**Perception of Communal Motives in Couples: Accuracy, Bias, and their
Associations with Relationship Length**

Sebastian Pusch¹, Felix D. Schönbrodt², Caroline Zygar-Hoffmann², and Birk
Hagemeyer¹

¹Friedrich-Schiller-Universität Jena, Germany

²Ludwig-Maximilians-Universität München, Germany

Article accepted for publication in *Journal of Research in Personality*

This manuscript might not exactly replicate the final version published in the journal. It is not the copy of record.

Please cite as:

Pusch, S., Schönbrodt, F.D., Zygar-Hoffmann, C., & Hagemeyer, B. (in press).
Perception of communal motives in couples: Accuracy, bias, and their
associations with relationship length. *Journal of Research in Personality*.

Author Note

Sebastian Pusch, Institute of Psychology, Friedrich-Schiller-Universität Jena, Germany. Felix D. Schönbrodt, Department of Psychology, Ludwig-Maximilians-Universität München, Germany. Caroline Zygar-Hoffmann, Department of Psychology, Ludwig-Maximilians-Universität München, Germany. Birk Hagemeyer, Institute of Psychology, Friedrich-Schiller-Universität Jena, Germany.

Correspondence concerning this article should be addressed to Sebastian Pusch, Humboldtstraße 11, 07743 Jena, Germany. Email: sebastian.pusch@uni-jena.de.

Funding: The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Preparation of this manuscript was supported by Grants HA 6884/2-1 and SCHO 1334/5-1 from the German Research Foundation.

Author Contributions: SP, FS, CZ-H, and BH conceptualized and designed the study. Data was collected by SP and CZ-H. SP analyzed the data and wrote the manuscript, and all authors contributed to paper revisions and approved the final version.

Abstract

Can romantic partners accurately perceive each other's communal motives, or are these perceptions biased by their own motivational hopes and fears? This study used data from $N = 1,905$ partnered participants to examine the extent to which partner perceptions of communal motives correspond to targets' (accuracy) and perceivers' (motivational bias) explicit and implicit communal motives. Our results indicate that explicit communal motives and implicit communal approach motives can be (a) accurately inferred and (b) positively bias communal motive perception. Furthermore, there was no evidence for moderation of either accuracy or motivational bias by relationship length. These findings point to the early visibility of both implicit and explicit motives in couples, as well as their persistent biasing effects on partner perception.

Keywords: interpersonal perception, implicit motives, explicit motives, couple relationships, communion

Perception of Communal Motives in Couples: Accuracy, Bias, and their Associations with Relationship Length

1 Introduction

People differ in the amount of intimacy and closeness they seek within a romantic relationship. For some, communion with the partner is of utmost importance — for others, it can become confining fast (e.g., Frost & Forrester, 2013; Mashek & Sherman, 2004). From the very beginning of the relationship, people seek to figure out where their partner stands on this question. For good reason: Understanding the partner’s communal motives may help to anticipate his/her behavior and evaluate the prospects of realizing one’s own communal needs in the relationship. Thus, investigating partners’ perceptions of each other’s communal motives is essential to understand the motivational processes that characterize close and happy relationships (Reis & Shaver, 1988; Sanderson & Cantor, 2001).

However, it is not fully understood how people form perceptions of their partners’ communal motives. According to dual-motive theory (McClelland et al., 1989; Schultheiss, 2001), motive perceptions may tap into two functionally distinct motive systems: Explicit motives, which are part of partners’ motivational self-concept, and implicit motives, which operate outside partners’ conscious awareness. Taking this duality of motives into account, the present research addressed two core questions in research on partner perception. First, we examined the extent to which individuals’ perceptions of their partners’ communal motives correspond to reality (i.e., the target’s actual explicit and implicit communal motives; referred to as accuracy) and motivational bias (i.e., the perceiver’s own explicit and implicit communal motives). Second, using recent methods (Hildebrandt et al., 2016), we explored whether accuracy and motivational bias are moderated by relationship length.

1.1 Partner-Related Communal Motives

Couple relationships count among the most intimate and closest types of relationships (Berscheid et al., 1989; Neyer et al., 2011). However, not everyone seeks

and enjoys the same amount of emotional or physical closeness with their partner. Rather, people demonstrate stable between-person differences in the dispositional preference for communal experiences in their partner relationships, which are conceptualized as partner-related communal motive dispositions (Hagemeyer & Neyer, 2012; Hagemeyer, Neyer, et al., 2013). Communal motive dispositions refer to relatively stable evaluative dispositions for classes of relationship situations that share communal characteristics. Hence, people with stronger partner-related communal motives are supposed to find communal situations in their relationships more rewarding and to derive greater pleasure from them. As a consequence, people with stronger partner-related communal motives are supposed to more often engage in behavior aimed at establishing or maintaining communion with the partner, such as self-disclosing personal thoughts and feelings, showing affection and understanding for their partner, engaging in joint activities with their partners, or making efforts to improve the relationship. Previous research suggests that stronger communal motives are associated with better relationship functioning, as indicated by higher relationship satisfaction (Czikmanti et al., 2018; Hagemeyer, Neberich, et al., 2013; Hagemeyer, Neyer, et al., 2013; Zygar et al., 2018a), fewer conflicts (Czikmanti et al., 2018), and higher relationship stability (Hagemeyer, Neyer, et al., 2013). According to dual-motive theory (McClelland et al., 1989; Schultheiss, 2001), two functionally distinct communal motives are distinguished. On the one hand, explicit communal motives describe a person's self-ascribed communal goals and are supposed to predict rather controlled behavior (such as deliberate decision making). As part of the motivational self-concept, explicit motives are accessible by self-report. On the other hand, implicit communal motives guide rather spontaneous behavior and affective processes during goal pursuit. Implicit motives operate rather unconsciously and are thus assessed with indirect measures.

1.2 Accurate Motive Perception

Can people accurately assess their partners' explicit as well as implicit communal motives? Generally, whether people can accurately perceive others depends on two

conditions (Brunswik, 1956; Funder, 1995): How strongly the trait under study relates to observable behavioral cues, and whether the perceiver correctly uses these cues in forming his/her impression of the target person. Previous research on partner perception has provided evidence that individuals can accurately assess their partners' communal characteristics. Accuracy has been demonstrated, for instance, for perceptions of partners' communal responsiveness and care (Lemay & Clark, 2008; Lemay et al., 2007; Lemay & Neal, 2013; Von Culin et al., 2017), communal regard (Overall et al., 2012), emotional support (Priem et al., 2009), sacrifices (Visserman, Impett, et al., 2018), or momentary closeness behavior (Pusch et al., 2020; Sadikaj et al., 2017). Because such partner acts are instrumental to establishing or maintaining communal experiences in the relationship, they can be conceptualized as expressions of partners' underlying communal motive dispositions (Horowitz et al., 2006). Thus, accurate perceptions of partners' communal behaviors should contribute to accurate perceptions of partners' communal motive dispositions.

According to the dual-lens model proposed by Nestler and Back (2013), personality perceptions can tap into the target's explicit and implicit characteristics, as both can produce relevant cues. This should likewise apply to communal motive perception in couples: Explicit and implicit communal motives select and energize interpersonal behaviors that, despite their functional differences, aim to establish and maintain communal experiences with the partner (McClelland et al., 1989). Thus, both individuals' explicit and implicit communal motives should provide behavioral cues that their partners can use for accurate motive perceptions. Prior research has not yet examined accuracy in the perception of communal motives from a dual-motive perspective but focused exclusively on explicit motives: Sanderson and Cantor (2001) reported a positive association between individuals' perceptions of their partners' intimacy goals and partners' actual, self-ascribed goals. However, as only 44 couples participated in this study, a replication of this finding in a larger sample is needed.

1.3 Motivational Bias

Although rooted in reality, partner perceptions can also be biased by perceivers' own needs and wishes. Most people seem motivated to hold positive illusions about their partners (Murray & Holmes, 1997; Murray et al., 1996) and frequently project their ideals and goals onto their partners (Kenny & Acitelli, 2001; LaBuda et al., 2019). Particularly in the communal domain, projection bias appears to be a common phenomenon. Previous studies have, for example, shown that people project their own communal care and responsiveness onto their partners (Lemay & Clark, 2008; Lemay et al., 2007; Lemay & Neal, 2013; Von Culin et al., 2017). With regard to the perception of communal motives, Sanderson and Cantor (2001) likewise found that individuals with stronger explicit intimacy goals perceived their partners to have stronger intimacy goals as well, irrespective of the partners' actual goals.

Indeed, there is evidence that implicit and explicit motives affect how people attend to, interpret, and remember social information (e.g., Gable & Impett, 2012; Gable & Poore, 2008; Woike & Bender, 2009). Dual-motive theory (McClelland et al., 1989; Schultheiss, 2001) predicts that explicit and implicit motives are involved in different types of information processing. Whereas the explicit motive system is supposed to involve propositional-reflective processing of verbal-symbolic cues (such as conversations, written words, or questions), the implicit motive system is theorized to operate through associative-affective networks that preferably process non-verbal cues (such as facial expressions of emotions, gestures, or touches). We know of no previous study that directly investigated the unique effects of explicit and implicit communal motives on partner perception. However, there is evidence that explicit and implicit motives are differentially related to the recall of partnership events (for a review, see Woike, 2008). Woike (1995), for instance, found that individuals with stronger implicit affiliation motives better remembered social events charged with affect. In contrast, individuals with stronger explicit affiliation motives showed better memory for routine social events (such as having dinner with a relationship partner). Hence, to get a more complete picture of motivational bias in couples, both explicit and implicit communal

motives should be considered.

Partner perception may, however, not only be biased by motivational hopes, but also by motivational fears. People may interindividually and intraindividually differ in their tendencies to approach rewarding experiences (referred to as approach motives) and avoid negative experiences (referred to as avoidance motives) in their relationships (Carver & Scheier, 1990; Gable & Impett, 2012; Weinberger et al., 2010). The approach-avoidance distinction can be applied to communal motives as well (Hagemeyer & Neyer, 2012). People may for instance seek closeness to their partners because it affords them pleasure (a communal incentive) or because they want to avoid feeling lonely (a communal disincentive). Approach and avoidance motives represent distinct constructs that differ in their effects on social perception. Compared to approach-motivated people, people with strong avoidance motives seem to better remember and more strongly focus on negative events in their close relationships and to interpret neutral events in a more negative manner (e.g., Gable, 2006; Kuster et al., 2015; Strachman & Gable, 2006).

Overall, previous research on communal partner perception has rarely adopted an approach-avoidance perspective, but predominantly focused on explicit communal approach tendencies or treated communal approach and avoidance tendencies as opposite ends of a continuum (e.g., Lemay & Clark, 2008; Lemay et al., 2007; Lemay & Neal, 2013; Sanderson & Cantor, 2001; Von Culin et al., 2017). The study by Sanderson and Cantor (2001), for instance, only assessed participants' explicit goals to approach intimacy in their relationships. To get a more complete picture, investigations using a broader approach to measuring communal motives (i.e., measures not limited to intimacy, implicit communal motive measures, measures of communal approach and avoidance motives) are needed. In line with previous research (e.g., Gable, 2006; Kuster et al., 2015; Strachman & Gable, 2006), we expected that strong communal approach motives would be associated with an overestimation of the partner's communal orientation, whereas strong communal avoidance motives should manifest in an underestimation. Indeed, a recent study by Pusch et al. (2020) suggests that communal

approach and avoidance motives differently bias partner perception. Whereas perceivers with strong explicit communal motives or strong implicit communal approach motives systematically overestimated their partner's momentary communal behavior, strong implicit communal avoidance motives were associated with systematic underestimation. In the current study, we aimed to extend these findings to the perception of dispositional communal motives.

1.4 Relationship Length

How people perceive their partners can depend on a variety of relationship characteristics. Extensive research has focused on relationship length as such a characteristic — but produced mixed findings. Several studies suggest that people are more accurate in judging others they have known for a longer time (for a recent review, see Back & Nestler, 2016). For instance, Wessels et al. (2020) found that individuals demonstrate greater accuracy and less positivity bias in judging the personality traits of others they know better. In contrast, a meta-analysis of partner perception studies on a variety of constructs (such as attitudes, behavior, and the Big Five; Fletcher & Kerr, 2010) neither found accuracy nor directional bias to be significantly associated with relationship length. As an explanation, the authors proposed that "accuracy probably peaks relatively early in romantic relationships" (p. 647). However, the exact time it takes for partner perceptions to consolidate remains speculative. Research on adult attachment suggests that cognitive representations of the relationship require up to two years to fully establish (e.g., Fraley & Davis, 1997; Hazan & Shaver, 1994). At the beginning of the relationship, most couples seem to go through a phase of strong infatuation (Reese-Weber, 2015), which may cloud partner perceptions with a general positivity bias. Partners' individual characteristics (such as communal motives) may thus not become relevant for partner perception until this honeymoon phase wears off.

1.5 The Present Study

The present study examined whether individuals' perceptions of their partners' communal motives are accurate (i.e., related to targets' actual communal motives) and

motivationally biased (i.e., related to perceivers' communal motives). To thoroughly examine this question, we considered two theoretical distinctions of communal motives: Implicit vs. explicit communal motives and communal approach vs. communal avoidance motives. In this regard, the present study extends existing literature on communal motive perception in couples, which has predominantly focused on explicit communal approach motives (Sanderson & Cantor, 2001). Specifically, we focused on the explicit desire for closeness to the partner (Hagemeyer, Neyer, et al., 2013) and the implicit partner-related need for communion (*pnCommunion*; Hagemeyer & Neyer, 2012). The relevance of these motive measures for relationship functioning, relationship behavior, and communal motivation has been demonstrated in previous studies (Czikmanti et al., 2018; Hagemeyer, Neberich, et al., 2013; Hagemeyer & Neyer, 2012; Hagemeyer, Neyer, et al., 2013; Hagemeyer et al., 2015; Pusch et al., 2020; Zygar et al., 2018a; Zygar-Hoffmann, Pusch, et al., 2020). Our measure of *pnCommunion* allowed us to differentiate between approach and avoidance tendencies, whereas our measure of the explicit desire for closeness did not. However, item wordings and evidence on the construct validity of this measure from prior studies (Hagemeyer, Neberich, et al., 2013; Hagemeyer, Neyer, et al., 2013; Zygar et al., 2018a) suggest that it mainly captures explicit communal approach motivation.

We hypothesized that couples would demonstrate substantial accuracy in their communal motive perceptions. In line with previous research (e.g., LaBuda et al., 2019; Sanderson & Cantor, 2001) and the dual-lens model of personality judgment (Nestler & Back, 2013), we expected individuals' perceptions of their partners' communal motives to be positively associated with their partners' actual explicit desire for closeness, *pnCommunion Approach*, and *pnCommunion Avoidance*. Independent of this accuracy, communal motive perceptions should also involve motivational bias due to perceivers' own communal motives. In line with previous research (e.g., Gable, 2006; Kuster et al., 2015; Pusch et al., 2020; Sanderson & Cantor, 2001; Strachman & Gable, 2006), we expected a strong explicit desire for closeness and a strong *pnCommunion Approach* to be associated with an overestimation, and a strong *pnCommunion Avoidance* to be

associated with an underestimation of the partner’s communal motives (as indicated by positive and negative bias effects, respectively). We addressed our hypotheses with Actor-Partner Interdependence Models (Kenny et al., 2006) which are well established and widely used in research on partner perception (e.g., Campbell et al., 2013; Clark et al., 2017; Kenny & Acitelli, 2001; Rodriguez et al., 2018).

Additionally, we examined whether relationship length moderates accuracy and motivational bias in communal motive perceptions. We used the recent local structural equation modeling (LSEM; Hildebrandt et al., 2016) approach, which enabled us to freely estimate and compare accuracy and motivational bias across participants’ relationship length. Instead of arbitrarily grouping relationship length into specific categories — which likely yields biased results (MacCallum et al., 2002) — LSEM allowed us to account for the continuous measurement of relationship length. To our knowledge, the present study is the first to examine whether relationship length moderates accuracy and bias in couples’ communal motive perceptions. Due to the mixed state of evidence for other traits reviewed in the previous section, we refrained from specific expectations regarding the shape of potential moderating effects. There might be no associations at all (i.e., accuracy and motivational bias do not depend on relationship length), linear associations (e.g., accuracy increases and motivational bias decreases in longer relationships), or even non-linear associations (e.g., accuracy and motivational bias transpire only after couples’ honeymoon phase wears off).¹

2 Method

The data used in the present study are accessible to researchers as scientific-use-files.² Detailed information on all used measures and reproducible analysis scripts are available at

¹ Data analyses were not preregistered.

² The data from Sample 1 will be published along with the 12th release of the German Family Panel (*pairfam*; Huinink et al., 2011), which is scheduled for May/June 2021. By that time, the scientific-use-file can be accessed via the *pairfam* website (<https://www.pairfam.de/>). In the meantime, the data can be obtained from the first author. For data from Sample 2 and Sample 3, please refer to Zygar et al. (2018b) and Zygar-Hoffmann, Hagemeyer, et al. (2020), respectively.

https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e.

2.1 Participants

The present research used combined data from three studies on German couples that were parts of a larger research project on the dynamics of implicit motives in couple relationships. In planning this project, we wanted to ensure at least 80% power to detect effects of average size in psychological research ($r = .21$; Richard et al., 2003) on the couple level, which requires at least 175 couples. To our knowledge, there is only one previous study that investigated accuracy and motivational bias in partner perception of communal motives (Sanderson & Cantor, 2001). Power analyses using the *APIMPowerR* app (Ackermann & Kenny, 2016) revealed that a minimum of $N = 20$ and $N = 13$ couples are needed to detect the accuracy effect ($\beta = .36$) and motivational bias effect ($\beta = .46$), respectively, as reported in this study, with a power of at least 80% (two-tailed with a .05 criterion of statistical significance).³ Combining the three samples allowed us to use all available data on communal motive perception in couples and surpass these sample size requirements by far, yielding a substantial increase in statistical power.

Data from Sample 1 ($N = 1,216$ individuals) were collected in cooperation with the German Family Panel (*pairfam*; Huinink et al., 2011). In 2016/2017, *pairfam* participants and their partners were recruited via postal and electronic mail. To gain a larger sample, additional participants were recruited via local and online advertising. Sample 2 ($N = 154$ individuals) and Sample 3 ($N = 576$ individuals) were recruited via newsletters and social media posts in 2016 and 2017/2018, respectively.

To be eligible for participation in either study, individuals had to be involved in a steady romantic relationship, be at least 18 years old, and speak German fluently.

After registration, each member of a couple received an email with a personalized link

³ The study by Sanderson and Cantor (2001) comprised a sample of 44 couples. Because of this low sample size, the found accuracy and bias effects run the risk of being misestimated. We therefore conducted an additional power analysis that was based on more conservative estimates of accuracy and motivational bias, namely the halved regression coefficients reported by Sanderson and Cantor (2001). At least $N = 111$ and $N = 69$ couples are needed to detect these accuracy and motivational bias effects, respectively, with at least 80% power.

to an online questionnaire set up via the formr framework (Arslan et al., 2019). The questionnaires differed slightly between the three studies. However, all variables used in the present analyses were assessed with identical measures. Both partners of a couple were asked to complete the questionnaire individually and not to discuss any answers with each other. In addition to the questionnaire, Sample 2 and Sample 3 subsequently participated in experience sampling. These experience sampling data were not used for the present analyses (see Pusch et al., 2020; Zygar et al., 2018a; Zygar-Hoffmann, Pusch, et al., 2020; Zygar-Hoffmann & Schönbrodt, 2020, for analyses of the experience sampling data). As compensation, participants in Sample 1 received personalized feedback about their explicit partner-related motives and could participate in a raffle for shopping and travel vouchers with a total worth of 9,000 €. Participants in Sample 2 received personalized feedback about their results and course credit and could sign up for a voucher lottery if they completed at least 80% of all experience sampling surveys. In Sample 3, couples received up to 190 €.

In Sample 1, 39 participants were excluded because they were younger than 18 years ($n = 3$), in a same-sex relationship ($n = 35$), or identified as neither female nor male ($n = 1$).⁴ In Sample 2, two participants who faked to be a couple were excluded. In Sample 3, no participants had to be excluded. The resulting combined sample comprised 1,905 participants (54% female) from 1,118 couples. Participants were, on average, 30.90 years old ($SD = 8.66$ years, range: 18 to 68 years) and in the relationship with their partner for 6.72 years ($SD = 6.63$ years, range: 0.5 months to 50.83 years). Most participants had no children ($n = 582$ had one to four children), and the majority (80 %) reported having a high school diploma (German Abitur).

⁴ Our LSEM moderation analyses were based on dyadic path models, which require a criterion by which the two members of a couple are distinguished. We made this distinction based on participants' sex (Kenny et al., 2006). Therefore, participants from same-sex relationships or those who identified as neither female nor male were excluded.

2.2 Measures

2.2.1 *Explicit Partner-Related Desire for Closeness*

The partner-related explicit desire for closeness was measured with the ABC questionnaire of social desires (Hagemeyer, Neyer, et al., 2013). On eight items, participants indicated how often they usually experience closeness motivation in their relationship (from 1 = *never* to 7 = *always*). Half of the items assessed appetitive motivation (e.g., "I like being very close to my partner") and the other half assessed aversive motivation (e.g., "I feel uncomfortable in the presence of my partner").⁵ Reliability (using reversed aversion items) was high for men ($\alpha = .88$) and women ($\alpha = .91$).

2.2.2 *Implicit Partner-Related Need for Communion*

Implicit motives cannot be verbalized and therefore need to be assessed with indirect measures (Schultheiss & Pang, 2007). To do so, the current study utilized the Partner-Related Agency and Communion Test (PACT; Hagemeyer & Neyer, 2012), which follows a partner-specific approach to the measurement of implicit motives. Participants were instructed to invent relationship stories in response to eight ambiguous picture cues, which all show social scenes in the form of blurred photographs or line drawings. Participants then elaborated on each story by openly answering three questions regarding the behavior and feelings of the respective protagonist: "What is important to the person in this situation, and what is he/she doing?", "How is the person feeling in this situation, and how are his/her feelings for his/her partner?", and "Why is the person feeling this way?". Two out of five trained coders were randomly assigned to each case and independently coded the frequency of communal approach and avoidance imagery in the written answers. Communal approach imagery was classified into six content categories: *Emotional Closeness*, *Positive Evaluations*, *Empathy*, *Commitment/Community*, *Personal Encounters*, and *Attachment*. Communal

⁵ Please see the supplemental measures information (available at https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e) for exact wording of all eight items.

avoidance was coded for answers indicating *Fear of Loneliness* (for details on the scoring rules, see Hagemeyer & Neyer, 2012).⁶ Ambiguous cases were resolved by discussion among all coders. Each coder's number of content categories was summed up to compute raw motive scores; hence, two scores were available per participant and motive (approach and avoidance). Agreement among coders was high, $ICC_{\text{approach}}(1, 2) = .98$, $ICC_{\text{avoidance}}(1, 2) = .95$. Because story length ($M = 301$, $SD = 145$) was associated with raw motive scores (ranging between $r = .16$ and $r = .36$), word count was partialled out of both coders' scores using a robust regression approach (Schönbrodt et al., 2020).

2.2.3 *Perception of Partner's Desire for Closeness*

Participants rated their partners' desire for closeness with a shortened version of the ABC closeness scale. On a scale ranging from 1 = *never* to 7 = *always*, participants indicated how they perceived their partner's closeness appetite (e.g., "My partner likes being very close to me") and closeness aversion (e.g., "My partner feels uncomfortable in my presence") on two items each. Reliability was high for men ($\alpha = .90$) and women ($\alpha = .88$).

2.2.4 *Relationship Length*

Relationship length was assessed by asking participants to indicate the number of years and months they have been in the relationship with their current partner. As couple members strongly agreed in their reports ($r = .96$), relationship length was averaged within couples for all subsequent analyses.

3 Results

3.1 Descriptive Analyses

Means, standard deviations, and correlations of all variables are presented in Table 1. Men and women did not significantly differ in their self-rated explicit desires for

⁶ An English paper-pencil version of the PACT can be found in the online repository for this paper (https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e). To illustrate the coding procedure, we also present an example of a PACT answer in the supplemental materials (Figure S1).

closeness ($t(786) = 0.60, p = .546, d = 0.00$) and residualized pnCommunion Approach scores ($t(754) = -0.84, p = .399, d = -0.05$). However, women had significantly higher pnCommunion Avoidance scores ($t(754) = 3.55, p < .001, d = 0.15$) and judged their partners' desire for closeness as stronger than men ($t(786) = 3.99, p < .001, d = 0.19$). Perceptions of partners' desire for closeness were significantly and negatively associated with relationship length, indicating that individuals in longer relationships perceived their partners' communal motives to be weaker. Furthermore, there were significant within-couple correlations, indicating dyadic non-independence of the data.

3.2 Accuracy and Motivational Bias

We examined accuracy and motivational bias in the perception of communal motives in couples with latent Actor-Partner Interdependence Models (APIM; Kenny et al., 2006). APIMs allow the estimation of unique effects of couple members' predictor variables on their own outcomes (i.e., actor effects) and on their partners' outcomes (i.e., partner effects). We estimated three separate APIMs in which male and female couple members' perceptions of their partners' desire for closeness were regressed on their own and their partners' (1) explicit desires for closeness, (2) pnCommunion Approach, and (3) pnCommunion Avoidance (see Figure 1). Thus, in the APIM, each couple member was treated as both perceiver and target. The measurement and structural specifications of our latent APIMs are detailed in Figure 1. To model latent explicit desires for closeness as well as perceptions of the partner's desire for closeness, participants' manifest appetite and aversion subscales were used as indicators with opposite factor loadings (fixed to 1 and -1, respectively; Figure 1, panel A; see also Hagemeyer, Neyer, et al., 2013). To model latent pnCommunion Approach and Avoidance, the residualized motive scores of the two coders were used as manifest indicators with both factor loadings fixed to 1 (Figure 1, panel B). In these models, partner effects quantify the extent of accuracy in partner perceptions; actor effects quantify the extent of perceptual bias due to perceivers' own communal motives (Kenny & Acitelli, 2001).

We controlled for differences in intercepts across the three studies by adding two contrast effects to the APIMs (contrast₁: Sample 1 vs. Sample 2; contrast₂: Samples 1 and 2 vs. Sample 3). Latent factor variances and actor and partner effects were constrained to be equal across men and women because we had no a priori expectations regarding sex differences.⁷ The APIMs were run in R version 3.5.3 (R Core Team, 2019) using the structural equation modeling package lavaan (Rosseel, 2012). Standard errors were calculated using robust maximum likelihood estimation, and missing data were handled with full information maximum likelihood procedures.⁸ In accordance with guidelines proposed by Marsh et al. (2005), all three latent APIMs had an acceptable fit to the data (all CFI $\geq$.959, all RMSEA $\leq$.057, all SRMR $\leq$.070).

As displayed in Table 2, individuals' perceptions of their partners' desire for closeness were significantly and positively associated with their partners' self-rated desires for closeness, indicating perceptual accuracy. Independent of this, individuals judged their partners' desire for closeness to be stronger the stronger they rated their own explicit desire, which points to an incremental motivational bias. As expected, we also found significant and positive actor and partner effects of pnCommunion Approach. This finding indicates that individuals' perceptions of their partner's desire for closeness tap into their partners' pnCommunion Approach (partner effect), but are also positively biased by their own pnCommunion Approach (actor effect). Compared to the effects of the explicit desire for closeness, actor and partner effects of pnCommunion Approach were, however, small. Regarding pnCommunion Avoidance, no significant effects were found. Hence, there was no evidence for a contribution of pnCommunion Avoidance to accuracy or motivational bias in communal motive perception.⁹

In a supplemental analysis, we further examined the unique actor and partner

⁷ Scaled χ^2 difference tests found no significant sex differences, except in the variances of the explicit desire for closeness; however, all results remained similar when standardizing the effects using men's and women's (freely estimated) pooled variance.

⁸ As detailed in the supplemental materials (Table S5 and Figure S4), results were largely identical when using listwise deletion instead of full information likelihood procedures to handle missing data.

⁹ As detailed in the supplemental materials (Table S2), all effects were similar with relationship length included as a covariate.

effects of the explicit desire for closeness and pnCommunion Approach by analyzing both motives simultaneously.¹⁰ As detailed in the supplemental materials (Table S3), the positive actor effects (i.e., motivational bias) of both motives remained significant in this combined model, indicating that they uniquely contribute to an overestimation of the partner's desire for closeness. Regarding partner effects (i.e., accuracy), the explicit desire for closeness remained a significant predictor, whereas pnCommunion Approach did not.

3.3 Moderation of Accuracy and Motivational Bias by Relationship Length

To test for moderation effects of relationship length on accuracy and motivational bias, we re-estimated our latent APIMs in a local structural equation modeling (LSEM; Hildebrandt et al., 2016) framework using the sirt R package (Robitzsch, 2019). In LSEM, a given model is repeatedly estimated for each focal point (i.e., specific value) of a continuously measured moderator variable. In our case, the three latent APIMs described in the previous section were estimated for each month in the range of participants' relationship length. Each local APIM was estimated based on weighted observations: Participants with a relationship length that exactly matched the respective focal point received a weight of 1, whereas participants with shorter or longer relationships received decreasing weights. Because relationship length was positively skewed (see Figure S2 in the supplemental materials), effective sample sizes at more than 165 months (13.75 years) relationship length dropped below 200; we thus estimated our local APIMs up to this focal point (Olaru et al., 2019).

Figure 2 illustrates the estimates of accuracy (panel A) and motivational bias (panel B) across the first 165 months of couples' relationships. Point-wise permutation tests with 1,000 permutations (Hildebrandt et al., 2016) found no significant variation in any of the local actor or partner effects of the three communal motives.¹¹ Thus, there

¹⁰ PnCommunion Avoidance was not included in this supplemental analysis because it had no significant effects on partner perception in the main model; including it did not change the results (see Table S4 in the supplemental materials).

¹¹ Exact *p*-values of the permutation tests are displayed in the supplemental materials (see Figure S3).

was no evidence for a moderation of accuracy or motivational bias by relationship length.

4 Discussion

The present research examined accuracy and motivational bias in communal motive perceptions in couples. Specifically, we investigated the extent to which communal motive perceptions correspond to both the target's and perceiver's explicit and implicit communal motives, and whether relationship length moderates these associations. In sum, we found evidence for accuracy and motivational bias in relation to both explicit and implicit communal motives, but no evidence for moderation by relationship length.

4.1 Accuracy of Communal Motive Perceptions

Our analyses revealed a positive association between individuals' perceptions of their partners' desire for closeness and their partners' actual explicit desire for closeness. This association was, like in previous research on broader personality traits (Fletcher & Kerr, 2010) or communal partner behavior (Lemay & Clark, 2008; Lemay et al., 2007; Lemay & Neal, 2013; Overall et al., 2012; Pusch et al., 2020; Von Culin et al., 2017) fairly substantial. Consistent with the study by Sanderson and Cantor (2001), but based on a much larger sample, this result corroborates that people are generally able to infer their partners' explicit communal motives with accuracy. Moreover, partner perceptions were significantly and positively associated with partners' *pnCommunion Approach*. Supporting our predictions based on the dual-lens model (Nestler & Back, 2013), this finding provides first evidence that people can also tap into their partners' implicitly represented motives. However, supplemental analyses revealed that this association was not incremental to the effect of the explicit communal motive. Thus, it seems that people can infer their partners' implicit communal approach motives only to the extent that they overlap with partners' explicit communal motives. Implicit motives are theorized to guide rather spontaneous behavior and affective expressions (Schultheiss, 2001) that might be less verbalizable. Deliberate motive judgments, as

analyzed in the present study, may instead more strongly rely on verbal cues (Nestler & Back, 2013), which have stronger conceptual and empirical links with explicit motives (e.g., Hagemeyer et al., 2016; Schultheiss, 2001). Future research is needed to identify the specific verbal and non-verbal cues fueled by explicit and implicit partner-related communal motives and, in turn, used for communal motive perceptions. Moreover, participants' perceptions of their partners' communal motives were measured in a way that was more symmetrical to their explicit than implicit communal motives (Hagemeyer, Neyer, et al., 2013). Future research should also include implicit measures of partner perception such as implicit partner evaluations (Krause & Dufner, 2019; Nestler & Back, 2013) or measures that more closely parallel the content categories used for coding motive imagery in the PACT.

Finally, we found no evidence for an association between partner perceptions and pnCommunion Avoidance. Thus, despite the high statistical power of the present study, we found no evidence that people are able to infer their partners' communal avoidance motives or are biased by their own implicit communal fears. This finding diverges from that of LaBuda et al. (2019) who showed that people can accurately judge their partners' avoidance motives. However, this study differed from the current study in three respects: LaBuda et al. (2019) (a) assessed daily motivations and not dispositional avoidance motives, (b) focused on explicit but not implicit avoidance motives, and (c) did not explicitly address avoidance motives in the communal domain. Previous research on partner perception in the communal domain has predominantly focused on explicit approach tendencies (e.g., Lemay & Clark, 2008; Lemay et al., 2007; Lemay & Neal, 2013; Sanderson & Cantor, 2001; Von Culin et al., 2017). The present study complements this literature by presenting a first examination of bias due to implicit communal avoidance motives. However, we note that the measure we used to assess participants' perceptions of their partners' desire for closeness primarily targets approach motivation, and therefore might be less than ideal to capture communal avoidance tendencies.

4.2 Motivational Bias of Communal Motive Perceptions

Independent of their accuracy, perceptions of the partner's desire for closeness were also biased by perceivers' own communal motives. Participants with a stronger explicit desire for closeness rated their partners' desire for closeness to be stronger as well, irrespective of their partners' actual motive strength. This finding largely converges with Sanderson and Cantor (2001) who found motivational biases in the perception of partner's explicit intimacy goals. In extension of previous research, our analyses further revealed that the implicit pnCommunion approach was likewise associated with positively biased perceptions of the partner's desire for closeness. The results of supplemental analyses suggest that both motives incrementally contribute to this overestimation. In contrast, we found no evidence for motivational bias due to perceivers' pnCommunion Avoidance. These findings largely converge with a recent study by Pusch et al. (2020) in which strong explicit communal motives and strong implicit communal approach — but not avoidance — motives contributed to systematic overestimation of the partner's momentary communal behavior. The present study extends this finding to perceptions of motive dispositions, thereby providing additional evidence that people perceive their partners in ways that fit their own communal needs (Gable & Impett, 2012; Woike, 2008). Moreover, our findings suggest that motivational bias is not a universal phenomenon in partner perception but differs between persons due to individual differences in communal motives.

The finding of implicit motivational bias is further noteworthy because it indicates that propositional partner representations can, in part, result from implicit motivational processes. Motives are assumed to have various perceptual functions (McClelland, 1987). People with stronger implicit communal motives pay more attention to social communal incentives (e.g., Schultheiss & Hale, 2007), more likely interpret social situations in communion-consistent ways (e.g., Woike, 1994), and better remember communal events (e.g., Woike, 2008). The present study suggests that interindividual differences in implicit communal motives likewise guide how people perceive and interpret their partners' communal acts and thereby affect the formation

of propositional representations of the partner's communal motives. Further investigations, preferably experimental studies, are needed to better understand the cognitive processes by which such motivational biases unfold.

4.3 No Evidence for Moderation of Accuracy and Motivational Bias by Relationship Length

The current study examined, for the first time, whether relationship length moderates accuracy and motivational bias in perceptions of communal motives to learn more about their development. Altogether, our LSEM analyses found no evidence of moderation: Despite the considerable statistical power, relationship length had no significant effects neither on accurate nor biased partner perceptions. This suggests that any actual moderation effects would be very small, if at all, and therefore rather negligible. However, we note that our LSEM analyses showed local variations in statistical power due to the distribution of relationship length. Especially for the upper end of the investigated range of relationship length (around 165 months), effective sample sizes were comparably low (but never below $n = 200$).

Altogether, these null findings largely converge with a meta-analysis by Fletcher and Kerr (2010), which found no association between relationship length and the perception of various partner characteristics. If the current findings are substantiated in further studies, this would indicate that, from early on, couples' communal motive perceptions contain both accuracy and motivational bias. This would not only speak for the early visibility of partners' communal motives — much like other personality traits (Vazire, 2010) — but also for their persistent (biasing) influence on social perception. Nonetheless, our cross-sectional analyses do not allow firm conclusions regarding changes in accuracy and motivational bias over time. Further longitudinal studies are needed to better understand the factors that maintain (or alter) accuracy and motivational bias over the course of romantic relationships. In this regard, it might also be worthwhile to address the functionality of communal motive perceptions. For instance, previous research suggests that accurate partner perceptions promote

understanding, gratitude, and intimacy in the relationship (e.g., Reis & Shaver, 1988; Visserman, Righetti, et al., 2018). Motivational bias seems to be particularly important for shielding love and commitment against uncertainties and doubts about the partner and the relationship (e.g., Fletcher & Kerr, 2010; Gagné & Lydon, 2004; Murray, 1999). The long-term couples who participated in the present study might thus reflect a selective group of those couples who managed to uphold their initial biased perceptions, which would limit the generalizability of the results.

4.4 Future Research

Most couples participating in the current study were in their young or middle adulthood, well educated, and from a Western cultural context (Germany). Thus, further research is needed to explore whether the current findings generalize to couples across more diverse social and cultural backgrounds. Recent findings, for instance, suggest that socioeconomic status moderates how partners interact with each other, and how they express their emotions to each other (Cho et al., 2020; Karney & Bradbury, 2020); whether socioeconomic differences also modulate how partners perceive each other remains an important question for future research.

More broadly, researchers should also consider cultural differences between couples. The cultural context may influence how motives develop (e.g., via culture-specific normative expectations, environmental pressures and demands), and which cues people link with motive-specific incentives (Hofer, 2010; McClelland et al., 1989). Ideal expectations and the personal relevance of specific cues are closely involved in how people form perceptions of their partners (e.g., Funder, 1995; Murray et al., 1996). Investigating whether couples from different cultures differ in their accurate and motivationally biased partner perceptions thus presents an interesting task for future studies.

Finally, examining accuracy and motivational bias in dating couples (versus committed couples as in the current study) appears promising because of two reasons. First, during the relationship initiation phase, potential partners should have limited

understanding of each other's communal motives due to a lack of information about the other. Answers to questions such as "Does this person like and care for me?" or "Do we get along when we interact?" are central to decide whether the other is a suitable partner. To get insightful information about the partner's communal motives, people can actively create diagnostic situations where they reveal their needs in the hope that the potential partner responds to them in a need-supportive way (Clark et al., 2019). For instance, people can self-disclose personal problems hoping that the partner reacts with caring and understanding. The more often potential partners meet, the more such diagnostic situations should occur. Therefore, accuracy in motive perceptions might substantially increase during couples' initial dating phase when partners start getting to know each other better. Second, motivational bias may be particularly pronounced in dating couples. In the early stages of getting to know each other, the number of diagnostic situations is low. To fill this knowledge gap, there is often no other option than to take a leap of faith and rely on one's assumptions about the potential partner's motives. These assumptions might be largely based on wishful thinking fueled by one's own motivational needs. Hence, motivationally biased partner perception may represent a crucial device for the initiation of romantic relationships by helping people to overcome uncertainties about the potential partner's communal motives (Murray & Holmes, 1997). This may also explain why perceived similarity is a more important predictor of initial attraction than actual similarity between dating individuals (Montoya et al., 2008).

4.5 Conclusion

Partner perceptions can be both accurate and biased. The present study is among the first to provide evidence that this is also the case for the perception of communal motives. Communal motive perceptions appear to mirror both the target's and the perceiver's explicit and implicit communal motives. Accuracy and motivational bias, however, seem to mainly correspond to partners' communal approach, but not avoidance, motives. Moreover, there was no evidence for either linear or non-linear

effects of relationship length on accuracy and motivational bias. Taken together, the current investigation underlines the relevance of both explicit and implicit communal motives for research on partner perception: It seems that explicit and implicit communal motives are not only visible from early on but also persistently bias social perception in couple relationships.

References

- Ackermann, R., & Kenny, D. A. (2016). Apimpower: An interactive tool for actor-partner interdependence model power analysis.
<https://robert-a-ackerman.shinyapps.io/apimpower/>
- Arslan, R. C., Walther, M. P., & Tata, C. S. (2019). Formr: A study framework allowing for automated feedback generation and complex longitudinal experience-sampling studies using R. *Behavior Research Methods*.
<https://doi.org/10.3758/s13428-019-01236-y>
- Back, M. D., & Nestler, S. (2016). Accuracy of judging personality. In J. A. Hall, M. Schmid Mast, & T. V. West (Eds.), *The social psychology of perceiving others accurately* (pp. 98–124). Cambridge University Press.
- Berscheid, E., Snyder, M., & Omoto, A. M. (1989). The relationship closeness inventory: Assessing the closeness of interpersonal relationships. *Journal of Personality and Social Psychology*, 57, 792–807. <https://doi.org/10.1037/0022-3514.57.5.792>
- Brunswik, E. (1956). *Perception and the representative design of psychological experiments*. University of California Press.
- Campbell, L., Overall, N. C., Rubin, H., & Lackenbauer, S. D. (2013). Inferring a partner's ideal discrepancies: Accuracy, projection, and the communicative role of interpersonal behavior. *Journal of Personality and Social Psychology*, 105, 217–233. <https://doi.org/10.1037/a0033009>
- Carver, C. S., & Scheier, M. F. (1990). Origins and functions of positive and negative affect: A control-process view. *Psychological Review*, 97, 19–35.
<https://doi.org/10.1037/0033-295x.97.1.19>
- Cho, M., Impett, E. A., Campos, B., Chen, S., & Keltner, D. (2020). Socioeconomic inequality undermines relationship quality in romantic relationships. *Journal of Social and Personal Relationships*, 37, 1722–1742.
<https://doi.org/10.1177/0265407520907969>
- Clark, M. S., Beck, L. A., & Aragón, O. R. (2019). Relationship initiation: Bridging the gap between initial attraction and well-functioning communal relationships. In

- B. Fiese, K. Deater-Deckard, M. Celano, E. Jouriles, & M. Whisman (Eds.), *APA handbook of contemporary family psychology: Foundations, methods, and contemporary issues across the lifespan (Vol. 1)* (pp. 409–425). American Psychological Association. <https://doi.org/10.1037/0000099-023>
- Clark, M. S., von Culin, K. R., Clark-Polner, E., & Lemay, E. P. (2017). Accuracy and projection in perceptions of partners' recent emotional experiences: Both minds matter. *Emotion, 17*, 196–207. <https://doi.org/10.1037/emo0000173>
- Czikmanti, T., Hagemeyer, B., & Engeser, S. (2018). A dyadic typology of social desires in couples. *Journal of Personality, 86*, 590–603. <https://doi.org/10.1111/jopy.12338>
- Fletcher, G. J. O., & Kerr, P. S. G. (2010). Through the eyes of love: Reality and illusion in intimate relationships. *Psychological Bulletin, 136*, 627–658. <https://doi.org/10.1037/a0019792>
- Fraley, R. C., & Davis, K. E. (1997). Attachment formation and transfer in young adults' close friendships and romantic relationships. *Personal Relationships, 4*, 131–144. <https://doi.org/10.1111/j.1475-6811.1997.tb00135.x>
- Frost, D. M., & Forrester, C. (2013). Closeness discrepancies in romantic relationships: Implications for relational well-being, stability, and mental health. *Personality and Social Psychology Bulletin, 39*, 456–469. <https://doi.org/10.1177/0146167213476896>
- Funder, D. C. (1995). On the accuracy of personality judgment: A realistic approach. *Psychological Review, 102*(4), 652–670.
- Gable, S. L. (2006). Approach and avoidance social motives and goals. *Journal of Personality, 74*, 175–222. <https://doi.org/10.1111/j.1467-6494.2005.00373.x>
- Gable, S. L., & Impett, E. A. (2012). Approach and avoidance motives and close relationships. *Social and Personality Psychology Compass, 6*, 95–108. <https://doi.org/10.1111/j.1751-9004.2011.00405.x>

- Gable, S. L., & Poore, J. (2008). Which thoughts count? Algorithms for evaluating satisfaction in relationships. *Psychological Science, 19*, 1030–1036.
<https://doi.org/10.1111/j.1467-9280.2008.02195.x>
- Gagné, F. M., & Lydon, J. E. (2004). Bias and accuracy in close relationships: An integrative review. *Personality and Social Psychology Review, 8*, 322–338.
https://doi.org/10.1207/s15327957pspr0804_1
- Hagemeyer, B., Dufner, M., & Denissen, J. J. (2016). Double dissociation between implicit and explicit affiliative motives: A closer look at socializing behavior in dyadic interactions. *Journal of Research in Personality, 65*, 89–93.
<https://doi.org/10.1016/j.jrp.2016.08.003>
- Hagemeyer, B., Neberich, W., Asendorpf, J. B., & Neyer, F. J. (2013). (In)Congruence of implicit and explicit communal motives predicts the quality and stability of couple relationships. *Journal of Personality, 81*, 390–402.
<https://doi.org/10.1111/jopy.12016>
- Hagemeyer, B., & Neyer, F. J. (2012). Assessing implicit motivational orientations in couple relationships: The Partner-Related Agency and Communion Test (PACT). *Psychological Assessment, 24*, 114–128.
<https://doi.org/10.1037/a0024822>
- Hagemeyer, B., Neyer, F. J., Neberich, W., & Asendorpf, J. B. (2013). The ABC of social desires: Affiliation, being alone, and closeness to partner. *European Journal of Personality, 27*, 442–457. <https://doi.org/10.1002/per.1857>
- Hagemeyer, B., Schönbrodt, F. D., Neyer, F. J., Neberich, W., & Asendorpf, J. B. (2015). When "together" means "too close": Agency motives and relationship functioning in coresident and living-apart-together couples. *Journal of Personality and Social Psychology, 109*, 813–835.
<https://doi.org/10.1037/pspi0000031>
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5*, 1–22.
https://doi.org/10.1207/s15327965pli0501_1

- Hildebrandt, A., Lüdtke, O., Robitzsch, A., Sommer, C., & Wilhelm, O. (2016). Exploring factor model parameters across continuous variables with local structural equation models. *Multivariate Behavioral Research*, 51, 257–278. <https://doi.org/10.1080/00273171.2016.1142856>
- Hofer, J. (2010). Research on implicit motives across cultures. In O. C. Schultheiss & J. C. Brunstein (Eds.), *Implicit motives* (pp. 433–467). Oxford University Press.
- Horowitz, L. M., Wilson, K. R., Turan, B., Zolotsev, P., Constantino, M. J., & Henderson, L. (2006). How interpersonal motives clarify the meaning of interpersonal behavior: A revised circumplex model. *Personality and Social Psychology Review*, 10, 67–86. https://doi.org/10.1207/s15327957pspr1001_4
- Huinink, J. J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., & Feldhaus, M. (2011). Panel analysis of intimate relationships and family dynamics (pairfam): Conceptual framework, and design. *Zeitschrift für Familienforschung*, 23, 77–101.
- Karney, B. R., & Bradbury, T. N. (2020). Research on marital satisfaction and stability in the 2010s: Challenging conventional wisdom. *Journal of Marriage and Family*, 82, 100–116. <https://doi.org/10.1111/jomf.12635>
- Kenny, D. A., & Acitelli, L. K. (2001). Accuracy and bias in the perception of the partner in a close relationship. *Journal of Personality and Social Psychology*, 80, 439–448. <https://doi.org/10.1037//0022-3514.80.3.439>
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. Guildford Press.
- Krause, S., & Dufner, M. (2019). The predictive validity of explicit and implicit partner evaluations for relationship behaviors: An actor-partner interdependence analysis. *Journal of Personality Assessment*. <https://doi.org/10.1080/00223891.2019.1625910>
- Kuster, M., Bernecker, K., Backes, S., Brandstätter, V., Nussbeck, F. W., Bradbury, T. N., Martin, M., Sutter-Stickel, D., & Bodenmann, G. (2015). Avoidance orientation and the escalation of negative communication in intimate

- relationships. *Journal of Personality and Social Psychology*, 109, 262–275.
<https://doi.org/10.1037/pspi0000025>
- LaBuda, J. E., Gere, J., & Impett, E. A. (2019). Perceptions of a romantic partner's approach and avoidance motives: Accuracy, bias, and emotional cues. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/pspp0000256>
- Lemay, E. P., & Clark, M. S. (2008). How the head liberates the heart: Projection of communal responsiveness guides relationship promotion. *Journal of Personality and Social Psychology*, 94, 647–671. <https://doi.org/10.1037/0022-3514.94.4.647>
- Lemay, E. P., Clark, M. S., & Feeney, B. C. (2007). Projection of responsiveness to needs and the construction of satisfying communal relationships. *Journal of Personality and Social Psychology*, 92, 834–853. <https://doi.org/10.1037/0022-3514.92.5.834>
- Lemay, E. P., & Neal, A. M. (2013). Accurate and biased perceptions of responsive support predict well-being. *Motivation and Emotion*, 38, 270–286.
<https://doi.org/10.1007/s11031-013-9381-2>
- MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods*, 7, 19–40.
<https://doi.org/10.1037/1082-989X.7.1.19>
- Marsh, H. W., Hau, K.-T., & Grayson, D. (2005). Goodness of fit in structural equation models. In A. Maydeu-Olivares & J. J. McArdle (Eds.), *Multivariate applications book series. contemporary psychometrics: A festschrift for roderick p. mcdonald* (pp. 275–340). Lawrence Erlbaum Associates Publishers.
- Mashek, D. J., & Sherman, M. D. (2004). Desiring less closeness with intimate others. In D. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 343–356). Lawrence Erlbaum Associates Publishers.
- McClelland, D. C. (1987). *Human motivation*. Cambridge University Press.
- McClelland, D. C., Koestner, R., & Weinberger, J. (1989). How do self-attributed and implicit motives differ? *Psychological Review*, 96, 690–702.
<https://doi.org/10.1037/0033-295X.96.4.690>

- Montoya, R. M., Horton, R. S., & Kirchner, J. (2008). Is actual similarity necessary for attraction? A meta-analysis of actual and perceived similarity. *Journal of Social and Personal Relationships, 25*, 889–922.
<https://doi.org/10.1177/0265407508096700>
- Murray, S. L. (1999). The quest for conviction: Motivated cognition in romantic relationships. *Psychological Inquiry, 10*, 23–34.
https://doi.org/10.1207/s15327965pli1001_3
- Murray, S. L., & Holmes, J. G. (1997). A leap of faith? Positive illusions in romantic relationships. *Personality and Social Psychology Bulletin, 23*, 586–604.
<https://doi.org/10.1177/0146167297236003>
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology, 70*, 79–98.
<https://doi.org/10.1037/0022-3514.70.1.79>
- Nestler, S., & Back, M. D. (2013). Applications and extensions of the lens model to understand interpersonal judgments at zero acquaintance. *Current Directions in Psychological Science, 22*, 374–379. <https://doi.org/10.1177/0963721413486148>
- Neyer, F. J., Wrzus, C., Wagner, J., & Lang, F. R. (2011). Principles of relationship differentiation. *European Psychologist, 16*, 267–277.
<https://doi.org/10.1027/1016-9040/a000055>
- Olaru, G., Schroeders, U., Hartung, J., & Wilhelm, O. (2019). Ant colony optimization and local weighted structural equation modeling. A tutorial on novel item and person sampling procedures for personality research. *European Journal of Personality, 33*, 400–419. <https://doi.org/10.1002/per.2195>
- Overall, N. C., Fletcher, G. J. O., & Kenny, D. A. (2012). When bias and insecurity promote accuracy: Mean-level bias and tracking accuracy in couples' conflict discussions. *Personality and Social Psychology Bulletin, 38*, 642–655.
<https://doi.org/10.1177/0146167211432764>

- Priem, J. S., Solomon, D. H., & Steuber, K. R. (2009). Accuracy and bias in perceptions of emotionally supportive communication in marriage. *Personal Relationships*, 16, 531–552. <https://doi.org/10.1111/j.1475-6811.2009.01238.x>
- Pusch, S., Schönbrodt, F. D., Zygar-Hoffmann, C., & Hagemeyer, B. (2020). Truth and wishful thinking: How interindividual differences in communal motives manifest in momentary partner perceptions. *European Journal of Personality*, 34, 115–134. <https://doi.org/10.1002/per.2227>
- R Core Team. (2019). R: A language and environment for statistical computing. <https://www.R-project.org/>
- Reese-Weber, M. (2015). Intimacy, communication, and aggressive behaviors: Variations by phases of romantic relationship development. *Personal Relationships*, 22, 204–215. <https://doi.org/10.1111/pere.12074>
- Reis, H. T., & Shaver, P. R. (1988). Intimacy as an interpersonal process. In S. Duck (Ed.), *Handbook of personal relationships* (pp. 367–389). Wiley.
- Richard, F. D., Bond, C. F., & Stokes-Zoota, J. J. (2003). One hundred years of social psychology quantitatively described. *Review of General Psychology*, 7, 331–363. <https://doi.org/10.1037/1089-2680.7.4.331>
- Robitzsch, A. (2019). sirt: Supplementary item response theory models. <https://CRAN.R-project.org/package=sirt>
- Rodriguez, L. M., Fillo, J., Hadden, B. W., Øverup, C. S., Baker, Z. G., & DiBello, A. M. (2018). Do you see what I see? Actor and partner attachment shape biased perceptions of partners. *Personality and Social Psychology Bulletin*, 45, 587–602. <https://doi.org/10.1177/0146167218791782>
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48, 1–36. <https://doi.org/10.18637/jss.v048.i02>
- Sadikaj, G., Moskowitz, D. S., & Zuroff, D. C. (2017). Intrapersonal variability in interpersonal perception in romantic relationships: Biases and accuracy. *Journal of Research in Personality*, 69, 67–77. <https://doi.org/10.1016/j.jrp.2016.06.011>

- Sanderson, C. A., & Cantor, N. (2001). The association of intimacy goals and marital satisfaction: A test of four mediational hypotheses. *Personality and Social Psychology Bulletin*, 27, 1567–1577. <https://doi.org/10.1177/01461672012712001>
- Schönbrodt, F. D., Hagemeyer, B., Brandstätter, V., Czikmantori, T., Gröpel, P., Hennecke, M., Israel, L. S. F., Janson, K., Kemper, N., Köllner, M., Kopp, P. M., Mojzisch, A., Müller-Hotop, R., Prüfer, J., Quirin, M., Scheidemann, B., Schiestel, L., Schulz-Hardt, S., Sust, L., . . . Schultheiss, O. (2020). Measuring implicit motives with the picture story exercise (PSE): Databases of expert-coded german stories, pictures, and updated picture norms. *Journal of Personality Assessment*. <https://doi.org/10.1080/00223891.2020.1726936>
- Schultheiss, O. C. (2001). An information processing account of implicit motive arousal. In M.-L. Maehr & P. Pintrich (Eds.), *Advances in motivation and achievement* (pp. 1–41). JAI Press.
- Schultheiss, O. C., & Pang, J. S. (2007). Measuring implicit motives. In R. W. Robins, R. C. Fraley, & R. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 322–344). Guilford Press.
- Schultheiss, O. C., & Hale, J. A. (2007). Implicit motives modulate attentional orienting to facial expressions of emotion. *Motivation and Emotion*, 31, 13–24. <https://doi.org/10.1007/s11031-006-9042-9>
- Strachman, A., & Gable, S. L. (2006). What you want (and do not want) affects what you see (and do not see): Avoidance social goals and social events. *Personality and Social Psychology Bulletin*, 32, 1446–1458. <https://doi.org/10.1177/0146167206291007>
- Vazire, S. (2010). Who knows what about a person? The self–other knowledge asymmetry (SOKA) model. *Journal of Personality and Social Psychology*, 98, 281–300. <https://doi.org/10.1037/a0017908>
- Visserman, M. L., Impett, E. A., Righetti, F., Muise, A., Keltner, D., & van Lange, P. A. M. (2018). To "see" is to feel grateful? A quasi-signal detection

- analysis of romantic partners' sacrifices. *Social Psychological and Personality Science*, 10, 317–325. <https://doi.org/10.1177/1948550618757599>
- Visserman, M. L., Righetti, F., Impett, E. A., Keltner, D., & Lange, P. A. M. V. (2018). It's the motive that counts: Perceived sacrifice motives and gratitude in romantic relationships. *Emotion*, 18, 625–637. <https://doi.org/10.1037/emo0000344>
- Von Culin, K. R., Hirsch, J. L., & Clark, M. S. (2017). Willingness to express emotion depends upon perceiving partner care. *Cognition and Emotion*, 32, 641–650. <https://doi.org/10.1080/02699931.2017.1331906>
- Weinberger, J., Cotler, T., & Fishman, D. (2010). The duality of affiliative motivation. In O. C. Schultheiss & J. C. Brunstein (Eds.), *Implicit motives* (pp. 71–88). Oxford University Press.
- Wessels, N. M., Zimmermann, J., Biesanz, J. C., & Leising, D. (2020). Differential associations of knowing and liking with accuracy and positivity bias in person perception. *Journal of Personality and Social Psychology*, 118, 149–171. <https://doi.org/10.1037/pspp0000218>
- Woike, B. A. (1994). The use of differentiation and integration processes: Empirical studies of "separate" and "connected" ways of thinking. *Journal of Personality and Social Psychology*, 67, 142–150. <https://doi.org/10.1037/0022-3514.67.1.142>
- Woike, B. A. (1995). Most-memorable experiences: Evidence for a link between implicit and explicit motives and social cognitive processes in everyday life. *Journal of Personality and Social Psychology*, 68, 1081–1091. <https://doi.org/10.1037/0022-3514.68.6.1081>
- Woike, B. A. (2008). A functional framework for the influence of implicit and explicit motives on autobiographical memory. *Personality and Social Psychology Review*, 12, 99–117. <https://doi.org/10.1177/1088868308315701>
- Woike, B. A., & Bender, M. (2009). Implicit motives as a way to understand cognitive processes. *Social and Personality Psychology Compass*, 3, 702–710. <https://doi.org/10.1111/j.1751-9004.2009.00198.x>

- Zygar, C., Hagemeyer, B., Pusch, S., & Schönbrodt, F. D. (2018a). From motive dispositions to states to outcomes: An intensive experience sampling study on communal motivational dynamics in couples. *European Journal of Personality*, 32, 306–324. <https://doi.org/10.1002/per.2145>
- Zygar, C., Hagemeyer, B., Pusch, S., & Schönbrodt, F. D. (2018b). From motive dispositions to states to outcomes: Research data of an intensive experience sampling study on communal motivational dynamics in couples [data set]. <https://doi.org/10.5160/psychdata.zrce16dy99>
- Zygar-Hoffmann, C., Hagemeyer, B., Pusch, S., & Schönbrodt, F. D. (2020). A large longitudinal study on motivation, behavior and satisfaction in couples: Research data from a four-week experience sampling study with a pre-, post-, and one-year follow-up-assessment [data set]. <https://doi.org/10.5160/psychdata.zrce18mo99>
- Zygar-Hoffmann, C., Pusch, S., Hagemeyer, B., & Schönbrodt, F. D. (2020). Motivated behavior in intimate relationships: Comparing the predictive value of motivational variables. *Social Psychological Bulletin*, 15. <https://doi.org/10.32872/spb.2873>
- Zygar-Hoffmann, C., & Schönbrodt, F. D. (2020). Recalling experiences: Looking at momentary, retrospective and global assessments of relationship satisfaction. *Collabra: Psychology*, 6. <https://doi.org/10.1525/collabra.278>

Table 1
Descriptive Statistics and Correlations

Variables	<i>M (SD)</i>		Correlations				
	Men	Women	1	2	3	4	5
1. Explicit desire for closeness	6.03 (0.73)	6.04 (0.83)	.24***	.28***	-.07*	.39***	-.29***
2. pnCommunion Approach	3.49 (2.05)	3.65 (2.05)	.24***	.15***	-.36***	.14***	-.04
3. pnCommunion Avoidance	1.21 (1.14)	1.44 (1.21)	-.05	-.32***	.08*	-.02	-.05
4. Perception of partner's desire for closeness	5.89 (1.04)	6.08 (0.96)	.38***	.17***	-.02	.09*	-.26***
5. Relationship length (dyadic)	83.72 (80.12)		-.12***	-.06	-.06	-.24***	-

Note. $N = 1,905$ (from 1,118 couples). The reported pnCommunion Approach and Avoidance estimates refer to averages across the two coders. Relationship length was scaled to months. Correlations below the diagonal pertain to men, above the diagonal to women, and on the diagonal to within-couple correlations. Residualized PACT scores were used for the correlation analyses. For 95% confidence intervals of the correlation coefficients, please see Table S1 in the supplemental materials. * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 2*Accuracy and Motivational Bias in the Perception of Partner's Desire for Closeness*

Model	Accuracy				Motivational bias			
	β	SE	p	CI	β	SE	p	CI
Explicit desire for closeness	0.552	0.038	<.001	[0.478; 0.626]	0.286	0.035	<.001	[0.218; 0.354]
pnCommunion Approach	0.127	0.028	<.001	[0.072; 0.181]	0.150	0.025	<.001	[0.101; 0.198]
pnCommunion Avoidance	-0.020	0.031	.512	[-0.082; 0.041]	-0.020	0.027	.464	[-0.074; 0.034]

Note. $N = 1,118$ dyads (1,905 individuals). β = standardized regression coefficient; SE = robust standard error; CI = 95% confidence interval with lower and upper boundary. Accuracy refers to partner effects, bias refers to actor effects (see Figure 1).

Figure 1

Latent Actor-Partner Interdependence Model for the Analysis of Accuracy and Motivational Bias in Partners' Perceptions of Each Other's Desire for Closeness.

Note. Subscript M denotes male couple member and subscript F denotes the female couple member. The measurement specifications of the explicit desire for closeness and pnCommunion (Approach and Avoidance) are detailed in panels A and B, respectively. Actor and partner effects were set equal across men and women. Effects of the contrast variables (contrast₁: Sample 1 vs. Sample 2; contrast₂: Samples 1 and 2 vs. Sample 3) are not displayed. Figure available at https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e under a CC-BY4.0 license.

Figure 2

Associations of Relationship Length with Accuracy and Motivational Bias in the Perception of Partner's Desire for Closeness.

Note. Figure available at https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e under a CC-BY4.0 license.

Table S1
Confidence Intervals of the Correlation Coefficients

Variables	Correlations				
	1	2	3	4	5
1. Explicit desire for closeness	0.24 [0.17; 0.30]	0.28 [0.22; 0.33]	-0.07 [-0.13; -0.01]	0.39 [0.34; 0.44]	-0.29 [-0.34; -0.23]
2. pnCommunion Approach	0.24 [0.17; 0.30]	0.15 [0.08; 0.22]	-0.36 [-0.42; -0.31]	0.14 [0.08; 0.20]	-0.04 [-0.11; 0.02]
3. pnCommunion Avoidance	-0.05 [-0.12; 0.02]	-0.32 [-0.38; -0.26]	0.08 [0.01; 0.15]	-0.02 [-0.08; 0.05]	-0.05 [-0.11; 0.01]
4. Perception of partner's desire for closeness	0.38 [0.32; 0.43]	0.17 [0.11; 0.24]	-0.02 [-0.09; 0.04]	0.09 [0.02; 0.16]	-0.26 [-0.32; -0.20]
5. Relationship length	-0.12 [-0.19; -0.06]	-0.06 [-0.13; 0.01]	-0.06 [-0.12; 0.01]	-0.24 [-0.30; -0.17]	-

Note. $N = 1,905$ (from 1,118 couples). Numbers in brackets refer to the lower and upper bound of 95% confidence intervals. Correlations below the diagonal pertain to men, above the diagonal to women, and on the diagonal to within-couple correlations. Residualized PACT scores were used for the correlation analyses.

Table S2*Accuracy and Motivational Bias in the Perception of Partner's Desire for Closeness (Including Relationship Length as a Covariate)*

Model	Accuracy				Motivational bias			
	β	SE	p	CI	β	SE	p	CI
Explicit desire for closeness	0.543	0.037	<.001	[0.470; 0.616]	0.265	0.035	<.001	[0.197; 0.334]
pnCommunion Approach	0.113	0.027	<.001	[0.060; 0.165]	0.137	0.024	<.001	[0.090; 0.185]
pnCommunion Avoidance	-0.029	0.030	.329	[-0.088; 0.029]	-0.031	0.027	.241	[-0.084; 0.021]

Note. $N = 1,118$ dyads (1,905 individuals). β = standardized regression coefficient; SE = robust standard error; CI = 95% confidence interval with lower and upper boundary. Accuracy refers to partner effects, bias refers to actor effects (see Figure 1).

Table S3*Unique Effects of the Explicit Desire for Closeness and pnCommunion Approach on the Perception of Partner's Desire for Closeness*

Model	Accuracy				Motivational bias			
	β	SE	p	CI	β	SE	p	CI
Explicit desire for closeness	0.559	0.038	<.001	[0.484; 0.634]	0.270	0.036	<.001	[0.200; 0.340]
pnCommunion Approach	-0.033	0.024	.177	[-0.080; 0.015]	0.053	0.024	.025	[0.007; 0.099]

Note. $N = 1,118$ dyads (1,905 individuals). β = standardized regression coefficient; SE = robust standard error; CI = 95% confidence interval with lower and upper boundary. Accuracy refers to partner effects, bias refers to actor effects (see Figure 1).

Table S4

Unique Effects of the Explicit Desire for Closeness, pnCommunion Approach, and pnCommunion Avoidance on the Perception of Partner's Desire for Closeness

Model	Accuracy				Motivational bias			
	β	SE	p	CI	β	SE	p	CI
Explicit desire for closeness	0.560	0.038	<.001	[0.485; 0.634]	0.270	0.036	<.001	[0.200; 0.341]
pnCommunion Approach	-0.035	0.026	.173	[-0.085; 0.015]	0.050	0.025	.047	[0.001; 0.099]
pnCommunion Avoidance	-0.003	0.024	.898	[-0.051; 0.044]	-0.007	0.025	.776	[-0.055; 0.041]

Note. $N = 1,118$ dyads (1,905 individuals). β = standardized regression coefficient; SE = robust standard error; CI = 95% confidence interval with lower and upper boundary. Accuracy refers to partner effects, bias refers to actor effects (see Figure 1).

Table S5*Accuracy and Motivational Bias in the Perception of Partner's Desire for Closeness (Listwise Deletion of Missing Data)*

Model	Accuracy				Motivational bias			
	β	SE	p	CI	β	SE	p	CI
Explicit desire for closeness	0.530	0.038	<.001	[0.455; 0.605]	0.291	0.037	<.001	[0.219; 0.363]
pnCommunion Approach	0.124	0.027	<.001	[0.070; 0.177]	0.147	0.026	<.001	[0.095; 0.199]
pnCommunion Avoidance	-0.020	0.029	.505	[-0.077; 0.038]	-0.032	0.030	.285	[-0.091; 0.027]

Note. $N = 787$ dyads. β = standardized regression coefficient; SE = robust standard error; CI = 95% confidence interval with lower and upper boundary. Accuracy refers to partner effects, bias refers to actor effects (see Figure 1).

Figure S1*PACT cue and scoring example.*

<p>What is important to this person in this situation, and what is he/she doing? <i>It is important to me that I get everything done perfectly and that my partner likes it. I am currently doing handicraft work and painting our guest room.</i></p> <p>How is the person feeling in this situation, and how are his/her feelings for his/her partner? <i>I feel very good and love my partner very much and am happy to do her a favor.</i></p> <p>Why is the person feeling this way? <i>Because it is a further step into our future together.</i></p>		

Emotional
Closeness

Commitment/
Community

Note. Figure available at https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e under a CC-BY4.0 license.

Figure S2*Distribution of Relationship Length.*

Note. Figure available at https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e under a CC-BY4.0 license.

Figure S3

Results of Point-Wise Permutation Tests of Accuracy and Motivational Bias in the Perception of Partner's Desire for Closeness

Note. p -values below .05 indicate a significant deviation of accuracy (motivational bias) at the respective focal point (months 1 through 165 of relationship length) from the average estimate in the total sample. p -values equal to or greater than .05 indicate that accuracy (motivational bias) at the respective focal point does not significantly differ from its average in the total sample. Figure available at https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e under a CC-BY4.0 license.

Figure S4

Associations of Relationship Length with Accuracy and Motivational Bias in the Perception of Partner's Desire for Closeness (Listwise Deletion of Missing Data).

Note. Figure available at https://osf.io/jc932/?view_only=3464066ea84943c98d6b87aab65b106e under a CC-BY4.0 license.