



Positive and negative romantic relationship quality: Age, familiarity, attachment and well-being as correlates of couple agreement and projection

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A B S T R A C T

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Capturing the multiple aspects of the romantic peer context is a significant challenge for research. One often recommended option is to use reports of multiple relationship features from both members of the romantic dyad. Using a new measure, we extended an existing model of dyadic perception (Kenny & Acitelli, 2001) to investigate associations between couples' ($N = 148$) reports about the positive and negative dimensions of their romantic relationships. Differences by participant age and relationship length were examined to test developmental hypotheses, and attachment and well-being were examined as correlates of participants' romantic perceptions. Agreement between partners was low, but associations of individuals' reports about themselves and their partners were high (projection). Agreement about negative romantic behaviors was higher in older compared to younger individuals and agreement about positive behaviors was higher in longer compared to shorter relationships. Partner similarity in negative behavior was higher than similarity in positive behavior. Individuals with better well-being reported more positive romantic behaviors, and attachment security was associated in some cases. Males were more negative about romantic behaviors than females, but there was no gender difference in agreement or projection.

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Judgment comes from experience; great judgment comes from bad experience. Bob Packwood.

We don't see things as they are. We see them as we are. Anais Nin.

These quotes easily apply to matters of the heart, love and romance. Increasing age brings with it romantic and sexual interests, as well as opportunities. Along with new opportunities and experiences there are continued formation of conceptions, views and perspectives on romance (Collins & van Dulmen, 2006). All of this can be intermingled with views of the self in relationships (Gagné & Lydon, 2004). Such developmental changes in relationships and self-conceptions can result in challenges for study design when the goal is to capture accurate information about the peer romantic context of adolescents and emerging adults.

The purpose of this study was to examine romantic dyads during arguably the most prominent romantic developmental period – late adolescence and emerging adulthood (Furman, Brown, & Feiring, 1999). The first primary aim was to investigate developmental aspects of couple perception by determining whether agreement between couple members' about their own and their partners' positive and negative romantic behaviors differed depending on two aspects of developmental time. One aspect was maturity and experience with romance and other close peer relationships, which we marked by focusing on age.

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The second aspect was the development of a relationship with the current partner, which was marked by relationship length. A second aim was to examine how individuals' secure versus insecure attachment orientation and psychological well-being are associated with their views of their own and their partners' behaviors, and whether adjusting for attachment security and well-being changes conclusions about agreement between partners. By including attachment orientation and well-being, the findings also highlight how individuals' general models of the self and other in couple relationships (i.e., attachment orientation; Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987) and psychological functioning are associated with reports about the self and the other within a close relationship (Fletcher & Fincham, 1991).

Partners' agreement about each other and the relationship have been topics of great interest to theorists and researchers (Foltz, Morse, & Barber, 1999; Gagné & Lydon, 2004; Kenny & Acitelli, 2001; Kenny & Albright, 1987; Murray, Holmes, & Griffin, 2003). The interest has typically been on how *perceptions of the other* in close relationships are formed and, after accounting for the other's report about him or herself, how these perceptions may differ between groups or be associated with individual and couple well-being and behavior. Another interest has been on how perceptions may yield self-fulfilling prophecies with one's perceptions becoming more consistent with reports from another over time. Those who have focused on close romantic relationships have generally noted positive bias in accounts of the partner and how these are associated with positive prospective outcomes (e.g., Murray et al., 2003), however there have been far fewer studies of agreement or inconsistencies in reports about negative features of romantic relationships, such as rejection and coercion.

We extend on previous research that has used a dyadic model of "agreement" and "bias" (Kenny & Acitelli, 2001). We used this model to examine self-other *agreement*, individual *projection*, and couple *similarity*. *Self-other agreement* was the association between self- and other-reported behaviors of the same person (see Fig. 1). The association between two reports from the same person – about the self and the partners' behaviors – estimated *projection* (sometimes referred to as assumed similarity or bias). Projection has been described as the tendency to rely on one's own behaviors when describing those of the other (Gagné & Lydon, 2004). In all models, the association between self-reports (i.e., *similarity*) was concurrently estimated. Our primary purpose was to compare agreement, projection and similarity in younger and older couples, and between those in shorter and longer length relationships.

Extending these models, we examined associations of individuals' attachment security and well-being with their reports about the self and their partners (see Fig. 1). Individual adjustment and other characteristics (e.g., self-esteem) have been found to play roles in the perception of romantic partners (Fletcher, Simpson, & Thomas, 2000; Murray, Holmes, & Griffin, 2000). However, few studies consider the developmental level of either the individual or the relationship at the same time as individual adjustment when testing couple agreement, projection and similarity. Individual projection could be inflated because of characteristics that are associated with reporting, regardless of whether an individual is reporting about the self or the other. Moreover, if couples' attachment and well-being are correlated, adjusting for individual characteristics also might yield different estimates of couple agreement and similarity.

Positive and negative romantic behaviors

Romantic behavior was the focus in the current study because behaviors are observable aspects of couple relationships, making them more accessible to both members of a couple. Behaviors were either positive (warmth, structure and autonomy

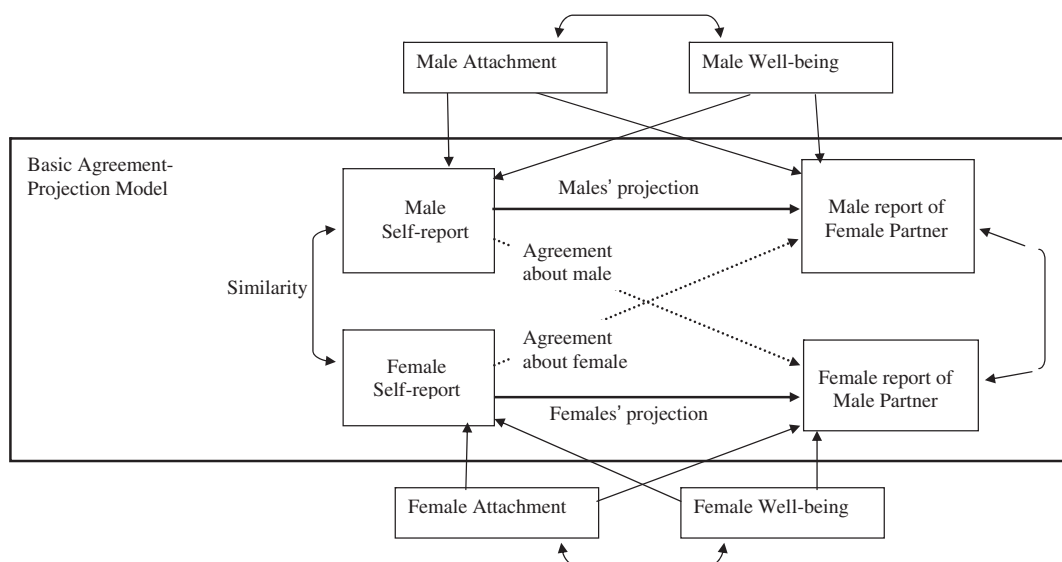


Fig. 1. Illustration of the basic agreement-projection model, and the extended model testing associations of individual attachment orientation and psychological well-being with self- and other-reports of romantic behavior. Note. Correlations between male and female attachment and male and female well-being were estimated in the model and reported in the results, but are not shown on the figure.

support) or negative (rejection, chaos, and coercion). Measuring both positive and negative behaviors allowed conclusions about agreement, projection and similarity for each. Few studies have examined positive and negative romantic interactions separately (see Foltz et al., 1999; Watson, Hubbard, & Wiese, 2000, exceptions). However, evidence shows that people attend to and recall negative romantic events more than positive and agree more about negative personality traits than positive ones (Watson et al., 2000). Hence, agreement and individual projection should differ for positive and negative romantic behaviors, with more agreement about negative behaviors than positive behaviors.

Age and relationship length

Age has not been considered as an important moderator in couples' romantic perceptions, although some researchers have suggested it is a potential confound in their work (Watson et al., 2000) and age differences have been examined in adolescents' agreement about peers (Cillessen & Bellmore, 1999; Van Aken, van Lieshout, & Haselager, 1996). In contrast, there has been more attention to the potential influence of acquaintanceship or knowledge about the other (e.g., Funder & Colvin, 1988; Paulhus & Reynolds, 1995; Watson et al., 2000). Observation and experience with a particular person does yield increased self-other agreement; *exposure* to the other (i.e., viewing a photo versus video segment) and *information* about the other (i.e., no written information vs. a small qualitative paragraph) have been found to increase self-other agreement (Beer & Watson, 2010). In the current study, age and relationship length were expected to moderate couple agreement and individual projection because, although age and relationship length are correlated (Collins, 2003), each reflects a different aspect of developmental time. Increasing age brings more experience with romance and other close relationships outside the family of origin and longer relationship length brings with it increasing exposure to and information about a particular partner.

Age is also an important factor to consider because there are many differences between adolescent and emerging adulthood relationships. For example, adolescent romantic relationships are less interdependent when compared to the relationships in emerging adulthood (Laursen & Williams, 1997), and adolescent partners report less closeness to romantic partners compared to reports of parents or peers, whereas the reverse is true by emerging of early adulthood (Brendgen, Vitaro, Doyle, Markiewicz, & Bukowski, 2002; Furman & Wehner, 1997). Also, adolescent romance has less core features of attachment including using the relationship as a secure base (Allen & Land, 1999; Furman, Simon, Shaffer, & Bouchev, 2002). Moreover, teenagers (17- to 18-year-olds) report fewer intimacy goals than those in their early 20s (21- to 23-year-olds; Zimmer-Gembeck & Petherick, 2006).

In summary, we expected younger couples and those in newer relationships to have less self-other agreement and use more individual projection when reporting about romantic partner behaviors. Individuals who have less romantic experience because of younger age and who are less acquainted with their current partners should have a greater need to fall back on a heuristic to judge another because actual knowledge is less complete. Agreement would be compromised and bias in the form of projection should be more evident in younger compared to older individuals and among less established compared to more established couples. For example, Watson et al. (2000) found higher agreement between self-report and partner-report of the same person (*agreement*), but lower correlations between report about the self and another person (*projection*) in married couples compared to friends and dating couples, particularly finding more agreement about negative personality traits and affectivity in married couples compared to friends. A simple rating of familiarity also has been associated with greater agreement (Paunonen, 1989; Watson & Clark, 1991).

Gender

Many studies have shown that women report more favorably about themselves than men do, and that women view others more positively when compared to men (Winqvist, Mohr, & Kenny, 1998). This suggests that there would only be modest levels of agreement between females and males. Nevertheless, other evidence suggests different possibilities. Women have been described as more accurate perceivers than men (Hall, 1984) suggesting that there should be higher agreement between males' self-reports and females' perceptions of their partners than between females' self-reports and males' perceptions. Another possibility is no gender differences in self-other agreement and bias. In a representative community sample of couples reporting their own views of relationship quality and what they estimated their partners would say, no differences between male and females' agreement and bias were found (Kenny & Acitelli, 2001). In a separate study (Winqvist et al., 1998) assumed similarity (*projection*) did not differ between males and females even though females, compared to males, perceived others as having more positive traits. These studies make it difficult to draw clear expectations regarding gender differences in self-other agreement and projection, but given the widespread discussion of this topic, gender differences were highlighted in the current study when they were found.

The agreement-projection model

Past research on self-other agreement has tended to test hypotheses using bivariate correlational analyses or has relied on adjusted correlations. Newer methods to examine data with a hierarchical structure (e.g., reports from both couples or from all members of a group about each other) and nonindependence among participants have increasingly emerged in the field, but are still rarely applied. Although there is little reason to doubt the results of earlier studies, given the care taken to examine assumptions and to adjust analyses whenever possible, newer methods provide a number of opportunities. In the

current study, we examined self-other agreement, projection and similarity in late adolescent and early adult romantic couples using structural equation modeling by extending the model of Kenny and Acitelli (2001; see Fig. 1). Most models were constructed using measured rather than latent variables, but in a final analysis we examined the impact of measurement error by constructing latent variables.

Method

Participants

Participants were 148 couples; each dyad member was between the age of 17 and 29 ($M = 20.8$, $SD = 3.8$). Relationships were required to be at least 1-month duration ($M = 17$ months, $SD = 16.5$ months). Four same-sex couples participated but were excluded from these analyses because of the need to have distinguishable individuals within dyads. Neither member was a university student in 16% of the couples, but at least one member of the couple was an Australian university student in the other 84% of couples. The majority of couples were not living together (60%). Participants were primarily White/Caucasian (76%), but 11% were Asian, 1% Aboriginal and/or Torres Strait Islander, and 12% reported a range of other sociocultural backgrounds.

Measures

Romantic partner behaviors (relationship quality)

The 30-item Partner Behaviors as Social Context (PBSC; Ducat & Zimmer-Gembeck, 2009) was used to measure behaviors from each participant's perspective. The PBSC consists of 30 items. Positive romantic behaviors include 15 items that assess *warmth* defined as the provision of affection and love, (e.g., "My partner shows me he/she loves me"), *autonomy support* defined as acknowledgement of the self and assistance with choice and decision-making (e.g., "My partner supports my interests"), and *structure* defined as consistency and reliability (e.g., "My partner follows through on things"). The other 15 items measure negative partner behaviors of *rejection* (cold, detached or critical behaviors, e.g., "My partner can make me feel like I'm not wanted"); *coercion* (excessively demanding and controlling behaviors, e.g., "My partner tries to control me") and *chaos* (unpredictable, unreliable behaviors; e.g., "I never know what my partner will do next"). Response options ranged from 1 (*not at all true*) to 6 (*very true*). Reliabilities in the present study were Cronbach's $\alpha = .88$ for each of the two subscales.

Two versions of the measure were administered to each participant to assess self-report of his/her own behaviors and his/her observation of the partner's behaviors. To assess reports about the self, items were slightly modified. For example, the PBSC item "My partner shows me he/she loves me" was modified to "I show my partner I love him/her." Reliabilities for the positive and negative behaviors of the self were .88 and .91, respectively.

The PBSC was founded on Self-Determination Theory (SDT; Deci & Ryan, 1985, 2000; see also Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Warmth, structure and autonomy support are the three positive dimensions of social context included in the PBSC, which were measured because of their theoretical links to promoting needs for relatedness, competence and autonomy, respectively. Rejection, chaos and coercion are the three negative dimensions included in the PBSC because they are expected to undermine relatedness, competence, and autonomy, respectively. The PBSC distinguishes between negative versus positive behaviors. Previous measures of marriage quality showing the negative and positive behaviors are moderately negatively correlated (Fincham & Linfield, 1997). This was found in the current study with an average correlation between positive and negative behaviors of $r = -.58$. Therefore, positive and negative romantic behaviors were investigated separately.

Psychological well-being

Dupuy's (1984) General Well-Being Schedule (GWB) was used to measure psychological well-being. The GWB is an 18-item measure, with six subscales of anxiety, depressed mood, positive well-being, self-control, general health and vitality. Participants are asked to answer each question in relation to the "past month". A sample question is "How happy, satisfied, or pleased have you been with your personal life in the past month?" with possible responses ranging from "extremely happy" to "very dissatisfied." As some items are scored on 6-point scales and some items on 10-point scales, raw scores were standardised, and anxiety and depression subscales were reversed before averaging subscale scores to form a general well-being measure. Higher total scores were indicative of higher levels of general well-being. The reliability in the present study was Cronbach's $\alpha = .92$.

Attachment

The Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991) was used to measure *attachment security* in close relationships. The RQ is widely used and consists of descriptive paragraphs of four attachment styles (secure, dismissive, preoccupied and fearful). Respondents indicated how much each prototype described their orientation to close relationships generally on a 7-point scale ranging from 1 (*not at all like me*) to 7 (*very much like me*). The RQ has demonstrated moderate stability over an 8-month period, with 59% of respondents retaining their RQ classification (Scharfe & Bartholomew, 1994). In order to create a single score reflecting more security in close relationships, scores on insecure dimensions (dismissive, preoccupied and fearful) were averaged and reverse scored before being averaged with the response to the secure attachment description. High scores indicated high security and low insecurity, whereas low scores indicated low security and high insecurity.

Procedure

Following ethics approval, most (75 couples) were recruited on university campuses through stalls advertising the study and offering small gifts and a prize draw. Another 69 couples had at least one member who was a psychology student and participated for partial course credit. Eight additional couples who were not university students were recruited via referral by other participants. A researcher was present during completion of surveys. Participants received an information sheet and returned questionnaires were taken as informed consent.

Results

Overview of the analyses

The primary path analyses are presented in four parts. First, structural equation modeling (SEM) was used to develop the basic agreement–projection model shown within the box in Fig. 1. These analyses tested the basic model of couple agreement and individual projection about positive and negative partner behaviors. These models freed all paths and did not fix variances to be equal between males and females. After this, models were re-fit after fixing measurement variance to be equal for males and females (i.e., gender equality of variance). Models with fixed variances were compared to the first set of models using χ^2 -difference tests. The comparison between the models showed that the second models with variances fixed to gender equality did not degrade model fit in any case, so variances were fixed to gender equality for all models reported here.

Second, two 2-group models were tested by building on the basic agreement–projection model. These first model estimated agreement, projection, and similarity for younger (age 17–21) separate from older couples (age 22–30). The second model estimated these for participants in shorter (<12 months) separate from those in longer relationships. Model fit was compared to models with the paths fixed to equality between groups to test differences in self-other agreement and projection between age and relationship length subgroups. Because males and females were distinguishable in these models, conclusions could also be made about males separate from females. Simple correlations were also estimated to compare to the model results.

Third, additional models were fit that extended the basic agreement–projection model to include self-reported individual attachment and well-being as potential correlates of couple members' reports about themselves and their partners. Fourth and finally, a number of additional analyses were conducted to test other important adjuncts or explanations for the correlational findings. This included examining age and relationship length in combination, testing the impact of measurement error, and the possibility that response patterns might be one explanation for group differences in agreement and projection.

Following these models, mean level differences in reports about self and partners were compared. Comparisons were also made between males and females. This provided information about positivity or negativity biases, which are often independent of agreement and projection estimates but add to an understanding of couples' perceptions of each other and how perceptions of the self might link with perceptions of the other (Gagné & Lydon, 2004).

Basic model of agreement and projection

Table 1 shows simple correlations between all measures (*Simple Correlations* in Table 1) and the results of estimating the Agreement–Projection Model (the two columns under the heading *Agreement–Projection Model* in Table 1). All estimates were calculated for positive separate from negative romantic behaviors. Both the agreement–projection model for positive romantic behaviors and the model for negative behaviors fit the data well on most indicators, positive behavior $\chi^2(2) = 6.83, p = .03$, CFI = .98, RMSEA = .128; negative behavior $\chi^2(2) = .02, p = .99$, CFI = 1.00, RMSEA = .000. The path estimates indicated that males' and females' reports about their partners' positive and negative behaviors are strongly associated with what they report

Table 1

Simple correlations between reports of romantic behaviors, and results of agreement and projection models ($N = 148$).

| Model path or association | Simple correlations | | Agreement–projection model | | Adjust for well-being and attachment | |
|---------------------------|------------------------|------------------------|----------------------------|--------------------------|--------------------------------------|------------------------|
| | Positive behavior, r | Negative behavior, r | Positive behavior, r^a | Negative behavior, r^b | Positive behavior, r | Negative behavior, r |
| Male projection | .75** | .74** | .69** | .67** | .64** | .53** |
| Agreement about male | .33** | .51** | .19** | .25** | .21** | .26** |
| Female projection | .70** | .69** | .71** | .58** | .64** | .49** |
| Agreement about female | .28* | .46** | .18** | .16** | .15** | .16** |
| Similarity | .18* | .44** | .17* | .44** | .07 | .36** |

Estimates that were significantly different from 0 are indicated with * $p < .05$ and ** $p < .01$.

^a $\chi^2(2) = 6.83, p = .03$, CFI = .98, RMSEA = .128.

^b $\chi^2(2) = .02, p = .99$, CFI = 1.00, RMSEA = .000.

about their own behaviors (projection), with similar projection estimates for positive and negative behaviors (ranging from .58 to .71). In contrast, there was low to moderate agreement between partners about both males' and females' positive and negative behaviors (ranging from .16 to .25). When paths were fixed to be equal for males and females, this did not degrade the model fit. Therefore, there were no significant gender differences in agreement or projection. It is also of note that self-reports of behavior were correlated, suggesting low (but significant) similarity for positive (.17), but stronger similarity for negative behaviors (.44). Overall, the model revealed less agreement but similar projection estimates when compared to simple correlations between couple reports (see Table 1).

Age, Self-other agreement and bias

The first section of Table 2 provides the results of estimating a 2-group (i.e., younger vs. older age groups) agreement-projection model. This model was estimated to compare projection, agreement and similarity between younger and older participants. Based on previous evidence of changes in the structure and meaning of romantic relationships beginning at age 21 (Zimmer-Gembeck & Gallaty, 2006), two groups were formed: younger couples (average couple age of 21 years or younger, $n = 90$, $M = 18.7$, $SD = 1.01$) and older couples (average couple age of 22–29, $n = 58$, M couple = 23.9, $SD = 2.29$). Twenty-one couples (14%) had members who differed in age by 3 or more years, 8 had an average age of 21 or younger and were included in the younger age group, whereas the other 13 had an average age of 22 or older and were placed in the older age group.

To determine whether there were age differences in the agreement-projection paths, we compared the fit of this model with paths freed to differ between the two age groups to a model with all paths fixed to be equal between age groups. For positive behaviors, there was no evidence of an age difference in paths when model fits were compared, $p = .15$. The strengths of the self-other agreement and projection paths, as well as similarity, for positive behaviors for each age group were similar to each other (see Table 2) and to the basic agreement-projection model (see the Agreement-Projection Model in Table 1).

In contrast to positive behaviors, there was a significant age group difference in paths for negative romantic behaviors, $p < .01$ (see Table 2). Older males had more agreement with their female partners (.46) than younger males did (.04), and projection was lower for older (.44) compared to younger males (.77). For females, the age group difference in projection was not as large (.55 for older females vs. .62 for younger females), but agreement with their male partners was low in younger females (.18) and was higher in older females (.38). Overall, the pattern of effects was similar across positive and negative behaviors, though age differences were only significant for negative behaviors.

Finally, there was no significant similarity (i.e., correlation between self-report of behavior from each partner) for positive behaviors in both younger and older couples (.07 and .15); however similarity was moderate to large for negative behaviors in each age group (.45 and .40). When simple correlations, shown in Table 1, were compared to SEM results, correlations showed much more self-other agreement (.18 and .44), although correlations and SEM showed similar levels of projection in most cases.

Relationship length, self-other agreement and Projection

The final two columns of Table 2 summarize the results of using similar methods to compare couples in shorter (<12 months, $n = 77$) and longer relationships ($n = 71$). We tested relationship length group differences in agreement and projection by comparing the model with paths freed to differ between groups to one with paths fixed to equality between groups. After comparing these models, agreement and projection about positive behaviors was found to differ between couples in shorter and longer relationships, $p < .05$. Although projection of positive behavior was high and similar for those in

Table 2

Results of the two-group agreement-projection models ($n = 90$ younger Couples and $n = 58$ older couples; $n = 77$ shorter relationships and $n = 71$ longer relationships).

| Model path | Age comparison | | | | Relationship length comparison | | | |
|------------------------|--------------------------------|------------|--------------------------------|------------|---------------------------------|-------------|---------------------------------|-------------|
| | Positive behavior ^a | | Negative behavior ^b | | Positive behaviors ^c | | Negative behaviors ^d | |
| | Younger, r | Older, r | Younger, r | Older, r | Shorter, r | Longer, r | Shorter, r | Longer, r |
| Male projection | .72** | .53** | .77** | .44** | .72** | .64** | .70** | .65** |
| Agreement about male | .16* | .29** | .18* | .38** | .07 | .32** | .23* | .30* |
| Female projection | .73** | .67** | .62** | .55** | .75** | .66** | .59** | .56** |
| Agreement about female | .18* | .21** | .04 | .46** | .07 | .31** | .09 | .23* |
| Similarity | .07 | .15 | .45** | .40** | .19* | .15 | .42** | .48** |

Estimates that were significantly different from 0 are indicated with * $p < .05$ and ** $p < .01$.

^a $\chi^2(6) = 37.98$, $p < .01$, CFI = .88, RMSEA = .191. No significant difference in fit was found when compared to a model with paths fixed to equality between age groups.

^b $\chi^2(6) = 7.63$, $p = .27$, CFI = .99, RMSEA = .043. A significant improvement in fit was found when compared to a model with paths fixed to equality between age groups.

^c $\chi^2(6) = 15.99$, $p < .01$, CFI = .96, RMSEA = .107. A significant improvement in fit was found when compared to a model with paths fixed to equality between those in shorter and longer relationships.

^d $\chi^2(6) = 4.64$, $p = .59$, CFI = 1.00, RMSEA = .000. No significant improvement in fit was found when compared to a model with paths fixed to equality between those in shorter and longer relationships.

shorter and longer length relationships (ranging from .64 to .75; see Table 2), Agreement about positive romantic behaviors was low in shorter length relationships (.07 for males and .07 for females) and significantly higher in couples that had been in their relationships for over 12 months (.32 for males and .31 for females).

Agreement and projection of those in shorter and longer relationships did not differ for negative behaviors, $p = .30$, although the pattern of effects was similar to those for positive behaviors. The strengths of self-other agreement and projection paths, as well as similarity, for negative behaviors for each relationship length group were similar to each other (see Table 2) and to the basic agreement-projection model (see the *Agreement-Projection Model* in Table 1).

Finally, as was found when age groups were compared, there was little similarity for positive behaviors in both shorter and longer relationships (.19 and .15). In contrast, similarity was moderate to large for negative behaviors in each group (.42 and .48).

The combination of age and relationship length

Although the group sizes were relatively small, estimates within four groups based on both age and relationship length were also explored using agreement-projection models (data not shown). Just as was found when age and relationship length were examined separately, projection about positive behavior did not differ by age but did differ by relationship length, with projection estimates lower in longer compared to shorter relationships. For negative romantic behaviors, both age and relationship length moderated agreement and projection estimates. There was more agreement among older compared to younger males (.33 vs. .08), but less projection among males in longer compared to shorter relationships (.55 vs. .75). Agreement was highest between older females and their partners in longer relationships (.41), compared to the other three groups (average of .13).

Effects of attachment security and well-being

In a final set of analyses, we extended on the agreement-projection model by adding individual attachment security and psychological well-being as correlates of reports about the self and the others' romantic behaviors (see Fig. 1). Males who were more secure and who reported better well-being also reported that they were more positive in their relationships, .38 and .34, respectively, both $p < .01$, but males reports of their own attachment and well-being were not associated with their reports about the romantic behaviors of their partners. Females who reported better well-being reported that they engaged in more positive romantic behaviors, .27, $p < .01$. Female attachment security was not associated with their reports of their own positive romantic behaviors, and neither females' well-being nor attachment was associated with their reports about their partners' positive romantic behaviors. Regarding negative romantic behaviors, well-being was associated with reporting fewer negative behaviors in the self and the other; this was found for both males, $-.43$ and $-.21$, respectively, and females, .31 and $-.21$, respectively, all $p < .01$. There was no association between attachment and reports of negative self or partner behaviors.

The results of the Agreement-Projection Model after adjusting for attachment security and well-being are reported in the final two columns of Table 1. When the results of this model were compared to estimates from the basic Agreement-Projection Model, all estimates did not differ except for a significantly lower estimate for males' projection when reporting negative behaviors (.53 vs. .67). Moreover, one other difference was found. There was a significant correlation between males and females' self-reports of their well-being, $r = .22$, $p < .01$, which was slightly larger among older and longer term couples, $r = .32$ and .31, respectively, both $p < .01$. This suggests some similarity in psychological well-being within couples, particularly those who are older or in more established relationships. There was no association between males and females' reports of attachment, $r = -.01$.

Measurement error and response set

To better account for measurement error, we re-estimated the basic models but used warmth, structure and autonomy support or rejection, chaos and coercion as three indicators of latent positive behavior or negative behavior, respectively. We correlated measurement errors within person, and fixed loadings to be the equal for men and women. For positive romantic behavior, projection was higher than previously found, average of .90, $p < .01$, but agreement was similar, average of .18, $p < .01$. The same was found for negative behavior, with projection higher, average of .77, $p < .01$, and agreement similar, average of .19, $p < .01$.

Some have argued that very high or very low responses to questionnaire items could result in less agreement when compared to reports that are closer to the middle range (Foltz, Morse, Calvo, & Barber, 1997; McCrae, 1993). It was possible that age or relationship length differences in agreement and projection might be partly explained by response patterns. If, for example, younger participants and those in shorter relationships tend to report excessively positive qualities in their romantic relationships when compared to the responses of older couples and those in longer relationships, self-other agreement might suffer among younger persons and those in shorter relationships. However, there were no mean level differences in positive or negative behaviors by age group, $t(147)$ ranged from -1.87 to .64, all $p > .05$, or between those with shorter or longer relationships, $t(147)$ ranged from $-.93$ to .25, all $p > .05$. There also were no differences in variances between groups for any partner behavior subscale and nonparametric group comparisons (Wilcoxon test) showed no differences in median positive and negative behaviors.

Mean level differences in reports of romantic partner behaviors

The agreement-projection model was used to examine correlations between reports from two romantic partners, but comparison of mean level differences in reports can also identify a different form of perceptual bias, usually referred to as a positive illusion or a positivity bias. One way to identify this bias is to compare each individual's report about his/her partner to the partner's report about him or herself. Many studies find that individuals often perceive their partners as more positive when compared to partners' reports about themselves (Gagné & Lydon, 2004). To examine mean level differences, we used paired *t*-tests to compare reports about the self to reports about the partner, and to compare males' to females' reports.

Overall, females had responses more consistent with a positivity bias than males, whereas, conversely, males had a negativity bias (see Table 3). Females reported they were more positive, $t(147) = -4.53, p < .01$ and less negative, $t(147) = 3.13, p < .05$ than reported by their male partners. Females also reported less negative behaviors by their partners than self-reported by their male partners, $t(147) = 4.73, p < .01$.

When self-reports of females and males were compared, females reported that they were more positive, $t(147) = -2.90, p < .01$, and they also reported that they were less negative, $t(147) = 2.44, p < .05$, when compared to males' self-reports. When males and females reports about their partners were compared, there was no difference in positive behaviors, $t(147) = -.50, p = .62$, but males perceived their female partners as more negative than females perceived males, $t(147) = 5.38, p < .01$.

Discussion

The primary aim of this study of couples' agreement, individual projection and similarity in reports about romantic behaviors was to examine how two different aspects of developmental time play roles in romantic perceptions. We also considered the associations of individual attachment orientation and psychological well-being with perceptions of the self and other. Overall, associations are much higher between reports about one's own and one's partner's romantic behaviors (individual *projection*) than are associations between reports about the same person from each couple member (self-other *agreement*). When positive romantic behaviors (displays of warmth, structure and autonomy support) were considered separately from the negative romantic partner behaviors of rejection, chaos and coercion, agreement was low for both valences of behaviors, but, as predicted, projection was lower for negative than positive behaviors and similarity between partners was higher for negative than positive behaviors. Although research has more often focused on positive aspects of relationships only, the current findings are consistent with a very recent study that reported differences in agreement when positive versus negative valenced domains were considered (Allik, Realo, Mottus, & Kuppens, 2010). The estimates in the current study also are similar to those in a previous study of 48 young couples (university students aged 22–33 years) reporting about negative partner behaviors such as domineering, vindictive and intrusive behaviors (Foltz et al., 1999), but lower than these same couples' self-other agreement about personality traits such as neuroticism and extraversion (Foltz et al., 1997). Self-other agreement in the current study is also similar to findings in a study of roommates reporting about sociability and responsibility (Malloy & Albright, 1990).

Age and relationship length were important to consider when estimating couple agreement and projection. These two aspects of development were expected to be relevant to understanding perceptions of romance – a history of experience with romance and other close peer relationships and the development of a relationship with a particular person. We expected that this would capture the role of an individuals' social developmental history separate from or in addition to familiarity with a particular other. Overall, self-other agreement about negative behaviors was higher and individual projection was lower in older compared to younger couples. Agreement was higher for those in longer, compared to shorter, relationships when they reported about positive behaviors. When the combination of age and relationship length was examined, each continued to play a role in agreement and projection. However, relationship length was more relevant for positive behaviors, whereas age and relationship length were both relevant for negative behaviors. This suggests that late adolescent (younger) couples and couples with a shorter history together (<12 months) have more difficulty with agreement about romantic behaviors. In fact, younger persons and those in comparatively newer relationships had agreement that was quite a bit lower than in one study of couples' reporting negative interpersonal behaviors (Foltz et al., 1999) and in two studies of personality, one of students who lived together and another of adults and close acquaintances (John & Robins, 1993).

Self-perceptions can be more distorted when a trait is affectively charged (Foltz et al., 1999; John & Robins, 1993). One possibility for the low agreement among the younger and newly formed couples could be the level of affect and the very high level of investment in their relationships. When young or in new relationships, emotionality can be high (Giordano, Manning,

Table 3

Descriptive information for measures of partner behaviors, and comparisons of males and females ($N = 148$ couples).

| Subscale | Reports about males | | | Reports about females | | |
|-------------------|--|---|----------------|--|---|----------------|
| | Male self-report, <i>M</i> (<i>SD</i>) | Female about male, <i>M</i> (<i>SD</i>) | <i>t</i> (147) | Female self-report, <i>M</i> (<i>SD</i>) | Male about female, <i>M</i> (<i>SD</i>) | <i>t</i> (147) |
| Positive behavior | 5.14 (.56) | 5.08 (.58) | 1.06 | 5.29 (.45) | 5.05 (.61) | -4.53** |
| Negative behavior | 2.49 (.85) | 2.18 (.76) | 4.73** | 2.31 (.85) | 2.53 (.80) | 3.13** |

* $p < .05$. ** $p < .01$.

& Longmore, 2006; Larson, Clore, & Wood, 1999). Further, maintaining this positive emotionality and the relationship may depend on providing a story about the partner that is consistent with one's own feelings and behaviors, despite observational evidence. This suggests that the lack of agreement could be due to problems with reporting about the other person, and could come about partly because of deception (which could also mean deceiving the self), as well as assuming that the partner feels and behaves as positively as the self. Reports about the self also may be problematic, because younger individuals and those in shorter relationships may be reporting that they behave in ways that are more socially desirable, reporting the "stereotype" of a good relationship or reporting their behaviors across multiple past or current relationships.

Another explanation for low agreement could be linked to observation of the other. Limited observation results in lack of availability of a good quantity and quality of information, and differential access to information between couple members. Younger couples or those in newer relationships may be displaying a restricted range of behaviors to aid relationship formation and maintenance. They may be on their best behavior, as dating couples often are focused on gaining approval and impressing their partners (Keenan, Gallup, Goulet, & Kulkarni, 1997), and much social interaction and communication between young or new couples may be awkward, less open, false, and focused on topics that avoid intimacy (sharing of personal and thoughts and feelings) and revealing too much about the self too soon (Giordano et al., 2006). Conversations that are more intimate, revealing of thoughts and feelings, with the aim of "getting to know each other" result in higher self-other agreement than conversations focused on hobbies and activities (Letzring, Wells, & Funder, 2006). A year may be a good quantity of time to get to know the other when an individual is aware of his or her preferences, has well-developed perceptual skills, has a good comparison set, and has experience with romantic relationship formation and dissolution. However, when young and invested in maintaining a new relationship type and a new partner, the quantity and quality of information available to be observed and the way the information is perceived, integrated, selected and recalled may not result in high or even moderate agreement with another (see Gagné & Lydon, 2004, for a review).

Age differences in agreement about negative behaviors might reflect age-related changes in how ambiguous or even more overt romantic behaviors are interpreted. For example, romantic behaviors may be interpreted as rejecting or supportive depending on past and current social experiences, such as the history of interactions with other romantic partners and friends (Collins & van Dulmen, 2006; Connolly & Goldberg, 1999; Downey, Bonica, & Rincon, 1999). When a partner becomes silent (i.e., giving "the silent treatment"), an individual may or may not interpret this as rejection depending on previous experience and the context. As alluded to in one of the opening quotes, recognition of romantic behaviors, particularly negative ones, may depend on some previous negative experiences with romance. Older individuals are more likely to have had negative romantic experiences in the past. Furthermore, younger couple members might be experimenting with relationship behaviors and learning how they want to be and how they want their partner to be in the relationship also leading to less consistency of behavior and less agreement in younger compared to older couples.

Finally, changes within relationships may occur and these also may account for differences in agreement and projection. Agreement may increase with relationship length not because those who are in shorter relationships do not have enough good information, but because "people came to see the same virtues in themselves that their partner initially perceived in them" as they are together longer (Murray et al., 2003, p. 290). Newer couples might not have had much influence on each other yet and, among young individuals in new relationships, other influences (friends, parents) may be stronger than the influence of partners. In addition, couples in older relationships can be considered "relationship survivors" and it may be that those who agree more with each other are more likely to stay together. Mean level differences between relationship groups suggest survival bias may be present in the sample.

Given low couple agreement, what are the foundations for judgments of others? Our analyses show that couple members often base their judgments on their perceptions of themselves, and that these perceptions of themselves are projected onto their partners and are associated with their psychological well-being and, in some cases, their attachment orientation. Reports of partners' behaviors seem to be reflections of one's own behaviors to a great extent. We referred to this as projection in the current study, but it is sometimes called "assumed similarity" or a form of "bias." Assuming similarity is a common tactic and has been described as a good (or at least useful) strategy to understand human behavior quickly (Funder, Kolar, & Blackman, 1995; Murray et al., 2003; Watson et al., 2000). When in a close relationship, it is likely adaptive to assume similarity. Expecting that the other is similar to the self may promote relationship maintenance and assist in interpretation of the social world (Toma, Yzerbyt, & Corneille, 2010). This was supported when we compared self and other reports from males and females. Males were found to have a negativity bias; they report fewer positive and more negative behaviors in themselves and this extended to their reports about their partners. Females report that they engage in more positive behaviors and fewer negative behaviors and this positivity bias extends to reporting fewer negative romantic behaviors of their partners.

Attachment has been described as either general or relationship-specific views of self and others, which develop via a history of interactions with close others (Collins & Sroufe, 1999; Furman & Wehner, 1997). In the current study, individuals who had more positive views about themselves and others (i.e., have a more secure and less insecure attachment orientation) also have better psychological well-being. Also, attachment and well-being each covary with self-reports about romantic behaviors, with psychological well-being more consistently associated with romantic behavior than attachment. Hence, attachment and psychological well-being may have some relevance for understanding agreement and projection when reporting about relationship behaviors and qualities, but this is primarily because of their associations with either more positive or negative reports about the self. It is still these self-perceptions that are projected onto the partner, especially for positive behaviors and among younger individuals and those in new relationships. Thus, working models of relationships and well-being promote projection and may undermine agreement but only via their association with self-perceptions.

Although we found no gender difference in accuracy and projection, there is evidence of a female positivity bias (or a male negativity bias) when females and males were compared. It has been argued that socialization and social experiences explain these patterns (Winquist et al., 1998). Females may be socialized to be more pleasant and socially sensitive than males (Eagly, 1987; Winquist et al., 1998), so they strive to be more positive in their social interactions and genuinely experience more positive regard from others in return. Yet, a self-perceptual difference also was found in the current study; females reported they were more positive and less negative than they were perceived to be by their partners.

Older males (age 22–30) had the highest self-other agreement and lowest projection. Since measurement validity usually requires some agreement with a similar measure (and is even more supported when there is lower bias; Watson et al., 2000), these findings distinguish older males as good reporters of partner behaviors. It also is important to highlight that males were more negative about their partners' romantic behaviors and about themselves when compared to females. This makes it important for researchers to consider why younger males and females have lower agreement and more projection. Younger males may not be good enough observers of their partners and may assume similarity to compensate, whereas females compared to older males may have more self-esteem invested in portraying or believing that their partners are more similar and positive than they are found to be based on males' reports about themselves.

We avoided the term "accuracy", because we had no criteria for considering what is or is not accurate. Others have addressed the issue of accuracy in their research (e.g., Funder, 1995; Letzring et al., 2006) and make useful recommendations for the inclusion of multiple reporters and methods (e.g., self-report, knowledgeable other, clinical interview, observation). It also seems important to consider whether accuracy matters as much as individual-perceptual and dyadic aspects of romantic relationships. It is possible that agreement versus disagreement, changes in agreement, and direction of differences between reporters (positive or negative) are more informative depending on the study purpose (e.g., Murray et al., 2000, 2003; Taylor & Brown, 1988; Taylor, Kemeny, Reed, Bower, & Gruenewald, 2000).

The agreement-projection model (Kenny & Acitelli, 2001) is a useful method for estimating self-other agreement, individual projection and similarity, as well as extending it to examine individual self-reported correlates of romance behaviors. When model path estimates were compared to simple correlations, the model seemed most important for estimating agreement; these estimates were much higher when compared to using simple correlations. In fact, differences were largest when similarity between self-reports was lowest. This suggests that the model better differentiates between self-other agreement and similarity than do simple correlations, but that individual projection may be less affected.

There are two limitations of this study to consider. First, age and relationship length were used as markers of maturity and experience, and interactions and observations of the romantic partner. Using experimental and between-groups designs, a few groups of researchers have considered how quantity and quality of information (Letzring et al., 2006) and relationship status (married vs. dating or friends versus unfamiliar individuals, John & Robins, 1993; Kenny & Acitelli, 2001) are associated with self-other agreement and projection. To date no study had considered age, so future research might build on ideas about acquaintanceship and information quantity/quality to investigate developmental explanations for the age differences found here.

Second, this was a cross-sectional, correlational study with between-group comparisons. Individual or couple changes should be investigated to confirm our results. Such longitudinal research can reveal how relationship longevity, increasing familiarity and other changes are associated with changes in self-other agreement and bias over time. Multiple authors have called for well-controlled longitudinal studies of self-other agreement and accuracy (Funder, 1995; Letzring et al., 2006; Watson et al., 2000) but we could locate only a few studies using longitudinal designs to address these or related questions (Murray et al., 2003; Park, Kraus, & Ryan, 1997; Paulhus & Reynolds, 1995).

Taken together, this study identified challenges and future directions for designing methodology to capture the peer context at the same time as providing substantive contributions to knowledge about perceptions of close others and the self at different ages and in relationships at different phases of their development. Our method recommendation is to consider participant age, familiarity and gender when designing studies to gather reports about relationship qualities, whether they are measured as particular behaviors or as more global aspects of relationships such as satisfaction and commitment. Asking romantic partners to provide information about their partners on a questionnaire without priming may not be best practice because of the assumption of similarity, the need to focus on strengths and minimize weaknesses, and the low agreement found, especially when participants are younger or in new relationships (Watson et al., 2000). One approach could be to increase "accuracy motives" (Gagné & Lydon, 2004, p. 333) by priming the participants before completing questions to assist them to be more deliberate in their considerations of their romantic relationship. One series of research studies has shown that reports about romance increase in agreement with another when individuals are also asked to make deliberate decisions about life choices and goals (e.g., moving, changing jobs; Gagné & Lydon, 2004). Priming deliberation or more simply encouraging reflection and accuracy might be enough to improve agreement and reduce projection. It also might be useful to supplement questionnaire measures about relationship qualities with questions about familiarity and the context and content of interactions with partners.

Using observations of couples, interviews, and reports from knowledgeable observers (e.g., close friends of a couple) in conjunction with self-report questionnaires is still one good strategy for capturing the peer romantic context of adolescents and emerging adults. Friends have been found to report that relationships are less positive than reported by couples and friend reports are more correlated with relationships dissolution than partner reports (Agnew, Loving, & Drigotas, 2001). Using multiple measurement strategies with younger and newer couples should provide romantic relationship information that is at least as valid and accurate as measuring partner behaviors and couple interactions in established adult relationships.

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