



## FlashReport

## Implicit partner affect, relationship satisfaction, and the prediction of romantic breakup

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## ABSTRACT

The current research investigated the role of spontaneous partner feelings (*implicit partner affect*) in the dynamics of relationship satisfaction, commitment, and romantic dissolution. Participants completed a variant of the name-letter task as a measure of implicit partner affect, and self-report measures of relationship satisfaction and commitment. Approximately 4 months later, participants were contacted to assess their current relationship status. Overall, participants showed a biased preference for their partner's initials (after adjusting for proper baselines), indicating the presence of positive implicit partner affect. Participants with more positive implicit partner affect were more satisfied with, but not more committed to, their relationship. Additionally, implicit partner affect exerted a significant indirect effect on relationship stability. These effects were independent of relationship length, age, and gender. Implications for the role of automatic affective processes in relationship processes and the utility of indirect measures for shedding light on relationship dynamics are discussed.

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"What's in a name? That which we call a rose  
By any other name would smell as sweet."

Shakespeare, *Romeo and Juliet* (II, ii, 1–2)

In the line above, Juliet expresses to Romeo that a name is artificial and meaningless—it is the person attached to that name that is of prime importance. But the letters Juliet considers meaningless can over time become inseparable from the bearer of the name, and even a simple glance at a partner's initials can automatically elicit one's feelings toward his or her partner (DeHart, Pelham, & Murray, 2004). Such spontaneous feelings toward one's partner are indeed ubiquitous (e.g., Banse, 1999; Scinta & Gable, 2007; Zayas & Shoda, 2005), but how these affective responses are associated with various relationship processes is still not well understood. In particular, how spontaneous partner feelings play into the dynamics of relationship satisfaction, commitment, and romantic dissolution over time has yet to be examined. In the research reported in this article, we examined the role of spontaneous partner feelings—or *implicit partner affect* (IPA)—in predicting relationship satisfaction, commitment, and ultimately, prospective romantic breakup.

The current investigation aims at obtaining deeper insights into the interplay of affective and cognitive processes underlying rela-

tionship satisfaction, commitment, and dissolution by using a novel methodology to assess IPA: participants' evaluations of their partner's initials. This procedure is based on the name-letter task (NLT) originally proposed by Nuttin (1985), which has become a popular measure of implicit self-esteem (ISE) in the self-esteem literature. A common finding in this research is that people tend to evaluate their own initials more favorably compared to baseline evaluations of those letters, which is commonly interpreted as an indicator of positive ISE (e.g., Bosson, Swann, & Pennebaker, 2000). More importantly, individual differences in name-letter preferences have been shown to predict a large variety of self-esteem-related outcomes (e.g., depression: Franck, De Raedt, & De Houwer, 2007; unrealistic optimism: Bosson, Brown, Zeigler-Hill, & Swann, 2003). We used an adaptation of the name-letter task in the present research to assess spontaneous feelings toward one's partner, such that preference for one's partner's initials was interpreted as an index of IPA (see also DeHart et al., 2004).

IPA is conceptualized as the spontaneous feelings (i.e., positive or negative gut reaction) associated with one's romantic partner or partner-related symbols (Greenwald & Banaji, 1995). In this conceptualization, the term *implicit* reflects the fact that these affective responses can be elicited unintentionally and independent of cognitive resources (Bargh, 1994). In addition, individuals may be unaware of the source of their affective response to a partner-related object, even though the affective response itself may be conscious (Gawronski, Hofmann, & Wilbur, 2006). This conceptualization is similar to DeHart et al.'s (2004) view of implicit evaluations of close others as the general favorability of implicit

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associations toward significant others. In the current research, we investigated the role of IPA in the dynamics of two primary relationship outcomes: relationship satisfaction (RS) and relationship commitment (RC). Additionally, the present research examined the potential indirect role of IPA in predicting relationship dissolution as transmitted via RS.

Baldwin's (1992) model of relational schemas provides a useful theoretical framework for the current research. Baldwin argues that relational schemas are composed of mental representations of the self, one's partner, and one's relationship. These representations are associatively linked, including declarative and non-declarative aspects of repeated interpersonal experiences with one's partner. The proposed links between declarative and non-declarative components may provide the basis for potential connections between IPA and RS, such that IPA may represent an important non-declarative determinant of declarative evaluations of RS (see also Gawronski & Bodenhausen, 2006). In line with this theorizing, past research has shown that spontaneous evaluations (e.g., IPA) can bias the interpretation of ambiguous information in an assimilative manner (e.g., Hugenberg & Bodenhausen, 2003). This biased interpretation of ambiguous partner behavior could then pave the way for subsequent relationship promotive (or destructive) self-fulfilling prophecies (Darley & Fazio, 1980).

It is important to note that RS and RC may be associated with IPA in different ways. Social psychologists studying attitudes have long distinguished between the affective, cognitive, and behavioral components of attitude judgments (e.g., Zanna & Rempel, 1988). From this perspective, RS judgments can be seen as more affect-laden than RC, the latter of which has been associated with careful consideration of how one is dependent on one's partner (Agnew, Van Lange, Rusbult, & Langston, 1998). As such, it seems reasonable to expect, given the affective nature of IPA, that IPA may be associated with RS, but not necessarily with RC.

Regarding the dissolution of relationships, it is possible that IPA may play a distal role (i.e., IPA may exert its influence on dissolution through many links in the causal chain: Shrouf & Bolger, 2002). For instance, although affect certainly plays a part in dissolution decisions, relationship researchers have argued that the final decision to end a romantic relationship is largely determined by a carefully reasoned decision process that considers the cost and rewards of staying versus leaving in terms of alternatives and barriers to the relationship (Edwards & Saunders, 1981; Thibaut & Kelley, 1959). However, affect associated with one's partner (i.e., IPA) may influence the interpretation of ambiguous partner behaviors, which then influences relationship behaviors, and in turn relationship quality. Hence, even though IPA may not be proximally related to breakup, IPA may nonetheless play a distal yet important indirect role in the dynamic of relationship stability via its effect on relationship quality.

Based on our theoretical considerations, we expected that (a) on average, people would possess positive IPA and (b) variation in IPA would be positively linked with self-reported RS, but not with RC. In addition, we expected that (c) although the direct link between IPA and dissolution may be negligible, more positive IPA would be indirectly associated with decreased likelihood of relationship dissolution over time as transmitted via RS.

## Method

### Participants

Participants were romantically involved undergraduates at a large Canadian university who had completed an online mass-testing survey in exchange for course credit. The only other requirement was that at least 4 months had elapsed since the

completion of the initial survey. Two hundred and five participants met these criteria, of which 127 responded to our follow-up email (62.0% response rate).<sup>1</sup> Twenty participants were excluded due to incomplete data on the main variables. Additionally, we excluded one participant with a score on the RS measure that was four standard deviations below the mean, yielding a final sample of 106 (81 females, 24 males, 1 non-specified; mean age = 20.2 years,  $SD = 6.4$ ). The final sample consisted mostly of individuals in exclusive dating relationships (91 dating exclusive, 5 dating non-exclusive, 2 common-law, 3 engaged, 3 married, and 2 non-specified).

### Materials and procedure

#### Implicit partner affect

As an indicator of IPA, participants completed the NLT (Nuttin, 1985) which involves rating how esthetically pleasing each letter of the alphabet is on a 9-point scale, anchored by 1 = *not esthetically pleasing at all* and 9 = *very esthetically pleasing* (letters presented in a fixed random order). As in past research, participants were instructed to make their judgments quickly and focus on their intuitive feelings toward each letter. To score letter ratings, we used a special instantiation of a NLT scoring algorithm recently recommended in the ISE literature (Baccus, Baldwin, & Packer, 2004; LeBel & Gawronski, 2009) specifically tailored to assess partner initial preferences.<sup>2</sup> This scoring algorithm goes beyond the coding procedure traditionally used to score the NLT (DeHart et al., 2004; Kitayama & Karasawa, 1997) by controlling for individual differences in response tendencies of letter ratings, in addition to baseline letter favorability. These response tendencies may be due to various factors including rating all letters relatively high or low, individual differences in positive or negative affect (Watson, 1988), or transient mood states (Schwarz, 1990). The scoring algorithm involves an ipsatization procedure (within-participant) such that each letter rating is centered around that participant's mean rating of all non-initial and non-partner-initial letters. Then, ipsatized partner initial letter ratings are centered around the respective baseline preferences for those letters, whereby baseline letter preferences are calculated as the mean (ipsatized) letter rating from participants whose own and partner's initials do *not* contain that letter (Baccus et al., 2004; LeBel & Gawronski, 2009).<sup>3</sup> Preference scores for partner's first and second initials were averaged to form an index of IPA. Higher scores indicate greater levels of positive IPA. Using this algorithm, as originally applied to the self, we also calculated an index of ISE (Baccus et al., 2004).

#### Satisfaction and commitment

Participants also completed self-report measures of RS and RC during the mass-testing session. The order in which the NLT and relationship questions were completed was counterbalanced across participants. RS and RC items were drawn from previous research (Agnew et al., 1998; Rusbult, 1983) and were composed of three items each, also using a 9-point scale (example satisfaction item: "All things considered, to what degree do you feel satisfied with your relationship?," anchored by *not satisfied at all* and *very satisfied*; example commitment item: "Do you feel committed to maintaining your relationship with your partner?," anchored by *not at all committed* and *completely committed*). The satisfaction and commitment items were averaged to form indices of RS ( $\alpha = .93$ ) and RC ( $\alpha = .76$ ), respectively.

<sup>1</sup> Independent *t*-tests confirmed that responders did not differ from non-responders in terms of time 1 RS, RC, or IPA (all *ts* < 1.7, *n.s.*).

<sup>2</sup> Please see the Supplementary appendix for a summary of discussions regarding the optimality of various NLT scoring algorithms that have been used in the literature.

<sup>3</sup> An SPSS-compatible syntax of this algorithm is available from the first author's website: <<http://publish.uwo.ca/~elebel/pNLT.html>>.

**Table 1**  
Descriptive statistics.

Variable	Minimum	Maximum	Mean	SD
Implicit partner affect	−2.47	5.59	.93	1.77
Implicit self-esteem	−1.55	4.80	1.96	1.40
Relationship satisfaction	2.33	9.00	7.52	1.44
Relationship commitment	4.67	9.00	8.00	1.13
Relationship length (months)	.50	294	24.66	37.36

**Table 2**  
Correlations among study variables.

Variable	Implicit partner affect	Implicit self affect	Relationship satisfaction	Relationship commitment
Implicit self-esteem	.49***			
Relationship satisfaction	.19 <sup>†</sup>	.08		
Relationship commitment	.12	.004	.56***	
Relationship status	.07	.04	.38***	.32***

Note. Relationship status: 0 = breakup, 1 = still together,  $N = 106$ .

<sup>†</sup>  $p < .05$ .

\*\*\*  $p < .001$ .

### Follow-up

At least 4 months after participants had completed the online survey, participants were contacted via email and asked whether they were still involved in the relationship indicated in the initial survey. In total, 23 of 106 (22%) participants indicated they were no longer involved in their relationship.

### Results

Table 1 presents descriptive information for all study variables; Table 2 presents the correlations between all study variables. A positive overall IPA score was obtained and this value was statistically different from zero ( $M = .93$ ,  $SD = 1.77$ ),  $t(105) = 5.43$ ,  $p < .01$ ,  $d = .53$ , indicating that participants showed a significant overall bias favoring their partner's initials. As shown in Table 2, IPA showed significant positive correlations with ISE and RS, but not with RC.

To further clarify the nature of the relation between IPA and RS, our primary analysis involved conducting a multiple regression analysis to estimate the IPA-RS relation controlling for relationship length, age, and sex to rule out the possibility that these factors explained our findings. Additionally, we controlled for participants' own ISE in all analyses to ensure that our findings distinctly reflected IPA. Our analysis revealed that IPA was positively predictive of RS, controlling for ISE, relationship length, age, and sex,  $\beta = .23$ ,  $t(100) = 2.08$ ,  $p = .04$  (see Fig. 1).<sup>4</sup>

In a secondary analysis, we investigated the potential indirect role of IPA in the dynamics of relationship dissolution. As in our primary analysis, we controlled for ISE, relationship length, age, and sex in all analyses. First, we examined the direct IPA-dissolution relation. As suspected, a logistic regression analysis failed to reveal a direct IPA-dissolution relation (Wald's  $\chi^2 = .25$ ,  $B = .08$ , odds ratio (OR) = 1.08,  $p = .61$ ). However, consistent with past research, RS significantly predicted the odds of staying together, after controlling for IPA (Wald's  $\chi^2 = 13.10$ ,  $B = .73$ , OR = 2.08,  $p = .0004$ ), suggesting that for every unit increase in RS, the odds of staying to-

gether (vs. breaking up) essentially doubled. To formally investigate IPA's indirect role in predicting romantic break up, we employed Preacher and Hayes' (2004, 2008) bootstrapping procedure, recommended for more accurate and powerful estimates of indirect effects (see also MacKinnon, Lockwood, & Williams, 2004; Shrout & Bolger, 2002). As recommended, we used 5000 resamples with replacement to derive a 95% confidence bias-corrected confidence interval for the indirect effect of IPA on dissolution as transmitted via RS (again controlling for covariates). Importantly, we used a special instantiation of Preacher and Hayes' macro (provided by A. Hayes, personal communication, March 14, 2009) given that our outcome variable was binary. This analysis revealed an indirect effect of .14 with a 95% confidence interval ranging from .02–.36, indicating a statistically significant indirect effect (given that the zero point was not included in the interval; Preacher & Hayes, 2008), suggesting that more positive IPA was indirectly associated with a decreased likelihood of breakup. Finally, to further strengthen our analysis, we also estimated an indirect effect whereby RS was treated as the starting variable with IPA as transmitting variable. The bootstrapped estimate of the indirect effect in this alternative model was not statistically significant (95% confidence interval =  $-.17$  to  $.07$ ).

### Discussion

The results of the current investigation support the presumed importance of IPA in the dynamics of relationship processes. First, we found that individuals had predominantly positive implicit affect associated with their partner. Second, individuals with more positive IPA were more satisfied with their relationship, but not necessarily more committed. Third, supporting the role of IPA as a distal yet important factor underlying romantic dissolution, IPA exerted a significant indirect effect on relationship persistence through its proximal relation to RS.

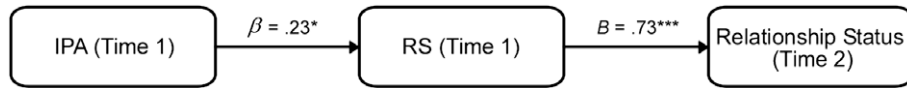
The current research is important for at least three reasons. First, the present results advance the idea that relatively automatic affective processes can play a significant role in the context of relationship quality and relationship dissolution decisions. Although deliberate processes may in large part drive dissolution decisions, the current work suggests that the impact of automatic affective processes should not be overlooked. In line with past research, we speculate that IPA may bias people's perceptions of their partner's ambiguous behavior in an assimilative manner (Hugenberg & Bodenhausen, 2003). This may set the stage for self-fulfilling prophecies in partner interactions (Darley & Fazio, 1980), which in turn may influence people's RS and ultimately their likelihood of breakup. Even though the current study did not measure these processes, it may provide a basis for future investigations addressing these intriguing possibilities.

Second, the present results suggest that indirect measurement procedures are a useful methodology to gain deeper insights into relationship processes in general. These indirect methodologies may be particularly useful for romantic processes because they have the potential to circumvent self-presentational biases due to social desirability concerns of reporting on one's romantic relationship in a positive light. In addition, indirect measures may be useful for understanding relationship dynamics because they allow for the measurement of relevant mental constructs that may be introspectively inaccessible or difficult to verbally articulate.

Finally, the present work contributes to the literature by advancing knowledge with respect to scoring the NLT to assess spontaneous partner feelings. It does so by putting forward a more optimal way of calculating NLT scores in the context of partner evaluations. This advancement permits unambiguous interpretations of letter preferences in terms of IPA rather than other sources

<sup>4</sup> Analyses conducted using IPA as indexed using a partner-variant of the recently proposed regression-based scoring algorithm (Albers, Rotteveel, & Dijksterhuis, 2009) and using DeHart et al.'s (2004) scoring algorithm to index IPA and adding an additional covariate representing participants' mean of all non-initial and non-partner-initial letter ratings, produced exactly the same results.





**Fig. 1.** Diagram of the relations between IPA at time 1, RS at time 1, and relationship status at time 2 (0 = breakup and 1 = still together). A standardized beta coefficient reflects the relation between IPA and RS, whereas an unstandardized log-odds logistic regression coefficient represents the relation between RS and relationship status. All relations control for relationship length, age, sex, and implicit self-esteem. IPA = implicit partner affect, RS = relationship satisfaction,  $p < .05$ ,  $p < .001$ .

of systematic variability confounded with letter ratings (e.g., response set biases; positive or negative affect; transient mood states; baseline letter favorability), which is required to make accurate theoretical claims. The algorithm used in the present study controls for these confounds in a psychometrically and theoretically sound manner and is thus recommended for future research investigating IPA using the NLT (see Supplementary appendix for more details).

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### Appendix A. Supplementary material

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.jesp.2009.07.003.

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