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Accuracy in perceptions of a partner's sexual goals

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Abstract

Intimate partners engage in sex for a variety of reasons, and their perceptions of each other's sexual goals play an important role in intimate relationships. How accurate are these perceptions of a partner's sexual goals and is accuracy associated with relationship quality and sexual satisfaction for the couple? To answer these questions, we conducted a 21-day dyadic daily experience study of 121 couples, which we analyzed using two different approaches to examine accuracy: the profile approach and the Truth and Bias Model. Results from these two approaches demonstrated that people's perceptions of their partner's sexual goals were indeed accurate, but that accuracy was not associated with relationship quality or sexual satisfaction for the perceiver or their partner. Rather, perceiving a partner's sexual goals in normative (or socially desirable) ways was associated with relationship quality and sexual satisfaction for both the perceiver and their partner. Implications of these findings are discussed.

Keywords

accuracy, sexual goals, intimate relationships, romantic relationships, partner perceptions, dyadic daily experience

Accuracy and bias in perceptions of a partner's sexual goals

Humans have a fundamental desire to understand the motivations underlying another person's actions (Reeder & Trafimow, 2005), especially in close relationships

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characterized by strong interdependence between partners (Reeder, 2013). This desire to understand another person's motivations may be even stronger in the domain of sexuality in which the inherent vulnerability that comes with discussing sexual issues can make open communication difficult (Rehman et al., 2019). Given this vulnerability, people might be especially driven to understand their partner's motivations for engaging in sex (i.e., their sexual goals). In addition to providing them with insight into their relationship and partner, perceptions of a partner's sexual goals also help people predict and shape their future relational interactions (Reeder, 2013). As such, perceptions of a partner's sexual goals play an important role in intimate relationships. Indeed, research has shown that perceiving that a partner engaged in sex for approach goals (i.e., to attain positive end states such as sexual pleasure or relationship intimacy) was associated with greater relationship satisfaction, whereas perceiving that a partner engaged in sex for avoidance goals (i.e., to prevent negative end states such as negative affect or relationship conflict) was associated with lower satisfaction and an increased likelihood of breaking up (Impett et al., 2005). What remains unknown is whether these perceptions are actually accurate and if so, whether accurate perceptions are related to how satisfied intimate partners are with their relationships and with their sexual experiences in these relationships. Thus, in addition to examining the accuracy of people's perceptions of their partner's sexual goals, we also examine if this accuracy is linked to greater relationship quality and sexual satisfaction.

Correlates of accurate partner perceptions

Although people may be motivated to accurately perceive their partner's goals and intentions, accurate perceptions have the potential to be associated with either beneficial or costly relationship factors. To our knowledge, only one study has tested whether people's perceptions of their intimate partner's sexual goals align with the partner's reports of their own goals, finding that people can perceive their partner's approach, but not avoidance, sexual goals (Impett et al., 2005). However, this study required participants to recall and mentally aggregate their partner's sexual goals for all sexual interactions that occurred over the previous 2 weeks, rather than report perceptions of their partner's sexual goals for a specific sexual encounter in real time. Further, this study did not examine the correlates of participants' accuracy. As such, it remains unclear whether people can accurately perceive their partner's sexual goals for specific sexual interactions and what the correlates of this accuracy might be.

Given the dearth of literature on perceptions of sexual motivation, we turned to the well-established literature on empathic accuracy, or the degree to which individuals can accurately read another person's thoughts and feelings (Ickes, 1993). This literature suggests that accuracy is generally good for relationships, as it allows partners to better understand and respond to one another's needs. Specifically, accurately inferring a partner's thoughts and feelings makes individuals aware of when their partner needs support and how to provide effective emotional and instrumental support (Verhofstadt et al., 2008), which is linked to greater relationship satisfaction for both partners (Cramer, 2004). People are also more satisfied when their partner views them the way they view

themselves. According to self-verification theory (Swann et al., 1994), having a partner who perceives them accurately (i.e., in line with their self-perceptions) increases individuals' sense of control and allows them to respond appropriately to their partner, which is key to maintaining a successful relationship. Self-verification theory also predicts that people like having a partner who perceives them in line with their self-perceptions regardless of whether these perceptions are positive or negative because they want their identities confirmed (Swann et al., 1994), which might make them feel understood by their partner. Indeed, people feel more closeness, intimacy, commitment, and satisfaction in long-term relationships in which partners view them the way they view themselves (Campbell et al., 2005; De La Ronde & Swann, 1998; Swann et al., 1994; Thomas & Fletcher, 2003). Based on this work, it is reasonable to expect that accurately perceiving a partner's sexual goals might be associated with positive relationship factors for both the perceiver and their partner.

However, there are also reasons why inaccuracy might sometimes be better for a relationship than accuracy. For instance, according to the empathic accuracy model (Ickes et al., 2005), empathic accuracy is associated with greater relationship satisfaction in situations that pose little to no threat to relationships, but *lower* relationship satisfaction in threatening situations (Simpson et al., 2003). Threatening situations are those in which the perceiver might uncover that their partner has thoughts or feelings that cause the perceiver distress (Ickes et al., 2005). In the context of perceiving a partner's sexual goals, a threatening situation might be one in which a partner holds more avoidance than approach sexual goals. Avoidance sexual goals include, for example, wanting to avoid feeling bad about oneself, upsetting one's partner, or igniting relationship conflict, whereas approach sexual goals include wanting sexual pleasure for oneself or one's partner, or greater relationship intimacy (Cooper et al., 1998; Impett et al., 2005). Therefore, accurately perceiving that one's partner is engaging in sex for avoidance goals, rather than approach goals, might threaten people's self-esteem and positive views of the relationship. Thus, there are also reasons to expect that accuracy, especially for specific types of goals, might be associated with negative relationship factors.

Modeling accuracy in perceptions of sexual goals

In the current study, we aimed to test whether people form accurate perceptions of their partner's sexual goals and, if so, whether accuracy is linked to greater or poorer relationship quality and sexual satisfaction for perceivers and their partners. To do this, we took two different approaches to conceptualizing accuracy. First, crucial to the study of accuracy for sexual motivation is an acknowledgement that sexual behavior is multiply-determined (Impett et al., 2005). As a result, when perceiving their partner's sexual goals for a given sexual encounter, people are likely to think about several sexual goals together and in relation to one another, rather than in isolation. To capture this reality and test the effects of being accurate about the relative importance of multiple goals directing their partner's sexual behavior, we used a person-centered approach to conceptualize accuracy. Specifically, we used profile-based accuracy (e.g., Human & Biesanz, 2011), which indexes accuracy as the degree to which perceivers understand their partner's pattern of

sexual goals for a given sexual interaction. Thus, positive associations observed between accuracy and relationship quality (or sexual satisfaction) using this person-centered approach would indicate that accurately perceiving the relative standings of a partner's sexual goals is associated with positive relational (or sexual) factors.

Second, based on the possibility that the association between accuracy and relationship factors might differ in situations that vary in their degree of threat, we then tested accuracy for approach and avoidance sexual goals separately, given the large body of literature indicating that they are guided by separate motivational systems (see Gable & Impett, 2012, for a review) and have distinct outcomes for sexuality and relationships (Impett et al., 2015). To do so, we re-conceptualized accuracy using a variable-centered approach called the Truth and Bias Model (West & Kenny, 2011). This approach allowed us to index accuracy as the perceiver's ability to detect changes in their partner's approach sexual goals and changes in their partner's avoidance sexual goals separately. Positive associations between accuracy and relationship quality or sexual satisfaction would indicate that accurately perceiving changes in a partner's approach (or avoidance) sexual goals is associated with positive relational or sexual factors.

In sum, four key questions guided the current research, including whether people can accurately perceive their partner's sexual goals, whether accuracy is linked to greater relationship quality and sexual satisfaction for the perceiver and their partner, whether people are more accurate about certain sexual goals (i.e., approach vs. avoidance), and whether accuracy about certain sexual goals is associated with greater relationship quality and sexual satisfaction. The first two questions were preregistered prior to conducting analyses but after the data were collected (original: https://osf.io/z54nc; update: https://osf.io/5b9my), whereas the last two questions were exploratory. Syntax and supplemental materials for the current research are available on the Open Science Framework (OSF) at https://osf.io/ejxsw/.

Method

Participants

A total of 242 individuals (i.e., 121 couples; 13 married, 19 engaged, 33 common-law, 71 cohabiting, 3 dating, and 1 "other"; M_{length} = 8 years, 6 months) participated in the study, 115 of which identified as male, 124 as female, and 2 as "other." Participants ranged in age from 20 to 70 years (M = 32.63, SD = 10.19). Additionally, 197 participants identified as heterosexual, 26 as bisexual or pansexual, eight as gay or lesbian, seven as asexual, and four as queer or "other." Nearly two-thirds (65.3%) of participants identified as White, 4.5% of Black, 8.3% as East Asian, 7.4% as South Asian, 4.1% as Latin American, 5.8% as bi- or multi-racial, and 4.1% as "other." Of the 121 couples, 117 reported having sex on at least 1 day (M = 4.80 days, SD = 3.08) during the 21-day study. Across the sample, a total of 562 sexual interactions were reported and analyzed. Participants received up to $48 USD in Amazon gift cards for completing all parts of the study.

Measures

As part of a larger study (see The Love Consortium Database for details: https://doi.org/10.15139/S3/CL6GZA), participants completed daily surveys each night for 21 consecutive nights. On days when they indicated having sex with their partner, participants rated the importance of six reasons in motivating their decision to engage in sex (1 = "not at all important" to 7 = "extremely important") including three *approach sexual goals* ("to pursue my own sexual pleasure," "to please my partner," and "to promote intimacy in my relationship") and three *avoidance sexual goals* ("to avoid feeling bad about myself," "to prevent my partner from becoming upset," and "to avoid conflict in my relationship"). Participants also rated their *perceptions of their partner's sexual goals* on the same rating scale on three approach items ("to pursue his or her own sexual pleasure," "to please me," and "to promote intimacy in our relationship") and three avoidance items ("to avoid feeling bad about himself/herself," "to prevent me from becoming upset," and "to avoid conflict in our relationship"). Importantly, each of the approach and avoidance items reflect distinct goals with different focuses: a self-focus, a partner-focus, or a relationship-focus. This measure of sexual goals was adapted from the Cooper et al. (1998) and Impett and Peplau (2002) measures of sex motives applicable to a daily context, but it was shortened to minimize participant fatigue and attrition. Cooper et al. (1998) demonstrated the validity of the original sex motives scale.

Each day, *relationship quality* was assessed with four items from the Perceived Relationship Quality Component Inventory (Fletcher et al., 2000): "How satisfied were you with your relationship?", "How committed were you with your relationship?", "How much could you count on your partner?", and "How passionate was your relationship?", all rated on a 7-point scale (1 = "not at all" to 7 = "extremely"; $M = 5.97$, $SD = 1.08$; $R_c = .81$). *Sexual satisfaction* was measured daily using the Global Measure of Sexual Satisfaction (Lawrance et al., 1998). Participants rated their sex life on five 7-point dimensions: "bad-good," "unpleasant-pleasant," "negative-positive," "unsatisfying–satisfying," and "worthless-valuable" ($M = 5.55$, $SD = 1.68$ $R_c = .97$).

Results

All analyses were conducted in R 3.5.0 using the nlme package (Pinheiro et al., 2021). Details about the analytic strategy adopted to test each key question are presented with the corresponding results below.

Are people able to accurately perceive their partner's sexual goals?

We tested whether people are able to accurately perceive their partner's sexual goals using multilevel modeling following the profile-based approach (Biesanz, 2010). To account for the dyadic nature of the daily responses (Bolger & Laurenceau, 2013) and the inclusion of multiple items in a profile, we used a three-level cross-classified model in which items (level 1) were nested in participants (level 2) who were nested in couples (level 3), and couples were crossed with time. Further, there were separate random intercepts for

partners, but slopes were treated as fixed. All predictors were grand-mean centered (Biesanz, 2019).

The profile approach indexes accuracy as the agreement between participants' reports of their own sexual goals and their partner's perceptions of their sexual goals. Importantly, this approach conceptualizes accuracy as the degree to which people understand their intimate partner's pattern of sexual goals, capturing the idea that people have multiple sexual goals that they think about together and relative to one another. For example, Tom might have sex with his partner, Pam, to promote intimacy in their relationship and to please Pam more so than to avoid conflict or to pursue his own pleasure, and Pam might be able to accurately detect these distinctions when considering Tom's sexual goals.

To test whether people know their partner's *unique* pattern of sexual goals above and beyond the pattern of sexual goals held by the average person, we controlled for the normative profile of sexual goals (i.e., the average report of each sexual goal across the sample). This is in line with traditional profile-based approaches (Biesanz, 2010, 2019; Borkenau & Leising, 2016) that remove the normative profile from indices of accuracy. This is an important step in the profile approach because, as demonstrated in past work (Wood & Furr, 2016), the normative profile can inflate indices of accuracy to an unknown degree. In the context of the current work, accuracy might be inflated because both the profile of perceptions of a partner's sexual goals and the profile of the partner's self-reported sexual goals resemble the profile of the average person's sexual goals. To account for this possibility, we created a normative profile in the current sample by averaging the responses of the entire sample on each of the six sexual goals. Then, we subtracted that average profile from each participant's profile of self-reported sexual goals to get a distinctive sexual goals profile. Both the distinctive and normative sexual goal profiles were entered as predictors of perceptions of a partner's sexual goals to index distinctive accuracy and normativity, respectively. Thus, when we discuss accuracy in the current paper, we are referring to distinctive accuracy, or people's understanding of their partner's unique pattern of sexual goals. For the raw accuracy model (i.e., a model which does not control for the normative profile), see Supplement S1 in the supplemental materials on OSF.

Notably, the normative profile can also represent social desirability or positivity, which can also inflate accuracy to an unknown degree (Wood & Furr, 2016). The normative profile indexes the extent to which people formed normative or positive impressions of their partner's sexual goals. This index includes both bias and accuracy, because while people tend to perceive their partners in an overly positive light, people's positive impressions can also be accurate. We know from previous research that people are more strongly motivated by approach than avoidance goals (Impett et al., 2005; Muise et al., 2013), suggesting that being more approach-motivated than avoidance-motivated—which is arguably more socially desirable—is normative. Indeed, the correlation between the normative profile in our sample and the average of eight independent coders' (*ICC2* = .92) social desirability ratings was strong (r = .984, 95% CI [.859, .998]), demonstrating that the normative profile was very socially desirable. Indeed, when we replace the normative profile (the profile of the average report of each sexual goal across the sample) with the socially desirable profile (the profile of the social desirability ratings

of each sexual goal), the results are the same (see Table S2 in the supplemental materials on OSF), suggesting that the normative profile is redundant with a socially desirable profile in the current sample. As such, our index of accuracy, which controlled for this normative profile, is independent of positivity. This allowed us to test whether people can accurately perceive their partner's sexual goals without relying on positivity, thus demonstrating a genuine understanding of their partner's unique pattern of sexual goals.

When analyzing daily diary data, it is possible that changes that occur concurrently in two variables are not due to an underlying association, but rather to the passage of time (Bolger & Laurenceau, 2013). To address this issue, Bolger and Laurenceau (2013) recommend that time should be included as a variable in the analysis to determine whether the passage of time affects results. In the current sample, because participants completed multiple daily surveys over the course of 21 consecutive days, we entered time as a moderator in our profile-based accuracy models to test whether there is an effect of time and repeated exposure to the daily diary measures on accuracy. Further, there is some evidence that women (Fletcher et al., 2000) and people in longer relationships (Thomas & Fletcher, 2003) generally form more accurate partner perceptions than men and people in shorter relationships, respectively. As such, we also entered the perceiver's gender, the partner's gender, and relationship length as separate moderators in our profile-based accuracy models to test whether there are associations between gender or relationship length and accuracy.

Results from this profile approach demonstrated that participants were able to accurately detect their partner's distinctive sexual goals (distinctive accuracy: $b = .350$, $SE = .012$, $p < .001$). That is, participants were accurate about their partner's sexual goals even when controlling for the normative pattern of sexual goals,[1] which strongly predicted accuracy (normativity: $b = .977$, $SE = .010$, $p < .001$). This accuracy was not moderated by time ($b = .003$, $SE = .002$, $p = .118$), participant's gender ($b = .025$, $SE = .025$, $p = .314$), or partner's gender ($b = -.035$, $SE = .025$, $p = .167$), but it was moderated by relationship length ($b = .006$, $SE = .002$, $p < .001$), suggesting that participants in more long-term relationships were more accurate about their partner's sexual goals. In contrast, while participants' reliance on normativity was not moderated by time ($b = .003$, $SE = .002$, $p = .119$) or relationship length ($b = .0008$, $SE = .001$, $p = .447$), it was moderated by the participant's gender ($b = -.122$, $SE = .021$, $p < .001$) and the partner's gender ($b = .084$, $SE = .021$, $p < .001$), suggesting that men relied on positivity less, while participants with male partners relied on positivity more when perceiving their partner's sexual goals, respectively.

Is Accuracy associated with greater relationship quality and sexual satisfaction for the perceiver and/or their partner?

We tested whether accuracy is associated with greater relationship quality and sexual satisfaction for the perceiver and/or their partner by entering participants' daily relationship quality (or sexual satisfaction) as a level-1 moderator (within-person centered; i.e., centered around each participant's own mean relationship quality/sexual satisfaction on the days that they had sex) and participants' average relationship quality (or sexual

satisfaction) as a level-2 moderator (grand-mean centered; i.e., centered around the average relationship quality/sexual satisfaction in the sample on days participants had sex) in the profile-based model described above. This is the recommended approach for testing the correlates of profile-based accuracy (e.g., Carlson, 2016a; 2016b). The level-1 moderator tests whether people experience higher relationship quality (or sexual satisfaction) on days when they are accurate about their partner's sexual goals, while the level-2 moderator tests whether people who experience higher relationship quality (or sexual satisfaction) on average are more accurate about their partner's sexual goals. Similarly, in a separate model, we entered partners' daily relationship quality (or sexual satisfaction) as a level-1 moderator (within-person centered) and partners' mean relationship quality (or sexual satisfaction) as a level-2 moderator (grand-mean centered) to test whether people who are accurate about their partner's sexual goals have partners who experience higher relationship quality (or sexual satisfaction) at the daily-level or mean-level, respectively.

Further, we explored potential moderators of this link, specifically relationship length and gender. Past work has demonstrated that early on in a dating relationship, positive, idealized illusions of a partner foster greater relationship satisfaction than accurate perceptions of a partner (Campbell et al., 2005), whereas in long-term relationships, people feel closer, more intimate, more committed, and more satisfied when partners view them the way they view themselves (Campbell et al., 2005). Past work also suggests that women are more inclined toward the maintenance of romantic relationships and are thus more prone to partner-serving and relationship-serving biases than men (Gagne and Lydon, 2003). As such, to determine whether the associations between accuracy and relationship factors (i.e., relationship quality and sexual satisfaction) vary be relationship length or gender, we entered relationship length, the perceiver's gender, and the partner's gender separately as moderators in our profile-based model of accuracy.

The results from the profile approach revealed that there were no significant associations between participants' accuracy and their relationship quality at the daily-level ($b = -.003$, $SE = .026$, $p = .900$) or the mean-level ($b = -.034$, $SE = .021$, $p = .103$). There were also no significant associations between participants' accuracy and their sexual satisfaction at the daily-level ($b = -.019$, $SE = .019$, $p = .323$) or the mean-level ($b = .019$, $SE = .010$, $p = .069$). However, on days when they reported their partner's sexual goals as being normative (or socially desirable), participants reported higher relationship quality ($b = .121$, $SE = .024$, $p < .001$) and higher sexual satisfaction ($b = .060$, $SE = .018$, $p < .001$). Participants who tended to perceive their partner's sexual goals in normative (or socially desirable) ways also experienced higher relationship quality ($b = .259$, $SE = .019$, $p < .001$) and higher sexual satisfaction ($b = .159$, $SE = .011$, $p < .001$) on average.

Regarding partner effects, results revealed that there were no significant associations between participants' accuracy and their partner's sexual satisfaction at the daily-level ($b = -.006$, $SE = .017$, $p = .703$) or the mean-level ($b = .006$, $SE = .010$, $p = .544$), or between participants' accuracy and their partner's relationship quality at the mean-level ($b = .026$, $SE = .019$, $p = .180$). However, on days when participants accurately detected their partner's sexual goals, their partner reported experiencing lower relationship quality ($b = -.057$, $SE = .023$, $p = .014$). There were also no significant associations between participants perceiving their partner's sexual goals in normative (or socially desirable) ways

and their partner's relationship quality (b = .018, SE = .025, p = .247) or sexual satisfaction (b = −.013, SE = .018, p = .471) at the daily level. However, participants who perceived their partner's sexual goals in normative (or socially desirable) ways had partners who experienced higher relationship quality (b = .165, SE = .018, p < .001) and higher sexual satisfaction (b = .094, SE = .011, p < .001) on average.

Most of these profile-based effects were not moderated by relationship length, the participant's gender, or the partner's gender (ps > .05). However, normativity was more strongly associated with average sexual satisfaction for male perceivers (b = .104, SE = .023, p <.001). Also, in longer, compared to shorter, relationships, normativity was more strongly associated with both participants' and partners' average relationship quality (participants: b = .014, SE = .003, p < .001; partners: b = .006, SE = .003, p = .022) and average sexual satisfaction (participants: b = .006, SE = .002, p <.001; partners: b = .003, SE = .002, p = .030). Taken together, these moderations suggest that the link between seeing a partner's sexual goals in positive ways and relational/sexual factors was stronger for men and people in longer relationships.

Are people accurate about certain types of sexual goals?

We next sought to test our question about whether people are accurate about certain types of goals (i.e., approach and avoidance). The profile-approach to accuracy—a person-centered approach that examines the pattern, or ranking, of all of a person's sexual goals at once—is not appropriate to test the distinction between approach and avoidance goals.[2] Instead, we used the Truth and Bias Model (West & Kenny, 2011), which is a variable-centered approach that can test approach and avoidance goals separately. The Truth and Bias Model distinguishes between directional bias and tracking accuracy (Fletcher & Kerr, 2010). Previous research has found that people can be both accurate and biased when making judgments about a partner in the sexual domain (e.g., perceptions of sexual interest; Muise et al., 2016). Thus, accuracy and bias are independent and can co-occur. In the current work, we focus on tracking accuracy but interested readers can find the directional bias effects in Tables S3 and S4 in the supplemental materials on OSF. In the Truth and Bias Model, tracking accuracy is the correlation between a judgment and the truth. In this context, tracking accuracy assesses whether people can accurately detect changes in their partners' approach or avoidance sexual goals across time. For example, does Pam know that Tom was more approach-motivated for this sexual encounter compared to previous ones?

To test whether people are accurate about certain sexual goals, we created an approach goals score and an avoidance goals score for each participant by averaging across participants' self-reports of the three approach goals (M = 5.69, SD = .99, R_c = .37) and the three avoidance goals (M = 2.20, SD = 1.60, R_c = .87), respectively. Likewise, to get scores for perceptions of a partner's approach and avoidance goals, we averaged across participants' reports of their partner's three approach goals (M = 2.27, SD = 1.63, R_c = .47) and three avoidance goals (M = 5.69, SD = .99, R_c = .88), respectively.

Next, we set up a two-level cross-classified Truth and Bias model in which time is crossed with couples and there are random intercepts for partners (level 1) who are nested

in couples (level 2). The dependent variable (perceptions of a partner's sexual goals) was centered on "the truth" (partners' self-reported sexual goals) by subtracting the grand-mean of the partner's self-reported sexual goals from perceptions of the partner's sexual goals on each day the couple engaged in sex. The predictor variable (partner's self-reported sexual goals) was also grand-mean centered by subtracting the average of partners' self-reported sexual goals across couples and time points. Thus, the slope of this predictor indexed tracking accuracy, or the degree to which participants' perceptions of their partner's sexual goals accurately tracked changes in their partners' sexual goals across the daily diary.

The results revealed that participants were able to accurately track their partner's approach sexual goals ($b = .169$, $SE = .033$, $p < .001$) and their partner's avoidance sexual goals ($b = .381$, $SE = .030$, $p < .001$). Following the suggestion of a reviewer, we explored the accuracy of individual items and found that participants were able to accurately track each of their partners sexual goals (see Table S5 in the supplemental materials on OSF for item-level effects).

Is accuracy about certain types of sexual goals associated with relationship quality and sexual satisfaction for the perceiver and/or their partner?

We tested whether accuracy for a partner's approach and avoidance goals is associated with relationship quality and sexual satisfaction for both the perceiver and their partner by entering the relationship quality (or sexual satisfaction) of perceivers and their partners as within-person centered moderators separately into the Truth and Bias Model. This is the approach that is commonly used and recommended for testing the correlates of accuracy in the Truth and Bias Model (e.g., Fletcher & Kerr, 2010; West & Kenny, 2011). The moderators tested whether perceivers and their partners were more or less satisfied than they typically were across the 21-day study when perceivers were accurate about their partner's approach or avoidance sexual goals.

Tracking accuracy was not associated with perceivers' daily relationship quality ($b = -.026$, $SE = .059$, $p = .662$) or sexual satisfaction ($b = -.060$, $SE = .049$, $p = .222$). Tracking accuracy for partner's approach goals was also not associated with higher relationship quality ($b = -.010$, $SE = .057$, $p = .856$) or sexual satisfaction ($b = .022$, $SE = .030$, $p = .471$) for their partners. Notably, the internal reliability of the three approach goal items was low, which may have contributed to why we did not observe any associations between relationship quality or sexual satisfaction and accuracy for approach sexual goals.

Tracking accuracy was not associated with higher relationship quality ($b = .004$, $SE = .043$, $p = .918$) or sexual satisfaction ($b = -.038$, $SE = .033$, $p = .250$) for perceivers. Likewise, tracking accuracy for a partner's avoidance sexual goals was not associated with higher relationship quality ($b = -.079$, $SE = .041$, $p = .054$) or sexual satisfaction ($b = -.011$, $SE = .033$, $p = .750$) for their partners.

Following the recommendation of a reviewer, we explored the effects for individual items and found that tracking accuracy was not associated with the relationship quality or sexual satisfaction of the perceiver or their partner for any of the individual items, with the

exception of one effect for item 2 (goal: to avoid feeling bad about oneself) for which accuracy was associated with a partner's lower relationship quality (see Tables S3 and S4 in the supplemental materials on OSF for item-level effects). This post-hoc exploration suggests that accurate perceptions of the goal were unrelated to relationship quality or sexual satisfaction regardless of the focus of the sexual goal (i.e., whether it was a self-focused, partner-focused, or relationship-focused goal).

General discussion

People often aim to understand their intimate partner's motivations, and this may be particularly true in emotionally charged, intimate domains, such as the sexual domain. In the current study, across two different approaches to testing accuracy, we found that people were indeed able to accurately perceive their partner's goals for engaging in sex, but accuracy was not associated with relational or sexual factors for the perceiver or their partner. The profile approach revealed that participants were able to accurately perceive the unique pattern of their partner's sexual goals for a given sexual encounter, but participants in longer relationships tended to be more accurate than participants in shorter relationships. The profile approach also revealed that, in addition to being accurate, participants also tended to perceive their partners as holding socially desirable sexual goals, but that women and participants with male partners (who in the current sample of primarily heterosexual couples were mostly women) tended to see their partners sexual goals in even more positive ways. The Truth and Bias approach, on the other hand, revealed that participants were able to track changes in their partner's approach or avoidance goals across time. Taken together, results from the profile approach and the Truth and Bias approach suggest that people have significant insight into their intimate partner's motivations for sex. However, neither accurately perceiving the unique pattern of a partner's sexual goals for a given sexual encounter (as revealed by the profile approach) nor accurately detecting changes in a partner's approach or avoidance sexual goals across time (as revealed by the Truth and Bias approach) was associated with relationship quality or sexual satisfaction for the perceiver or their partner.

In contrast, perceiving the unique pattern of a partner's sexual goals in positive ways (as revealed by the profile approach) was associated with higher relationship quality and sexual satisfaction for the perceiver at the daily-level and on average, as well as higher relationship quality and sexual satisfaction for their partner on average, associations which were stronger for men and people in longer relationships. Thus, our results suggest that it is positive, rather than accurate, perceptions of a partner's sexual goals that are linked to positive relational and sexual factors. These findings are in line with past work that shows that positive perceptions of a partner are associated with relationship satisfaction (Murray & Holmes, 1997) and the growing literature on the critical role of partner perceptions in intimate relationships (Campbell et al., 2005; Impett et al., 2005; Joel et al., 2013; Muise et al., 2016).

Notably, the current work used two approaches that conceptualize accuracy in different ways. The profile-based approach conceptualizes accuracy as an understanding of a partner's unique *pattern* of sexual goals. That is, being accurate entails being aware of a

partner's standing on a sexual goal relative to all their other sexual goals for a specific sexual encounter. In contrast, the Truth and Bias model conceptualizes accuracy as the ability to detect changes in one type of sexual goal (e.g., approach or avoidance goals) in isolation. For instance, being accurate involves knowing whether a partner is more (or less) approach-motivated to engage in sex today than they typically are. As such, results from these differing approaches should be seen as complementing one another; i.e., together, they provide more insight into what is related to relationship quality and sexual satisfaction. Specifically, perceiving the pattern of a partner's sexual goals for a given sexual encounter as more socially desirable was more relevant to relationship quality and sexual satisfaction than understanding how a partner's approach (or avoidance) sexual motivation has changed across sexual encounters.

Implications

A main strength of the current work is the use of the profile-based approach to index accuracy. While the profile approach is common in the literature on interpersonal perception (e.g., Carlson, 2016a; Human & Biesanz, 2011), it is rare in the study of intimate relationships (with few exceptions; e.g., Carlson, 2016b; Kerr et al., 2020). There are specific cases in which the use of the profile approach is extremely advantageous. In particular, in the context of the current work, participants hold multiple distinct sexual goals for a given sexual encounter (i.e., some that are approach vs. avoidance in nature; others that are more self-focused vs. more partner- or relationship-focused), suggesting that rankings of these sexual goals relative to one another might have important implications that could not be captured by using a variable-centered approach that examines each sexual goal in isolation. The profile approach allowed us to index people's ability to accurately perceive the pattern of their partner's sexual goals, which likely better captures how people actually hold and perceive sexual goals in everyday life. Overall, this study demonstrates how the strengths of a profile-based approach can be capitalized upon to better answer important questions in relationship science.

Another strength of the current study is the enhanced ecological validity afforded by the administration of daily surveys. Rather than relying on participants to recall past sexual encounters, participants instead reported on their own and their partner's sexual goals on the day of the sexual encounter. This design feature is more suited to capture the dynamic process of sexual motivation in daily life than one-time surveys and, thus, can provide a better understanding of people's perceptions of their partner's sexual goals in daily life and the implications of these perceptions.

Finally, this study contributes to a growing body of literature on the importance of partner perceptions in intimate relationships (Campbell et al., 2005; Impett et al., 2005; Joel et al., 2013; Muise et al., 2016) and an emerging literature on sexual goals (Impett et al., 2005; Muise et al., 2013). By bridging these two lines of work, the current study highlights the importance of studying perceived partner motives in the sexual domain. Particularly, this study demonstrates that positive perceptions of a partner's goals for sex are associated with factors involved in the maintenance of intimate relationships (i.e., sexual satisfaction and relationship quality). We encourage future research to test whether

people can be trained to perceive their partner's goals in more positive ways (i.e., if these perceptions can be shifted), and if this would have benefits for couples' relationship quality.

Limitations and future directions

One limitation of the current work is that it is correlational and, as such, we were unable to determine causality. For instance, it is possible that perceiving an intimate partner's sexual goals in normative or positive ways leads to higher relationship quality, but it is also possible that people who positively perceive their partner's sexual goals are able to do so because they are more satisfied in their relationships. It is also possible that there are characteristics of high-quality relationships that allow people to be both highly satisfied and more inclined to see their partner's sexual goals in positive ways. For example, perhaps high partner responsiveness (Reis et al., 2004) leads to both higher relationship quality and more positive perceptions of a partner's sexual goals. An important avenue for future work will be to disentangle the direction of causality[3] and the mechanism(s) underlying the association between positive perceptions of partners' sexual goals and relational and sexual factors.

Based on the literature, we expected that accuracy might be associated with lower relationship quality and sexual satisfaction in relationship-threatening situations. As such, we explored the associations between accuracy and relationship quality and sexual satisfaction for approach and avoidance goals separately, expecting avoidance goals to constitute a relationship-threatening situation. However, it is possible that accurately perceiving that a partner engaged in sex for avoidance goals was not a strong relationship-threatening situation. Instead, trying to avoid upsetting a partner or instigating conflict may have been interpreted by participants as trying to protect the relationship, especially given that the current sample consists of couples in highly satisfied intimate relationships. It is possible that the associations between perceptions of a partner's sexual goals and relational or sexual factors may be different for couples who are experiencing lower relationship quality or are less sexually satisfied. Future research should strive to test the effects of accurately perceiving a partner's sexual goals among couples coping with a sexual issue, who tend to be less sexually satisfied (e.g., Rosen et al., 2019), and who may have higher avoidance goals for sex (Dubé et al., 2017).

Further, in the current sample, the normative (i.e., average) profile of sexual goals was highly socially desirable. As such, normativity reflected having positive perceptions of a partner's sexual goals, which was associated with higher relationship quality and sexual satisfaction. However, it is important to note that in other samples (i.e., couples with lower relationship quality and satisfaction) the average profile might not be as socially desirable and, as such, might not be related to higher quality or satisfaction. Future work is needed to test the effects of perceiving a partner's sexual goals in normative ways among couples with lower relationship quality and/or sexual satisfaction.

The current research demonstrated that people are accurate about their partner's sexual goals, but the sources of this accuracy are unknown. Future research should explore what contributes to people's insight into their partner's motivations; for example, do partners

openly communicate about their sexual goals with one another? Past work suggests that direct, open communication is rare and often avoided in the domain of sexuality (Byers, 2011) (Metts & Spitzberg, 1996) , leading us to expect that explicit communication about one's sexual goals in the context of couples' daily lives is rare. However, perhaps partners who openly communicate about their sexual goals tend to be more accurate. This possibility and other potential sources of accuracy should be explored.

Conclusion

This work demonstrates that people can accurately perceive the unique pattern of their intimate partner's sexual goals for a given sexual interaction, as well as changes in their partner's approach and avoidance sexual goals. Further, this study explores relational and sexual factors associated with accurately perceiving a partner's sexual goals. The central finding from the current work is that it is positivity, not accuracy, that is associated with greater relationship quality and sexual satisfaction, which contributes to a broader understanding that perceptions of a partner's sexual goals are associated with the quality of people's sex lives and relationships.

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Supplemental Material

Supplemental material for this article is available online.

Notes

1. Participants were also accurate about their partner's sexual goals when controlling for projection of their own sexual goals (see supplemental materials on OSF).
2. Originally, we preregistered that we would test this distinction by creating a profile of contrast codes in which the six sexual goal items are coded as either approach or avoidance motivated and use this profile of contrast codes as a moderator in our profile models. However, we did not conduct this analysis as we came to the decision post-preregistration that it could only reveal *if* there was a moderation by type of goal, but not the *direction* of the simple effects. Instead, we decided that the Truth and Bias Model was a much more appropriate method to test our questions.
3. See supplemental materials on OSF for our attempt at disentangling directionality in the current sample, as well as a discussion of the limitations of this attempt and why we believe future research is necessary.

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