
Beyond the Ludic Lover

Individual Differences in Playfulness and Love Styles in Heterosexual Relationships

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RENÉ T. PROYER, KAY BRAUER,
ANNEGRET WOLF, AND GARRY CHICK

Adult playfulness contributes to well-functioning romantic relationships, claim the authors, who study the association between playfulness of several kinds (other directed, lighthearted, intellectual, whimsical) and six specific attitudes towards love they call love styles—*eros*, *ludus*, *storge*, *pragma*, *mania* and *agape*. To do so, they engaged seventy-seven heterosexual couples to rate the love styles against a checklist for playful behaviors in romantic relationships the authors call the Playful Love Checklist (PLC). The authors then analyzed the responses for similarities and robust associations, either negative or positive, between partners for their views on playfulness in love relationships. Their findings suggest, among other things, that current conceptualizations of playfulness do not much overlap with what other researchers have called the ludic lover, and the authors' analysis of self-ratings and partner ratings contributes to our understanding of the association between playfulness and love styles. **Key words:** adult playfulness; love; love styles; ludus; playfulness; romantic relationships

PLAYFULNESS AS AN individual differences variable enables adults to frame a situation they experience as entertaining, intellectually stimulating, and personally interesting (Proyer 2017; see also Barnett 2007). Lately, our understanding of playfulness has broadened, and though many early conceptualizations focused on play's contribution to joy, fun, and entertainment, newer modes encompass facets not primarily directed at fun or entertainment. A recently developed structural model differentiates among four basic play facets: other directed—using playfulness to cheer up others or to solve social tension in interactions with others; lighthearted—seeing life as more a playground for improvisation than a battlefield for competition; intellectual—involving the cognitive aspects of playfulness with a preference for complexity over simplicity, for viewing problems from different angles and perspectives; and whimsical—finding amusing

aspects in everyday situations and interactions with a liking of odd things or activities. These constitute the Proyer (2017) OLIW model. Here, we consider the association between self-rated and partner-rated playfulness and different attitudes towards love (love styles) in romantic couples.

Adult Playfulness and Romantic Relationships

The study of love styles and romantic relationships seems to offer a natural home for playfulness research. Structural models of playfulness frequently contain facets directed at interpersonal functioning. Among these, we have already mentioned other-directed playfulness in Proyer's OLIW model. Other examples include gregarious playfulness (Barnett 2007), playfulness retrieved in focus groups of young adults, and kind-loving playfulness (Proyer 2012a) derived from implicit psychological and linguistic theories. Chick (2001) has proposed the signal theory of playfulness and argues that playfulness signals nonaggressiveness in men and youth when they search for a partner for a long-term relationship but signals health—as a sign of fecundity—in women. Some research has supported this notion by showing that playfulness constitutes a preferred trait in potential romantic partners (Chick, Yarnal, and Purrington 2012; Proyer and Wagner 2015). To play and be playful in a relationship contributes to the intimacy of its partners as well as the communication between them (Baxter 1992; see also Raskin 1998). A more qualitatively oriented study has shown that lay people can list a large number of uses for playfulness in their everyday lives including uses that enable communication and facilitate social relationships (Proyer 2014a).

Evidence exists that playfulness contributes to relationship satisfaction (Aune and Wong 2002; Baxter 1992; Bruess and Pearson 1993; Metz and Lutz 1990). In direct tests, the correlation coefficients tend to be small. For example, Proyer (2014b) found coefficients between global playfulness and relationship satisfaction (Hendrick 1988) of $r_1 = .16$ and $r_2 = .14$ in two, independently collected samples ($N_{1/2} = 157/558$). The findings were much more differentiated in Wolf, Brauer, and Proyer (2016), who studied two samples of adult heterosexual couples ($N_{1/2} = 80/77$ couples) using the OLIW model and taking not only self-ratings but also partner ratings into account. The findings show that, for example, men's satisfaction with sexuality, togetherness, or tenderness (all facets of relationship satisfaction) correlated positively with their partners' playfulness (except the lighthearted facet) but that females showed higher mistrust (indicat-

ing lower relationship satisfaction) when males were high in lighthearted, intellectual, and whimsical playfulness. The authors also found support for assortative mating preferences for other-directed ($r = .42$) and whimsical playfulness ($r = .47$) but lower similarity in global ($r = .22$) and intellectual playfulness ($r = .16$; all $ps < .05$). There was no overlap in lighthearted playfulness ($r = -.10$). This type of playfulness might be an indicator of interest in a relationship on a more superficial level with less focus on its long-term prospects. We might further argue that, if both partners were high in lighthearted playfulness, the relationship would probably be more open and less formally established. Longitudinal data are missing, but we might speculate that such a constellation could be associated with a lower duration of the relationship and a greater risk for infidelity. Hence, a differentiation among facets of playfulness contributes to a better understanding of the nature of the associations with relationship satisfaction, and we also expect a better understanding of the associations with different types of loving.

Love Styles

In 1973 John Lee introduced his influential typology of loving, which consisted of several love styles that he considered important in romantic relationships. Although Lee (1977) also proposed a structural model of the love styles (from primary to tertiary), researchers typically study a selection of them—*eros*, *storge*, *agape*, *pragma*, *mania*, and *ludus*. Eros involves searching for a partner whose “physical presentation of self embodies an image already held in the mind of the lover” (174). Those high in eros look for their notion of beauty represented in a partner. Storge involves searching for long-term partners and relationships and “slowly developing affection and companionship, gradual disclosure of self, [and] an avoidance of self-conscious passion” (175). Agape means altruistic love). Pragma includes the search for a partner who is a good fit in terms of such “vital statistics [as] education, vocation, religion, age, and numerous other demographic characteristics” (175). Mania is an “obsessive, jealous, emotionally intense love style characterized by preoccupation with the beloved and a need for repeated reassurance of being loved” (175). Finally, ludus, the playful or game of love, is of primary interest to our study. Lee describes it as “permissive and pluralistic (a less loaded word than promiscuous). The degree of ‘involvement’ is carefully controlled, jealousy is eschewed, and relationships are often multiple and relatively short-lived” (174). Those in a ludus kind of love do not aspire to

what those high in agape aspire to in a relationship. In Lee's model, ludus is a primary love style, which means it contributes to other styles that he then calls secondary love styles. Both storge and ludus, for example, contribute to the explanation of pragma, and he sees mania as a combination of eros and ludus. At the secondary level, combinations such as ludic eros and storgic eros exist as well as manic, agapic, and pragmatic ludus at the tertiary level.

The Ludic versus the Playful Lover

Lee describes the ludic lover.

He is not ready to commit himself ("settle down"). He likes a variety of physical types and can switch easily from one to another. He does not "fall in love" but goes on with life as usual, expecting love relationships to fit into his existing schedule of activities. He carefully avoids future commitment to the relationship (never planning a summer vacation with the partner the previous January!). He avoids seeing too much of the beloved, to prevent over-involvement on either side. Ludus can be played as an open game, with fair warning to the partner, or with deception, leading the partner on (178).

In addition, with the ludic lover, "sexual intimacy is enjoyed as fun, rather than as evidence of serious emotional rapport. When the relationship ceases to be pleasant and diverting, the ludic lover feels justified ending it. Often, he will already have found an alternative partner. Indeed, the optimum ludic situation is one where there are two or three beloveds separated by different nights of the week" (179).

We offer these quotes to show that Lee depicts the ludic lover negatively from the perspective of long-term relationships and commitment to the partner. The findings on playfulness in relationships we reported earlier only partially fit this description. We argue that the experiential world of those high in ludus also shows only partial overlap with those high in playfulness.

For example, the ludus love style correlates with, among other things, impulsivity (Mallandain and Davies 1994); sensation seeking (Richardson, Medvin, and Hammock 1988); sexual permissiveness (Bailey, Hendrick, and Hendrick 1987); low partner engagement (Frey and Hojjat 1998); low neuroticism and agreeableness in men (White, Hendrick, and Hendrick 2004); extraversion and psychoticism (Davies 1996); low relationship satisfaction, sociosexual

orientation, and the absence of a love-is-blind bias (that is, ascribing greater psychological attractiveness to one's partner than to oneself) (Swami, Stieger et al. 2009; see also Vedes et al. 2016); and the “dark triad” variables of Machiavellianism, narcissism, and psychopathy (Jonason and Kavanagh 2010). Examples of traits typically associated with ludus are inconsiderateness, secrecy, dishonesty, selfishness, danger, and immaturity (Taraban and Hendrick 1995). Hence, although the term “ludus” suggests a relationship with trait playfulness, the question arises whether the playful lover should be considered different from the ludic lover to fit better with playfulness as we currently understand it.

Research on play and playfulness (e.g., Aune and Wong 2002; Baxter 1992; Bruess and Pearson 1993; Proyer 2014a; Wolf, Brauer, and Proyer 2016; Proyer et al., forthcoming) suggests that partners in romantic relationships use play and playfulness to enhance relationship satisfaction in contrast to those oriented toward ludus. As mentioned, some theoretical reasoning (Chick 2001) and empirical data (Chick, Yarnal, and Purrington 2012; Proyer and Wagner 2015) support the notion that playfulness is a desired personality trait for potential partners in long-term relationships. Hence, we expect there will be a difference between the ludic lover and the playful lover. A ludic lover seems passionate but unreliable and only interested in maximizing his or her own pleasure rather than investing in a relationship. But playful lovers use their ability to play and their playfulness to support and strengthen their relationships. Hence, our analysis of the positive attributes of greater playfulness warrants a different conceptualization from those reflected in the classic love styles we described earlier.

A Brief Summary of Findings on the Association between Playfulness and Love Styles

There are only limited data available on the association between playfulness and love styles. Woll (1989) examined the localization of the need-for-play scale of the Personality Research Form (Jackson 1984) in Lee's taxonomy. Murray (1938) describes the basic human need for play: “To relax, amuse oneself, seek diversion and entertainment. To ‘have fun,’ to play games. To laugh, joke, and be merry. To avoid serious tension” (83). Woll found a positive association of the need for play with ludus ($r = .38$) and coefficients of $r = .39$ with eros/ludus—a “superficial attraction based on sensuality” (Hendrick et al. 1984, 189)—and of $r = .29$ with storge/eros (all $p < .01$). The ludic lover in Woll is characterized as

“one that is dominated by disinhibition, playfulness, sociability, and a desire for multiple relationships” (495). Proyer (2012b) used the Short Measure of Adult Playfulness—which assesses an easy onset and high intensity of playful experiences along with the frequent display of playful activities—to test its localization in an alternative taxonomy of love styles. Proyer (2014b) also used the Relationship and Attachment Personality Inventory (Andresen 2012) to assess eight relationship styles resembling Lee’s (1973) dimensions—namely, love, sexuality, insecurity, dominance, attachment, seduction, faithfulness, and market orientation.

Love included eroticism and understanding, that is, tender eroticism, romanticism, and need for caring closeness. Sexuality involved adventure, desire, and strong libidinous sensuality. Insecurity denoted frustration and doubt, anxiety in relationships, and ambivalence in bonding. Dominance was characterized by disputatiousness and aggression in relationships. Attachment pointed to a need for closeness and dependence and indicated a fear of disconnection. Seduction involved charm and allure, describing those convinced of their abilities in seducing partners and of their attractiveness. Faithfulness described those who were moral and constant with high moral standards and who were conservative and liked routines in a relationship. And market orientation came with a sense of pride and entitlement toward partners or potential partners.

Overall, these love styles shared about 14 percent variance with playfulness (corrected for the contribution of age and gender). Numerically, the largest correlation coefficients were found for sexuality ($r = .23$), attachment ($r = .18$), and seduction ($r = .31$, all $p < .001$; $N = 558$). Hence, our findings suggest that the styles associated with ludus in Lee only demonstrated partial overlap with playfulness. The association with seduction could probably be explained best by its sociability component and its presumed association with (perceived) sexual attractiveness in the taxonomy of Schmitt and Buss (2000; see Andresen 2012).

Aims of this Study

We aimed to narrow three gaps in the literature. First, no earlier studies have taken the plural nature of adult playfulness into account (see e.g., Barnett 2007; Proyer 2012a, 2014a, 2017; Shen, Chick, and Zinn 2014). Previous findings were mainly based on global and broad measures that do not differentiate among types of playfulness. Hence, we used not only a broad measure but also a measure that

assesses the four facets of the OLIW-model of adult playfulness (Proyer, 2012b; 2017). This allowed us to test different hypotheses. We expected the strongest associations for eros, because this style has the largest conceptual overlap with current operationalizations of playfulness—that is, enjoying the intensity of a relationship, spending time together, and intimacy; seeking exchange with a partner and feeling self-confident in love (Lee 1973, 1977). Aside from the global measure of playfulness, we expected positive associations for other-directed and intellectual playfulness (Proyer 2017). We expected the size of the correlation coefficients to be in the range reported in Proyer (2014b). Based on earlier findings, we further expected positive associations with agape and negative associations with pragma. Lighthearted playfulness seems to converge best with the definition of the ludus love style. Lovers high in this trait like to improvise, do not like to think or plan ahead, and see life in general as a game. Hence, this should reflect findings by Woll (1989) on a positive association between playfulness and ludus.

Second, it has been argued that the notion of ludus does not cover how a playful lover behaves in a relationship despite what the term might suggest. Therefore, we have developed a short checklist based on previous research (e.g., Aune and Wong 2002; Betcher 1977; Bruess and Pearson 1993; Proyer 2014b, 2017) on the expression of playfulness in romantic relationships—for example, teasing a partner, nicknaming joint acquaintances, or sharing relationship-related rituals. Of course, this list does not constitute a new love style and we do not argue that this should be a supplement to the catalogue of existing love styles. It was designed instead to reflect individual differences in the degree to which people behave playfully in relationships. We expected positive relationships for all indicators of playfulness with the exception of lighthearted playfulness.

Third, to the best of our knowledge, researchers have not yet examined the association of playfulness and love styles in romantic couples. In our study, both partners provide self-ratings for their love styles, which allows us to analyze the partners' similarity in love styles. Previous research on couples' similarity in love styles suggests good convergence in eros, storge, pragma, and agape, but differences typically in mania and ludus (Bierhoff, Grau, and Ludwig 1993; Hendrick, Hendrick, and Adler 1988). Moreover, participants provide self-ratings and partner ratings of playfulness. Because research has shown that both views (self and partner) uniquely contribute to the prediction and description of personality-related external variables (e.g., Borkenau and Liebler 1993; Connolly, Kavanagh, and Viswesvaran 2007; Vazire and Mehl 2008), we argue that

the use of the romantic partner's view of an individual's playfulness contributes to the understanding of the nature of the relationship between love styles and playfulness. Furthermore, data on the self-other convergence of playfulness exist (e.g., Proyer 2017) and showed robust overlap—coefficients between .44 (other-directed/intellectual) and .57 (whimsical), which we expected to find also in our homogenous sample of romantic partners (see also Proyer and Brauer 2018).

Method

Participants

In total, $N = 249$ adults aged eighteen to seventy-two ($M = 26.8$, $SD = 9.2$, median = 24 years; $n = 147$ females) completed the online survey and provided self-ratings of all measures. Of these, data from seventy-seven heterosexual romantic couples were available that provided self-ratings and partner ratings in playfulness. They reported a relationship duration of $M = 40.3$ months ($SD = 49.0$; range = [3; 332]; median = 27.0). Their mean age was 26.7 years for men and 23.9 years for women ($SD = 8.0$ men/5.7 women). Their ages ranged from eighteen to sixty-two for men and from eighteen to forty-five for women. Of these 154 participants $n = 52$ were employees, $n = 89$ students, $n = 3$ in vocational training, and $n = 3$ unemployed at the time of study (seven participants did not indicate their occupational status). The educational status was high. The majority ($n = 89$) held either a high school diploma qualifying them to attend university or a university degree ($n = 39$), or they had completed vocational training ($n = 26$).

Instruments

The Short Measure of Adult Playfulness (SMAP) (Proyer 2012b) consists of five items (e.g., "I am a playful person") and assesses an easy onset and high intensity of playful behavior along with a participant's frequent experience. Answers are given on a seven-point rating scale (1 = strongly disagree, 7 = strongly agree). The SMAP has demonstrated good psychometric properties, and studies support its validity (e.g., Ruch and Heintz 2013; Yue, Leung, and Hiranandani 2016). Along with the standard form of the SMAP, participants completed the peer-rated version, SMAP peer (e.g., "S/He is a playful person") (see Proyer 2017). For reliabilities of all instruments in this study see figure 1.

The OLIW (Proyer 2017) consists of twenty-eight items (seven per scale) and assesses four basic facets of adult playfulness: other directed (OTD) (a sample item is “I have close friends with whom I can just fool around and be silly”); lighthearted (LTH) (“Many people take their lives too seriously; when things do not work you just have to improvise”); intellectual (INT) (“If I want to develop a new idea further and think about it, I like to do this in a playful manner”); and whimsical (WHI) (“I have the reputation of being somewhat unusual or flamboyant”). Answers are given on a seven-point scale (1 = strongly agree, 7 = strongly disagree). Proyer established the validity of two independently collected samples using exploratory and confirmatory factor analyses, to test and retest reliabilities. The study’s self-other agreement with well-acquainted peers fell in the expected range, and there was good support for both convergent (e.g., from a diary study on daily ratings of playful behavior) and discriminant validity. As in Proyer (2017), we used the standard form and the peer-rating form (OLIW-P) for partner ratings (e.g., “S/He has close friends with whom s/he can just fool around and be silly”).

Lee (1973) assessed love styles using the Marburg Attitude-Inventory for Love Styles (MAIL) (Bierhoff et al. 1993). Accordingly, again, the scales are eros (a sample item is: “Our sex life is very intense and satisfying”), ludus (“Often I fall in love for a short amount of time”), storge (“The best kind of love originates from friendship”), pragma (“It is important to me that my partner thinks good about my family”), mania (“My mood depends strongly on the quality of my relationship”), and agape (“It gives me great satisfaction when I am able to help my partner”). The MAIL, Lee’s standard instrument in German-speaking countries, has been used in numerous studies (e.g., Neumann and Bierhoff 2004; Rohmann, Führer, and Bierhoff 2016; Vedes et al. 2016). It consists of sixty items (ten for each scale) and uses a nine-point answer format (1 = absolutely wrong, 9 = absolutely correct). These authors provide good support for satisfactory reliability and validity of the scale.

We developed the Playful Love Checklist (PLC) for our study. We consider its main purpose to cover behaviors described as playful in the literature. Examples include good-naturedly teasing a partner, initiating joint rituals, or resolving tension. Answers are given on a nine-point answer format (1 = absolutely wrong, 9 = absolutely correct). We developed an initial set of twelve items by means of a literature search. We scanned the literature for hints of actual behavior from those high in playfulness in romantic relationships (e.g., Aune and Wong 2002; Betcher 1977; Bruess and Pearson 1993; Proyer 2014b, 2017).

For example, based on Baxter's (1992) analysis of adult play, we wrote an item about (playful, benevolent) teasing between the partners. We subjected these items to a principal component analysis (PCA) using both the full set of 249 participants who provided self-ratings and computed-item statistics such as item-difficulties, distribution statistics, and corrected item-total correlation (CITC). We identified three items that had low loadings on the first unrotated principal component (FUPC) or a low CITC. These we discarded from further analyses. For the remaining nine items, the loadings on the FUPC ranged between .44 and .70 (mean = .55) and the CITCs were between .32 and .52 (mean = .40). The PLC demonstrated satisfactory reliability (see figure 1), and the total score was normally distributed. There were no associations with age and no gender differences (shared variance < 1 percent). We have subjected the PLC items to a joint exploratory factor analysis (EFA) to examine their differences from the love styles assessed by the MAIL. The EFA provides support for a seven-factor solution based on the Scree-test using data rotated to the Varimax criterion. Eighteen factors exceeded unity, and the first ten eigenvalues were 9.24, 5.18, 5.10, 3.15, 2.92, 2.64, 2.27, 1.88, 1.74, and 1.60. The first seven factors explained 44.2 percent of the variance. Although the PLC could be distinguished from the love styles at the factorial level, we also computed the bivariate correlations with the MAIL. The test of intercorrelations between the PLC and MAIL scores showed that the PLC existed widely unrelated from ludus ($r = .12, p = .07$), but yielded positive correlations to agape ($r = .29$) and eros ($r = .40$, both $p < .001$). Thus, while there was an overlap with some of the love styles, the coefficients came nowhere near indicating redundancy.

Procedure

The participants were recruited via leaflets at the University of Zurich and on social media. To take part in the study, participants had to be over eighteen years of age, currently in a romantic relationship, and heterosexual. After the study, subjects received individualized feedback on their playfulness and localization in the six love styles, and students were eligible for course credit upon request. We informed all participants that we would provide feedback only on their self-ratings, not on the peer ratings, and that we would give this feedback only upon completion of the full survey.

Results

Preliminary analyses

Descriptive statistics (see Table 1) show that all variables were normally distributed, that playfulness scores were in a comparable range with respect to previous studies (e.g., Brauer and Proyer 2017; Proyer 2017), and that males were higher in playfulness than females. The effect sizes for the gender differences ranged between $d = 0.24$ (whimsical) and $d = 0.56$ (lighthearted). The mean scores for the ludus love style were numerically below those reported in the handbook of the MAIL, that is between 3.31 and 3.54 (Bierhoff et al. 1993), although the other love styles were in a comparable range. Mean level comparisons showed that men scored higher in global playfulness (SMAP) as well as all facets of the OLIW, with lowest differences (in terms of the effect size) for whimsical playfulness. When testing the similarity between partners through bivariate correlations, we found substantial similarity between romantic partners in global ($r = .22$), other directed ($r = .42$), and whimsical playfulness ($r = .47$), but partners showed no robust similarity in intellectual ($r = .16$) and lighthearted ($r = -.10$) playfulness. Next, we tested whether participants could accurately perceive their partner's playfulness and correlated self- and partner-rated playfulness scores. The coefficients fell in the expected range of conformity; namely, .56 for the SMAP, .57 for other-directed, .58 for lighthearted, and .55 for whimsical types of playfulness. (However, the coefficient for intellectual playfulness [.33] was numerically lower.) These indicated the validity of the partner ratings because they generally comported with how each participant saw himself or herself.

In love styles (MAIL), women scored higher in eros and mania, while men scored higher in ludus. There were no gender differences in the PLC. The similarity coefficients in the love styles were .42 (eros), .01 (ludus), .30 (storge), .23 (pragma), .03 (mania), and .27 (agape), and there was a high similarity in the PLC ($r = .42$).

The Association of Playfulness and Love Styles in Self-Ratings

Results of the correlational analyses between self-rated playfulness and love styles are displayed in figure 2 separately for the men and women. Global playfulness was robustly related to eros in the sample of women while the coefficients in the male sample were considerably lower (about 4 percent shared variance; $z = 1.41$, $p = .08$). In the sample of males, other-directed playfulness demonstrated a strong association with eros, while the other coefficients were widely unrelated

| Scale | Men | | | | | Women | | | | | α | |
|--------------------|----------|-----------|-----------|----------|------|----------|-----------|-----------|----------|--------|----------|----------|
| | <i>M</i> | <i>SD</i> | <i>SK</i> | <i>K</i> | Age | <i>M</i> | <i>SD</i> | <i>SK</i> | <i>K</i> | Age | | <i>d</i> |
| <i>Playfulness</i> | | | | | | | | | | | | |
| SMAP | 4.86 | 1.11 | -0.81 | 0.22 | -.08 | 4.35 | 1.22 | -0.45 | -0.34 | -.22 | 0.44 | .89/.90 |
| OTD | 5.39 | 0.78 | -0.78 | 0.51 | -.20 | 5.10 | 0.92 | -0.90 | 0.77 | -.32** | 0.34 | .70/.76 |
| LTH | 4.51 | 0.84 | -0.13 | 0.19 | .15 | 4.04 | 0.84 | -0.27 | -0.44 | .04 | 0.56 | .72/.83 |
| INT | 4.29 | 0.73 | -0.11 | -0.77 | -.02 | 4.02 | 0.67 | 0.03 | 0.61 | .09 | 0.39 | .53/.58 |
| WHI | 4.32 | 0.80 | -0.08 | 0.47 | .01 | 4.11 | 0.99 | 0.10 | 0.08 | .00 | 0.24 | .77/.80 |
| <i>Love Styles</i> | | | | | | | | | | | | |
| EROS | 7.30 | 1.15 | -0.64 | -0.02 | .15 | 7.60 | 1.03 | -1.11 | 1.12 | -.12 | 0.28 | .89 |
| LUDUS | 2.75 | 0.98 | 0.18 | -0.52 | -.13 | 2.40 | 1.06 | 0.69 | -0.04 | .03 | 0.34 | .71 |
| STORGE | 5.21 | 1.34 | -0.24 | 0.64 | -.22 | 5.46 | 1.33 | -0.65 | 0.97 | -.12 | 0.18 | .81 |
| PRAGMA | 4.26 | 1.47 | 0.24 | -0.02 | -.06 | 4.17 | 1.48 | -0.05 | -0.91 | .03 | 0.06 | .82 |
| MANIA | 4.93 | 1.47 | 0.07 | -0.18 | .20 | 5.52 | 1.24 | -0.28 | -0.07 | .03 | 0.44 | .83 |
| AGAPE | 7.05 | 1.05 | 0.11 | -1.05 | .12 | 6.99 | 1.16 | -0.48 | -0.64 | -.08 | 0.05 | .87 |
| PLC | 6.39 | 1.17 | 0.11 | -0.33 | .13 | 6.38 | 1.08 | -0.45 | 0.36 | -.08 | 0.01 | .72 |

Note. *N* = 77 dyads. *Sk* = Skewness. *K* = Kurtosis. Age = Pearson correlations with age. *d* = Cohen's effect size for differences in scores between partners.
 SMAP = Short Measure of Adult Playfulness. OTD = Other-directed; LTH = Lighthearted; INT = Intellectual; WHI = Whimsical Playfulness. PLC = Playful Love Checklist.
 Last column numbers for SMAP, OTD, LTH, INT, and WHI indicate reliabilities for self-rating version/peer-rating version.
 p* < .05. *p* < .01. Two-tailed.

Figure 1. Descriptive statistics and reliabilities for playfulness and love style measures separated for sex

to the love styles—with some being around .20 and awaiting replication and further clarification in future research. We found a robust association between eros and other-directed playfulness in our sample of women and, additionally, negative associations between lighthearted playfulness and storge and pragma, respectively. Other correlational patterns (e.g., a negative association between

Self-Rating of Playfulness

| Self-rated Love Style | Men's Playfulness | | | | | Women's Playfulness | | | | | R ² |
|-----------------------|-------------------|---------------|------|--------------|-------------|---------------------|---------------|----------------|--------------|--------------|----------------|
| | SMAP | OTD | LTH | INT | WHI | SMAP | OTD | LTH | INT | WHI | |
| EROS | .19 | .39** | .02 | .21 | .14 | .40*** | .33** | .20 | .22* | .20 | .17 |
| LUDUS | .09 | -.07 | -.03 | .06 | .19 | .04 | .05 | .04 | -.10 | .15 | .05 |
| STORGE | -.04 | .09 | .13 | -.14 | -.18 | -.13 | -.20 | -.34** | -.19 | -.19 | .13 |
| MANIA | .17 | -.04 | -.12 | .10 | .03 | .09 | -.08 | -.20 | -.19 | .01 | .11 |
| PRAGMA | -.14 | -.12 | -.11 | -.22 | -.04 | -.16 | -.16 | -.44*** | -.23* | -.18 | .20 |
| AGAPE | .21 | .09 | -.19 | .01 | .00 | .16 | .05 | .10 | -.04 | -.14 | .10 |
| PLC | .43*** | .53*** | .18 | .32** | .28* | .40*** | .45*** | .10 | .27* | .32** | .30 |

Note. N = 77 dyads. SMAP = Short Measure of Adult Playfulness. OTD = Other-directed; LTH = Lighthearted; INT = Intellectual; WHI = Whimsical Playfulness. PLC = Playful Love Checklist. Significant (p < .05) correlations in boldface. *p < .05. **p < .01. ***p < .001. Two-tailed.

Figure 2. Correlations between self-rated playfulness and self-rated love styles

intellectual playfulness and pragma) were smaller but partly comparable to the pattern found in the sample of men. For both men and women, playfulness was robustly and positively associated with the PLC. Other-directed playfulness was numerically strongest, and the exception proved to be lighthearted playfulness, which was unrelated to the PLC.

Testing the Association of Self-rated Playfulness and Partner's Self-ratings in Love Styles

Figure 3 shows that the self-rated playfulness of male participants existed independently from the love styles of their female partners. In contrast, robust and negative associations abounded between the playfulness of females and the love styles of their male partners—women high in intellectual and whimsical playfulness had male partners low in storge. Further, the self-rated global and other-directed playfulness of females was negatively associated with the pragmatic love style of the men; higher expressions in agape in the men were negatively associated with whimsical playfulness in the women. Finally, greater scores in the PLC of the men correlated with global and intellectual playfulness among their partners.

Testing the Association of Partner Ratings in Playfulness and Self-Rated Love Styles

Figure 4 displays associations between partner ratings of playfulness and self-rated love styles. We found that men who rated their partners as playful had greater expressions in eros (with the exception of whimsical playfulness) but reported lower pragma when assigning other-directed and lighthearted playfulness to their partners. They also expressed more global and other-directed playfulness when measuring higher in agape. Women who rated their partners as playful (exception lighthearted) reported greater eros but lower mania and agape when assigning lighthearted playfulness to their partner. Men and women who rated their partners as more playful (with the exception of lighthearted playfulness) also had greater scores in the PLC.

Finally, we tested how partner ratings of playfulness compared with the partners' love styles (see figure 5). Men's ratings of their partners' playfulness were positively associated with females' eros but negatively with storge (global and other directed). Partner ratings in lighthearted playfulness were associated with a greater inclination toward pragma among the women. Further, the partner ratings of males and the global and other-directed playfulness of females corresponded positively with female PLC scores. Women's ratings of their partner's playfulness corresponded positively with males' eros (except for lighthearted) and negatively with males' pragmatic love style (except for lighthearted and intellectual). Males PLC scores were positively associated with partner ratings of playfulness by their female partners (except for lighthearted).

Self-Rating of Playfulness

| Partner's Self-rated Love Style | Men's Playfulness | | | | | Women's Playfulness | | | | | | |
|---------------------------------|-------------------|------|------|------|------|---------------------|---------------|--------------|------|--------------|--------------|----------------|
| | SMAP | OTD | LTH | INT | WHI | R ² | SMAP | OTD | LTH | INT | WHI | R ² |
| EROS | .06 | .21 | .07 | -.04 | .15 | .08 | -.25* | .20 | .18 | .17 | .14 | .08 |
| LUDUS | -.14 | -.01 | .12 | .08 | -.03 | .06 | -.04 | -.01 | .10 | .07 | .13 | .03 |
| STORGE | -.15 | -.19 | .10 | .01 | .00 | .08 | -.09 | .08 | -.18 | -.23* | -.25* | .15 |
| MANIA | -.03 | -.11 | -.07 | .10 | .00 | .04 | -.01 | -.03 | -.09 | .18 | -.10 | .08 |
| PRAGMA | .04 | .02 | .12 | .10 | -.01 | .03 | -.33** | -.24* | -.10 | -.17 | -.20 | .12 |
| AGAPE | .06 | .05 | -.15 | -.22 | -.10 | .09 | -.02 | .00 | .12 | -.02 | -.24* | .10 |
| PLC | .09 | .15 | .03 | .13 | .17 | .06 | .26* | .21 | .16 | .26* | .10 | .10 |

Note. N = 77 dyads. SMAP = Short Measure of Adult Playfulness. OTD = Other-directed; LTH = Lighthearted; INT = Intellectual; WHI = Whimsical Playfulness. PLC = Playful Love Checklist.
 Significant ($p < .05$) correlations in boldface.
 * $p < .05$. ** $p < .01$. *** $p < .001$. Two-tailed.

Figure 3. Correlations between self-rated playfulness and partner's self-rated love styles

Discussion

This study contributes to the understanding of the localization of adult playfulness in Lee's classification of love styles in couples in heterosexual relationships.

| Self-rated Love Style of Rater | Partner-ratings of Playfulness | | | | | | | | | | | |
|--------------------------------|---|---------------|--------------|--------------|------|---|---------------|---------------|--------------|--------------|--------------|----------------|
| | Men's Partner Ratings | | | | | Women's Partner Ratings | | | | | | |
| | (Playfulness rating by male partner towards female partner) | | | | | (Playfulness rating by female partner towards male partner) | | | | | | |
| | SMAP | OTD | LTH | INT | WHI | R ² | SMAP | OTD | LTH | INT | WHI | R ² |
| EROS | .50*** | .51*** | .28* | .34** | .21 | .29 | .25* | .34** | .08 | .30** | .32** | .20 |
| LUDUS | -.17 | -.23* | -.12 | .00 | .09 | .09 | -.08 | -.14 | .01 | -.14 | .06 | .05 |
| STORGE | .07 | .01 | .02 | -.12 | -.16 | .06 | -.12 | -.09 | .12 | -.01 | -.17 | .08 |
| MANIA | .04 | .02 | -.04 | .09 | .19 | .05 | .02 | .01 | -.27* | .05 | -.05 | .12 |
| PRAGMA | -.18 | -.32** | -.23* | -.07 | -.12 | .14 | -.08 | -.11 | -.09 | -.09 | .10 | .02 |
| AGAPE | .25* | .33** | .09 | .17 | .10 | .11 | .12 | .13 | -.27* | .04 | -.13 | .16 |
| PLC | .32** | .47*** | .02 | .34** | .20 | .32 | .37*** | .47*** | .02 | .32** | .26* | .28 |

Note. N = 77 dyads. SMAP = Short Measure of Adult Playfulness. OTD = Other-directed; LTH = Lighthearted; INT = Intellectual; WHI = Whimsical Playfulness. PLC = Playful Love Checklist.
 *p < .05; **p < .01; ***p < .001. Two-tailed. Significant (p < .05) correlations in boldface.

Figure 4. Correlations between partner ratings in playfulness and self-rated love styles

The findings support the notion that there is a difference between the ludic and the playful lover. The main distinction suggests that those high in ludus may enjoy playing games with their partners and seem less interested in long-term and honest relationships, but more current conceptualizations of playfulness describe activities that contribute toward relationship satisfaction (Proyer

Partner-ratings of Playfulness

| Self-rated Love Style of Partner | Men's Partner Ratings | | | | | | | Women's Partner Ratings | | | | | | |
|----------------------------------|---|------|---------------|------|------|----------------|--|---|---------------|------|-------------|----------------|----------------|--|
| | (Playfulness rating by male partner towards female partner) | | | | | | | (Playfulness rating by female partner towards male partner) | | | | | | |
| | SMAP | OTD | LTH | INT | WHI | R ² | | SMAP | OTD | LTH | INT | WHI | R ² | |
| EROS | .42*** | | .18 | .04 | .09 | .27 | | .27* | .28* | .07 | .27* | .33*** | .17 | |
| LUDUS | .02 | -.02 | .03 | .11 | .12 | .03 | | .00 | -.06 | .20 | -.11 | .03 | .09 | |
| STORGE | -.28* | | -.31** | -.10 | -.21 | .11 | | -.07 | .01 | .20 | -.08 | -.03 | .08 | |
| MANIA | .01 | .03 | -.14 | -.07 | .02 | .04 | | .18 | .11 | -.12 | .08 | .00 | .07 | |
| PRAGMA | -.19 | -.16 | -.24* | -.08 | -.12 | .09 | | -.24* | -.20 | -.15 | -.15 | -.35*** | .15 | |
| AGAPE | .17 | .15 | -.09 | -.18 | -.16 | .18 | | .11 | .05 | -.08 | .08 | -.10 | .05 | |
| PLC | .33** | | .30** | .05 | .13 | .14 | | .30*** | .41*** | .21 | .26* | .26* | .20 | |

Note. N = 77 dyads. SMAP = Short Measure of Adult Playfulness. OTD = Other-directed; LTH = Lighthearted; INT = Intellectual; WHI = Whimsical Playfulness. PLC = Playful Love Checklist.
 *p < .05, **p < .01, ***p < .001. Two-tailed. Significant (p < .05) correlations in boldface.

Figure 5. Correlations between partner ratings in playfulness and partner's self-rated love styles

2014b; Wolf, Brauer, and Proyer 2016) and the facilitation of positive emotions in romantic relationships (e.g., Aune and Wong 2002) and potentially also longevity of the relationships (cf. Chick 2001; Chick, Yarnal, and Purrington 2012).

To address our research question, we recruited romantic couples who provided self-rating and partner ratings of playfulness and self-ratings of love styles.

Analyses on similarity showed that romantic partners resemble each other in all facets of playfulness except for lighthearted playfulness. Further, the views about an individual's playfulness, as assessed by self-ratings and partner ratings, converged and were comparable to findings from Proyer (2017), who tested a mixed sample consisting of peers, family members, and romantic partners on self-other agreement (see also Proyer and Brauer 2018).

The findings show that an individual's attitude toward love varies with his or her playfulness. The analyses of the self-ratings show that adult playfulness is robustly and positively associated with the eros love style. When we compute the multiple squared correlation coefficient of the four OLIW facets and the love styles separately, we find the strongest overlap for eros—21 percent in the men and 17 percent in the women (see Proyer 2014b)—but in the sample of women, the (negative) associations with pragma were numerically even higher (20 percent). Overall, ludus was widely unrelated to playfulness in men and women (7 percent and 5 percent overlapping variance). The comparatively largest associations with whimsical types of playfulness may be of interest for future research, but it seems as if ludus cannot be well located in the current conceptions of playfulness used in this study. Contrary to our expectations, lighthearted playfulness also did not increase with greater ludus. These findings warrant replication and should not be overinterpreted. Overall, adult playfulness was not associated with the ludic love style—hence, differentiating the ludic from the playful lover seems important.

One possible explanation may relate to the so-called “dark triad” personality traits (i.e., Machiavellianism, narcissism, and psychopathy) because some might argue that the ludic love style may link playfulness with these three traits. Research shows those pursuing the ludic love style to be high in all three dark-triad personality traits (Jonason and Kavanagh 2010). In line with the assumption that characteristics of the ludic lover—for example, bias toward short-term sexual relationships and seeing love as a game (see also Koladich and Atkinson 2016; Lee et al. 2013)—might be explained by the dark triad, we might argue that playfulness does not characterize those high in Machiavellianism, narcissism, and psychopathy. Hence, playfulness cannot explain the variability in ludus related to these traits. However, to the best of our knowledge, no data on the playfulness–dark-triad relationship exist. Thus, our notion should be tested in future research. This would also add to the scarce literature on correlates of playfulness that may be negative (e.g., relations with risk taking or personality pathology) or socially unacceptable.

Across all coefficients, the correlations were numerically larger among the women in our study. This may be associated with a greater orientation toward romantic relationships in women (see Cross, Bacon, and Morris 2000) and different usage of playfulness in relationships. The playful male lover could be primarily described as high in eros among those who are high in other-directed playfulness, but the playful female lover could be described as high in eros (all facets of playfulness) and low in pragma among those higher in intellectual playfulness. The gender differences in the correlational pattern are in line with differences reported for relationship satisfaction (Wolf et al. 2016). There, playfulness contributed to relationship satisfaction to a greater extent among the women than among the men. Our findings also support the notion that it is important to differentiate among facets of playfulness.

The Playful Love Checklist demonstrated robust and positive associations with playfulness in men and women with the notable exception of lighthearted playfulness. This indicates that greater levels of playfulness in men and women in romantic relationships are also associated with greater self-ascribed inclinations to these playful types of behaviors in the relationships. Our findings may suggest that lighthearted types of playfulness do not contribute to playful behaviors that facilitate growth in a relationship. Although we initially expected this type of playfulness to reflect the ludic part of play in relationships, it seems as if parts of what constitutes lighthearted playfulness may contribute positively but other parts negatively to relationships. In this sense we argue that playfulness in its current operationalizations should not be seen as a characteristic of the ludic lover (Lee 1973, 1977). The use of the term may have been appropriate with a narrow understanding of playfulness. In this sense, not everyone interested in game playing is playful, and not all playful individuals enjoy game playing. It is evident that if we regard the fun-seeking and entertainment component of playfulness as its core, those high in playfulness would behave differently in romantic relationships (e.g., in terms of felt and expressed commitment or intimacy). It has also been shown that the endorsement of ludus is associated with a shorter duration of a relationship (Hendrick et al. 1988), while the more benevolent forms of playfulness seem to contribute to greater relationship satisfaction (Aune and Wong 2002; Baxter 1992; Metz and Lutz 1990; Wolf et al. 2016) and potentially also to longer duration (cf. Chick 2001; Chick, Yarnal, and Purrington 2012). We might argue that such behaviors may still be observable in those who demonstrate primarily lighthearted types of playfulness and, to some degree but less so, also those who endorse its whimsical facets (Proyer

2017). Those high in other-directed and intellectual playfulness also seem to have different interests when it comes to romantic relationships. We might further argue that they also send different signals (see Chick 2001) to potential partners and may, therefore, be perceived differently from those who are seeking long-term relationships. Our findings fit the observation that the mean scores in the ludus scale were numerically lower than those reported in the handbook of the MAIL (Bierhoff, Grau, and Ludwig 1993). We might argue that this is an effect of the preselection because those in our sample reported a comparatively long relationship duration, which is atypical for those high in ludus.

Women with greater levels of global and other-directed playfulness seem to have partners with greater expressions in eros and low inclinations to pragma. Women with higher intellectual and whimsical types of playfulness seem to have partners with lower inclination to storge. Hence, there may be effects of selective partner choice in the sense that playful women prefer men higher in eros but lower in less passionate love styles. Additionally, intellectually playful women seem to have a preference for playfully loving men (greater scores in the PLC). Interestingly, there were no comparable effects for the men. This means that playfulness in the men existed widely unrelated to their partners' expression in love styles and the PLC.

We have already mentioned, but should highlight again, that our PLC is not intended to be an additional love style or that the items set together could be used as a fully developed questionnaire. We used it as an approximation for the type of behaviors to which a playful lover (in contrast to the ludic lover) aspires in a relationship.

Women who described their partners as playful had partners with greater expressions in eros (with the exception of lighthearted playfulness) but lower pragma (global and whimsical). Women with greater inclination to eros were perceived as globally and other directed playful by their partners. Similarly, those higher in storge were rated as less globally and other directed playful by their partners. Hence, the perception of playfulness by the partners was associated with self-ratings in the love styles. In particular, those who have greater inclinations to eros but lower expressions in pragma are perceived as playful by their partners.

Men higher in eros also rated their partner as more playful (least so for whimsical playfulness), and we found a similar pattern for women rating the playfulness of their partners (with the exception of lighthearted playfulness). Hence, there was good convergence in the sense that those higher in eros also

rated their partners as more playful. Men who rated their female partners higher in global and other-directed playfulness had partners who showed inclinations to higher eros and lower storge. Of course, we do not know anything about the causality here, but we might argue that those who are interested in passionate love are, in particular, searching for signals of playfulness among potential partners for long-term relationships (Chick 2001; Chick, Yarnal, and Purrington 2012; Proyer and Wagner 2015). Furthermore, those assigning greater playfulness to their partners also reported greater inclinations to behaving playfully in a relationship (PLC). The notable exception was that there were no associations with ascribed lighthearted playfulness in both men and women and their partners except for negative associations with pragma. We might argue that those who behave playfully in a relationship are interested in playful partners—while those who are on the high end of lighthearted playfulness may be less preferable partners for long-term relationships.

Limitations

Our findings warrant replication in independently collected samples and must, therefore, be regarded as preliminary. Further, it would be desirable to have a larger sample allowing for greater variance in the tested variables—in ludus in particular, but also with respect to demographic factors. A larger data set would also allow researchers to perform more complex analyses for a more fine-grained differentiation between actor and partner effects by analyzing a full Actor-Partner-Interdependence Model (Kenny 1996) within structural equation modeling. Our present findings allow our testing for specific hypotheses within this framework in forthcoming studies. We have only limited knowledge about validity for the PLC. We derived the behaviors in the list directly from the existing literature and, thus, we would argue for content validity and that the factorial validity has been established by means of an exploratory factor analysis. In interpreting the findings, it must be noted that the selection of behaviors was not random, but that it surely does not account for the full range of possible playful behaviors in romantic relationships. We do not have data beyond the mentioned facets of validity and, clearly, a replication and extension of the findings—by conducting interviews or focus groups with individuals in romantic relationships to clarify how they use their playfulness in their relationship—will be needed if the PLC should be used in future research. Finally, we have tested only heterosexual couples in this study. The main reason for doing so was that we wanted to define the groups clearly by their gender, and thus we distinguished

them by their partners. Having found robust associations, it will be interesting to test whether these findings can be replicated for couples in same-sex relationships (see e.g., Smith, Sayer, and Goldberg 2013).

Previous studies (Proyer 2012a, 2014c), as we have pointed out, may involve crosscultural differences in their understanding of playfulness (see also Chick 1998). Examples of such differences may be found in the studies by Chick, Yarnal, and Purrington (2012) and Proyer and Wagner (2015). Participants in both studies indicated that playfulness is a desired trait in potential partners for long-term relationships, but the rank order differed (higher ranking in data from the United States than in that from the German-speaking countries). Taking the limitations of these rank order comparisons into account (e.g., differences in the sample characteristics and critical differences among the scores) may point to differences in the understanding of playfulness of individuals in different countries. Because we lack a full investigation of such differences, a caveat of this study must be that the application of its findings across cultures needs further testing.

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