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Humour Styles and Negative Intimate Relationship Events

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Honours Psychology Thesis

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Abstract

Research has shown that humour is associated with satisfaction and conflict management in dyadic relationships, such as friendships and romantic relationships. However, humour is not inherently positive or negative in itself. The function of humour depends on the style through which it is expressed. Adaptive uses of humour, especially affiliative humour, are positively correlated with relationship satisfaction and conflict management. Maladaptive uses of humour, particularly aggressive humour, have the opposite effect. The current study examined daily changes in humour use, relationship satisfaction, and conflict over a period of ten days in participants who were in a dating relationship. Two hundred undergraduate students were recruited from the University of Western Ontario (UWO) Psychology Department's Research Participation Pool. The participants must have been in a dating relationship of three months or more at the time of the study. They were asked to complete online daily diaries which included questionnaires assessing the variables of interest. As hypothesized, affiliative humour, used by the participant and by the partner as perceived by the participant, was positively correlated with relationship satisfaction on a day-to-day basis. Daily aggressive humour used by the partner as perceived by the participant was negatively correlated with daily relationship satisfaction. However, no significant association was found between aggressive humour used by the participant and relationship satisfaction. Conflict was negatively correlated with relationship satisfaction on a daily basis. And finally, daily affiliative humour was found to have a moderating effect on the relationship between conflict and relationship satisfaction, though a moderating effect was not found for daily aggressive humour.

Humour Styles and Negative Intimate Relationship Events

Humour in Relationships

Having a sense of humour is an important aspect to both social (Ziv, 2010) and romantic relationships (Bippus, 2000). Researchers have found that having a sense of humour is associated with the long-term success of marriages for both men and women (Driver & Gottman, 2004; Lauer, Lauer, & Kerr, 1990). In their study, Lauer et al. (1990) asked couples who were married for forty-five years or more to identify factors that they think are important to their long-term marriages. Laughing together was a variable that both husbands and wives identified as important. In some cases, participants even said that they would intentionally look for things to laugh about together. Having a good sense of humour has also been shown to be a very desirable trait in mate selection in both genders (Buss, 1988; Goodwin, 1990). Undergraduate students of both genders rated that displaying humour is an effective tactic in attracting potential mates (Buss, 1988) and that they prefer partners who demonstrate a keen sense of humour (Goodwin, 1990).

Definition of Humour

Martin (2007) proposed that there are four different components to humour: (1) a specific positive emotion that is (2) elicited by the perception of playful incongruity, which usually (3) occurs in an interpersonal context and is (4) typically expressed by laughter.

Emotional component. The emotional component of humour is referred to as 'mirth', which is a pleasurable feeling that manifests in laughter and merriment and can vary in its intensity (Ruch, 1993). Research found that forced laughter, even for a brief period of time, resulted in improvement of mood (Foley, Matheis, & Schaefer, 2002), while smiling had similar but smaller effects compared to laughter (Neuhoff & Schaefer, 2002).

Cognitive component. Playful incongruity is considered to be the major cognitive component of humour. It involves the perception of the stimulus as incongruous and unexpected in a non-serious way (Gervais & Wilson, 2005). Apter's (1982) reversal theory details the concept of synergy which could help explain this incongruity. 'Synergy', according to Apter, occurs when a particular object, person, place, or situation "is seen to have mutually exclusive characteristics, either successively or simultaneously." (1982, p. 369). Alternatively, Koestler's (1964) concept of bisociation could help explain incongruity. Koestler defined 'bisociation' as the simultaneous activation of two or more self-consistent but normally contradictory frames of reference (1964, p. 38). Therefore, humour, which is playful and non-serious, must also possess cognitive incongruity. This component could be very helpful in resolving conflicts, when shifting to the partner's perspective in the argument might aid in understanding and decrease tension.

Interpersonal component. The interpersonal component of humour refers to its social nature, in that most humour is about people, and people rarely laugh when alone (Martin & Kuiper, 1999). This is well illustrated in the study by Baxter (1992), which found that humour can be used to help people interact in playful ways. Thus, humour becomes a communication tool to help convey messages, especially on topics that may be uncomfortable or not socially acceptable. Interactions in this manner could serve to promote intimacy and moderate conflict (Baxter, 1992).

Behavioural component. The behavioural component of humour can be considered as the expression of mirth in the form of smiling and laughter. This, like the emotional component, can vary in intensity. Laughter has also been found to increase positive affect in listeners (Owren & Bachorowski, 2003), which could improve their interpersonal relationships. This may be

helpful in reducing tensions in conflict scenarios as well, which could aid in resolution and maintain relationship satisfaction.

Humour Styles

Positive and negative uses of humour can have different associations with relationship variables. Martin, Puhlik-Doris, Larsen, Gray, & Weir (2003) conceptualized the ways that humour could be used in everyday life as 'humour styles'. There are four different humour styles, separated into positive and negative. The positive humour styles include affiliative and self-enhancing, and the negative styles include aggressive and self-defeating.

Affiliative humour refers to the way that humour is used to entertain others and to decrease interpersonal tension. It is a non-hostile form of humour and facilitates relationships. Self-enhancing humour uses humour to maintain a positive outlook on life when faced with stressful situations. It is also commonly known as 'coping humour', and is used as an emotion regulation mechanism. Aggressive humour uses humour disparagingly, usually as a means of enhancing the speaker at another's expense. This humour style expresses humour in ways such as teasing, ridicule, and derision. Somewhat opposite to aggressive humour, self-defeating humour uses humour in an excessively self-disparaging way, usually in order to gain the attention and approval of others at one's own expense.

Humour Styles in Relationships

Before the conceptualization of humour styles by Martin and colleagues (2003) and its increased usage in research, researchers had already attempted to differentiate humour use as either positive or negative in their study methods. Though those definitions of positive and negative humour use may be different from that of Martin et al. (2003), the results from those studies give valuable insight and are important for designing future studies. For example,

positive use of humour has been found to be associated with better initiation of social interactions (Kuiper, Grimshaw, Leite, & Kirsh, 2004) and higher personal disclosure (Yip & Martin, 2006), which can act as a maintenance strategy for relationship quality (such as love, commitment, and relationship satisfaction) for both genders (Sprecher & Hendrick, 2004). On the other hand, negative use of humour has been found to be inversely correlated with relationship satisfaction in both pleasant and conflict scenarios for those in romantic relationships (Butzer & Kuiper, 2008).

After Martin and colleagues (2003) conceptualized the four humour styles and designed the Humor Styles Questionnaire (HSQ) to measure them, this definition of humour styles was frequently utilized in research. For example, affiliative humour has been found to be positively correlated with factors such as intimacy (Martin et al., 2003), relationship satisfaction and relationship persistence (Saroglou, Lacour, & Demeure, 2010). The study by Martin et al. (2003) was conducted with an undergraduate student population using a cross-sectional design. Participants answered a questionnaire package which included measures on humour styles using the HSQ and relationship variables such as intimacy. Intimacy was found to be positively correlated with affiliative and self-enhancing humour, but negatively correlated with self-defeating humour. The study conducted by Saroglou et al. (2010), on the other hand, used two different samples of participants in their cross-sectional study (a heterosexual married sample, and a heterosexual divorced sample) in investigating the relationship between humour styles and relationship quality. Again, humour styles were assessed by the HSQ, while relationship quality was assessed by attachment, marital satisfaction, and relationship status (married versus divorced). The results showed that positive humour styles were associated with relationship satisfaction and relationship persistence, while self-defeating humour predicted both satisfaction

and divorce. Aggressive humour was also predictive of divorce, and was associated with low relationship quality after divorce.

Partner Perception of Humour Styles in Relationships

An aspect in humour research that is frequently overlooked is the fact that the intended use of humour by an individual may not be perceived in the same way by another (partner perception of an individual's humour use). Humour expression and its perception may not correspond. This is especially important during conflict events. If humour is perceived in a different way than how it was intended, then miscommunication has occurred, which could worsen the conflict situation.

There is also evidence that an individual's perception of the way his/her partner uses humour is significant to relationship variables such as satisfaction. In a study conducted by Cann, Zapata, & Davis (2011), a population of university students in committed romantic relationships of at least two months were recruited. Both partners of the dyadic relationship were asked to fill out questionnaires that included assessments on their humour styles, relationship satisfaction, and relationship quality. Participants completed the HSQ twice, once for their own humour use tendencies, and another for how they perceive their partner uses humour. As expected of the self-report measurements of humour use, positive humour styles were positively related to relationship quality, and negative humour styles were negatively related to relationship quality. However, the results also showed that relationship satisfaction was most strongly associated with individuals' perceptions of their partners' humour styles. Therefore, the way the individual perceives his/her partner's humour use is important for relationship satisfaction. Hence, in future studies involving humour styles, conflict events, and relationship satisfaction, it will be

important to also assess perceptions of partners' humour use in order to obtain more comprehensive results.

Conflict in Relationships

There has been a great deal of research conducted on conflicts in relationships in terms of conflict resolution and the effects of conflict on relationship variables (Campbell, Martin, & Ward, 2008; Gottman & Driver, 2005). In an observational study of newlyweds, Driver, Tabares, Shapiro, Nahm, & Gottman (2003) found that couples who were able to resolve conflict well were likely to have higher relationship satisfaction. There has also been some past research investigating the role of humour styles in conflict resolution. In an observational study of dating couples, Campbell et al. (2008) found that more frequent uses of affiliative humour and fewer uses of aggressive humour during the conflict resolution process were correlated with an increase in perceived relationship closeness and better conflict resolution.

Relational problems such as conflict events have been linked to aggressive humour in particular. In the study by Kuiper et al. (2004), undergraduate students were asked to fill out a questionnaire package that included the HSQ and questionnaires measuring psychological well-being (such as self-esteem and depression) and self-competency (such as interpersonal competence). The results showed that higher levels of aggressive humour use were associated with reduced ability to provide emotional support or engage in conflict management.

Partner perception of humour use during conflict and its impact on relationship satisfaction is more complex. In a recent study by Bippus, Young, & Dunbar (2011), married and dating couples were recruited to participate, and humour use during a conflict scenario was assessed by the two partners both of themselves and of each other. Results showed that humour was frequently used during the conflict discussion. The more humour an individual used, the higher

their rating of relationship satisfaction. However, the amount of humour the partner perceived that the individual used was correlated negatively with the partner's relationship satisfaction. This discrepancy could be due to the fact that the intended use of humour by an individual may not be perceived in the same way by the relationship partner. It could have detrimental effects during conflict events and, in turn, negatively affect relationship satisfaction. Once again, partner perceptions of humour use were found to be important to humour styles and relationship quality.

Humour as a Moderating Variable

There has been some evidence of humour having a moderating effect on the relationship between life stressors and well-being (Abel, 1998; Martin & Lefcourt, 1983; Nezu, Nezu, & Blissett, 1988). A moderator, according to Baron and Kenny (1986), is a variable that "affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable" and that "within a correlational analysis framework, a moderator is a third variable that affects the zero-order correlation between two other variables" (p. 1174). In the context of conflict and relationship satisfaction, possible moderating effects of humour could be tested by examining the interaction between conflict and specific humour styles in predicting relationship satisfaction. If there is a significant interaction, then that particular humour style has a moderating effect on the relationship between conflict and relationship satisfaction. This means that the effect of conflict on relationship satisfaction would change depending on the humour style and the amount of humour used.

Limitations of Prior Studies

Most prior research so far is based on a cross-sectional design in which data collection occurred at one point in time. It would thus be meaningful to explore the changes in how humour is used on a daily basis, as it could potentially fluctuate, as well as how this could affect its

relationship with other variables, such as relationship satisfaction in dating couples. A daily diary methodology would be a good alternative to a cross-sectional design. Assessing humour use and relationship satisfaction on a day-to-day basis will allow analysis of the interaction between the changing levels of these two variables.

In past research in this area, humour styles have typically been assessed by the HSQ, which is appropriate for a general identification of an individual's humour styles. However, different situations may require different measures, even if similar variables are under study. For an investigation of humour styles in romantic relationships, the HSQ needs to be tailored to that specific topic – humour use in romantic relationships – which should improve the external validity of the results.

Partner perception of humour use by an individual has also not typically been taken into account in research studies assessing humour styles. However, research has shown that it does have a significant association with relationship satisfaction (Cann et al., 2011). Therefore, future studies would benefit with the inclusion of participants' perceptions of their partners' humour use as part of the study design.

The current study was a follow-up of the study conducted by Caird (2011), which addressed the limitations mentioned above and incorporated the suggested modifications to the study design. So far, the study by Caird (2011) has been the only one to utilize this design in investigating humour in dating relationships. Caird (2011) investigated dating couples using a daily diary methodology. The humour questionnaire that was administered was modified from the HSQ specifically for dating relationships. Caird (2011) found that the self-reported affiliative and aggressive humour styles are most strongly associated with relationship satisfaction. This association was found to be bidirectional. For example, aggressive humour predicted relationship

satisfaction decline when it was directed at the partner. However, a decrease in relationship satisfaction also predicted an increase in aggressive humour use against the partner. Therefore, humour use and relationship satisfaction appear to have a reciprocal effect. The best method to study this bidirectional relationship is by using a longitudinal design such as the daily diary method. Additionally, given the strong associations that were found for affiliative and aggressive humour with relationship satisfaction in dating relationships, these two humour styles merit further study.

Current Study

The current study investigated 200 undergraduate students currently in a dating relationship for three months or more. Over a period of ten days, participants completed daily diaries, including questionnaires that measure daily humour use by both the participant and the partner as perceived by the participant, as well as daily relationship satisfaction, and the presence or absence of daily conflict events. Three hypotheses were formed in regard to this study:

1. Daily humour styles, both self-reported and as perceived in one's partner, should be correlated with participants' daily relationship satisfaction.
 - Higher daily affiliative humour should be correlated with an increase in daily relationship satisfaction.
 - Higher daily aggressive humour should be correlated with a decrease in daily relationship satisfaction.
2. The presence of conflict events on a given day should be associated with a decrease in relationship satisfaction on that day.
3. Daily humour styles, both self-reported and as perceived in one's partner, should moderate the relationship between daily conflict events and relationship satisfaction.

- Higher daily affiliative humour should reduce the association between conflict events and relationship satisfaction.
- Higher daily aggressive humour should increase the association between conflict events and relationship satisfaction.

Method

Participants

Two hundred students from the UWO Psychology Department's Research Participation Pool were recruited for this study. The eligible participant must have been involved in a romantic relationship of three months or more at the time of the study. There were no other exclusionary criteria. Participation was entirely voluntary, and participants received research credits as compensation for taking part in the study.

Of the students who participated in the study ($N = 200$), 53 (26.5%) were male and 147 (73.5%) were female. The participants' age ranged from 17 to 33 years ($M = 18.72$, $SD = 2.13$), and the length of their dating relationship ranged from 1 to 132 months ($M = 19.55$, $SD = 19.38$). The largest proportion of participants was European-Canadian at 56.5%, with Asian-Canadians following at 24.5%, then South Asian-Canadians (6.5%), African/Caribbean-Canadians (3%), Native-Canadians (1.5%), Latin American-Canadians (1.5%), and the remaining 6.5% were identified as 'Other'. Additionally, 70% of the participants indicated that they were born in Canada, and 74% specified that English was their first language.

Measures

Demographics. Demographic data were collected (Appendix A).

Humour styles. Two different but related scales were used to assess daily humour styles. The Daily Humour Styles – Self (DHS-S; Appendix B) was utilized to assess the frequency of

affiliative (SAF, $\alpha = 0.91$) and aggressive (SAG, $\alpha = 0.91$) humour use by the participant in relating to their dating partner in the past 24 hours. Similarly, the Daily Humour Styles – Partner (DHS-P; Appendix C) was utilized to assess the frequency that the participant’s partner had used affiliative (PAF, $\alpha = 0.93$) and aggressive (PAG, $\alpha = 0.91$) humour in relating to the participant, as perceived by the participants themselves, in the past 24 hours. Both scales were adapted from items taken from the Humour Styles Questionnaire (Martin et al., 2003) and the Relational Humour Inventory (de Koning & Weiss, 2002). Each scale contained 18 items, nine of which assessed affiliative humour use, and the remaining nine items assessed aggressive humour use. From the DHS-S, a sample item that assessed affiliative humour use is “I laughed and joked around with my partner”, and a sample item that assessed aggressive humour use is “I made a joke at my partner’s expense”. From the DHS-P, a sample item that assessed affiliative humour use is “My partner laughed and joked around with me”, and a sample item that assessed aggressive humour use is “My partner made a joke at my expense”. The response options used a 7-point Likert scale for both the DHS-S and the DHS-P, ranging from 1 (not very much/less than most couples) to 7 (a great deal/far more than most couples). The total score for each scale was the sum of the raw scores, with affiliative and aggressive humour being scored separately. Higher total scores indicated more humour use of that type.

Relationship satisfaction. An adapted form of the Relationship Assessment Scale (RAS; Hendrick, 1988) was used as a measure of daily relationship satisfaction. Two items were eliminated from the original RAS, resulting in a five-item Likert scale. One item on the scale was used to assess relationship conflict, leaving four items to assess relationship satisfaction ($\alpha = 0.89$). The participants’ perceptions of their romantic relationships were assessed on a daily basis. Sample items of the scale included “Today, how satisfied are you with your relationship?”

and “Today, how much do you love your partner?” Response options ranged from 1 (not at all/poor) to 7 (a great deal/extremely well). The total score was the sum of the raw scores. Higher total scores indicated higher daily relationship satisfaction.

Relationship conflict. The item taken from the modified RAS, which asked “Today, how many problems were there in your relationship?” was used to assess relationship conflict. Response options ranged from 1 (not at all/poor) to 7 (a great deal/extremely well). This raw score from 1 to 7 was then converted into a score ranging from 0 (no conflict) to 6 (a lot of conflict) before being divided by 6 to get a scale ranging from 0 (no conflict) to 1 (a lot of conflict). In addition to this, a one-item scale was used to separately assess whether there was conflict in the relationship within the past 24 hours. The question was phrased as follows: “Today, did you and your partner get into an argument or disagreement?” The response options were dichotomized as either ‘yes’ or ‘no’, with ‘yes’ coded as 1 and ‘no’ as 0. The total score for conflict (CON) was the sum of the scores of the two items ($\alpha = 0.64$). Higher total scores indicated higher daily relationship conflict.

Procedure

Students signed up for the study through UWO’s online sign-up system for the Psychology Department’s Research Participation Pool. They signed up for an initial group testing session which took place in a small and quiet classroom and included up to eight participants in each session. After the students arrived for this first testing session, they were introduced to the test administrators, given the letter of information (Appendix D), and were asked to sign the informed consent form (Appendix E). The participants were then given the questionnaire packages, which included the first of the ten daily diaries. They were assured that

they could ask questions, skip questions, or stop the study at any time. The time of completion was less than thirty minutes.

After returning the completed questionnaire packages, the participants were provided preliminary feedback about the study (Appendix F) and were given instructions on how to access the online diaries for the following nine days. Links to the daily diaries were sent to the participants every day in email messages and they were asked to go to the website and complete the diary each day at approximately the same time, between 6pm and 2am. One missed diary pushed back the date of completion by one day until all nine diaries were collected, but two missed diaries terminated the online diary part of the study. An electronic feedback email (Appendix G) was sent after the daily diaries were completed, which provided information about the rationale and goals of the study and included relevant contact information for the participants if they had any questions. This study was approved by The University of Western Ontario Research Ethics Board for Non-Medical Research Involving Human Subjects (Appendix H).

Results

Descriptive Statistics

The mean, standard deviation, and sample size for each variable at Level 1 (within-person) and Level 2 (between-person) are presented in Table 1.

Overview of Analyses

The data collected contained measures at two different levels: Level 1 is the within-person level (i.e., daily scores on the diary measures) and Level 2 is the between-person level (i.e., trait-level scores). Hierarchical Linear Modeling (HLM) for Windows, Version 7 (Raudenbush, Bryk, & Congdon, 2014), was used to analyze the data. All models were estimated using Full Maximum Likelihood procedures, as this allows for testing the significance of overall

Table 1. Means, standard deviations, and sample sizes of study variables

Measure	Mean	SD	N
Within-Person			
RAS	22.51	5.76	1912
SAF	38.80	14.45	1912
PAF	39.28	14.74	1908
SAG	17.45	10.04	1909
PAG	16.99	9.97	1903
CON	0.38	0.57	1904
Between-Person			
Age	18.72	2.13	200

Note. RAS = Relationship Assessment Scale; SAF = Self-Affiliative Humour; PAF = Partner-Affiliative Humour; SAG = Self-Aggressive Humour; PAG = Partner-Aggressive Humour; CON = Conflict

difference of fit between models that differ in fixed as well as random effects (West, Welch, & Galecki, 2007). The Level 1 daily measures were analyzed as nested within persons, and were centered around person-means.

Main Effect Analyses

As a first step in performing HLM analyses, an unconditional model was run to examine the distribution of the within-person and between-person variance in relationship satisfaction. In this model, only the intercept of the outcome variable, RAS, was entered as the predictor. The model showed that the total variance at Level 2 (between-person) was 19.452 (58.21% of the total variance) and the variance at Level 1 (within-person) was 13.966 (41.79% of the total variance). This result shows that the day-to-day fluctuation in satisfaction within individuals is nearly as great as the overall variability between individuals, indicating that further analyses examining predictors of this within-person variability are appropriate.

Main effect analyses of the four humour styles and conflict were performed by running a main effects model with RAS as the outcome variable. In this model, SAF, PAF, SAG, PAG, and CON were all entered as predictors with random slopes. The model was then checked for any non-significant random effects associated with the slopes of each of the predictors. The random effects associated with the slopes of SAF and PAG were found to be non-significant and were removed. The model was analyzed again to check that this simplification did not significantly alter the overall fit of the model.

Level 1 Model

$$RAS_{ti} = \pi_{0i} + \pi_{1i}*(SAF_{ti}) + \pi_{2i}*(PAF_{ti}) + \pi_{3i}*(SAG_{ti}) + \pi_{4i}*(PAG_{ti}) + \pi_{5i}*(CON_{ti}) + e_{ti}$$

Level 2 Model

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

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

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

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

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

$$\pi_{5i} = \beta_{50} + r_{5i}$$

Final estimates of fixed effects with robust standard errors are reported in Table 2. The β coefficient for each predictor is as follows: SAF (0.083, $p < 0.001$), PAF (0.110, $p < 0.001$), PAG (-0.046, $p < 0.05$), and CON (-2.029, $p < 0.001$). SAG was not found to be a significant predictor of RAS in this model.

As hypothesized, daily measures of affiliative humour used by the participant and by the partner as perceived by the participant were both significantly positively associated with relationship satisfaction. Also, daily measures of aggressive humour used by the partner as perceived by the participant were significantly negatively associated with relationship satisfaction. However, contrary to expectations, daily measures of aggressive humour used by the participant were not significantly associated with relationship satisfaction. The model also showed that conflict had a significant negative association with relationship satisfaction.

Moderator Analyses

Four separate moderator analyses were then performed, one analysis for each humour style: SAF, PAF, SAG, and PAG. For each analysis, the product of the conflict measure and the potential moderator (e.g., CONxSAF) was added into the previous main effects model to test the interaction or moderating effect of that humour style. The model was then checked for any non-significant random effects associated with the slopes of each of the predictors. Any random effects that were found to be non-significant were removed, in which case the model was

Table 2. *Multilevel model of main effects*

Predictor Variable	Fixed Effects	
	β (SE)	t (d.f.)
Intercept	22.447 (0.324)	69.179 (199) ***
SAF	0.083 (0.015)	5.483 (1120) ***
PAF	0.110 (0.016)	6.811 (199) ***
SAG	-0.007 (0.017)	-0.423 (199)
PAG	-0.046 (0.019)	-2.436 (1120) *
CON	-2.029 (0.207)	-9.809 (199) ***
Random Effects		
	Variance (SD)	χ^2 (d.f.)
Intercept	20.430 (4.520)	5710.675 (167) ***
PAF	0.012 (0.110)	360.471 (167) ***
SAG	0.007 (0.081)	199.171 (167) *
CON	3.660 (1.913)	296.329 (167) ***

Note. SAF = Self-Affiliative Humour; PAF = Partner-Affiliative Humour; SAG = Self-

Aggressive Humour; PAG = Partner-Aggressive Humour; CON = Conflict

* $p < 0.05$, *** $p < 0.001$

analyzed again to check that this simplification did not significantly alter the overall fit of the model. Final estimates of fixed effects with robust standard errors are reported for each model of the four potential moderators.

Self-Affiliative Humour Style as a Potential Moderator

The results of the analysis of self-affiliative humour style as a potential moderator of the relationship between conflict events and relationship satisfaction are shown in Table 3. This analysis revealed a significant interaction between CON and SAF ($\beta = 0.049, p < 0.01$), indicating a significant moderating effect. This model represented a significant improvement over the unconditional model, $\chi^2(33) = 1526.230, p < 0.001$, and explained 65.57% of the Level 1 variance. This indicates that, overall, the predictors account for a highly significant proportion of the variance in daily satisfaction, and that SAF has a significant moderating effect on the relationship between daily conflict events and daily relationship satisfaction.

To examine the direction of this interaction, the predicted relationship satisfaction scores for participants with high and low scores for CON and SAF were plotted on a graph, using the β coefficients from the results shown in Table 3 in a regression equation to compute each predicted value. This graph is shown in Figure 1. For conflict, the high and low scores used in the prediction were +1 and -1 (i.e., the extremes of the range of the centered conflict scores). For self-affiliative humour, the high and low scores were set at +/- 2 SD (i.e., 28.9 and -28.9). As seen in Figure 1, on days when individuals had low levels of daily self-affiliative humour, they showed a strong negative association between daily conflict and daily relationship satisfaction; whereas on days when individuals had high levels of daily self-affiliative humour, this relationship was considerably weaker, and overall relationship satisfaction levels were higher.

Table 3. *Multilevel model with self-affiliative humour as a potential moderator*

Predictor Variable	Fixed Effects	
	β (SE)	t (d.f.)
Intercept	22.504 (0.327)	68.826 (199) ***
SAF	0.085 (0.014)	5.933 (199) ***
PAF	0.101 (0.016)	6.430 (199) ***
SAG	-0.003 (0.017)	-0.191 (199)
PAG	-0.048 (0.017)	-2.768 (199) **
CON	-1.959 (0.191)	-10.277 (199) ***
CONxSAF	0.049 (0.015)	3.178 (199) **
Random Effects		
	Variance (SD)	χ^2 (d.f.)
Intercept	20.751 (4.555)	2853.171 (137) ***
SAF	0.005 (0.072)	168.298 (137) *
PAF	0.014 (0.116)	180.349 (137) **
SAG	0.015 (0.123)	165.340 (137) *
PAG	0.014 (0.118)	166.317 (137) *
CON	2.968 (1.723)	173.217 (137) *
CONxSAF	0.012 (0.109)	178.667 (137) **

Note. SAF = Self-Affiliative Humour; PAF = Partner-Affiliative Humour; SAG = Self-

Aggressive Humour; PAG = Partner-Aggressive Humour; CON = Conflict

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

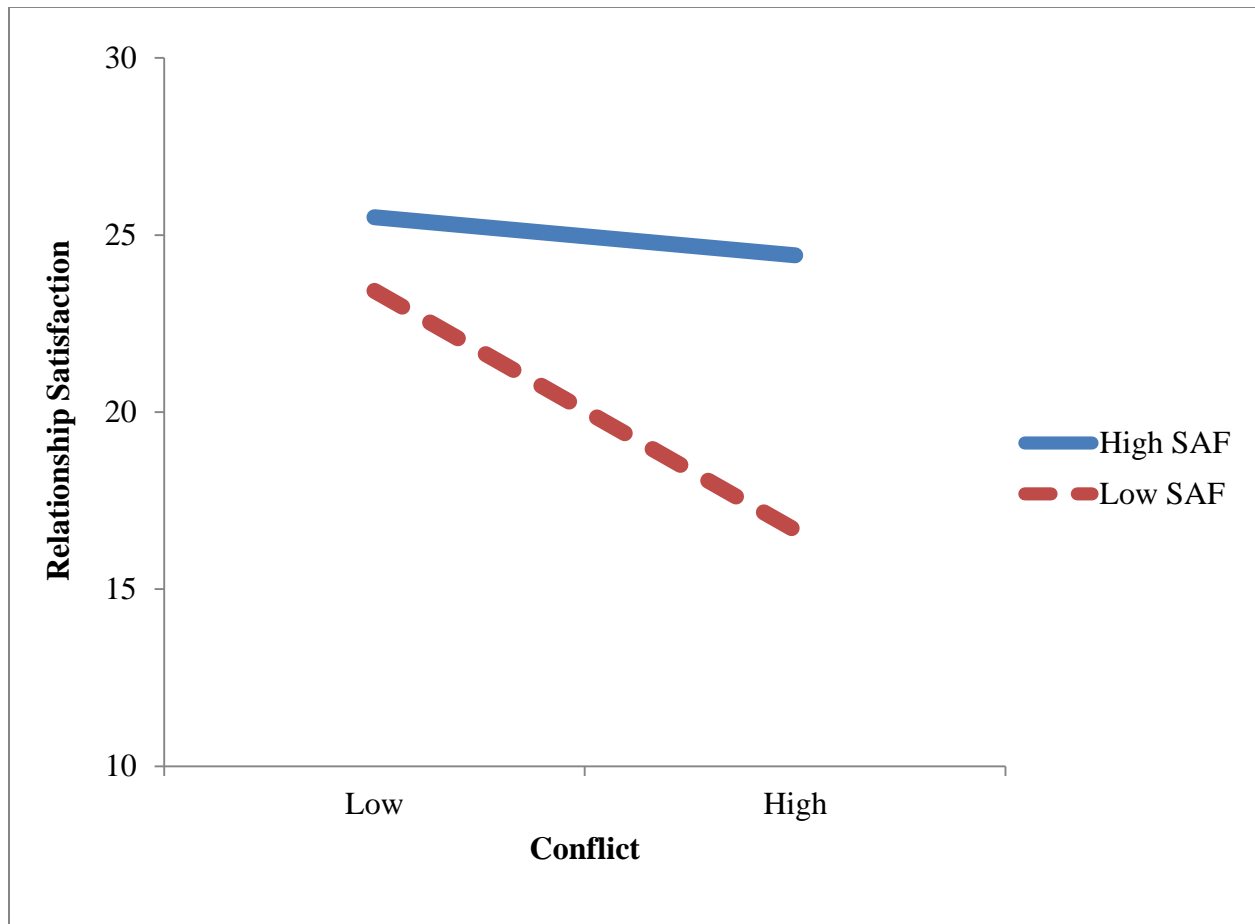


Figure 1. Moderating effect of self-affiliative humour (SAF) on the relationship between conflict events and relationship satisfaction

Partner-Affiliative Humour Style as a Potential Moderator

The results of the analysis of partner-affiliative humour style as a potential moderator of the relationship between conflict events and relationship satisfaction are shown in Table 4. The random effects associated with the slopes of SAF and SAG were found to be non-significant and were removed from the model. This analysis found a significant interaction between CON and PAF ($\beta = 0.046, p < 0.01$), indicating a significant moderating effect. This model represented a significant improvement over the unconditional model, $\chi^2(20) = 1493.886, p < 0.001$, and explained 62.44% of the Level 1 variance. This indicates that, overall, the predictors account for a highly significant proportion of the variance in daily satisfaction, and that PAF has a significant moderating effect on the relationship between daily conflict events and daily relationship satisfaction.

To examine the direction of this interaction, the predicted relationship satisfaction scores for participants with high and low scores for CON and PAF were plotted on a graph, using the β coefficients from the results shown in Table 4 in a regression equation to compute each predicted value. This graph is shown in Figure 2. For conflict, the high and low scores used in the prediction were +1 and -1 (i.e., the extremes of the range of the centered conflict scores). For partner-affiliative humour, the high and low scores were set at +/- 2 SD (i.e., 29.5 and -29.5). As seen in Figure 2, on days when individuals had low levels of daily partner-affiliative humour, they showed a strong negative association between daily conflict and daily relationship satisfaction; whereas on days when individuals had high levels of daily partner-affiliative humour, this relationship was considerably weaker, and overall relationship satisfaction levels were higher.

Table 4. *Multilevel model with partner-affiliative humour as a potential moderator*

Predictor Variable	Fixed Effects	
	β (SE)	t (d.f.)
Intercept	22.510 (0.327)	68.834 (199) ***
SAF	0.082 (0.015)	5.602 (920) ***
PAF	0.109 (0.016)	6.938 (199) ***
SAG	-0.010 (0.017)	-0.580 (920)
PAG	-0.044 (0.017)	-2.638 (199) **
CON	-1.889 (0.187)	-10.121 (199) ***
CONxPAF	0.046 (0.015)	3.117 (199) **
Random Effects		
	Variance (SD)	χ^2 (d.f.)
Intercept	20.704 (4.550)	3230.260 (146) ***
PAF	0.012 (0.109)	283.627 (146) ***
PAG	0.005 (0.072)	188.378 (146) *
CON	2.616 (1.617)	205.199 (146) **
CONxPAF	0.009 (0.093)	209.012 (146) ***

Note. SAF = Self-Affiliative Humour; PAF = Partner-Affiliative Humour; SAG = Self-

Aggressive Humour; PAG = Partner-Aggressive Humour; CON = Conflict

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

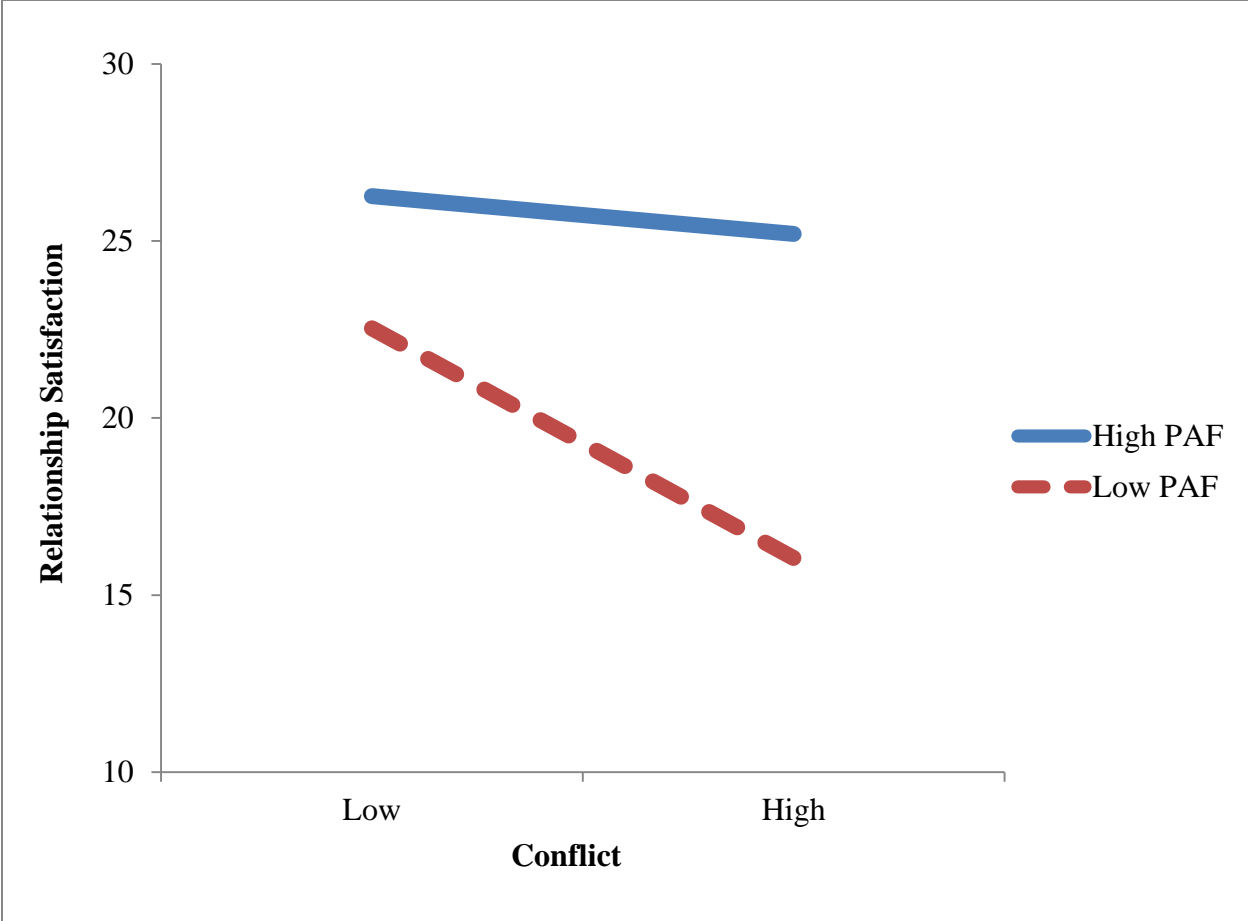


Figure 2. Moderating effect of partner-affiliative humour (PAF) on the relationship between conflict events and relationship satisfaction

Self-Aggressive Humour Style as a Potential Moderator

The results of the analysis of self-aggressive humour style as a potential moderator of the relationship between conflict events and relationship satisfaction are shown in Table 5. The random effects associated with the slopes of SAF, SAG, and PAG were found to be non-significant and were removed from the model. This analysis found no significant interaction between CON and SAG ($\beta = 0.006$, *ns*). This model represented a significant improvement over the unconditional model, $\chi^2(15) = 1447.594$, $p < 0.001$, and explained 61.74% of the Level 1 variance. This indicates that, overall, the predictors account for a highly significant proportion of the variance in daily satisfaction, even though SAG was not found to be a significant moderator for the relationship between conflict events and relationship satisfaction.

Partner-Aggressive Humour Style as a Potential Moderator

The results of the analysis of partner-aggressive humour style as a potential moderator of the relationship between conflict events and relationship satisfaction are shown in Table 6. The random effects associated with the slopes of SAF, PAF, and PAG were found to be non-significant and were removed from the model. This analysis found no significant interaction between CON and PAG ($\beta = -0.017$, *ns*). This model represented a significant improvement over the unconditional model, $\chi^2(15) = 1319.349$, $p < 0.001$, and explained 55.77% of the Level 1 variance. This indicates that, overall, the predictors account for a highly significant proportion of the variance in daily satisfaction, even though PAG was not found to be a significant moderator for the relationship between conflict events and relationship satisfaction.

Table 5. *Multilevel model with self-aggressive humour as a potential moderator*

Predictor Variable	Fixed Effects	
	β (SE)	t (d.f.)
Intercept	22.455 (0.324)	69.274 (199) ***
SAF	0.080 (0.015)	5.416 (1119) ***
PAF	0.111 (0.016)	7.000 (199) ***
SAG	-0.003 (0.016)	-0.177 (1119)
PAG	-0.039 (0.019)	-2.024 (1119) *
CON	-2.073 (0.211)	-9.829 (199) ***
CONxSAG	0.006 (0.024)	0.234 (199)
Random Effects		
	Variance (SD)	χ^2 (d.f.)
Intercept	20.349 (4.511)	4124.331 (164) ***
PAF	0.012 (0.109)	377.295 (164) ***
CON	3.350 (1.830)	272.255 (164) ***
CONxSAG	0.017 (0.131)	199.547 (164) *

Note. SAF = Self-Affiliative Humour; PAF = Partner-Affiliative Humour; SAG = Self-Aggressive Humour; PAG = Partner-Aggressive Humour; CON = Conflict

* $p < 0.05$, *** $p < 0.001$

Table 6. *Multilevel model with partner-aggressive humour as a potential moderator*

Predictor Variable	Fixed Effects	
	β (SE)	t (d.f.)
Intercept	22.460 (0.324)	69.261 (199) ***
SAF	0.095 (0.016)	5.994 (1119) ***
PAF	0.111 (0.017)	6.689 (1119) ***
SAG	-0.016 (0.018)	-0.893 (199)
PAG	-0.034 (0.020)	-1.717 (1119)
CON	-1.938 (0.215)	-8.994 (199) ***
CONxPAG	-0.017 (0.023)	-0.739 (199)
Random Effects		
	Variance (SD)	χ^2 (d.f.)
Intercept	20.261 (4.501)	3334.911 (160) ***
SAG	0.008 (0.091)	212.453 (160) **
CON	2.810 (1.676)	256.027 (160) ***
CONxPAG	0.011 (0.107)	217.223 (160) **

Note. SAF = Self-Affiliative Humour; PAF = Partner-Affiliative Humour; SAG = Self-Aggressive Humour; PAG = Partner-Aggressive Humour; CON = Conflict

** $p < 0.01$, *** $p < 0.001$

Discussion

The overall purpose of this study was to investigate the potential moderating effects of affiliative and aggressive humour styles on the relationship between conflict events and relationship satisfaction on a daily basis. The primary objective was to determine whether higher daily affiliative humour would reduce the association between daily conflict events and daily relationship satisfaction, and whether higher daily aggressive humour would increase this association. A secondary goal of this study was to determine whether humour styles would be correlated with relationship satisfaction on a daily basis, such that higher daily affiliative humour use would correspond with an increase in daily relationship satisfaction, and higher daily aggressive humour use would correspond with a decrease in daily relationship satisfaction. Lastly, this study also aimed to investigate whether the presence of conflict events would be detrimental to daily relationship satisfaction.

The daily diary design of this study was utilized in order to extend existing research, most of which had been cross-sectional and thus did not measure change over time. Since the unconditional model had revealed that almost half of the total variance in relationship satisfaction was due to within-person differences, analyses at this level were considered to be appropriate. Additionally, this study assessed humour use by the participant and by the partner as perceived by the participant, in order to determine if there would be any differences in the pattern of associations.

Affiliative Humour and Relationship Satisfaction

Results from the model of main effects found significant main effects for four of the five predictors. For affiliative humour, higher daily use of this style of humour, either by the participant or by the partner as perceived by the participant, was positively correlated with daily

relationship satisfaction. This means that on days when the participant used a higher level of affiliative humour than usual, or the participant perceived his/her dating partner to have used a higher level of affiliative humour than usual, the participant rated his/her relationship satisfaction for that day higher than he/she normally did. For example, the participant may have said something funny and joked around with his/her dating partner and made him/her laugh. Although the direction of causality is unknown, this affiliative use of humour may have helped in increasing relationship satisfaction for that day. These results, which are based on a within-person longitudinal analysis, are similar to findings from past cross-sectional research, which has found that affiliative humour is positively correlated with relationship satisfaction (Saroglou et al., 2010) for both self-report and partner-perceived measures (Cann et al., 2011).

The current findings make perfect sense as affiliative humour is defined as humour that is used to decrease interpersonal tension and facilitate relationships, so it is no surprise that more frequent uses of affiliative humor are correlated with higher relationship satisfaction. However, since this is a correlational study, conclusions of causality cannot be made. It is possible that more frequent uses of affiliative humour resulted in higher relationship satisfaction. But, it is equally possible that higher relationship satisfaction influenced the participants to use more affiliative humour. Future research could try to explore the direction of causality between humour styles and relationship satisfaction. For example, humour styles at one time point could be investigated as possible predictors of relationship satisfaction at later time points. If higher affiliative humour use at an earlier time point is positively associated with relationship satisfaction at a later time point, then a causal conclusion could be made – that higher affiliative humour causes an increase in relationship satisfaction.

Aggressive Humour and Relationship Satisfaction

Higher daily aggressive humour used by the partner as perceived by the participant was found to be negatively correlated with daily relationship satisfaction. This means that on days when the dating partner used a higher level of aggressive humour than usual, the participant rated his/her relationship satisfaction for that day lower than he/she normally did. For example, if the dating partner used aggressive teasing to show that he/she was annoyed with the participant, then there would be a decrease in the participant's rating of relationship satisfaction for that day. However, daily aggressive humour used by the participant was not found to be significantly correlated with the participant's daily relationship satisfaction. This means that regardless of the frequency of aggressive humour use by the participant, his/her relationship satisfaction rating would not change. Taken together, it can be concluded that aggressive humour has a significant negative effect on an individual's relationship satisfaction only when it is used on an individual by his/her partner, but not vice versa.

These results, which are longitudinal in nature, show somewhat similar patterns to past cross-sectional research. The negative direction of the significant correlation was no surprise, as research has found that aggressive humour has a detrimental effect on relationship satisfaction (Saroglou et al., 2010). This makes sense as aggressive humour is usually used as a means of enhancing the speaker at another's expense, and would not be conducive for maintaining relationship satisfaction. Therefore, more frequent use of aggressive humour is correlated with lower relationship satisfaction. However, contrary to expectations, aggressive humour used by the participant was not found to be a significant predictor of relationship satisfaction in the main effects model. Previously, Cann et al. (2011) found that relationship satisfaction was best predicted by the partner's use of humour as perceived by the participant, rather than the participant's own use of humour. Thus, the non-significant main effect for self-aggressive

humour is perhaps not very surprising. The reason for this may be due to the main effects model itself. The predictors of the model included all four humour styles that were assessed in this study, as well as conflict, which means that the contribution of each variable is examined while controlling for the other predictors. It is likely that self-aggressive humour may share a large amount of within-person variance with partner-aggressive humour and conflict, and this may explain why self-aggressive humour did not contribute enough unique variance to the model to produce a significant effect on relationship satisfaction.

Similarly to affiliative humour, conclusions of causality cannot be made for partner-aggressive humour as this is a correlational study. It is possible that more frequent uses of aggressive humour by the partner resulted in lower relationship satisfaction. But, it is also possible that it was due to lower relationship satisfaction that the dating partner was using more aggressive humour. Future research could try to explore the direction of causality between these two variables, using the same methodology briefly outlined for affiliative humour.

Conflict Events and Relationship Satisfaction

Daily conflict was found to be significantly negatively correlated with daily relationship satisfaction. On days when individuals experienced more conflict in their dating relationship, such as getting into an argument or disagreement, they tend to be more dissatisfied with their relationship. This is likely because conflict is usually associated with negative emotions, which may lead to less satisfaction with the relationship. Alternatively, it may be that feeling less satisfied with the relationship could lead to conflict in the relationship. The direction of causality cannot be determined in this current study.

As expected, this within-person pattern of results corresponds with previous cross-sectional (between-person) research (Cramer, 2002). Future research could extend the current

study and investigate whether different types of conflict or conflict duration would affect relationship satisfaction in different ways. For example, conflict events that last for a longer period of time may have a greater negative impact on relationship satisfaction compared to conflict events that last for a short period of time and are quickly resolved.

Affiliative Humour Styles as Potential Moderators

The models of the moderator analyses showed that daily self-affiliative and partner-affiliative humour styles both have significant moderating effects on the association between daily relationship conflict and daily relationship satisfaction. More frequent affiliative humour use reduces this association, which means that conflict events have less impact on relationship satisfaction on a daily basis. Less frequent use of affiliative humour strengthens this association, so that conflict events have more negative impact on relationship satisfaction on a daily basis. For example, on days when there is high conflict in the relationship and the relationship partners engage in more affiliative humour, their relationship satisfaction would not be reduced as much as it would be on days when they have high conflict but do not engage in affiliative humour.

This suggests that affiliative humour, used by both the participant and by the partner as perceived by the participant, is important in mitigating the negative effect that conflict has on relationship satisfaction. This makes sense if one were to imagine a conflict scenario in a dating relationship. In this situation, during the argument, either one of the two relationship partners could say something funny to try to make the other laugh, which could decrease interpersonal tension, or refer to an inside joke to maintain relationship closeness. These are just two of many possible uses of affiliative humour during a conflict scenario, and they would both likely result in the relationship partners experiencing less negative emotions about the conflict event, which would mitigate the negative impact conflict events generally have on relationship satisfaction.

Alternatively, affiliative humour could be used after a conflict event in order to restore relationship closeness between the two dating partners. For example, the two partners could very well be stewing in negative feelings even after the conflict had been resolved. In that circumstance, if one partner were to say something witty to amuse the other, or do something silly to make the other laugh, then both partners would potentially feel better and more satisfied about the relationship, thereby alleviating the strain that the conflict event had put onto the relationship.

The results of the self-affiliative and partner-affiliative moderator models showed that, on a daily basis, regardless of which dating partner used affiliative humour, as long as it is used, negative impact of conflict events on relationship satisfaction in dating relationships is reduced. Future research could examine the actual mechanisms by which affiliative humour mitigates the negative effects of conflict on relationship satisfaction. It could also investigate whether the same pattern of results would be found for relationships other than dating relationships. For example, the moderating effects of affiliative humour on the relationship between conflict events and relationship satisfaction in friendships may be different than that of dating relationships. It may be that the type of conflict events in friendships has a more important role than humour styles, and this could affect the significance of its use in reducing the negative impact that conflict has on relationship satisfaction.

Aggressive Humour Styles as Potential Moderators

The moderator analyses showed that daily self-aggressive and partner-aggressive humour styles both do not have significant moderating effects on the association between daily relationship conflict and daily relationship satisfaction. This means that no matter how frequently aggressive humour is used in the relationship within one day, it would not have a significant

impact on how conflict affects relationship satisfaction. For example, on days when there is high conflict in the relationship, relationship satisfaction would not significantly change regardless of how much aggressive humour is used by either dating partner.

This suggests that aggressive humour does not play a significant role in moderating the association between conflict events and relationship satisfaction on a daily basis. This is contrary to expectation, which predicted that more frequent use of aggressive humour would increase this association, so that the more aggressive humour is used, the worse the impact of conflict events on relationship satisfaction on a daily basis. A possible reason for this may be that the presence of conflict events in the relationship on any particular day has a large enough impact on relationship satisfaction that any additional decrease in satisfaction due to aggressive humour use would not be significant in comparison. For example, if two dating partners were to experience conflict, then their relationship satisfaction would significantly decrease, as evidenced by the main effects analysis of conflict and relationship satisfaction. Therefore, should the partners use aggressive humour that day, such as using it to show annoyance, then their relationship satisfaction would definitely not improve. However, since they are already dissatisfied due to the conflict event, it would make no significant statistical difference to be further dissatisfied by the use of aggressive humour.

It would be interesting for future research, using this daily diary methodology, to explore the potential cross-level moderating effect of the mean score of aggressive humour across the ten days (i.e., aggressive humour as a Level 2 variable) on the Level 1 relationship between daily conflict and satisfaction. While daily fluctuation in aggressive humour use does not have a significant moderating effect on the relationship between conflict and relationship satisfaction, it is possible that a moderating effect could exist between-persons. For example, those who

generally use more aggressive humour compared to most couples might find that the amount of aggressive humour used has no effect on the relationship between conflict and relationship satisfaction, likely because the two partners are used to the aggressive humour in the relationship. However, for those who generally do not use much aggressive humour in their relationship compared to other couples, high aggressive humour use might have a significant negative impact on the relationship between conflict and relationship satisfaction, simply because the partners are not used to aggressive humour in their relationship and would be sensitive when it is used. If this is the case, then a conclusion could be made for the moderating effects of aggressive humour on the relationship between conflict and relationship satisfaction on a between-person basis.

The results of the self-aggressive and partner-aggressive moderator models showed that, on a daily basis, aggressive humour does not have a significant moderating effect on the relationship between conflict and relationship satisfaction. This difference between the positive affiliative humour style and the negative aggressive humour style as moderators is similar to the findings of attachment as a moderator between quality of friendship and delinquent behaviour (McElhaney, Immele, Smith, & Allen, 2006). McElhaney et al. (2006) found that for the high school students participating in the study, moderating effects exist only for the attachment style of heightened attention to attachment relationships. This means that for students with more preoccupied attachment and those with less dismissive attachment, strong friendship quality was correlated with engaging in less delinquency. However, for those with less preoccupied attachment and those with more dismissive attachment, friendship quality was found to be unrelated to delinquent behaviour. McElhaney et al. (2006) suggested that close friendships may serve as a buffer to delinquent behaviours. Taking these findings in the context of humour styles,

conflict, and relationship satisfaction, it could be interpreted that moderating effects exist for the affiliative humour style, possibly because it serves as a buffer to the negative effect of conflict on relationship satisfaction.

In summary, it appears that the moderating effect of humour styles on the association between daily conflict events and daily relationship satisfaction is such that positive affiliative humour could make the conflict appear less unpleasant, but negative aggressive humour would not make the situation any worse. This study utilized the daily diary methodology and expanded on existing research in investigating the relationships between daily fluctuations of humour styles, conflict, and relationship satisfaction. It also investigated the potential moderating effects of humour styles on the relationship between conflict and relationship satisfaction. Currently, there are no studies conducted on this topic, either between-person (cross-sectional) or within-person (longitudinal).

Limitations and Future Directions

The current study expanded on existing research by examining daily fluctuations in humour use, presence of conflict events, and relationship satisfaction in dating relationships. However, there are several limitations to the study design. The participants consisted of only university students, so the results may not be entirely generalizable to other populations. This population also limited the average duration of the dating relationship – the length of the relationship was only specified as more than three months and was not otherwise controlled. Different patterns of associations among humour styles, conflict, and satisfaction might be found in intimate relationships that have longer durations compared to those that are relatively new. For example, it is likely that people in long-term relationships would have different types of conflicts compared to those who are in short-term or new relationships. In a long-term relationship, the

conflicts that take place would be potentially of a more serious nature, as the partners should be used to the small things that might cause conflict in newer relationships. In that case, because the topic under discussion is more serious, using humour during the conflict discussion might not be appreciated by the relationship partner and thus have a detrimental effect on relationship satisfaction. On the other hand, in newer relationships, the relationship partners might be more sensitive to the things that could cause conflict, and therefore would not appreciate humour use during the conflict discussion compared to partners who have been in a relationship for a longer period of time and consequently are more used to each other.

Another limitation to this study was the use of self-reports in all measures, which could arguably result in reduced validity due to social desirability or other response biases. However, the data analysis procedures may have reduced the effects of any such biases. Before conducting the statistical analyses, the data were centered around person-means for all measures. This means that for each participant, an average was taken for each of the variables over the ten days. This average was interpreted as the 'normal' or 'usual' level for that measure for that person. This average score was then subtracted from each of the ten data points for that measure for that person, resulting in a measurement of how far away the individual was from his/her normal level each day. Since any social desirability or other biases would likely occur to the same extent every day, those inaccuracies should be eliminated by centering the data.

Future research could also try to investigate the possible gender differences in the associations between humour styles, conflict, and relationship satisfaction on a daily basis. This study did not investigate gender differences because males only made up approximately a quarter of the participant population. However, previous research by Cohan & Bradbury (1997) found that couples were more likely to be separated when husbands used more humour during major

negative events, such as hospitalization and bankruptcy, whereas this was not the case when wives used more humour. This suggests that there may be a potential gender difference in the correlations between the three variables assessed in this study, and that future research extending this study to investigate this may prove fruitful.

Despite the limitations of the study, it has nevertheless extended current understanding of the relationship between humour styles, conflict, and relationship satisfaction in actual intimate relationships on a daily basis.

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Appendix A: Demographic Questionnaire

Instructions: 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 first name only: _____
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, text, email, etc.).
 - Every day or more
 - 5-6 days/week
 - 4-5 days/week
 - 2-3 days/week
 - Once/week
 - Less than once/week
9. Ethnicity (group that you *most* 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 yes
 If "No": How long have you lived in Canada? _____ (years)
11. Is English your first language? (check one) no yes
 If "No": How long have you been speaking English? _____ (years)

Appendix B: DHS-S

Instructions: 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
<i>Not very much/less than most couples</i>							
<i>Somewhat/about the same as most couples</i>							
<i>A great deal/far more than most couples</i>							
1. I told my partner a joke or said something funny to make him/her laugh.	1	2	3	4	5	6	7
2. I referred to my partner with a cute/silly nickname.	1	2	3	4	5	6	7
3. I laughed and joked around with my partner.	1	2	3	4	5	6	7
4. My partner seemed offended or hurt by something I said or did while trying to be funny.	1	2	3	4	5	6	7
5. I used humour to put down my partner in a teasing way.	1	2	3	4	5	6	7
6. I was able to think of witty things to say to amuse my partner.	1	2	3	4	5	6	7
7. I used humour with my partner to show that I was annoyed by him/her.	1	2	3	4	5	6	7
8. I used humour with my partner to have fun.	1	2	3	4	5	6	7
9. I made a joke at my partner's expense.	1	2	3	4	5	6	7
10. I used humour with my partner so we would feel closer as a couple.	1	2	3	4	5	6	7
11. I made my partner laugh by doing or saying something funny.	1	2	3	4	5	6	7
12. My partner was bothering me so I made a joke about it.	1	2	3	4	5	6	7
13. I engaged in silly behaviors to make my partner laugh.	1	2	3	4	5	6	7
14. I had to defend myself when I told my partner a joke by saying that I was "just kidding".	1	2	3	4	5	6	7
15. I was trying to be funny but I think my partner was getting annoyed with me.	1	2	3	4	5	6	7
16. I teased my partner about his/her appearance or something he/she said or did.	1	2	3	4	5	6	7
17. I mentioned our shared "inside jokes".	1	2	3	4	5	6	7
18. My aggressive humour seemed to make my partner uncomfortable.	1	2	3	4	5	6	7

Appendix C: DHS-P

Instructions: 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
<i>Not very much/less than most couples</i>				<i>Somewhat/about the same as most couples</i>			<i>A great deal/far more than most couples</i>
1. My partner told me a joke or said something funny to make me laugh.	1	2	3	4	5	6	7
2. My partner referred to me with a cute/silly nickname.	1	2	3	4	5	6	7
3. My partner laughed and joked around with me.	1	2	3	4	5	6	7
4. I was offended by something my partner did or said while trying to be funny.	1	2	3	4	5	6	7
5. My partner used humour to put me down in a teasing way.	1	2	3	4	5	6	7
6. My partner was able to think of witty things to say to amuse me.	1	2	3	4	5	6	7
7. My partner used humour to show that he/she was annoyed with me.	1	2	3	4	5	6	7
8. My partner used humour with me to have fun.	1	2	3	4	5	6	7
9. My partner made a joke at my expense.	1	2	3	4	5	6	7
10. My partner seemed to use humour so we would feel closer as a couple.	1	2	3	4	5	6	7
11. My partner made me laugh by doing or saying something funny.	1	2	3	4	5	6	7
12. I seemed to be bothering my partner and he/she made a joke about it.	1	2	3	4	5	6	7
13. My partner engaged in silly behaviours to make me laugh.	1	2	3	4	5	6	7
14. My partner had to defend him/herself after making a joke by saying that he/she was "just kidding".	1	2	3	4	5	6	7
15. My partner was trying to be funny, but I was getting annoyed by him/her.	1	2	3	4	5	6	7
16. My partner teased me about my appearance or something I said or did.	1	2	3	4	5	6	7
17. My partner mentioned our shared "inside jokes".	1	2	3	4	5	6	7
18. My partner told aggressive jokes that made me uncomfortable.	1	2	3	4	5	6	7

Appendix D: Letter of Information

Project Title: Humor 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 humor 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 nine 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, you personality, and you and your partner's use of humor. 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 humor 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 2am) 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 humor 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 (scaird@uwo.ca) or Rod Martin, PhD (ramartin@uwo.ca). 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 (519) 661-3036, email: ethics@uwo.ca.

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, scaird@uwo.ca.

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

Appendix E: 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 UWO email (please print): _____

Participant's Signature: _____

Date: _____

Person Obtaining Informed Consent (please print): _____

Signature: _____

Date: _____

Appendix F: Feedback Sheet, Part 1

Project Title: Humor 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 humor 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 humor is an important component in a successful relationship, little research has been conducted examining how humor may impact intimate relationships, and most research has focused on married couples. This study will help clarify the role that humor 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 (scaird@uwo.ca) or Dr. Rod Martin (ramartin@uwo.ca, 519-661-3665).

If you have questions about your rights as a research participant, you should contact the Director of the Office of Research Ethics (ethics@uwo.ca, 519-661-3036).

If you are interested in the general results of this study, they should be available by August 2014. 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 humor use while resolving conflict in dating couples. *Personal Relationships, 15*(1), 41-55.

Martin, R.A., Puhlik-Doris, P., Larsen, G., Gray, J., & Weir, K. (2003). Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire. *Journal of Research in Personality, 37*(1), 48-75.

Appendix G: Feedback Sheet, Part 2

Subject: Humor 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 humor usage is related to relationship satisfaction and stability among young dating couples.

Past research indicates that humor can be both beneficial and detrimental to romantic relationships. Positive forms of humor (e.g., use of humor to cope with stress and enhance social relationships) tend to be associated with relationship quality, whereas negative forms of humor (e.g., sarcasm, put-downs) tend 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 humor in their relationships was associated with fluctuations in relationship satisfaction and relationship events. Additionally, the questionnaires you completed during Part 1 allow us to examine how individual difference variables (e.g., playfulness, attachment styles, and conflict styles) may influence the relative success of humor use in romantic relationships.

We hypothesized that on days when individuals and their partners used more positive humor in their relationships, they would experience greater relationship satisfaction than their averages across the study period. We expected an opposite pattern for negative humor use. Additionally, we believed that individuals who endorsed more negative relationship events (e.g., arguments) would be more likely to use aggressive forms of humor than individuals who endorsed more positive relationship events. Furthermore, we believed that the positive and negative styles of humor would be more harmful for those who felt anxious about their relationships. We believed that those who were concerned about getting too close to their partners would use higher levels of negative humor and that negative humor would not be as strongly associated with their relationship satisfaction, compared to other participants.

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 (scaird@uwo.ca) or Dr. Rod Martin (ramartin@uwo.ca, 519-661-3665).

If you have questions about your rights as a research participant, you should contact the Director of the Office of Research Ethics (ethics@uwo.ca, 519-661-3036).

If you are interested in the general results of this study, they should be available by August 2014. 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 humor use while resolving conflict in dating couples. *Personal Relationships, 15*(1), 41-55.
- Cann, A., Davis, H. B., & Zapata, C. L. (2011). Humor styles and relationship satisfaction in dating couples: Perceived versus self-reported humor styles as predictors of satisfaction. *Humor: International Journal of Humor Research, 24*(1), 1-20.
- Saroglou, V., Lacour, C., & Demeure, M. (2010). Bad humor, bad marriage: Humor styles in divorced and married couples. *Europe's Journal of Psychology, 6*(3), 94-121.

Appendix H: Ethics Approval

Principal Investigator: Prof. Rod Martin
File Number: 104327
Review Level: Delegated
Approved Local Adult Participants: 30
Approved Local Minor Participants: 0
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

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 referenced revision(s) or amendment(s) 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.



 Signature

Ethics Officer to Contact for Further Information

<input checked="" type="checkbox"/> Grace Kelly (grace.kelly@uwo.ca)	<input type="checkbox"/> Vikki Tran (vikki.tran@uwo.ca)	<input type="checkbox"/> Erika Basile (ebasile@uwo.ca)
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