


# Partner Accuracy in Humor Perception and Associations With Relationship Satisfaction

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## Abstract

Do people accurately perceive their partner's humor style? The current study extends work on partner perception by examining accuracy and bias in people's perception of their partners' humor styles—a subjective, evaluative, and important factor in relationship satisfaction. We recruited 337 heterosexual couples ( $N = 674$  individuals,  $M_{age} = 65.71$  years,  $SD = 12.107$ ) who completed self-reports and partner-reports of humor styles. Truth and Bias modeling revealed that, although bias varied across humor styles, participants consistently demonstrated accuracy in their judgments of their partner's humor styles. Bias forces were moderated by relationship satisfaction such that assumed similarity biases were stronger among those in particularly satisfying relationships.

## Keywords

accuracy and bias, partner perception, humor, relationship satisfaction

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Perceptions of romantic partners have been the subject of research and theory in the field of close relationships (e.g., Neff & Karney, 2005). Research to date suggests that people tend to see their partners with a mixture of idealism and reality—evaluating them more positively than others might while, at the same time, being capable of accurately identifying their partner's faults and flaws (Fletcher, 2015; Fletcher & Kerr, 2010; Neff & Karney, 2005). The vast majority of research on partner perception has been focused on constructs for which there is some relative consensus or a set of criterion behaviors (e.g., people generally agree on what makes someone physically attractive, extroverted; Eisenthal et al., 2006). Relatively less work has been conducted on constructs such as humor, which are seen as desirable in partners, important for relationship initiation and maintenance, but very subjective (Barelds & Barelds-Dijkstra, 2010; Lundy et al., 1998; McGee & Shevlin, 2009; Ziv & Gadish, 1989). Are people accurate or biased in how they perceive their partners' humor styles? In the current study, we used the Truth and Bias (T&B) Model to examine bias and accuracy in partner perceptions of humor styles among 337 couples (West & Kenny, 2011). We also examined how relationship satisfaction was associated with partner perceptions of different *types* of humor (i.e., positive humor, such as self-enhancing and affiliative humor, and negative humor, such as self-deprecating or aggressive humor).

## Partner Perception

Spending time and sharing experiences with a romantic partner allows for unique insight into their personality, habits, and quirks. Of course, this increased exposure does not necessarily lead to more *accurate* judgments. Both lay wisdom and psychological research suggest that people sometimes see their partners as “better” than they really are (e.g., “love is blind”; Hall & Taylor, 1976). How individuals perceive their partners—and if their perceptions are accurate—can impact satisfaction within these relationships (Neff & Karney, 2005). Below, we discuss how the accuracy of partner perception has been theorized to be associated with relationship outcomes.

## Ignorance Is Bliss?

Seeing your partner more positively than they are (i.e., through “rose-tinted glasses”) is common (Endo et al., 2000; Hall & Taylor, 1976; Solomon & Vazire, 2014). In general, individuals tend to believe that their relationships are more

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positive than the relationships of those around them (Endo et al., 2000). People evaluate their partners more favorably on positive traits than others—and even more positively than partners themselves (Murray et al., 2000; Solomon & Vazire, 2014). There is some evidence that this type of positive bias may also be good for relationship satisfaction. For example, Murray et al. (2000) found that individuals who were satisfied with their relationship had especially inflated views of their partner's virtues—seeing them as higher in positive interpersonal qualities (such as warmth, attractiveness, and skill) than ratings provided by both the partner themselves and their partner's close friend. Interestingly, satisfied individuals who showed this positive bias had spouses, who, in turn, evaluated them with a similarly benevolent bias.

People also display a tendency to see their partner as similar to themselves—even when this may not be the case (Montoya et al., 2008; Morry, 2005). This phenomenon has been referred to by many names in the person-perception literature (e.g., assumed similarity, social projection, false consensus), but each describes the tendency to ascribe our own traits and qualities to others. While it may be true that people are similar to close others in their lives (Caspi et al., 1992; Gruber-Baldini et al., 1995; Lee et al., 2009), it is also true that people tend to overestimate this similarity (Cho & Knowles, 2013; Lee et al., 2009). This overestimation is seen in both cross-sectional and longitudinal work: People consistently ascribe their own feelings (e.g., depression, satisfaction, financial strain) to their partner (Kenny & Acitelli, 2001). Theoretically, this sort of bias may be good for relationship satisfaction. The attraction-similarity hypothesis, for example, suggests that because people may be attracted to those who are similar to them; perceiving your partner as more similar to you may make you especially satisfied in the relationship (Montoya et al., 2008; Morry, 2005). These findings suggest that believing a partner is similar to you, even if it is not necessarily true, may be associated with relationship satisfaction.

### Bias and Accuracy

Of course, intuition may tell you that satisfying long-term relationships cannot survive on rose-tinted glasses alone. At some point, being accurate about a partner's strengths and weaknesses would be beneficial. Both accuracy and biases co-exist in perceptions of romantic partners (Fletcher, 2015; Fletcher & Kerr, 2010; Neff & Karney, 2005). In a series of longitudinal studies, Neff and Karney (2005) suggested that happy couples hold *global adoration* for each other, with nearly half of couples giving their partner the highest possible rank on broad evaluations such as “I feel that my spouse has a number of good qualities” and “I feel positively about my spouse.” However, they also found evidence of *specific accuracy* (i.e., spouses were less universally positive and more accurate when asked to evaluate their partner's specific traits such as “My partner is always prepared” and “My

partner is quick to understand things”). Importantly, this study also found evidence that specific accuracy may be beneficial for long-term relationships. In the first of two studies, wives who were more accurate (i.e., their evaluations more closely matched their husbands' self-evaluations) provided more positive support in the relationship and were less likely to get divorced over time (Neff & Karney, 2005). A second study replicated and extended this effect: Wives who were more accurate provided more support, felt more capable in resolving conflicts with their partner, and were less likely to get divorced over time (Neff & Karney, 2005). Interestingly, these effects were not found in husbands, although this may be at least partially explained by the female-skewed workload in relationship maintenance (Acitelli & Young, 1996; Christensen & Heavey, 1990).

Other models of romantic partner perception revolve around a similar blend of accuracy and bias. Fletcher and Kerr (2010) propose that partner perception involves two distinct cognitive components: mean-level bias (in which people generally inflate their partner's positive traits) and tracking accuracy (in which, despite their bias, people are able to identify which traits their partners are lower or higher in). For example, an individual may rate themselves as a 6 on attractiveness and a 4 on kindness. Their partner may rate them as an 8 and a 6 on the same constructs, respectively. The partner's inflated evaluation (by 2 points for each construct) demonstrates a mean-level bias—they consistently see their partner as more attractive and kinder than the partner sees themselves. However, the partner also rated the individual as lower in kindness than attractiveness, duplicating the pattern of scores that the individual themselves reported. This demonstrates tracking accuracy—both partners agree that the individual is less kind than they are attractive. Individuals, despite their inflated evaluations of significant others, also appear to see them with a kernel of truth. Fletcher and Kerr (2010) offered strong evidence for a cognitive theory of partner perception by meta-analyzing 98 studies examining tracking accuracy, 48 of which also involved elements of mean-level bias. They found a strong effect for tracking accuracy ( $r = .47, Z = 23.85, p < .001, 95\% \text{ CI} = [.44, .50]$ ) and a smaller effect of positive mean-level bias ( $r = .09, Z = 3.51, p < .001, 95\% \text{ CI} = [.04, .13]$ ). Importantly, participants' accuracy in the rank ordering of their partner's traits was unrelated to their use of mean-level bias ( $ps > .50$ ), suggesting that even though partners may show high tracking accuracy, this does not mean that they show more or less mean-level bias.

Within this meta-analysis, Fletcher and Kerr (2010) were also able to identify a handful of studies that linked mean-level bias and tracking accuracy to relationship quality. While they found evidence that positive mean-level bias was associated with higher relationship quality ( $r = .36, p < .001$ ), accuracy was not significantly associated with relationship quality ( $r = .03, p = .42$ ). Perhaps, as the authors suggest, individuals use mean-level biases, but not accuracy,

when evaluating whether they are enjoying their relationships. These findings echo those of Murray et al. (2000), suggesting that seeing our partners with a certain amount of positive bias may be beneficial for relationship satisfaction.

Importantly, much of this research has examined partner bias and accuracy with respect to constructs that have some relative consensus—most people agree on what the construct looks like in others (e.g., extroversion, conscientiousness, attractiveness; Albright et al., 1988). But what about constructs that are more subjective—like humor? Humor is often characterized as an extremely subjective experience (Ziv & Gadish, 1989), and yet, it plays an important role in relationship satisfaction (Barelds & Barelds-Dijkstra, 2010; Lundy et al., 1998; McGee & Shevlin, 2009; Ziv & Gadish, 1989). Based on the field's current understanding of partner perceptions, it is not yet known how accurate perceptions about partner humor may be and whether relationship satisfaction is associated with accuracy and bias in these perceptions.

## Humor and Romantic Relationships

Particular styles of humor influence social relationships in different ways. Humor at school and in the workplace is positively associated with collegiality, satisfaction, and creativity, and is negatively associated with burnout and emotional exhaustion (Burford, 1987; Mesmer-Magnus et al., 2012; Stogdill, 1972). Other research has acknowledged the importance of humor in relationships with family and friends. Positive humor is often used to reduce interpersonal tension, build bonds, and signal solidarity between people (Burns & Pearson, 2011; Gonzales & Mierop, 2004). However, much of the current literature has focused on the importance of humor within close romantic relationships. And for good reason—sense of humor (especially an individual's perception of their partners' humor) has been shown to predict higher relationship satisfaction (Barelds & Barelds-Dijkstra, 2010; Hall, 2013, 2017; Ziv & Gadish, 1989). Below, we briefly review the literature surrounding humor and close relationships, including how different *types* of humor have implications for people's relationships.

Individuals often cite humor as an important factor in both how they initially choose a partner and how relationships are happily maintained—people like funny partners and want to be in relationships with funny people (Lundy et al., 1998; McGee & Shevlin, 2009; Ziv & Gadish, 1989). However, the relationship between humor and a happy relationship is not always a straightforward one. Humor is not universally positive, and different types of humor (i.e., adaptive and maladaptive humor) are associated with different relationship outcomes.

### Adaptive Humor

Positive displays of humor in romantic relationships are largely predictive of happier relationships (Hall, 2013, 2017;

Lundy et al., 1998; McGee & Shevlin, 2009; Ziv & Gadish, 1989). In a recent meta-analysis, Hall (2017) found that positive humor (e.g., humor used to connect to or communicate with a partner, release tension, appreciate a partner, make a partner laugh) was consistently associated with higher relationship satisfaction. Some work suggests that couples who simply appreciate humor more may experience more intimacy within a relationship (Barelds & Barelds-Dijkstra, 2010). Hall (2013) suggests that humor may influence relationship satisfaction because it serves unique communicative functions. Specifically, positive humor allows partners to share enjoyment, share affection, and let go of tensions and conflict. Findings such as these have served to combat the notion that humor plays “a limited role in intimate, long-term relationships” as some have claimed (Barelds & Barelds-Dijkstra, 2010)—suggesting instead that positive humor is an important facet in maintaining happy relationships.

### Maladaptive Humor

Of course, negative humor is not tied to the same rosy relationships outcomes as positive humor (Butzer & Kuiper, 2008; De Koning & Weiss, 2002; Hall, 2017). In the meta-analysis discussed above, Hall (2017) found that negative humor (e.g., humor used to attack or demean a partner, humor used to put down others, self-deprecating humor) was consistently associated with lower relationship satisfaction. Other work echoes these findings (Butzer & Kuiper, 2008; De Koning & Weiss, 2002). De Koning and Weiss (2002), for example, found that negative humor (characterized with items such as “My partner uses humor to put me down” and “I can feel really hurt by some of my partner's jokes”) was associated with lower marital satisfaction and intimacy. Furthermore, maladaptive humor was also associated with individuals' active withdrawal from a partner's demands—further jeopardizing close relationships.

Self-deprecating and self-defeating humor can create challenges for romantic relationships, even if the target of the maladaptive humor is oneself and not a partner or the relationship specifically. Those who have a self-deprecating humor style also tend to have lower self-esteem, greater depression, and anxiety and judge themselves as less competent (Kuiper et al., 2004; Stieger et al., 2011). Individuals with lower self-esteem and self-worth often report lower relationship satisfaction and believe their partners see them less positively (Sciangua & Morry, 2009). The negative relationship cognitions resulting from lower levels of self-esteem create a self-reinforcing cycle: lower self-esteem negatively colors relationship experiences, leads individuals to devalue partners, and exacerbates minor problems and relationship threats—ultimately leading to negative relationship behaviors and partners being burdened with protecting their feelings, undermining relationships, and lowering self-esteem (Downey et al., 1998; Lemay Jr & Dudley, 2011; Murray et al., 2002, 2003).

Humor that is exceptionally aggressive can also serve as a “red flag” for other, more problematic behaviors. For example, previous research has shown that men who enjoy sexist jokes are more likely to endorse rape-myth beliefs (e.g., that women lie about rape, want to be raped), to force sex, and to participate in more psychological, physical, and sexual aggression (Ryan & Kanjorski, 1998). This humor style captures more than just problematic beliefs, as men with sexist beliefs who are then exposed to sexist humor show an increase in real-world prejudicial decision-making and behavior (Ford et al., 2008). This research suggests that, in a heterosexual relationship, a man with an exceptionally aggressive humor style may even pose a threat to his partner.

In evaluating how adaptive and maladaptive humor is associated with relationship outcomes, the degree to which humor styles impact relationships likely depends on people's perceptions of their partners' humor styles. Indeed, previous work on the subject has found that partner perceptions of humor styles are *better* predictors of relationship satisfaction than self-reported humor styles (Hall, 2017). However, less is known about whether people are accurate or biased in their evaluation of a partner's humor style and how this accuracy and bias are associated with relationship satisfaction. There is some precedence for asking this question; similar work has been done through the lens of co-orientation—where partner similarity is examined through actual similarity, perceived similarity, and understanding (i.e., accuracy; Hall & Sereno, 2010). For example, evaluating a partner's humor style involves making inferences about their intentions, which is likely linked to how satisfied people are in their relationships. Being in a satisfying relationship might be associated with rating adaptive humor styles (e.g., self-enhancement, affiliative) as more common than maladaptive humor styles (e.g., self-deprecating or aggressive). Although knowing accuracy and bias in how funny partners think each other are, knowing how relationship satisfaction differentially alters perceptions of humor styles can provide additional theoretical insights for how partner evaluations vary across different types of interactions. In the current study, we extend work on humor and humor styles by focusing on accuracy (i.e., truth) and bias in partner-reports in four styles of humor.

## The Current Study

Research regarding humor in close relationships suggests that it plays a salient role in how satisfied individuals are. This may be surprising when considering, as stated before, the subjective nature of humor (Ziv & Gadish, 1989) and some inconsistent effects when predicting individual satisfaction from partner-reported humor styles (Barelds & Barelds-Dijkstra, 2010). Because of this subjectivity, it may largely be an individual's *perception* of their partner's humor that may be associated with (or depend on) their relationship satisfaction (as other work has suggested; i.e., Hall, 2017).

Unfortunately, as the literature stands, there is little information about the degree and direction in which people are biased about their partner's humor styles.

Knowing the magnitude and direction of bias will help us understand if partners over- or underestimate their partners' humor and to what degree (i.e., directional bias). For example, do people downplay the degree to which their partner uses aggressive forms of humor or play up their use of positive forms of humor? Knowing whether partners have some degree of insight into how their partner views their own humor is also important (i.e., truth or accuracy). In other words, do partners agree in their evaluations of humor? Finally, knowing some sources of bias is also informative—do people assume that their partner has a particular humor style because they have that same humor style (i.e., assumed-similarity)? Are perceptions of a partners' aggressive humor style related to one's own report of aggressive humor? Are partners more accurate or biased when assessing different kinds (i.e., maladaptive vs. adaptive) of humor? Each of these questions, in their own right, provides a more complete picture of how partners view each other. However, in an extension of this research, we also examined relationship satisfaction as a possible moderator of these accuracy and bias effects—do people in more satisfying relationships have a greater degree of directional bias, accuracy, and assumed-similarity bias?

## Method

### Participants and Procedure

Participants were 337 heterosexual couples between the ages of 19 and 89 years ( $M = 65.71$  years,  $SD = 12.11$ ) and recruited through the survey software company Qualtrics.<sup>1</sup> Participants were compensated \$10 each for completing the survey. On average, couples had been together for roughly 37 years ( $SD = 15.01$ ), although this ranged from 1 month to 69.5 years. Participants were largely White (82.3%), with roughly 8.8% of the sample identifying as Asian, 3.0% identifying as Black or African American, 1.9% identifying as Hispanic or Latino, and the remaining 4% identifying as Native Hawaiian/Pacific Islander, American Indian/Alaska Native, or multiracial. A small portion of the couples (5% of couples) were interracial (i.e., one partner's race was different than their partner's race). With these demographics in mind, it is important to note that our sample is not representative of the U.S. population as a whole.

We collected as many participants as possible given the funds available to us. Thus, there was no formal stopping rule. We were able to recruit 337 couples,<sup>2</sup> which enabled us to estimate effects as small as  $r = .152$  with 80% power at  $\alpha = .05$  (Lane & Hennes, 2018). This study was not preregistered; all data, syntax, and materials used for this study can be found at <https://osf.io/wukny/>.



## Measures

**Humor styles.** Self-reports and partner-reports of humor styles were measured using the Humor Styles Questionnaire (HSQ), developed by Martin et al. (2003). Four dimensions of humor styles exist, capturing both adaptive (self-enhancing, affiliative) and maladaptive (self-defeating, aggressive) types of humor. The 32-item measure includes four subscales, each consisting of eight items. Each subscale captures one type of humor: self-enhancing (e.g., “If I am feeling depressed, I can usually cheer myself up with humor”), affiliative (e.g., “I laugh and joke a lot with my closest friends”), self-defeating (e.g., “I let people laugh at me or make fun at my expense more than I should”), and aggressive (e.g., “If someone makes a mistake, I will often tease them about it”). Each item asks participants how much they agree with a statement about their own humor using a 7-point Likert-type scale ranging from 1 (*totally disagree*) to 7 (*totally agree*). Responses were averaged to yield scores for each of the subscales.

Partners were asked to complete both a self-report and partner-report of the HSQ. The same questions were asked in each style of report, although the partner-report asked the participants to answer the questions with their partner in mind (e.g., “My partner laughs and jokes a lot with their closest friends” and “If someone makes a mistake, my partner will often tease them about it”).

In these analyses (discussed further in the analytic approach below), partner-reports served as the outcome judgment, while partner self-reports served as the truth variable. Reliabilities were high for each scale for both self-reports and partner-reports (affiliative:  $\alpha_{\text{self}} = .89$ ,  $\alpha_{\text{other}} = .88$ ; self-enhancing:  $\alpha_{\text{self}} = .86$ ,  $\alpha_{\text{other}} = .86$ ; self-deprecating:  $\alpha_{\text{self}} = .73$ ,  $\alpha_{\text{other}} = .71$ ; and aggressive:  $\alpha_{\text{self}} = .81$ ,  $\alpha_{\text{other}} = .78$ ).

**Funniness.** Because humor styles are largely behavioral and may not capture how “funny” an individual is, participants were also asked to indicate how funny they found themselves and how funny they found their partner. Participants ranked their agreement to the items “I am funny” and “My partner is funny” on a scale from 1 (*totally disagree*) to 7 (*totally agree*). These items were meant to provide a more general/abstract comparison to the more specific behavioral humor styles.

**Relationship satisfaction.** Relationship satisfaction was measured with a modified version of the Couples Satisfaction Index (CSI; Funk & Rogge, 2007). This shortened version of the scale is a five-item measure which asks participants’ agreement on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) about how satisfied they are with their current romantic relationship (e.g., “We have a good relationship” and “My relationship with my partner makes me happy”). Reliability for this measure was high ( $\alpha = .97$ ).

**Ancillary measures.** In the interest of full disclosure, other variables were measured, including attachment orientation, Big Five personality traits, self-rated health, and a single-item measure of subjective well-being. These measures were beyond the scope of the current research questions and will not be discussed further.

## Analytic Approach

**T&B Model.** The accuracy of partner judgments was assessed with the T&B Model (West & Kenny, 2011). The T&B Model conceptualizes partner judgment (i.e., if a person thinks their partner uses aggressive humor) as a result of several forces: (a) *directional bias* (i.e., a tendency to under/over evaluate others, conceptually similar to Fletcher and Kerr’s mean-level bias), (b) *truth force* (i.e., the extent to which the perceiver is “drawn” to the *truth value*, conceptually similar to Fletcher and Kerr’s tracking accuracy), and (c) *bias* (i.e., any another non-truth value that the perceiver bases their judgment on; in this case, this bias of interest is assumed similarity; West & Kenny, 2011; Wood et al., 2017). This approach also allows for modeling *moderator variables*—variables that influence the strength of either the truth or bias forces.

The basic model can be formally expressed as follows:

$$J_{Ci} = b_0 + tT_{Ci} + bB_{Ci} + E_i$$

where  $J_{Ci}$  is person  $i$ ’s judgment of their partners’ humor style;  $b_0$  or the intercept is the directional bias (i.e., the degree to which a person is biased to perceive their partner as using more/less humor than they really do);  $T_{Ci}$  is the truth variable (i.e., the partners’ actual amount of humor);  $t$  is the truth force (i.e., the strength of the effect of the partner’s actual [i.e., self-reported] humor on the persons’ judgment of their partner);  $B_{Ci}$  is the bias variable (i.e., to test assumed similarity, this is the person’s own humor style predicting their judgment of their partner’s humor style);  $b$  is the bias force (i.e., the strength of the effect of a person’s own humor style on their judgment of their partner); and  $E_i$  is random error. The subscript  $C$  indicates which variables have been grand mean-centered according to the truth variable (i.e., a target’s self-reported humor style).

When the variables have been centered in this way, directional bias ( $b_0$ ) can be interpreted as the average estimate of a partners’ humor when controlling for truth (their partner’s actual usage of humor) in their judgment. This value—the intercept—reflects the difference between the person’s judgment of their partner and the truth (their partner’s self-reported humor score). This value is a measure of mean-level bias, and the interpretation of this value will determine if mean-level biases play a significant role in people’s perceptions of their partner’s humor. A significant positive intercept would suggest that people are indeed positively biased when evaluating their partner’s humor. A significant negative

intercept would suggest that people are negatively biased when evaluating their partner's humor. Truth force ( $t$ ) can be interpreted as a traditional regression coefficient (i.e., a significant positive value would indicate that people are indeed using the "truth" when evaluating their partner's humor; West & Kenny, 2011; Wood et al., 2017). Bias force ( $b$ ) can also be interpreted as a traditional regression coefficient (i.e., a significant positive value would indicate that people are assuming similarity between their own rating and the rating they provide of their partner).

**Moderation of T&B by relationship satisfaction.** To address the question of whether relationship satisfaction is associated with partner perception, an individual's relationship satisfaction will be included as a moderator in the model; this model can be expressed formally as follows:

$$J_{Ci} = (b_0 + sS_i) + (tT_{Ci} + t_sT_{Ci}S_i) + (bB_{Ci} + b_sB_{Ci}S_i) + E_i$$

where  $S_i$  is person  $i$ 's relationship satisfaction (centered with the grand mean of relationship satisfaction);  $s$  is the overall effect of a person's relationship satisfaction on their judgment (estimating the moderating effect of satisfaction on directional bias; if positive, this means that satisfaction has a positive effect on directional bias);  $t_s$  is the overall effect of a person's relationship satisfaction on the truth force (i.e., determining if the truth force is stronger when relationship satisfaction is higher or lower);  $T_{Ci}S_i$  is the interaction between satisfaction and the truth variable (i.e., determining whether reports of a partner's humor style and relationship satisfaction are related in predicting partner-reports of humor style);  $b_s$  is the overall effect of a person's relationship satisfaction on the bias force (i.e., determining whether assumed similarity is stronger when relationship satisfaction is higher or lower); and  $B_{Ci}S_i$  is the interaction between satisfaction and the bias variable (i.e., determining whether assumed similarity and relationship satisfaction are related in predicting partner-reports of humor style). Humor-style reports were centered using the truth variable, and relationship satisfaction was mean-centered prior to the analyses. Based on previous work finding gender differences in how partners perceive each other (Neff & Karney, 2005), gender was also examined as a moderating variable of T&B forces.

## Results

### Humor Styles

Descriptive data for humor style and relationship satisfaction are displayed in Table 1. Affiliative humor was the highest reported style of humor in both self-reports and partner-reports. Each report of affiliative humor spanned the full range of possible values (1–7), with a mean of 4.77 ( $SD = 1.21$ ) for self-reported humor and 4.80 ( $SD = 1.23$ ) for partner-reported humor. This was followed by self-enhancing

**Table 1.** Descriptive Data for Relationship Satisfaction, Humor Styles, and Funniness.

Measure	N	Minimum	Maximum	M	SD
<b>Self-report</b>					
Funniness	674	1.00	7.00	4.52	1.53
Affiliative	674	1.00	7.00	4.77	1.21
Self-enhancing	674	1.00	7.00	4.63	1.02
Self-deprecating	674	1.00	6.25	3.40	0.94
Aggressive	674	1.00	6.75	2.96	1.09
<b>Partner-report</b>					
Funniness	674	1.00	7.00	5.04	1.51
Affiliative	674	1.00	7.00	4.80	1.23
Self-enhancing	674	1.25	7.00	4.54	1.04
Self-deprecating	674	1.00	6.25	3.37	0.90
Aggressive	674	1.00	6.13	3.10	1.08
Relationship satisfaction	667	1.00	5.00	4.47	0.74

humor, which was the second most common style of humor reported by both individuals and their partners ( $M$  for self-report = 4.63,  $SD = 1.02$ ;  $M$  for partner-report = 4.54,  $SD = 1.04$ ). The maladaptive humor styles were less common: self-deprecating ( $M$  for self-report = 3.40,  $SD = 0.94$ ;  $M$  for partner-report = 3.37,  $SD = 0.90$ ) and aggressive ( $M$  for self-report = 2.96,  $SD = 1.09$ ;  $M$  for partner-report = 3.10,  $SD = 1.08$ ) humor styles were the lowest reported humor styles. The self-reports and other-reports of each dyad member were significantly correlated—affiliative:  $r_{\text{self}}(\text{correlating P1's self-report and P2's self-report}) = .30$ ,  $r_{\text{other}}(\text{correlating P1's other-report and P2's other-report}) = .23$ ; self-enhancing:  $r_{\text{self}} = .56$ ,  $r_{\text{other}} = .42$ ; self-deprecating:  $r_{\text{self}} = .56$ ,  $r_{\text{other}} = .44$ ; and aggressive:  $r_{\text{self}} = .45$ ,  $r_{\text{other}} = .42$ ; see Supplemental Material for full correlation matrix by gender.

Gender differences in humor can be seen in Table 2. Men reported that they used more humor and rated themselves as funnier than women (all  $ps < .05$ ). Women also reported that their partners (i.e., men) used more humor and were funnier than men reported of their partners (i.e., women; all  $ps < .001$ ). The average effect size of these differences ( $d = .36$ ) is consistent with previous work on the subject, which finds that men tend to produce more humor (perhaps due to its importance in female mate selection and its signaling of intelligence and creativity to potential partners; Greengross, 2014; Greengross & Miller, 2011; Greengross et al., 2020).

### Accuracy and Bias

T&B models were completed for each humor style in the context of multilevel modeling (to account for the nonindependence of partner ratings). Gender was effect coded ( $-1 = \text{women}$ ,  $1 = \text{men}$ ). Each model included interaction terms for relationship satisfaction and gender on T&B variables. The results of each model are presented below and in Tables 2 to 5.

**Table 2.** Descriptive Differences in Humor Styles and Funniness by Gender.

Gender	Method of measurement	Measure	N	M	SD	Gender	Method of measurement	Measure	N	M	SD	d of gender difference
Men	Self-report	Funniness	337	4.80	1.52	Women	Self-report	Funniness	337	4.25	1.49	.36***
		Affiliative	337	5.04	1.23			Affiliative	337	4.50	1.12	.46***
		Self-enhancing	337	4.71	0.98			Self-enhancing	337	4.55	1.06	.17*
		Self-deprecating	337	3.50	0.92			Self-deprecating	337	3.31	0.94	.20**
		Aggressive	337	3.19	1.13			Aggressive	337	2.73	1.00	.44***
	Partner-report	Funniness	337	4.75	1.53	Partner-report	Partner-report	Funniness	337	5.33	1.43	.39***
		Affiliative	337	4.53	1.17			Affiliative	337	5.07	1.23	.45***
		Self-enhancing	337	4.40	1.07			Self-enhancing	337	4.69	0.99	.29***
		Self-deprecating	337	3.22	0.87			Self-deprecating	337	3.52	0.91	.34***
		Aggressive	337	2.85	0.99			Aggressive	337	3.34	1.11	.47***

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

**Table 3.** Truth and Bias Model Predicting Directional Bias, Tracking Accuracy, and Assumed Similarity in Partner-Reports of Affiliative Humor.

Model component		SE	t(df)	p	95% CI: LB	95% CI: UB
Intercept (directional bias)	.012	0.031	0.388 (331)	.698	-0.049	0.073
Truth force (tracking accuracy)	.751	0.027	28.085 (582)	<.001	0.699	0.804
Bias force (assumed similarity)	.034	0.027	1.25 (582)	.212	-0.019	0.086
Gender	-.075	0.031	-2.405 (331)	.017	-0.136	-0.014
Relationship satisfaction	.244	0.039	6.231 (408)	<.001	0.167	0.321
Truth force $\times$ Gender	-.008	0.026	-0.314 (580)	.754	-0.060	0.043
Bias force $\times$ Gender	.001	0.026	0.041 (581)	.967	-0.051	0.053
Truth force $\times$ Relationship satisfaction	-.028	0.033	-0.846 (657)	.398	-0.092	0.037
Bias force $\times$ Relationship satisfaction	.107	0.032	3.345 (623)	<.001	0.044	0.169

Note. CI = confidence interval; LB = lower bound; UB = upper bound.

**Table 4.** Truth and Bias Model Predicting Directional Bias, Tracking Accuracy, and Assumed Similarity in Partner-Reports of Self-Enhancing Humor.

Model component	b	SE	t(df)	p	95% CI: LB	95% CI: UB
Intercept (directional bias)	-.113	0.029	-3.856 (331)	<.001	-0.170	-0.055
Truth force (tracking accuracy)	.641	0.031	20.576 (542)	<.001	0.579	0.702
Bias force (assumed similarity)	.049	0.031	1.582 (546)	.114	-0.012	0.111
Gender	-.101	0.025	-4.032 (328)	<.001	-0.151	-0.052
Relationship satisfaction	.316	0.044	7.209 (448)	<.001	0.230	0.403
Truth force $\times$ Gender	.004	0.032	0.118 (467)	.906	-0.059	0.067
Bias force $\times$ Gender	.031	0.032	0.957 (472)	.339	-0.033	0.094
Truth force $\times$ Relationship satisfaction	.003	0.033	0.092 (582)	.927	-0.061	0.067
Bias force $\times$ Relationship satisfaction	.085	0.033	2.552 (572)	.011	0.020	0.150

Note. CI = confidence interval; LB = lower bound; UB = upper bound.

**Table 5.** Truth and Bias Model Predicting Directional Bias, Tracking Accuracy, and Assumed Similarity in Partner-Reports of Self-Deprecating Humor.

Model component	b	SE	t(df)	p	95% CI: LB	95% CI: UB
Intercept (directional bias)	-.037	0.025	-1.502 (320)	.134	-0.086	0.012
Truth force (tracking accuracy)	.505	0.031	16.102 (492)	<.001	0.443	0.566
Bias force (assumed similarity)	.265	0.031	8.469 (493)	<.001	0.203	0.326
Gender	-.129	0.024	-5.307 (321)	<.001	-0.176	-0.081
Relationship satisfaction	.018	0.033	0.557 (404)	.578	-0.046	0.083
Truth force $\times$ Gender	-.002	0.031	-0.053 (482)	.958	-0.063	0.060
Bias force $\times$ Gender	-.036	0.031	-1.150 (482)	.251	-0.098	0.026
Truth force $\times$ Relationship satisfaction	-.061	0.037	-1.629 (545)	.104	-0.134	0.013
Bias force $\times$ Relationship satisfaction	.075	0.036	2.102 (506)	.036	0.005	0.145

Note. CI = confidence interval; LB = lower bound; UB = upper bound.

**Affiliative humor.** The results of the T&B Model for affiliative humor are presented in Table 3. The intercept for this model was nonsignificant ( $b = .01$ ,  $p = .07$ ), indicating that no directional bias was present in this judgment of partner humor. The bias force was also not significant ( $b = .03$ ,  $p = .21$ ), indicating that assumed similarity did not play a role in partner's judgments of affiliative humor. The truth force in the judgment, however, was significant and quite large ( $b =$

$.75$ ,  $p < .001$ ), indicating that participants were accurate in their judgment of their partner's affiliative humor. This model also indicated a first-order effect of gender, such that women reported that their partners used more affiliative humor than did men ( $b = -.08$ ,  $p = .02$ ), and a first-order effect of relationship satisfaction, such that more satisfied people reported that their partners used more affiliative humor ( $b = .24$ ,  $p < .001$ ).



**Table 6.** Truth and Bias Model Predicting Directional Bias, Tracking Accuracy, and Assumed Similarity in Partner-Reports of Aggressive Humor.

Model component	<i>b</i>	<i>SE</i>	<i>t</i> ( <i>df</i> )	<i>p</i>	95% CI: LB	95% CI: UB
Intercept (directional bias)	.122	0.028	4.341 (332)	<.001	0.067	0.177
Truth force (tracking accuracy)	.579	0.029	19.723 (508)	<.001	0.522	0.637
Bias force (assumed similarity)	.213	0.029	7.263 (498)	<.001	0.156	0.271
Gender	-.157	0.029	-5.383 (331)	<.001	-0.215	-0.100
Relationship satisfaction	-.196	0.037	-5.313 (396)	<.001	-0.268	-0.123
Truth force × Gender	-.071	0.028	-2.518 (545)	.012	-0.126	-0.016
Bias force × Gender	.041	0.028	1.470 (529)	.142	-0.014	0.096
Truth force × Relationship satisfaction	.021	0.034	0.609 (617)	.543	-0.046	0.088
Bias force × Relationship satisfaction	.037	0.036	1.030 (633)	.303	-0.033	0.107

Note. CI = confidence interval; LB = lower bound; UB = upper bound.

**Self-enhancing humor.** The results of the T&B Model for self-enhancing humor are presented in Table 4. The intercept for this model was small but significant ( $b = -.11, p < .001$ ), indicating that people slightly underestimated the amount of self-enhancing humor their partner uses. The bias force was not significant in this model ( $b = .05, p = .11$ ), indicating that participants did not rely on assumed similarity when making a judgment of their partner's humor. There was, however, a significant effect of the truth force ( $b = .64, p < .001$ ), indicating that participants relied on their partner's actual use of humor (demonstrating tracking accuracy) when judging their partner's humor. This model also indicated a first-order effect of gender, such that women reported that their partners used more self-enhancing humor than did men ( $b = -.10, p < .001$ ), and a first-order effect of relationship satisfaction, such that more satisfied people reported that their partners used more self-enhancing humor ( $b = .31, p < .001$ ).

**Self-deprecating humor.** The results of the T&B Model for self-deprecating humor are presented in Table 5. The intercept for this model was not significant ( $b = -.04, p = .13$ ), suggesting that a directional bias was not present in participants' judgments of their partner's self-deprecating humor. Participants demonstrated both tracking accuracy and assumed similarity when judging their partner's humor: Both the truth force ( $b = .51, p < .001$ ) and the bias force ( $b = .27, p < .001$ ) were significant predictors of judgment. The analysis also found first-order effects of gender, such that women reported that their partner used this sort of humor more than men did ( $b = -.13, p < .001$ ). There was no first-order effect of relationship satisfaction on partner-report of self-deprecating humor ( $b = .02, p = .58$ ).

**Aggressive humor.** The results of the T&B Model for aggressive humor are presented in Table 6. The intercept for this model was positive and significant ( $b = .12, p < .001$ ), indicating that participants consistently overestimated their partner's report of aggressive humor. Again, participants demonstrated both tracking accuracy and assumed

similarity, as both the truth force ( $b = .58, p < .001$ ) and bias force ( $b = .21, p < .001$ ) were significant. This model also indicated a first-order effect of gender, such that women reported that their partners used more aggressive humor than did men ( $b = -.16, p < .001$ ), and a first-order effect of relationship satisfaction, such that more dissatisfied people reported that their partners used more aggressive humor ( $b = -.20, p < .001$ ).

**Funniness.** The results of the T&B Model for funniness are presented in Table 7. The intercept for this model was large, positive, and significant ( $b = .55, p < .001$ ), indicating that participants consistently rated their partner as funnier than their partner rated themselves. The bias force was not significant ( $b = .06, p = .07$ ), indicating that how funny people found themselves was independent of how funny they found their partner. The truth force was significant ( $b = .45, p < .001$ ), indicating that participants demonstrated accuracy in their judgment of how funny their partner is. There were also first-order effects of gender ( $b = -.17, p < .001$ ), and relationship satisfaction ( $b = .60, p < .001$ ), such that women and those more satisfied in a relationship rated their partner as funnier.

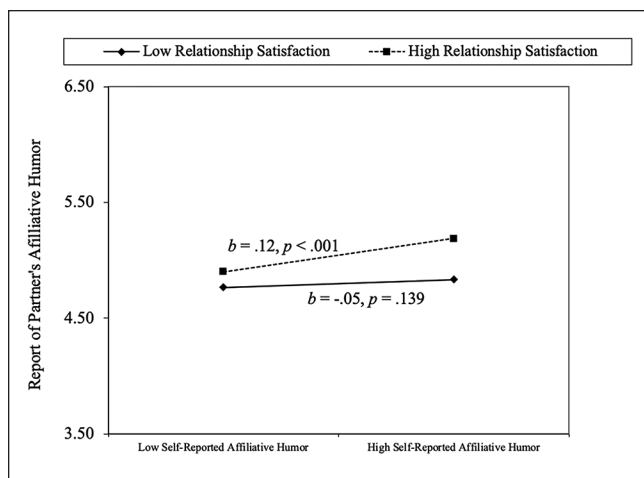
### Moderating Effects of Gender and Relationship Satisfaction

**Gender.** We examined whether gender moderated any of the truth or bias forces (see Tables 3 to 6). Despite finding consistent gender differences in self-reports and partner-reports of humor (Greengross et al., 2020), the vast majority of T&B effects were not moderated by gender (all  $ps > .06$ ). The one exception was an interaction with the truth force on reports of aggressive humor ( $b = -.07, p = .01$ ). Specifically, the truth force was stronger for women ( $b = .65, p < .001$ ) than men ( $b = .51, p < .001$ ). Thus, altogether, it seems that T&B forces are relatively similar across men and women. However, women's ratings of men's aggressive humor more closely matched the truth.

**Table 7.** Truth and Bias Model Predicting Directional Bias, Tracking Accuracy, and Assumed Similarity in Partner-Reports of Funniness.

Model component	<i>b</i>	SE	<i>t</i> ( <i>df</i> )	<i>p</i>	95% CI: LB	95% CI: UB
Intercept (directional bias)	.545	0.048	11.288 (329)	<.001	0.067	0.177
Truth force (tracking accuracy)	.542	0.031	17.562 (597)	<.001	0.522	0.637
Bias force (assumed similarity)	.057	0.031	1.851 (602)	.065	0.156	0.271
Gender	-.173	0.041	-4.216 (328)	<.001	-0.215	-0.100
Relationship satisfaction	.593	0.062	9.548 (442)	<.001	-0.268	-0.123
Truth force × Gender	.054	0.032	1.680 (503)	.094	-0.126	-0.016
Bias force × Gender	-.061	0.032	-1.895 (505)	.059	-0.014	0.096
Truth force × Relationship satisfaction	-.028	0.033	-0.833 (630)	.405	-0.046	0.088
Bias force × Relationship satisfaction	.029	0.033	0.863 (651)	.389	-0.033	0.107

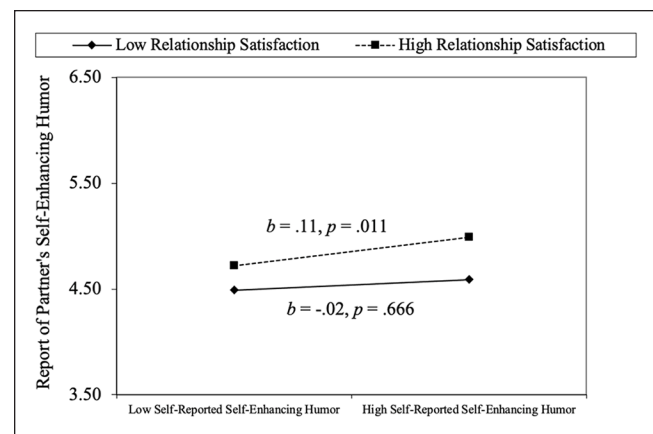
Note. CI = confidence interval; LB = lower bound; UB = upper bound.

**Figure 1.** Simple slopes analysis of the moderating effect of relationship satisfaction on assumed similarity bias for affiliative humor.

**Relationship satisfaction.** We examined whether relationship satisfaction moderated any of the truth or bias forces (see bottom of Tables 3–6). The vast majority of effects were not moderated by satisfaction (all *ps* > .10). There were three exceptions—bias forces in affiliative ( $b = .11, p < .001$ ), self-enhancing ( $b = .09, p = .01$ ), and self-deprecating humor ( $b = .08, p = .04$ ) were moderated by relationship satisfaction.

The decomposition of the relationship satisfaction by bias force interaction for affiliative humor is displayed in Figure 1. For those high in relationship satisfaction, the effect of self-reported humor style on judgments of partner humor (i.e., assumed similarity bias) was significant ( $b = .12, p < .001$ ). The assumed similarity bias was not significant among those who were low in relationship satisfaction ( $b = -.054, p = .14$ ). Participants high in affiliative humor also reported that their partner used more affiliative humor.

The decomposition of the relationship satisfaction by bias force interaction for self-enhancing humor is displayed in Figure 2. For those high in relationship satisfaction ( $b = .11$ ,

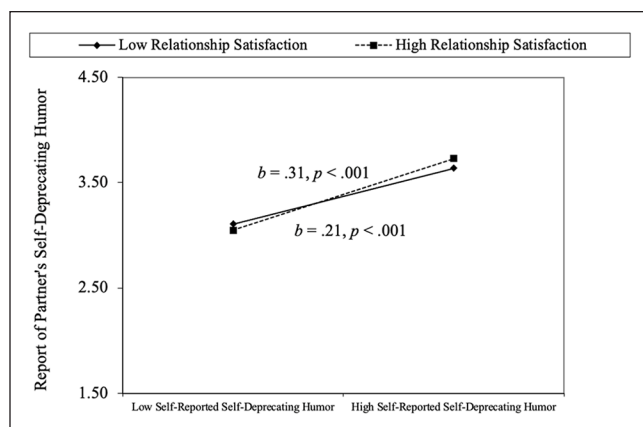
**Figure 2.** Simple slopes analysis of the moderating effect of relationship satisfaction on assumed similarity bias for self-enhancing humor.

$p = .01$ ), the effect of self-reported humor style on judgments of partner humor (i.e., assumed similarity bias) was significant. The assumed similarity bias was not significant among those who were low in relationship satisfaction ( $b = -.02, p = .66$ ).

Finally, the decomposition of the relationship satisfaction by bias force interaction for self-deprecating humor is displayed in Figure 3. For those high in relationship satisfaction ( $b = .31, p < .001$ ), the effect of self-reported humor style on judgments of partner humor (i.e., assumed similarity bias) was slightly stronger than the same effect among those who were low in relationship satisfaction ( $b = .21, p < .001$ ).

## Discussion

Similar to the predictions made by Fletcher and Kerr's (2010) partner evaluation model—where partner judgments include both mean-level bias and tracking accuracy—participants demonstrated both accuracy and bias in their judgments of self-enhancing, self-deprecating, and aggressive humor. However, mean-level (i.e., directional) bias was only



**Figure 3.** Simple slopes analysis of the moderating effect of relationship satisfaction on assumed similarity bias for self-deprecating humor.

significant for partner judgments of self-enhancing humor (where participants slightly underestimated the amount of humor their partner was using), aggressive humor (where participants slightly overestimated the amount of humor their partner was using), and funniness (where participants overestimated how funny their partner is).

Because self-enhancing humor is largely private (including items such as “Even when I’m by myself, I’m often amused at the absurdities of life” and “I don’t need to be with other people to feel amused—I can usually find things to laugh about even when I’m by myself”), it may be relatively unsurprising that people do not have an especially accurate insight into how their partner uses this type of humor. The overestimation of aggressive humor, however, may reflect a few different processes. For example, perhaps partners disagree on what is considered aggressive, or perhaps people are uniquely aware of their partner’s aggressive humor (reporting higher use of aggressive humor), even when their partner may not be aware that they are using aggressive humor. Perhaps more likely, when answering questions about their own problematic humor use, participants may feel the need to answer in a socially desirable way. When reporting on another person’s maladaptive humor use, participants may not feel as strong a need to engage in socially desirable responding, causing a discrepancy between report types. Participants’ overestimation of how funny their partner (i.e., funniness) was congruent with the findings of Murray et al. (2002); because being funny, similar to being attractive or skilled, is a highly positive evaluative trait, partners may overinflate the judgment of their partner. Worth noting, few assumed similarity biases were seen among this general, more abstract trait of funniness, but more assumed similarity biases emerged among the more specific and behavioral humor styles.

Across participants, assumed similarity biases were present in partner judgments of self-deprecating and aggressive humor. These findings align with previous work suggesting

that, in close romantic relationships, people tend to see their partner as similar to themselves and use their own behaviors and attitudes as information about their partner’s behaviors and attitudes (Kenny & Acitelli, 2001). Interestingly, the assumed similarity bias (for aggressive and affiliative humor) was particularly present for those who are more satisfied in their relationships, a point we specifically discuss in the next section.

Largely, however, these analyses point to an overwhelming effect of accuracy—the truth force was significant and relatively large (all  $b$ s > .50) in each analysis.<sup>3</sup> On one hand, this may be relatively unsurprising—romantic partners presumably know each other very well, and, as discussed earlier, accuracy is a cornerstone of partner judgments (Fletcher, 2015; Fletcher & Kerr, 2010; Kenny & Acitelli, 2001; Neff & Karney, 2005). Partners tended to be more accurate when evaluating their partner’s adaptive humor than their maladaptive humor. This could reflect a few different processes. Perhaps self-reports and partner-reports of maladaptive humor styles differ more because they are socially undesirable characteristics, and participants are hesitant to self-report this behavior (or even admit that their partner uses these humor styles). Perhaps these kinds of humor are more difficult to observe and track accurately, either due to their uncommon nature (see Table 1) or their private nature (similar to self-deprecating humor).

When asked about how funny their partner was in general, participants were slightly less accurate and relied more on directional bias than when asked about the specific ways that their partner uses humor. This aligns with Neff and Karney’s (2005) description of partner evaluations as a mix of global adoration (in which people perceive their partners very positively when evaluating broad traits, such as funniness) and specific accuracy (in which people are more accurate in evaluating their partner’s specific traits, such as humor style).

Although the truth force of aggressive humor was higher for women than men, (indicating that women were slightly more accurate in this judgment), across humor styles, men and women did not differ in their judgments of humor styles. Interestingly, there were also no significant interactions of the truth force by relationship quality, suggesting that those who are satisfied in their relationships see their partner’s humor style with the same amount of accuracy as those who are less satisfied. These findings echo that of the meta-analysis conducted by Fletcher and Kerr (2010): There was no evidence that being particularly accurate about a partner’s humor was associated with relationship satisfaction for individuals.

### *The Moderating Role of Relationship Satisfaction on T&B*

Those who were more satisfied reported that their partner used more adaptive humor, including affiliative and self-enhancing

humor. Those who were less satisfied reported that their partner used more aggressive humor. This echoes much of the previously discussed work on humor and relationship satisfaction—positive humor is good for relationships whereas negative humor damages relationships (Butzer & Kuiper, 2008; De Koning & Weiss, 2002; Hall, 2013, 2017).

However, there was no first-order effect of relationship satisfaction on partner-reports of self-deprecating humor, which may be surprising when considering how damaging self-deprecation and low self-esteem can be for interpersonal relationships (Downey et al., 1998; Lemay Jr & Dudley, 2011; Murray et al., 2002, 2003). One possibility is that self-deprecating humor may not be associated with relationship satisfaction as much as other types of humor. Hall's (2017) meta-analyses of the topic found that while self-deprecating humor negatively impacted relationship satisfaction, the correlation between the two ( $r = -.11$ ) was much smaller than correlations between other types of humor and relationship satisfaction (e.g.,  $r$ s between  $-.16$  and  $.65$ ). It is also possible that different types of self-directed humor serve different functions in relationships. Perhaps self-deprecating humor influences relationship outcomes indirectly, via personality correlates (such as self-esteem and neuroticism), whereas other humor styles (that serve more interpersonal functions) may have a more direct effect. For example, self-enhancing humor may serve as a positive buffer that keeps individuals—and their partners—happier in relationships or in general (Jovanovic, 2011). Self-deprecating humor may also not resonate with partners because it conflicts with the rosy view one may have of a partner; this disconnect may make it difficult for self-deprecating humor to influence a partner's relationship satisfaction (e.g., "I know my partner uses self-deprecating humor, but the things they say about themselves don't reflect how good of a person/partner they are").

When making judgments about their partner's self-deprecating humor, those more satisfied in their relationships relied more strongly on this bias (i.e., their self-ratings were associated with their judgments of their partners). These findings offer more evidence for a link between relationship satisfaction and assumed similarity—when people are in satisfying relationships, they tend to see more similarities between them and their partners, controlling for the accuracy of their judgments (Fletcher & Kerr, 2010; Montoya et al., 2008; Morry, 2005; Murray et al., 2000).

### Limitations and Future Directions

There were limitations to this study that need to be addressed by future research. First, this study relied on reports from couple members only. This allowed us to determine how individuals' perceptions of their partners differed from partners' self-perceptions. However, it did not allow us to make any claims about the uniqueness of partner perceptions (i.e., are they uniquely biased compared with friends or family

members?) and whether a target's self-reports represent the genuine truth about humor (an inherent assumption of the T&B model). For example, if an individual reports that their partner uses very little aggressive humor, and their partner reports that they themselves use a lot of aggressive humor, who is correct? To continue the example, if a third informant also reports that a partner uses a lot of aggressive humor, it would suggest that the individual is seeing their partner uniquely—in a way that others do not. Getting reports from more informants (e.g., friends who know the partner or third-party strangers watching them behave) would allow us to more accurately examine whether individuals see their partner in an accurate or biased light. This sort of study design would also allow for the examination of other person-perception biases that are not couple-specific (Malloy & Kenny, 1986; Snijders & Kenny, 1999).

This study was also limited in its assessment of humor via the HSQ. The validity of this measure is a subject of debate, with some work finding that the four humor styles have not achieved construct validity (Heintz, 2019; Heintz & Ruch, 2015, 2016). Measures that capture more dimensions of humor (such as humor behaviors; Heintz, 2017) and expand beyond self-report surveying (e.g., using daily diary methods; Heintz, 2017) may be better poised to achieve construct validity. The HSQ also limits individual differences in humor to humor style. Future research on partner humor perception can capture other relevant humor-related individual difference variables, such as gelotophobia (the fear of being laughed at), gelotophilia (the joy in being laughed at), and katagelasticism (the joy in laughing at others). Recent work on the topic has suggested that partner perceptions of these individual difference variables may be important for relationship satisfaction (e.g., Brauer et al., 2021). Future work should incorporate these variables alongside broader measures of humor to get a clearer picture of how partner humor perception influences relationship satisfaction.

This study is also limited by its sample. As discussed in our section "Method," our sample does not accurately capture the demographics of the U.S. population as a whole. The sample used in this study is older and whiter than is representative of the country's population. Age, ethnicity, and culture are not independent of humor expression and perception (Greengross, 2013; Jiang et al., 2019); more representative samples moving forward would best reflect the humor perception process.

Perhaps one of the largest limitations of this study is its reliance on cross-sectional data. This is especially problematic when considering the role of relationship satisfaction in predicting or moderating the magnitude of T&B forces. Does relationship satisfaction give rise to greater or reduced T&B forces? Or do T&B forces give rise to higher or lower relationship satisfaction? To date, much of the work on partner perceptions conceptualized relationship satisfaction as an outcome—that being positively biased unidirectionally leads to better relationships. Future longitudinal work will be able



to examine the origins of partner perceptions in a way that cross-sectional work cannot. For example, future work can examine how or when in a relationship people may achieve accuracy or begin to use biases, how accuracy and biases change over time, and the directionality of the association between partner humor use and relationship satisfaction. Indeed, some recent work examining T&B models over time has found that accuracy estimates improve with relationship length (Keum et al., 2021).

## Conclusion

Participants occasionally demonstrated directional bias, more consistently demonstrated assumed similarity biases, and most consistently demonstrated accuracy—basing their judgment of their partner's humor use on what partners actually reported (and likely did). However, participants may have been more accurate when evaluating adaptive humor styles than maladaptive humor styles. Interestingly, people in highly satisfying relationships showed a stronger assumed similarity bias when judging their partners' humor. Overall, however, the most consistent effect in the current work was that of accuracy—participant's accuracy was never moderated by relationship satisfaction. Future research can more carefully examine the antecedents and consequences of partner judgments of humor through the use of multi-informant, longitudinal data. The current study provided important descriptive information to quantify the degree of accuracy and bias in partners' judgments of humor and highlights important future directions for how couples view themselves, their partners, and their relationships.

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## Supplemental Material

Supplemental material is available online with this article.

## Notes

1. Truth and Bias models require distinguishable dyads. Gender served as the sole distinguishing factor between partners, limiting our sample to heterosexual dyads only.
2. In total, 55 couples were excluded after failing an attention check item ("Please select the 'slightly disagree' option below"); 337 couples remained after this exclusion.

3. Another way of operationalizing self-other agreement in humor styles is to adopt a profile correlation approach (Furr, 2008; Rogers et al., 2018). This approach provides a few advantages to the Truth and Bias modeling approach conducted in our main analyses. First, it allows us to consider *all four humor styles simultaneously* by computing an overall level of agreement across them. Second, it also allows us to control for normativeness in both self-ratings and other-ratings (i.e., the degree to which a profile resembles the average profile). Doing so enables the ability to model distinctive agreement (i.e., controlling for the degree to which profiles reflect the average group under reference, are couple members [i.e., targets and raters] uniquely agreeing on their humor-style ratings?). In a supplementary analysis, we computed both normative (i.e., "raw" agreement;  $r = .746$ ) and distinctive ( $r = .648$ ) self-other agreement, which suggested high normative agreement and that couple members uniquely agreed in their humor-style ratings.

To examine the association between self-other agreement and relationship satisfaction, we predicted individual relationship satisfaction from both raw and distinctive agreement controlling for individual and observer ratings of the four humor styles (see Humbad et al., 2013). Normative/raw agreement was associated with higher relationship satisfaction both controlling for,  $b = .363$ , 95% confidence interval [CI] = [.108, .619],  $SE = 0.130$ ,  $t(370.580) = 2.801$ ,  $p = .005$ , or not controlling for self-reports and observer-reports,  $b = .633$ , 95% CI = [.370, .895],  $SE = 0.106$ ,  $t(336.98) = 4.739$ ,  $p < .001$ . Distinctive agreement was not associated with relationship satisfaction when controlling for,  $b = -.100$ , 95% CI = [-.294, .093],  $SE = 0.099$ ,  $t(311.007) = -1.019$ ,  $p = .309$ , or not controlling for self-reports and observer-reports,  $b = -.079$ , 95% CI = [-.301, .142],  $SE = 0.113$ ,  $t(334.863) = -0.703$ ,  $p = .482$ . Full models can be found in Supplemental Table 2.

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