire

Below is a list of statements describing ways people may express humour. Please read each statement and indicate how much you agree with the following statements. Answer using the scale below.

1	2	3	4	5	6	7
Totally	Moderately	Slightly	Neutral	Slightly	Moderately	Totally
Disagree	Disagree	Disagree		Agree	Agree	Agree

- 1. I tell my partner jokes and say funny things to make him/her laugh.
- 2. I find that my humorous outlook on life kept me from getting overly upset or depressed about things.
- 3. If my partner makes a mistake, I will often tease them about it.
- 4. I let my partner laugh at me or make fun of me more than I should.
- 5. I laugh and joke around with my partner.
- 6. I cope with problems or difficulties by thinking about some amusing aspect of the situation.
- 7. My partner is never offended or hurt by my sense of humour.
- 8. I say funny things to my partner to put myself down.
- 9. I am able to think of witty things to say to amuse my partner.
- 10. Even when I'm by myself, I'm often amused by the absurdities of life.
- 11. I use humour to put down my partner in a teasing way.
- 12. I often try to make my partner like or accept me more by saying something funny about my own weaknesses, blunders, or faults.

Appendix M: Study 2 Ethics Approval





Use of Human Participants - Initial Ethics Approval Notice

Principal Investigator: Prof. Rod Martin

File Number: 104327

Review Level: Delegated Protocol Title: Humor Use in Romantic Relationships

Department & Institution: Social Science\Psychology,Western University Sponsor:

Ethics Approval Date: September 27, 2013 Expiry Date: May 31, 2014

Documents Reviewed & Approved & Documents Received for Information:

Document Name	Comments	Version Date
Western University Protocol		2013/09/04
Instruments	Participant measures revised	2013/09/12
Revised Letter of Information & Consent	Consent Form	2013/09/12
Revised Letter of Information & Consent	LOI Revised.	2013/09/22
Instruments	demographic questionnaire revised	2013/09/22
Recruitment Items	Poster Revised with Western Logo	2013/09/22
Approval Notice	Approval Notice	2013/09/27

This is to notify you that The University of Western Ontario Research Ethics Board for Non-Medical Research Involving Human Subjects (NMREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the applicable laws and regulations of Ontario has granted approval to the above named research study on the approval date noted above.

This approval shall remain valid until the expiry date noted above assuming timely and acceptable responses to the NMREB's periodic requests for surveillance and monitoring information.

Members of the NMREB who are named as investigators in research studies, or declare a conflict of interest, do not participate in discussions related to, nor vote on, such studies when they are presented to the NMREB.

The Chair of the NMREB is Dr. Riley Hinson. The NMREB is registered with the U.S. Department of Health & Human Services under the IRB registration number IRB 00000941.

	Ethics Officer to Contact for Further Is	nformation	
Grace Kelly	Vikki Tran	Erika Basile	
(grace.kelly@uwo.ca)	(vikki.tran@uwo.ca)	(ebasile@uwo.ca)	

This is an official document. Please retain the original in your files.

Appendix N: Letter of Information - Study 2

Project Title: Humour Use in Romantic Relationships

Principal Investigator: Rod Martin, PhD, Department of Psychology, Western

University

You are invited to participate in a study about humour use in romantic relationships. The purpose of this letter is to provide you with the information required for you to make an informed decision regarding participation in this research.

The purpose of this study is to assess the role of humour in romantic relationships using daily diary methodology. The objectives of the study are to determine how fluctuations in humour use are related to fluctuations in relationship satisfaction, intimacy, and emotions over time.

To participate in this study, you must currently be involved in a romantic relationship of three or more months. If you are not involved in a romantic relationship of three or more months, you are not eligible to participate in this study.

If you agree to participate, you will be asked to fill out a series of questionnaires online. This study takes place over a 10 day period and should take no longer than 2 hours in total. There is the initial meeting (today) and a series of 9 short online diaries that you complete on your own. In the initial meeting (today), you will be asked to complete questionnaires in SSC. Completing these questionnaires should take approximately 20 minutes. These questionnaires will ask about your romantic relationship, your personality, and you and your partner's use of humour. If you feel uncomfortable answering specific questions, you do not have to provide a response for those questions. You can withdraw from this session at any point, for any reason.

The second part of this study involves completing 9 brief online diaries over a secure website. The diaries include questions on humour usage in your relationship, interactions with your partner, and aspects of your relationship. You do not need to answer questions that you are uncomfortable with. You will be asked to complete an online diary every evening (from 6pm to 12am) for the next 9 days. Please do your best to complete the online diaries at the same time each evening. You will receive a series of emails containing website links to access the online diaries. Four months from now, you will receive an email asking you whether or not you are still involved in the same romantic relationship.

We would also like to invite your partner to participate by completing a 5 minute questionnaire about humour and your relationship. Along with your first email, we will send you an email that you can choose to forward to your romantic partner. You are not obligated to forward the email and your partner is in no way obligated to participate in this study.

The questionnaires contain potentially sensitive questions about relationships and personality, such as passion, intimacy, and anxiety. You may experience minor psychological discomfort from completing the questionnaires. However, there are no known risks to participating in this study.

You will be compensated with up to 2 research participation credits for your participation in this study. Credits are granted in 0.5 credit, or 30 minute intervals. For attending the initial meeting, you will receive 0.5 credits. You can earn up to 1.5 credits for completing the 9 online diaries. For completing 3 diaries, you would earn 0.5 credits, for 6 diaries you would earn 1 credit, and for completing all 9 diaries, you would earn 1.5 credits, for a total of 2 credits. If you miss a diary, you will receive up to 2 reminder emails. If you do not complete a diary after you receiving the second email, you will no longer be eligible to participate in the study, but will receive the research credits earned to that point in time, in 30 minute intervals.

Participation in this study is voluntary. You may refuse to participate, refuse to answer any questions, or withdraw from the study at any time. If you withdraw from the study, you will receive the research credits earned to that point, in 30 minute intervals (i.e., 0.5 credit intervals).

The information obtained in this study will be kept confidential and will be used for research purposes only. The data from this study will only be accessible to the investigators of this study. You and your partner's responses will be completely confidential; we will not inform your partner of your responses or vice versa. The online questionnaires are completed over a secure site and your information will be identified by a unique participant number, not your name. The only place your name will appear is on the consent form and on the computerized list of participants. These files are kept separate from the questionnaire data. Electronic information is stored on the university server and is password protected.

If you require any further information regarding this research project or your participation in the study, you may contact Sara Caird, PhD Candidate or Rod Martin, PhD. If you have any questions about your rights as a research participant or the conduct of this study, you may contact the Office of Research Ethics.

If results from this study are published, your name will not be used. If you would like to receive a copy of potential study results, please contact Sara Caird.

To consent to participate in this study, please complete the Consent Form.

Appendix O: Consent Form

Project Title: Humour Use in Romantic Relationships

Investigators: Sara Caird (Ph.D. Candidate) and Dr. Rod Martin

I have read the Letter of Information, have had the nature of the study explained to me and I agree to participate. All questions have been answered to my satisfaction.

Participant's Name (please print):
Participant's Signature:
Date:
Person Obtaining Informed Consent (please print):
Signature:
Date:

Appendix P: Feedback Sheet

Project Title: Humour Use in Romantic Relationships

Investigators: Sara Caird (Ph.D. Candidate) and Dr. Rod Martin

This study is being conducted by Sara Caird (Ph.D. Candidate), under the supervision of Dr. Rod Martin. The purpose of this study is to examine whether humour usage is related to relationship satisfaction and stability among romantic couples.

The quality of one's interpersonal relationships is an important contributor to psychological well- being. Though researchers generally agree that a sense of humour is an important component in a successful relationship, little research has been conducted examining how humour may impact intimate relationships, and most research has focused on married couples. This study will help clarify the role that humour plays in romantic relationships and could provide some useful information to mental health professionals.

Thank you for participating in the first section of this study! Your involvement is greatly appreciated. If you have any questions, please do not hesitate to contact Sara Caird or Dr. Rod Martin.

If you have questions about your rights as a research participant, you should contact the Director of the Office of Research Ethics.

If you are interested in the general results of this study, they should be available by July 2015. Feel free to contact Sara Caird for feedback about the results.

If you are interested in learning more about this topic, please refer to the following references:

Campbell, L., Martin, R. A., & Ward, J, R. (2008). An observational study of humour use while resolving conflict in dating couples. *Personal Relationships*, 15, 41-55.

Martin, R.A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in the uses of humour and their relation to psychological well-being: Development of the Humour Styles Questionnaire. *Journal of Research in Personality*, *37*, 48-75.

Appendix Q: Feedback Sheet – Part 2 (Email Message)

Subject: Humour and Dating Relationship Study – Feedback Sheet

Dear < Participant Name>,

Thank you for completing the online diaries! You will now receive 1.5 credits, for a total of 2 credits.

If you have not already done so, please consider giving your partner the option to participate by filling out a very brief questionnaire. At the beginning of the study, you received a message that you could forward on to your partner. If you haven't already done so, please forward this message. Note that you are not required to forward this message and your partner is in no way obligated to complete the brief questionnaire.

This study is being conducted by Sara Caird (Ph.D. Candidate), under the supervision of Dr. Rod Martin. The purpose of this study is to examine whether humour usage is related to relationship satisfaction and stability among young dating couples.

Past research indicates that humour can be both beneficial and detrimental to romantic relationships. Positive forms of humour (e.g., use of benign humour to enhance social relationships) tend to be positively associated with relationship quality, whereas negative forms of humour (e.g., sarcasm, put-downs) tends to be negatively associated with relationship quality.

Your participation in this study allowed us to track how fluctuations in couples use of positive and negative humour in their relationships was associated with fluctuations in relationship satisfaction and relationship events. Using your online responses, we can also determine if variables such as playfulness, positive emotion, and intimacy are responsible (or mediate) the link between humour use and relationship satisfaction. Additionally, the questionnaires you completed during Part 1, allowed us to examine how individual difference variables (e.g., attachment styles, conflict styles, affiliation, and aggressive) influence how strongly humour is associated with relationship satisfaction.

We hypothesized that on days when individuals and their partners used more positive humour in their relationships, they would experience greater relationship satisfaction than their averages across the study period. We expected an opposite pattern for negative humour use. Additionally, we believed that individuals who endorsed more negative relationship events (e.g., arguments) would be more likely to use aggressive forms of humour than individuals who endorsed more positive relationship events. Furthermore, we hypothesized that the relationship between positive humour and relationship satisfaction would be accounted for by daily reports of intimacy, positive emotion, and playfulness.

Thank you for participating in this study! Your involvement was greatly appreciated. If you have any questions, please do not hesitate to contact Sara Caird or Dr. Rod Martin.

If you have questions about your rights as a research participant, you should contact the Director of the Office of Research Ethics.

If you are interested in the general results of this study, they should be available by July 2015. Feel free to contact Sara Caird for feedback about the results.

If you are interested in learning more about this topic, please refer to the following references:

Campbell, L., Martin, R. A., & Ward, J, R. (2008). An observational study of humour use while resolving conflict in dating couples. *Personal Relationships*, 15, 41-55.

Cann, A., Zapata, C. L., & Davis, H. B. (2011). Humour styles and relationship satisfaction in dating couples: Perceived versus self-reported humour styles as predictors of satisfaction. *Humour: International Journal of Humour Research*, 24, 1-20.

Saroglou, V., Lacour, C., & Emeure, M. (2010). Bad humour, bad marriage: Humour styles in divorced and married couples. *Europe's Journal of Psychology*, *3*, 94-121.

Appendix R: Couples Play

<u>Instructions:</u> Play describes behaviors that are voluntary and associated with pleasure, enjoyment, and entertainment. Play can take a variety of forms in romantic relationships, including teasing, physical play (e.g., silly behaviours), and formal games. Please indicate how much you agree with the following statements by clicking one of the response options below.

1 Strongly disagree	2	3	4	į	5	6		7 Stron agree	
	d creative	nave our own ways of having	1	2	3	4	5	6	7
2. Our play refreshing.		timulating and	1	2	3	4	5	6	7
3. I enjoy b my partne		taneous with	1	2	3	4	5	6	7
4. We usua play.	ally don't h	nave time to	1	2	3	4	5	6	7
5. We play different w	_	in many	1	2	3	4	5	6	7
6. I have fu partner.	ın acting s	illy with my	1	2	3	4	5	6	7
7. I don't li child.	ke my par	tner to act like a	1	2	3	4	5	6	7
		ng a serious talk vith my partner.	1	2	3	4	5	6	7
9. We ofte each other	-	ew things with	1	2	3	4	5	6	7

Appendix S: Daily Humour Styles in Relationships - Participant

<u>Instructions:</u> Below is a list of statements describing ways people may express humour. Please read each statement and indicate how often **you** have engaged in each of these forms of humour with your boyfriend/girlfriend DURING THE PAST 24 HOURS. Answer by circling one of the options.

1	2	3	4	5			6				7			
Not very			Somewhat						Δ	are	eat			
much /	/ about								A great deal/far					
less than			the same							more than				
most			as most							most				
couples			couples						С	oup	ies			
1. I told my him/her lau		e or said son	nething funny	to make	1	2	3	4	5	6	7			
2. I referred	l to my partne	r with a cut	e/silly nicknam	ie.	1	2	3	4	5	6	7			
	and joked ard				1	2	3	4	5	6	7			
• •	er seemed off trying to be f		urt by somethi	ng I said	1	2	3	4	5	6	7			
	, -	•	tner in a teasii	าต พลง	1	2	3	4	5	6	7			
	-		o say to amuse		1	2	3	4	5	6	7			
partner.		icty timigs t	o say to amast	y	_	_	J	•			,			
•	mour with my	partner to	show that I wa	S	1	2	3	4	5	6	7			
annoyed by		•												
8. I used hu	mour with my	partner to	have fun.		1	2	3	4	5	6	7			
9. I made a	joke at my pa	rtner's expe	nse.		1	2	3	4	5	6	7			
10. I used h	umour with m	y partner so	we would fee	el closer	1	2	3	4	5	6	7			
as a couple.														
11. I made i	my partner laເ	igh by doing	g or saying som	ething	1	2	3	4	5	6	7			
funny.														
			I made a joke a		1	2	3	4	5	6	7			
	-		ke my partner		1	2	3	4	5	6	7			
	•		d my partner a	joke by	1	2	3	4	5	6	7			
	I was "just kid	_												
-	_	· ·	k my partner w	/as	1	2	3	4	5	6	7			
	oyed with me													
	• •		appearance o	r	1	2	3	4	5	6	7			
_	he/she said or							_			_			
	oned our share				1	2	3	4	5	6	7			
,		ir seemed to	make my par	tner	1	2	3	4	5	6	7			
uncomforta	ibie.													

Appendix T: Daily Humour Styles in Relationships – Perceived Partner

<u>Instructions:</u> Below is a list of statements describing ways people may express humour. Please read each statement and indicate how often **your partner** engaged in these forms of humour with you DURING THE PAST 24 HOURS. Answer by circling one of the options.

1	2	3	4	5			6				7	
Not very much / less than most couples			Somewhat/ about the same as most couples						r			les
1. My partne make me la	_	oke or said so	omething funr	ny to	1	2	3	4	5	6	7	
	_	me with a cu	ute/silly nickn	ame.	1	2	3	4	5	6	7	
3. My partne	er laughed ar	nd joked arou	nd with me.		1	2	3	4	5	6	7	
4. I was offe trying to be	•	ething my pa	rtner did or sa	aid while	1	2	3	4	5	6	7	
5. My partno way.	er used humo	our to put me	down in a tea	asing	1	2	3	4	5	6	7	
6. My partne amuse me.	er was able to	o think of with	ty things to sa	y to	1	2	3	4	5	6	7	
7. My partne annoyed wit		our to show th	hat he/she wa	ıs	1	2	3	4	5	6	7	
8. My partne	er used humo	our with me to	o have fun.		1	2	3	4	5	6	7	
9. My partne	er made a jol	ke at my expe	nse.		1	2	3	4	5	6	7	
10. My parti		o use humou	r so we would	l feel	1	2	3	4	5	6	7	
11. My parti something f		laugh by doi	ng or saying		1	2	3	4	5	6	7	
12. I seemed a joke about		ring my partr	ner and he/sh	e made	1	2	3	4	5	6	7	
13. My parti laugh.	ner engaged	in silly behavi	ours to make	me	1	2	3	4	5	6	7	
		efend him/her ne was "just ki	rself after mal dding".	king a	1	2	3	4	5	6	7	
15. My parti annoyed by		g to be funny	, but I was get	tting	1	2	3	4	5	6	7	
16. My parti something I		e about my a	ppearance or		1	2	3	4	5	6	7	
17. My parti	ner mentione	ed our shared	"inside jokes	".	1	2	3	4	5	6	7	
18. My parti uncomforta		essive jokes tl	hat made me		1	2	3	4	5	6	7	

Appendix U: Daily Frequency of Emotions Index

<u>Instructions</u>: We experience different emotions in relationships. For example, our partners' actions can make us feel happy or sad. Please indicate how often you experienced each emotion within your current relationship in the past 24 hours.

experiencea	each emotion wi	unın your cui	rrent re	nau	ons	<u>mp</u>	ın ı	ne j	9ast 24 f	iours.
1	2	3	4			5			6	7
Not at all										Extremely
	Excited		1	2	3	4	5	6	7	
	Irritated		1	2	3	4	5	6	7	
	Angry		1	2	3	4	5	6	7	
	Нарру		1	2	3	4	5	6	7	
	Sad		1	2	3	4	5	6	7	
	Calm		1	2	3	4	5	6	7	
	Rejected		1	2	3	4	5	6	7	
	Optimistic		1	2	3	4	5	6	7	
	Content		1	2	3	4	5	6	7	
	Worried		1	2	3	4	5	6	7	
	Disappointed		1	2	3	4	5	6	7	
	Wanted/cared t	or	1	2	3	4	5	6	7	

Appendix V: Daily Intimacy in Relationships

<u>Instructions:</u> Please use the following scale to indicate how much you agree with each statement.

1 Strongly disagree	2	3	4	5		6	5			7 Stro agre	ngly ee
1. Today, partner.	1. Today, I felt comfortable in my relationship with my partner.								5	6	7
2. Today,	I could real	ly trust my p	artner.		1	2	3	4	5	6	7
3. Today, my partner and I really understood each other.					1	2	3	4	5	6	7
4. Today, my partner and I shared deeply personal information with each other.					1	2	3	4	5	6	7
5. Today, I felt close to my partner.					1	2	3	4	5	6	7

Appendix W: Daily Relationship Satisfaction

<u>Instructions:</u> Please answer the next set of questions using the following scale. These questions ask about your perceptions of your relationship.

1 Not at all/poor	2	3	4	5		6			_	•	tremely
1. Today, ł needs?	now well d	our	1	2	3	4	5	6	7		
2. Today, how satisfied are you with your relationship?					1	2	3	4	5	6	7
3. Today, I to most?	now good	was your rel	ationship c	ompared	1	2	3	4	5	6	7
4. Today, ł	now much	do you love	your partn	er?	1	2	3	4	5	6	7
5. Today, ł relationsh	•	problems w	ere there i	n your	1	2	3	4	5	6	7

Appendix X: Humour Styles in Relationships (Partner Version)

Below is a list of statements describing ways people may express humour. Please read each statement and indicate how often you engage each of these forms of humour with your boyfriend/girlfriend Answer by circling one of the options.

Not very much 1. I tell my partner jokes and say funny to make him/her laugh. 2. I refer to my partner with cute/silly nicknames. 3. I laugh and joke around with my partner. 4. Sometimes my partner seems offended or hurt by things I 5. I use humour to put down my partner in a teasing way. 5. I use humour to put down my partner in a teasing way. 6. I am able to think of witty things to say to amuse my partner. 7. I sometimes use humour with my partner to show that I amanoyed by him/her. 8. I use humour with my partner to have fun. 9. I sometimes make jokes at my partner's expense. 10. I use humour with my partner so we will feel closer as a couple. 11. I frequently make my partner laugh by doing or saying tunny. 12. If my partner is bothering me, I will often make a joke about it. 13. I engage in silly behaviors to make my partner laugh. 14. Sometimes I have to defend myself when I tell my partner a joke by saying that I was "just kidding". 15. Sometimes I tease my partner about his/her appearance of the partner in the said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me.	1	2	3	4	5		6					
laugh. 2. I refer to my partner with cute/silly nicknames. 1 2 3 4 5 6 7 3. I laugh and joke around with my partner. 1 2 3 4 5 6 7 4. Sometimes my partner seems offended or hurt by things I 1 2 3 4 5 6 7 say or do while trying to be funny. 5. I use humour to put down my partner in a teasing way. 6. I am able to think of witty things to say to amuse my 1 2 3 4 5 6 7 partner. 7. I sometimes use humour with my partner to show that I 1 2 3 4 5 6 7 am annoyed by him/her. 8. I use humour with my partner to have fun. 9. I sometimes make jokes at my partner's expense. 1 2 3 4 5 6 7 10. I use humour with my partner so we will feel closer as a 1 2 3 4 5 6 7 10. I use humour with my partner laugh by doing or saying 1 2 3 4 5 6 7 something funny. 12. If my partner is bothering me, I will often make a joke 1 2 3 4 5 6 7 about it. 13. I engage in silly behaviors to make my partner laugh. 14. Sometimes I have to defend myself when I tell my 1 2 3 4 5 6 7 14. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 around with me. 17. I often mention "inside jokes" with my partner. 18. My aggressive humour seems to make my partner. 19. I 2 3 4 5 6 7 10. I 2 3 4 5 6 7 11. I 2 3 4 5 6 7	-	•								A g	great	: deal
3. I laugh and joke around with my partner. 4. Sometimes my partner seems offended or hurt by things I 5. I use humour to put down my partner in a teasing way. 5. I use humour to put down my partner in a teasing way. 6. I am able to think of witty things to say to amuse my partner. 7. I sometimes use humour with my partner to show that I 1 2 3 4 5 6 7 am annoyed by him/her. 8. I use humour with my partner to have fun. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 an annoyed by him/her. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me. 1 2 3 4 5 6 7 annoyed with me.		oartner jokes	and say funr	ny to make hir	m/her	1	2	3	4	5	6	7
4. Sometimes my partner seems offended or hurt by things I 1 2 3 4 5 6 7 say or do while trying to be funny. 5. I use humour to put down my partner in a teasing way. 6. I am able to think of witty things to say to amuse my partner. 7. I sometimes use humour with my partner to show that I 1 2 3 4 5 6 7 am annoyed by him/her. 8. I use humour with my partner to have fun. 9. I sometimes make jokes at my partner's expense. 10. I use humour with my partner so we will feel closer as a 1 2 3 4 5 6 7 couple. 11. I frequently make my partner laugh by doing or saying something funny. 12. If my partner is bothering me, I will often make a joke 1 2 3 4 5 6 7 about it. 13. I engage in silly behaviors to make my partner laugh. 14. Sometimes I have to defend myself when I tell my 1 2 3 4 5 6 7 annoyed with me. 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner. 1 2 3 4 5 6 7	2. I refer to	my partner w	ith cute/silly	nicknames.		1	2	3	4	5	6	7
say or do while trying to be funny. 5. I use humour to put down my partner in a teasing way. 6. I am able to think of witty things to say to amuse my partner. 7. I sometimes use humour with my partner to show that I am annoyed by him/her. 8. I use humour with my partner to have fun. 9. I sometimes make jokes at my partner's expense. 10. I use humour with my partner so we will feel closer as a couple. 11. I frequently make my partner laugh by doing or saying something funny. 12. If my partner is bothering me, I will often make a joke about it. 13. I engage in silly behaviors to make my partner laugh. 14. Sometimes I have to defend myself when I tell my partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets annoyed with me. 16. Sometimes I tease my partner about his/her appearance or something he/she said or did. 17. I often mention "inside jokes" with my partner. 12 3 4 5 6 7 18. My aggressive humour seems to make my partner. 12 3 4 5 6 7 19 19 19 19 19 19 19 19 19 19 19 19 19	3. I laugh ar	nd joke aroun	d with my pa	artner.		1	2	3	4	5	6	7
6. I am able to think of witty things to say to amuse my partner. 7. I sometimes use humour with my partner to show that I 1 2 3 4 5 6 7 am annoyed by him/her. 8. I use humour with my partner to have fun. 1 2 3 4 5 6 7 9. I sometimes make jokes at my partner's expense. 1 2 3 4 5 6 7 10. I use humour with my partner so we will feel closer as a 1 2 3 4 5 6 7 couple. 11. I frequently make my partner laugh by doing or saying 1 2 3 4 5 6 7 something funny. 12. If my partner is bothering me, I will often make a joke 1 2 3 4 5 6 7 about it. 13. I engage in silly behaviors to make my partner laugh. 1 2 3 4 5 6 7 14. Sometimes I have to defend myself when I tell my 1 2 3 4 5 6 7 partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner		• •		nded or hurt l	oy things I	1	2	3	4	5	6	7
partner. 7. I sometimes use humour with my partner to show that I 1 2 3 4 5 6 7 am annoyed by him/her. 8. I use humour with my partner to have fun. 1 2 3 4 5 6 7 9. I sometimes make jokes at my partner's expense. 1 2 3 4 5 6 7 10. I use humour with my partner so we will feel closer as a 1 2 3 4 5 6 7 couple. 11. I frequently make my partner laugh by doing or saying 1 2 3 4 5 6 7 something funny. 12. If my partner is bothering me, I will often make a joke 1 2 3 4 5 6 7 about it. 13. I engage in silly behaviors to make my partner laugh. 1 2 3 4 5 6 7 14. Sometimes I have to defend myself when I tell my 1 2 3 4 5 6 7 partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7	5. I use hun	nour to put do	wn my part	ner in a teasir	ng way.	1	2	3	4		6	7
am annoyed by him/her. 8. I use humour with my partner to have fun. 9. I sometimes make jokes at my partner's expense. 1 2 3 4 5 6 7 10. I use humour with my partner so we will feel closer as a couple. 11. I frequently make my partner laugh by doing or saying 1 2 3 4 5 6 7 something funny. 12. If my partner is bothering me, I will often make a joke 1 2 3 4 5 6 7 about it. 13. I engage in silly behaviors to make my partner laugh. 1 2 3 4 5 6 7 14. Sometimes I have to defend myself when I tell my 1 2 3 4 5 6 7 partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner		to think of w	itty things to	say to amuse	e my	1	2	3	4	5	6	7
9. I sometimes make jokes at my partner's expense. 1 2 3 4 5 6 7 10. I use humour with my partner so we will feel closer as a 1 2 3 4 5 6 7 couple. 11. I frequently make my partner laugh by doing or saying 1 2 3 4 5 6 7 something funny. 12. If my partner is bothering me, I will often make a joke about it. 13. I engage in silly behaviors to make my partner laugh. 1 2 3 4 5 6 7 14. Sometimes I have to defend myself when I tell my 1 2 3 4 5 6 7 partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7			ur with my բ	partner to sho	w that I	1	2	3	4	5	6	7
10. I use humour with my partner so we will feel closer as a couple. 11. I frequently make my partner laugh by doing or saying 1 2 3 4 5 6 7 something funny. 12. If my partner is bothering me, I will often make a joke 1 2 3 4 5 6 7 about it. 13. I engage in silly behaviors to make my partner laugh. 1 2 3 4 5 6 7 14. Sometimes I have to defend myself when I tell my 1 2 3 4 5 6 7 partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7	8. I use hun	nour with my	partner to h	ave fun.		1	2	3	4	5	6	7
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something funny. 12. If my partner is bothering me, I will often make a joke about it. 13. I engage in silly behaviors to make my partner laugh. 1 2 3 4 5 6 7 14. Sometimes I have to defend myself when I tell my apartner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets annoyed with me. 16. Sometimes I tease my partner about his/her appearance appeara		mour with my	partner so	we will feel cl	oser as a	1	2	3	4	5	6	7
about it. 13. I engage in silly behaviors to make my partner laugh. 1 2 3 4 5 6 7 14. Sometimes I have to defend myself when I tell my partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7			partner laug	gh by doing or	saying	1	2	3	4	5	6	7
14. Sometimes I have to defend myself when I tell my partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets 1 2 3 4 5 6 7 annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7		irtner is bothe	ring me, I w	ill often make	a joke	1	2	3	4	5	6	7
partner a joke by saying that I was "just kidding". 15. Sometimes when I try to be funny, my partner gets annoyed with me. 16. Sometimes I tease my partner about his/her appearance or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7	13. I engage	e in silly behav	viors to make	e my partner l	augh.	1	2	3	4	5	6	7
annoyed with me. 16. Sometimes I tease my partner about his/her appearance 1 2 3 4 5 6 7 or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7			•		my	1	2	3	4	5	6	7
or something he/she said or did. 17. I often mention "inside jokes" with my partner. 1 2 3 4 5 6 7 18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7			to be funny	, my partner	gets	1	2	3	4	5	6	7
18. My aggressive humour seems to make my partner 1 2 3 4 5 6 7			•	out his/her ap	pearance	1	2	3	4	5	6	7
7 . 60	17. I often i	mention "insid	le jokes" wit	h my partner.		1	2	3	4	5	6	7
	,		r seems to r	nake my parti	ner	1	2	3	4	5	6	7

Curriculum Vitae

SARA CAIRD, M.Sc. Curriculum Vitae

CONTACT INFORMATION

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EDUCATION

In Progress Doctor of Philosophy, Clinical Psychology

University of Western Ontario, London, Ontario

Advisor: Rod A. Martin, Ph.D., C. Psych.

Dissertation: An Examination of Daily Humour Styles and Relationship Satisfaction

in Dating Couples

2011 Master of Science, Clinical Psychology

University of Western Ontario, London, Ontario

Advisor: Rod A. Martin, Ph.D. C. Psych.

Thesis: Laughter and love: The role of humour styles in dating relationships

2008 Bachelor of Arts, Honours Psychology with Class 1 Distinction

Queen's University, Kingston, Ontario *Advisor:* Valerie A. Kuhlmeier, Ph.D.

Thesis: The influence of previous interactions on infants' prosocial behaviour

PUBLICATIONS AND PRESENTATIONS

Peer Reviewed Publications:

Caird, S. & Martin, R. A. (2014). Relationship-focused humour styles and relationship satisfaction in dating couples: A repeated-measures design. *International Journal of Humour Research*, 27, 224-247.

Rudnick, A., Kohn, P., Edwards, K., Podnar, D., Caird, S., & Martin, R. (2014). Humour-related interventions for people with mental illness: A randomized controlled pilot study. *Community Mental Health Journal*, *50*, 737-742.

Conference Presentations:

- **Caird, S.** & Martin, R. A. (July 2013). The Role of Humour Styles in Dating Relationships. Presented at the International Society for Humour Studies Conference, Williamsburg, VA.
- Martin, R. A., Caird, S. & Edwards, K. (July 2013). An Overview of Diary Methods in Humour Styles Research. Presented at the International Society for Humour Studies Conference, Williamsburg, VA.
- **Caird, S.** & Martin, R. A. (July 2012). Funny You Should Say That: The Effectiveness of Humorous Communication in Romantic Relationships. Presented at the International Society for Humour Studies Conference, Krakow, Poland.
- Martin, R. A., Caird, S., Edwards, K. R., Podnar, D. J., Rudnick, A., Wedlake, M., & Kohn, P. (July 2012). A Randomized Controlled Pilot Study of a Humour-Based Intervention for People with Mental Illness. Presented at the International Society for Humour Studies Conference, Krakow, Poland.
- **Caird, S.** & Martin, R. A. (July 2011). Laugher and Love: The Impact of Humour Styles on Relationship Satisfaction and Longevity. Presented at the International Society for Humour Studies Conference, Boston, MA.
- **Caird, S.** (June 2008). The Influence of Previous Interactions on Infants' Prosocial Behaviour. Presented at the Ontario Undergraduate Thesis Conference, Brock University, St. Catharines, ON.

Poster Presentations:

- Rudnik, A., Kohn, P. M., **Caird, S.,** Edwards, K. R., Podnar, D., & Martin, R A. (June 2012). Feasibility and Effectiveness of Humour-Related Interventions for People with Mental Illness: A Randomized Controlled Pilot Study. Presented at the Academic Research Day, Department of Psychiatry, University of Western Ontario, London, ON.
- **Caird, S.** & Martin, R. A. (June 2011). Laughter and Love: The Impact of Humour Styles on Relationship Satisfaction and Longevity. Presented at the Canadian Psychological Association Conference, Toronto, ON.
- Edwards, K. R., Martin, R. A., Kohn, P., Rudnick, A., Podnar, D., **Caird, S.,** Wedlake, M., Granirer, D., Reiss, J., Nelson, C., van Egmond, P., & Owen, R. (June 2011). The Role of Humour in an Anti-Stigma Initiative: Results from an Efficacy Study Evaluating Stand-Up For Mental Health. Presented at the Canadian Psychological Association Conference, Toronto, ON.
- Edwards, K. R., Martin, R. A., Kohn, P., Rudnick, A., Podnar, D., **Caird, S.,** Wedlake, M., Granirer, D., Reiss, J., Nelson, C., van Egmond, P., & Owen, R. (October 2010). Stand Up For Mental Health: Results from a Pilot Study in London, Ontario. Presented at Thriving in 2010 and Beyond Conference, London, ON.

- Dargie, E., Blair, K., Goldfinger, C., Pukall, C., & **Caird, S.** (May 2010). Are Long Distance Dating Relationships Doomed to Fail? Presented at the Society for Sex Therapy and Research 35th Annual Meeting, Boston, MA.
- Dargie, E., Blair, K., Goldfinger, C., Pukall, C., & Caird, S. (June 2009). Long Distance Dating Relationships: Are they doomed to fail? Presented at the 31st Annual Guelph Sexuality Conference, Guelph, ON.
- Dunfield, K. A., Caird, S. M., & Kuhlmeier, V. (April 2009). Tit for Tat: The Effect of Intentions on the Helping Behaviour of Human Toddlers. Presented at the Society for Research in Child Development, Denver, CO.

ACADEMIC AWARDS AND HONOURS

Date	Award	Institution	Value
2014	Canadian Graduate Scholarship	Social Sciences and Humanities	\$40,000
		Research Council of Canada (SSHRC)	
2014	Ontario Graduate Scholarship	Ontario Ministry of Training, Colleges,	\$15,000
	(declined)	and Universities	
2013	Ontario Graduate Scholarship	Ontario Ministry of Training, Colleges,	\$15,000
		and Universities	
2013	Graduate Student Award	International Society for Humour	\$250
		Studies	
2011	Ontario Graduate Scholarship	Ontario Ministry of Training, Colleges,	\$15,000
		and Universities	
2010	Ontario Graduate Scholarship	Ontario Ministry of Training, Colleges,	\$15,000
		and Universities	
2009	Joseph Armand Bombardier	Social Sciences and Humanities	\$17,500
	Master's Scholarship	Research Council of Canada (SSHRC)	
2009	Ontario Graduate Scholarship	Ontario Ministry of Training, Colleges,	\$15,000
	(declined)	and Universities	
2008	Undergraduate Student Research	National Sciences and Engineering	\$5,625
	Award	Research Council of Canada (NSERC)	
2007	Lilian Coleman Taylor Prize for	Queen's University	\$930
	Top Female Student from Leeds		
	and Grenville County		

RELEVANT EMPLOYMENT AND RESEARCH EXPERIENCE

Research Assistant, Stand Up for Mental Health, University of Western Ontario, London, Ontario (September 2009 - December 2009)

- Supervisor: Rod Martin, Ph.D. & Abraham Rudnick, Ph.D., C. Psych.
- Worked as one of three graduate students on a study designed to evaluate the effectiveness of stand-up comedy as a psychological treatment option for individual seeking community mental health services
- Coordinated and attended weekly focus groups designed to increase humour experiences in individuals diagnosed with a variety of psychological disorders (e.g., Schizophrenia, MDD,

- Bipolar Disorder); wrote qualitative notes; administered questionnaires; coordinated stand-up comedy performance at the London Public Library
- Designed and presented posters at conferences; co-wrote a peer-reviewed journal article

Research Coordinator, Sexual Health Research Lab, Queen's University, Kingston, Ontario (August 2008 - July 2009)

- Supervisor: Caroline Pukall, Ph.D., C. Psych.
- Coordinated 8 research projects investigating topics such as female sexual arousal, female genital pain, and couple functioning
- Recruited and interviewed participants for studies; supervised undergraduate research assistants
- Administered research protocols; data collection, coding, entry, and management; received training on Rapid Marital Interaction Coding System

Research Assistant/NSERC Student, Bio-Motion Lab, Queen's University Kingston, Ontario (May 2008 - August 2008)

- *Supervisor:* Niko Troje, Ph.D.
- Trained pigeons to discriminate between different biological motions using operant conditioning procedures; data collection, entry, and analyses; animal care

Research Assistant, Intimate Relationships Lab, Queen's University Kingston, Ontario (January 2007 - August 2007)

- Supervisor: Uzma Rehman, Ph.D.
- Aided with collection of cortisol samples, data collection and entry; attended lab meetings

TEACHING EXPERIENCE

Teaching Assistantships:

- Introduction to Psychology (Winter 2015)
- Introduction to Psychology (Fall 2014)
- Human Sexuality (Summer 2014)
- Abnormal Child Psychology (Winter 2014)
- Psychology of Health and Illness (Fall 2013)
- Introduction to Test Construction (Fall 2013)
- Clinical Psychology (Summer 2013)
- Adult Psychopathology (Winter 2012)
- Adult Psychopathology (Fall 2011)
- Exceptional Children: Behavioural Disorders (Summer 2011)
- Child Development (Winter 2011)
- The Psychology of Humour (Fall 2010)
- The Psychology of Humour (Winter 2010)
- Introduction to Psychology (Fall 2009)

Academic Lectures:

- Sleep Disorders (2011 and 2012). Adult Psychopathology, University of Western Ontario
- Effect of Humour on Interpersonal Attraction and Mate Selection (2010). Psychology of Humour, University of Western Ontario

 Energy Expenditure of Genuine Laughter (2010). Psychology of Humour, University of Western Ontario

GRADUATE COURSE WORK

- Professional Foundations of Clinical Psychology (Psych 9800)
- Clinical Skills Pre-Practicum (Psych 9301)
- *Adult Psychopathology and Diagnosis* (Psych 9311)
- Clinical Assessment (Psych 9800)
- Psychotherapy Approaches (Psych 9320)
- *Cognitive-Behavioural Therapy* (Psych 9321)
- *Theory and Practice in Clinical Science* (Psych 9344)
- *History and Systems of Psychology* (Psych 9370)
- Methods and Issues in Program and Policy Evaluation in Health and Human Services (Epid 9531)
- Research Design (Psych 9540)
- *Multilevel Modelling* (Psych 9542)

UNIVERSITY AND PROFESSIONAL SERVICE

Committees and Organizations

Campus Representative, Canadian Psychological Association (September 2012 - August 2014)

- Served as a liaison between graduate students and CPA
- Promoted CPA membership among graduate students

Clinical Student Advisory Committee, Clinical Psychology Program (May 2013 - May 2014)

- Served as a liaison between students in the clinical program and the clinical faculty
- Scheduled monthly brown-bag presentations by clinical psychologists in the London area and clinical training seminars for clinical students
- Assisted with CPA re-accreditation process by reviewing documents

Secretary and Advertising Committee, Advocacy through Action (September 2011- August 2013)

- Advocacy through Action is an initiative of clinical psychology graduate students that
 endeavors to make research and resources on psychological issues available to the London
 community. The group offers an annual series of public lectures on various topics related to
 mental health and well-being.
- As secretary, I was responsible for producing and distributing meeting minutes. As a member of the advertisements committee, I helped advertise our lecture series by hanging posters, and communicating with local news outlets.

Psychology Councillor, Society of Graduate Students (September 2011 - August 2012)

• Councillors are responsible for attending monthly meetings and voting on issues relevant to graduate students.

Treasurer and Activities Coordinator, Psychology Graduate Students' Association (September 2010 - August 2011)

 Assisted in organizing and hosting student social events and welcoming new graduate students

Community Lecture

Caird, S. Talk Title: *Humor Styles in Everyday Life*. Finding your way: The sixth annual lectures series in the psychology of everyday life. Central Library, London, Ontario. February 2013.

Journal Reviewer

Humour: International Journal of Humour Research Translational Issues in Psychological Science

MEMBERSHIP IN PROFESSIONAL SOCIETIES

2014-present	Ontario Psychological Association
2012-present	London Regional Psychological Association
2011-present	Canadian Psychological Association
2013	International Society for Humour Studies