



Individual differences and disagreement in romantic relationships

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ABSTRACT

We developed and validated the Reasons for Disagreement in Romantic Relationships Scale (RDRRS). We conducted act nomination (Study 1), investigated the items' component structure in a sample of newlywed couples (Study 2), and compared responses in the newlywed year to responses three years later (Study 3). First, we identified 82 reasons for disagreement. Second, 214 participants (107 couples) reported how frequently they disagreed about each issue in the past six months. The RDRRS contains 30 items organized into Inadequate Attention/Affection, Jealousy/Infidelity, Chores/Responsibilities, Sex, Control/Dominance, and Future Plans/Money. Finally, we re-assessed 138 participants three years later. The associations between disagreement and relationship satisfaction decreased over time. We recommend the RDRRS for assessing reasons for disagreement in romantic relationships.

Conflict and disagreement in romantic relationships can have devastating consequences for the partners (Buss & Duntley, 2011). For example, 32% of men report verbal abuse by their partners (Carney & Barner, 2012), 14% of married women are raped at least once by their husbands (Bergen & Barnhill, 2006), and divorce can negatively affect parents' well-being (e.g., loss of custody of children; Amato, 2010) and their child's development (e.g., cognitive skills; Bernardi & Radl, 2014). One way romantic partners may engage in conflict is by *disagreeing* with each other's behaviors, attitudes, and values. Despite the negative consequences of conflict—and disagreement, in particular—for the romantic partners (e.g., rape, insult, divorce), no previous research has developed a psychometrically sound assessment of the specific reasons for disagreement in romantic relationships. In the current research, we identified and assessed these reasons by developing the Reasons for Disagreement in Romantic Relationships Scale (RDRRS).

1. Reasons for disagreement in romantic relationships

Over human evolutionary history, sex-specific costs and benefits of mating selected for sex-differentiated preferences in a long-term partner (Buss & Schmitt, 1993), which sometimes produces conflict and disagreement between romantic partners (Buss, 2015). For example, parental investment by an offspring's putative sire is beneficial to a woman to the extent that it reduces the woman's burden (e.g., childrearing;

Sear & Mace, 2008), and particular psychological and social characteristics in men may signal greater ability and willingness to share resources with a woman and her offspring (e.g., intelligence, social status; Williams, Fisher & Cox, 2008). The benefits correlated with preferring men who were able and willing to invest in the woman and her offspring therefore selected for women's preferences for psychological and social characteristics more than physical features in their evaluation of long-term partner attractiveness (Buss, 2015).

Because redirection of a partner's investment to another woman and her offspring is reproductively costly for a woman (Buss & Schmitt, 1993), a male partner's behaviors that may negatively affect his ability or willingness to share resources with a woman and her offspring may cause disagreement between romantic partners. For example, financial concerns are among the most recurrent sources of conflict and disagreement in romantic relationships, especially for women (Papp, Cummings & Goeke-Morey, 2009)—perhaps because a man's income reflects his investment potential (Buss, 2015)—and concerns about a partner's parenting are correlated with relationship dissatisfaction for women, but not for men (Duba, Hughey, Lara & Burke, 2012). Reasons for disagreement therefore may include a partner's diversion of resources (e.g., gambling, over-expenditure on hobbies; unaccounted for expenditures) and a partner's lack of parenting skills (e.g., neglecting offspring, not being home enough), for example.

In contrast, because child development is strongly influenced by the

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mother's health, especially during pregnancy (e.g., mother's bacterial infection during pregnancy can adversely affect the offspring's brain development; Hagberg, Gressens & Mallard, 2012), and because some physical features may signal health (e.g., facial symmetry is a phenotypic marker of immunocompetence; Fink, Neave, Manning & Grammer, 2006), men more than women place a premium on physical features (e.g., facial symmetry, waist-to-hip ratio) in their evaluation of attractiveness (Buss & Schmitt, 1993).

Because men place a premium on indicators of a partner's reproductive capacity, a female partner's behaviors that may negatively affect her reproductive capacity may be a reason for disagreement in romantic relationships. For example, a partner's physical attractiveness is a stronger predictor of husbands' than of wives' relationship satisfaction (Meltzer, McNulty, Jackson, & Karney, 2014), and women more than men attempt to retain their partner by enhancing their appearance (e.g., Buss & Shackelford, 1997), suggesting that men are more responsive than women to a partner's behaviors that may affect their reproductive capacity. Reasons for disagreement may therefore include a partner's neglect of their health (e.g., smoking cigarettes, drunkenness) and sexual incompatibility (e.g., one wants sex, the other doesn't), for example.

Additionally, infidelity inflicts costs on the betrayed partner: A man whose long-term partner is sexually unfaithful risks cuckoldry (i.e. unwitting investment in a child to whom he is genetically unrelated; Buss & Shackelford, 1997), and a woman whose long-term partner is emotionally unfaithful risks losing partner-provisioned resources (Buss, 2015). Because men face the adaptive problem of paternity uncertainty, men report greater upset than do women in response to a partner's sexual infidelity (Buss, Larsen, Westen & Semmelroth, 1992). In contrast, because the redirection of a partner's investment to another woman and her offspring is reproductively costly for a woman (Buss et al., 1992), women report greater upset than do men in response to a partner's emotional infidelity (Shackelford, LeBlanc & Drass, 2000).

Behaviors that increase risk of infidelity—in particular, a man's emotional infidelity and a woman's sexual infidelity—may lead to conflict and disagreement in romantic relationships. For example, men report upset in response to a partner's pretended orgasm, perhaps because the frequency with which a woman reports pretending orgasm is positively related to the likelihood of her sexual infidelity (Ellsworth & Bailey, 2013), and men sometimes sexually coerce their partners by hinting that other women are interested in a romantic relationship with them (Goetz & Shackelford, 2004), perhaps because women report upset in response to a partner's emotional infidelity (Shackelford et al., 2000). The reasons for disagreement in romantic relationships may therefore include, for example, behaviors or circumstances that increase perceived risk of partner infidelity (e.g., going out at night, too little time spent together), or reactions to increased perceived risk of infidelity (e.g., jealousy, possessiveness).

Conflict and disagreement between romantic partners plague many relationships (Buss & Duntley, 2011). However, no previous research has developed a psychometrically sound assessment of the specific reasons for disagreement in romantic relationships. We queried Google Scholar, PsycINFO, and PubPsych with keywords commonly used in research addressing conflict and disagreement in romantic relationships (e.g., “adjustment”, “conflict”, “disagreement”, “dissatisfaction”). The searches returned publications identifying, for example, facets of marital adjustment (Orden & Bradburn, 1968) and marital satisfaction (Canel, 2013), but none secured evidence of reliability or validity of a broadly applicable assessment of the specific reasons for disagreement in romantic relationships.

2. Measures of conflict in romantic relationships

Orden and Bradburn (1968) developed the Marriage Adjustment Balance Scale (MABS), which includes two dimensions of marital adjustment (Satisfaction and Tensions), measured with nine items (e.g.,

“in-laws,” “household expenses”). However, the MABS includes assessments of activities and disagreements, which secures a broader assessment of reasons for disagreement in romantic relationships than we were interested in securing. Canel (2013) developed the Marital Satisfaction Scale (MSS), which contains 101 yes/no items assessing an individual's opinions about his or her marriage, organized into four dimensions: Marital Harmony, Anger, Communication with the Spouse's Family, and Economic Understanding. Although the MSS captures factors related to disagreement (e.g., Anger), the MSS is time-consuming to complete and does not capture the frequency or the intensity of the disagreement—attributes that would allow researchers to test a wider range of hypotheses.

Levinger (1965) investigated the sources of marital dissatisfaction among applicants for divorce, and identified 12 categories of spouses' complaints, including financial problems, infidelity, and lack of love. Although Levinger provided insights into sex differences in marital conflicts—for example, wives complain more about financial problems, and husbands complain more about sexual incompatibility—he focused on the reasons that lead to divorce (vs. moderate disagreements) and did not secure evidence of reliability or validity for the categories. Mitchell, Bullard and Mudd (1962) identified four dimensions of marriage adjustment: Domestic-Economic (e.g., “husband's work”), Personal (e.g., “jealousy”), Social-Biographical (e.g., “religious matters”), and Parental-Social (e.g., “wife's mother”). Although Mitchell et al. reported several insightful findings—for example, concerns about finances generated the most problematic and recurrent conflict, and husbands' and wives' reports were highly correlated—they analyzed archival data and did not develop a quantitative measure of marital conflict.

Existing assessments of disagreement in romantic relationships lack parsimony and theoretical focus, which may hinder scientific progress when the results of studies are to be compared or meta-analyzed. The current research developed a psychometrically sound and broadly applicable assessment of the specific reasons for disagreement in romantic relationships, which we term the Reasons for Disagreement in Romantic Relationships Scale (RDRRS). Specifically, we identified the reasons for disagreement in romantic relationships (act nomination; Study 1). Next, we investigated the component structure underlying the reasons for disagreement, using a sample of newlywed couples (Study 2). Finally, we re-assessed and compared responses of these participants three years later, in the fourth year of marriage (Study 3).

3. Study 1

3.1. Participants and procedure

We recruited several dozen individuals from a university and surrounding community in the Northern U.S. to complete a brief survey (individuals were not screened for pre-existing conditions, such as psychopathology or special educational needs). Prospective participants were provided a consent form, and those who signed the consent form and indicated that they were at least 18 years old, completed the survey. Using an act nomination procedure (Buss & Craik, 1983), we asked participants to list specific issues that couples sometimes disagree about.

3.2. Results and discussion

We collected several hundred nominations. A team of researchers consolidated the responses by independently inspecting them and removing vague, redundant, or irrelevant acts. This process resulted in a list of 83 reasons, such as “what TV program to watch,” “being possessive,” and “goals in life.” We used these reasons in Study 2 as the preliminary list of items in the Reasons for Disagreement in Romantic Relationships Scale (RDRRS).

4. Study 2

4.1. Method

4.1.1. Participants

Participants were 214 individuals in a heterosexual marriage (individuals were not screened for pre-existing conditions, such as psychopathology or special educational needs). Participants were in their first year of marriage, and the sample included responses from both partners of each couple (i.e., 107 couples; see Procedure). Spouses who lived together before marriage (68.2%) did so on average for 18.9 months ($SD = 20.2$). Male participants were between 18 and 41 years old ($M = 26.7$; $SD = 3.8$), and female participants were between 18 and 36 years old ($M = 25.5$; $SD = 4.1$). Previous reports (e.g., Buss & Shackelford, 1997) presented analyses of different variables included in this larger data to test different hypotheses. The current article presents novel analyses of data included in this larger dataset. Our sample size is larger than the sample size necessary for correlation stabilization (Schönbrodt & Perugini, 2013) and is above the minimum suggested for factor analyses (i.e., factor analysis can yield reliable results for $n > 50$, especially when data shows high factor loadings, low number of factors, and high number of items; de Winter, Dodou & Wieringa, 2009)

5. Materials

5.1. Participants completed a survey that included the following parts

5.1.1. Reasons for Disagreement in Romantic Relationships Scale (RDRRS)

This preliminary version included 83 items (see Study 1). Participants answered how frequently they and their spouses disagreed about each issue (item) within the past six months, using a 4-point Likert scale (0 = *Never* and 3 = *Often*). Items included “children,” “religion,” and “money.”

5.1.2. Demographic questions

We included demographic questions (e.g., age, sex), as well as questions about the relationship to which participants responded on a 7-point Likert scale (e.g., 1 = *Not at all satisfied* and 7 = *Extremely satisfied*), such as “How satisfied are you with your current marriage?”, “Overall, how satisfied are you with your sex life with your partner?”, and “What is the probability of you having an affair within five years?”. Finally, participants were asked to indicate their annual income [“What is your current personal income per year (excluding spouse's income)?”] and how long they had lived with their current spouse before marriage [“How long did you live together before marriage (in months)?”]. We also included questions regarding religiosity (“Are you:”, to which participants responded in a 7-point Likert scale, where 1 = *not religious at all* and 7 = *extremely religious*) and political liberalism (1 = *extremely conservative* and 7 = *extremely liberal*).

5.2. Procedure

Participants engaged in three separate sessions. First, participants received through the mail a survey to be completed at home. This survey included a confidential biographical questionnaire containing demographic questions (e.g., age, sex). Second, one week after receiving the first survey, participants arrived at the laboratory and were escorted to a private room by a researcher. The second survey included the preliminary version of the RDRRS. Third, participants were interviewed toward the end of the second survey to provide information about their relationship. The surveys included several measures and demographic questions not relevant to the aims of the current article. Confidentiality of all responses was assured. Participants were paid \$30 each for their participation.

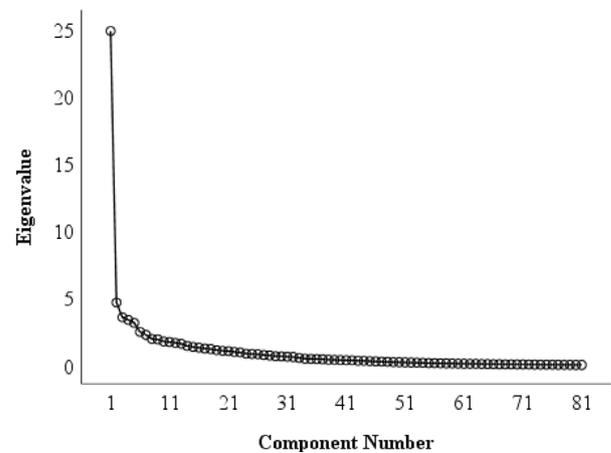


Fig. 1. Scree plot of the items of the RDRRS.

6. Results

We first correlated the partners' responses to the 83 items included in the preliminary version of the RDRRS. The results indicated that the spouses' responses are moderately correlated (average $r = 0.37$; all $ps < 0.001$), indicating that the spouses concur on the reasons for disagreements and the frequency with which they disagree about these issues. For parsimony and reportorial efficiency, we averaged responses of the spouses for each couple.

The item “not being a good parent to step-child” showed extremely low variance (97.1% participants scored “0” = *Never*) and responses to this item therefore were excluded from further analyses. Additionally, two items were identical (i.e., “money”). We combined these items by averaging responses to these items. We then verified that Kaiser-Meyer-Olkin (0.70) and Bartlett's sphericity tests [$\chi^2(3240) = 17,807.50$, $p < 0.001$] supported the suitability of the data for Principal Components Analysis (PCA).

We performed a PCA on responses to the 81 items. The results indicated 21 components meeting the Kaiser criterion (eigenvalue ≥ 1), explaining 79.4% of the total variance. However, the scree plot (Cattell criterion, see Fig. 1) suggested six components (51.8% of total variance), a result corroborated by the results of a parallel analysis (Horn criterion). A parallel analysis generates randomized data with the same parameters as the observed data (i.e., 107 observations and 81 variables). The Horn criterion suggests retention of components for which the eigenvalue in the observed data is greater than the associated eigenvalue in the randomized data (Horn, 1965).

Component extraction criteria suggested different numbers of components for extraction, but because two of three criteria (Horn and Cattell) suggested a six-component structure, because the Horn criterion is the most rigorous (Garrido, Abad & Ponsoda, 2013), and because the six-component structure appeared to be the most theoretically meaningful and interpretable (i.e., similar measures have identified similar number of components; see Introduction), we performed another PCA, setting the number of components to six, followed with varimax rotation of the resulting components. We retained items that either loaded > 0.30 on a single component, or that loaded > 0.30 on multiple components but loaded > 0.40 on a single component.

Thirteen items did not meet the component loading requirements and were excluded (e.g., “independence,” “whose fault it was,” “not being honest”). Additionally, we retained only reasons that are commonly reported by excluding 16 items that showed very low variance (at least 75% of participants scored “0” = *Never*), because an item with low variance suggests that the reason (item) was infrequently a target of disagreement. Items with low variance included “abortion,” “which side of the bed to sleep on,” and “dating other people.” The resulting RDRRS contains 52 items organized into six components.

We labeled Component 1 “Inadequate Attention or Affection” because it includes items regarding expressions of love and care that romantic partners may disagree about (e.g., “not being appreciated”). We labeled Component 2 “Jealousy and Infidelity” because it includes items related to perceived increased risk of infidelity, or reactions to perceived risk of infidelity (e.g., “talking to an ex-girlfriend or ex-boyfriend,” “being possessive”). We labeled Component 3 “Chores and Responsibilities” because it includes items that refer to tasks that romantic partners may share (e.g., “housekeeping”). We labeled Component 4 “Sex” because it includes items that refer to sexual incompatibility, or disclosure of a couple's sexual intimacy (e.g., “frequency of sex,” “telling private information about relationship to others”). We labeled Component 5 “Control and Dominance” because it includes items that refer to events in which one partner attempts to manipulate the other partner's behaviors (e.g., “who's in control”). We labeled Component 6 “Future Plans and Money” because it includes items that refer to ability and willingness to invest resources in the relationship (e.g., “who should pay for something,” “goals in life”).

For parsimony, we retained the five items with the highest loadings for each component. The excluded items, although statistically acceptable, did not add unique information to the constitutive definition of the component on which they loaded. For example, we excluded the item “future plans (long-term)” because it showed a lower component loading on the component Future Plans and Money, relative to an item similar in content (“future plans;” $r = 0.77$; $p < 0.001$). Additionally, items such as “sex,” “money,” and “equality in the relationship” were excluded because they are vague or general. For example, we excluded the item “sex” but retained the items “frequency of sex,” “sexual acts,” and “one wants sex, other doesn't” because the retained items describe more specific sex-related issues, relative to the item “sex.” The final version of the RDRRS contains 30 items organized into six components (see Appendix). The items' component loadings and communalities (h^2), and the eigenvalue, variance explained, and composite reliability for each component are displayed in Table 1.

As part of the evaluation of the construct validity of the RDRRS, we correlated the spouses' averaged responses to the six components with the spouses' separate responses to the following questions: “How satisfied are you with your current marriage?”, “Overall, how satisfied are you with your sex life with your partner?”, “What is the probability of you having an affair within five years?”, “What is your current personal income per year (excluding spouse's income)?”, and “How long did you live together before marriage (in months)?”. The results are summarized in Table 2. The results revealed, for example, that (1) women's but not men's relationship satisfaction is negatively correlated with the frequency with which the couple disagrees about Control and Dominance, (2) women's but not men's age is negatively correlated with the frequency with which the couple disagrees about Jealousy and Infidelity, (3) women's but not men's sexual satisfaction is negatively correlated with the frequency with which the couple disagrees about Chores and Responsibilities, and (4) women's but not men's probability of having an affair within five years is positively correlated with the frequency with which the couple disagrees about Inadequate Attention or Affection.

For reportorial completeness, we investigated sex differences in the reported frequency of disagreement for each component. Men ($M = 0.71$; $SD = 0.59$) more than women ($M = 0.55$; $SD = 0.51$) reported to disagree about Future Plans and Money ($t = 2.16$; $p = 0.036$). We then investigated sex differences in the reported frequency of disagreement for each item of the component Future Plans and Money. Men reported higher frequencies than women for the items “children” (Men: $M = 1.10$; $SD = 0.89$; Women: $M = 0.83$; $SD = 0.75$; $t = 2.35$; $p = 0.020$) and “future plans” (Men: $M = 0.70$; $SD = 0.87$; Women: $M = 0.45$; $SD = 0.72$; $t = 2.27$; $p = 0.024$). Additionally, we correlated each component with religiosity and political liberalism, for men and women separately. The results revealed that, for women, political liberalism was positively correlated with Chores and

Responsibilities ($r = 0.21$; $p = 0.03$) and negatively correlated with Jealousy and Infidelity ($r = -0.23$; $p = 0.02$).

7. Discussion

The current research employed well-established methods to develop the Reasons for Disagreement in Romantic Relationships Scale (RDRRS). The results revealed a six-component structure. The component Inadequate Attention or Affection included reasons concerning expressions of love and care that couples disagree about (e.g., “not being appreciated”). A man's expression of love and care may serve as a proxy for his willingness to invest resources in a relationship with that partner (Buss, 2015). A male partner's inadequate attention or affection may therefore signal to a woman that he is not willing to share resources with her and her offspring, corroborating our expectation that the reasons for disagreement would include behaviors that signal emotional detachment and diversion of resources (e.g., lack of communication, not paying enough attention to the partner). A man's inadequate expressions of love and care may portend a higher likelihood of his partner's infidelity, consistent with our findings that women's but not men's probability of having an affair within five years is positively correlated with the frequency with which the couple disagrees about Inadequate Attention or Affection. One possible explanation is that humans may have evolved a mate ejection psychology designed to facilitate relationship dissolution and emotional detachment (Boutwell, Barnes & Beaver, 2015), and female ejection of a mate may be activated when men threaten to cease resource-provisioning (Boutwell et al., 2015).

The component Jealousy and Infidelity includes a partner's behaviors that may increase the perceived risk of infidelity (e.g., “talking to an ex-girlfriend of ex-boyfriend”), and reactions to an increased risk of infidelity (e.g., “jealousy,” “being possessive”), in line with our expectation that the reasons for disagreement include behaviors or circumstances affecting perceived risk of partner infidelity. A partner's infidelity is costly for both men and women (Shackelford et al., 2000): Men face the adaptive problem of paternity uncertainty, and the redirection of a partner's investment to another woman and her offspring is reproductively costly for a woman (Buss et al., 1992). However, the item “lack of fidelity” showed low variance (82% of participants scored “0” = *Never*) and was excluded from the RDRRS. Because infidelity is a leading cause of divorce (e.g., Daly & Wilson, 1988), it is possible that most couples who experienced infidelity divorced soon after marrying, and therefore did not participate in our survey—our sample included only married individuals, and the RDRRS refers to the current marriage. Future research may investigate whether and how disagreements experienced in *previous* relationships affect the *current* relationship, for example. Additionally, women's but not men's probability of having an affair within five years is positively correlated with the frequency with which couples disagree about Jealousy and Infidelity, perhaps because women more than men anticipate and appraise opportunities to mate-switch should they incur costs inflicted by the partner (e.g., a partner's diversion of resources; Buss, Goetz, Duntley, Asao & Conroy-Beam, 2017). Additionally, the frequency with which couples disagree about Jealousy and Infidelity is negatively correlated with women's but not men's age, perhaps because age is a proxy for reproductive capacity (Buss, 2015), and women of reproductive age (relative to older, post-reproductive age women) are more likely to have affairs (Buss & Schmitt, 1993).

The component Chores and Responsibilities includes reasons for disagreements about everyday tasks that partners may share (e.g., “housekeeping”). Women incur substantial costs as a consequence of reproduction—for example, metabolic energy expended on pregnancy and parental care often expected from a mother (e.g., breastfeeding; Hewlett & Winn, 2014). Therefore, paternal investment—such as cooperation in chores and responsibilities—is beneficial to a woman and her offspring to the extent that it reduces the woman's child-rearing

Table 1
Component structure and loadings of the RDRRS items ($n = 107$).

Item description	Components						h^2
	I	II	III	IV	V	VI	
Not showing enough love of affection	0.77	0.16	0.18	0.23	0.04	0.15	0.73
Lack of communication	0.72	0.04	0.06	0.20	0.11	0.19	0.62
One not paying enough attention to the other	0.71	0.28	0.16	0.15	0.18	0.04	0.67
Not being appreciated	0.69	0.14	0.18	0.34	0.26	0.18	0.74
Feelings	0.67	0.07	0.21	0.08	0.08	0.19	0.54
Jealousy	0.34	0.65	-0.12	0.08	0.02	-0.02	0.55
Talking to an ex-girlfriend or ex-boyfriend	0.13	0.63	0.03	-0.05	0.12	-0.05	0.44
Being possessive	0.37	0.63	0.04	0.16	0.37	0.05	0.70
Past relationships	0.27	0.60	-0.17	0.07	-0.04	0.07	0.48
Whose friends we hang around more	0.13	0.44	0.25	0.16	0.32	0.12	0.41
Housekeeping	0.15	-0.16	0.72	0.33	0.16	0.15	0.72
Chores	0.16	-0.11	0.64	0.39	0.17	0.28	0.71
Who does more work	0.23	-0.04	0.62	0.35	0.28	0.25	0.71
Not showing up when supposed to	0.17	0.24	0.61	-0.19	0.08	0.22	0.55
Sharing responsibilities	0.40	-0.03	0.58	0.20	0.22	0.19	0.62
One wants sex, other doesn't	0.06	-0.01	0.23	0.78	0.09	0.11	0.69
Frequency of sex	0.18	0.06	0.18	0.77	0.12	0.08	0.69
Sexual acts	0.06	0.13	0.09	0.54	0.25	0.26	0.46
Telling private information about relationship to others	0.23	0.19	0.03	0.51	0.11	0.13	0.37
In-laws	0.20	0.24	0.08	0.41	0.31	0.10	0.36
Who's boss	0.28	0.08	0.01	0.07	0.81	0.30	0.83
Who's in control	0.34	-0.05	0.04	0.13	0.71	0.37	0.77
Dominance	0.37	0.03	0.08	0.15	0.68	0.17	0.66
What to wear	-0.01	0.14	0.19	0.26	0.36	-0.03	0.26
Religion	0.21	0.03	0.29	0.28	0.31	0.10	0.30
Goals in life	0.31	0.26	0.16	0.10	0.18	0.71	0.74
Future plans	0.34	0.05	0.30	0.11	0.18	0.70	0.75
Children	0.16	0.13	-0.06	0.33	-0.01	0.61	0.53
Who should pay for something	0.07	0.14	0.24	-0.04	0.33	0.54	0.48
One uses all of the other's money	0.23	0.22	0.25	0.04	0.38	0.44	0.51
Eigenvalue	24.9	4.6	3.5	3.3	3.1	2.5	
Explained variance (%)	30.6	5.7	4.4	4.1	3.9	3.0	
Composite reliability	0.84	0.73	0.77	0.75	0.72	0.74	

Note: Bolded numbers refer to the loading of each item in its respective component.

burden. This interpretation is consistent with our findings that the frequency with which couples disagree about Chores and Responsibilities was negatively correlated with women's but not men's sexual satisfaction, suggesting that women more than men place a premium on psychological and social characteristics that signal parenting skills in a partner (Williams et al., 2008).

The component Sex includes reasons for disagreements associated with sexual incompatibility and disclosure of a couple's sexual intimacy (e.g., "sexual acts," "telling private information about relationship to others"), capturing a facet of conflict included in existing measures of

conflict and disagreement ("sex;" e.g., Geiss & O'Leary, 1981; Levinger, 1965). A partner's infidelity inflicts costs on the betrayed partner (Buss, 2015). For example, men who fail to secure paternity may unwittingly invest in a child to whom they are genetically unrelated (Buss & Shackelford, 1997). The costs of cuckoldry may have selected for psychological mechanisms in men that motivate efforts to detect and decrease the risk of a partner's infidelity. For example, men perform more sexual coercion when a female partner is known or suspected to have been sexually unfaithful (Goetz & Shackelford, 2006), and men more than women complain about sexual incompatibility

Table 2
Correlation between spouses' average responses to the RDRRS components and spouse's separate responses to questions about the romantic relationship (Time 1; $n = 107$).

		IAA	JI	CR	S	CD	FM
Male partner	Time lived together before marriage	0.09	-0.04	.29*	0.14	0.11	.29*
	Annual income (excluding spouse)	0.07	0.04	-0.04	0.09	0.12	0.1
	Relationship satisfaction	-0.26**	-0.26**	-0.29**	-0.22*	-0.17	-0.35***
	Probability of affair within 5 years	0.04	0.09	0.19	0.06	-0.02	.21*
	Sexual satisfaction	-0.22*	-0.03	-0.13	-0.34***	-0.10	-0.17
Female partner	Age	0.11	-0.08	0.02	-0.03	0.05	0.12
	Time lived together before marriage	-0.02	-0.10	0.22	-0.03	0.08	0.13
	Annual income (excluding spouse)	-0.10	-0.09	0.06	-0.14	-0.03	-0.03
	Relationship satisfaction	-0.49***	-0.38***	-0.40***	-0.37***	-0.29**	-0.39***
	Probability of affair within 5 years	.21*	.31**	0.11	.24**	0.09	0.11
	Sexual satisfaction	-0.26**	0.01	-0.26**	-0.30**	-0.20*	-0.16
	Age	-0.12	-0.30**	-0.01	-0.01	-0.04	-0.01

Note: IAA = Inadequate Attention or Affection; JI = Jealousy and Infidelity; CR = Chores and Responsibilities; S = Sex; CD = Control and Dominance; FM = Future Plans and Money;

* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

(e.g., Buss, 2015). However, our results revealed that the frequency with which couples disagree about Sex was positively correlated with women's but not men's probability of having an affair within five years. One possible explanation is that the component Sex does not directly reflect infidelity, but instead reflects behaviors that suggest sexual or emotional infidelity (e.g., "one wants sex, other doesn't"). Additionally, Sex includes behaviors that may upset women more than men, and therefore may affect women's more than men's responses in this component. For example, women whose partner discloses private information about the relationship to others (i.e., an item of the component Sex) may have their sexual reputation damaged, especially if the information is derogatory (e.g., men may derogate their partners as a means of mate retention; Buss et al., 2008).

The component Control and Dominance includes reasons for disagreement over attempts by one partner to manipulate the other (e.g., "Who's boss"). Manipulating a female partner's behaviors may have conferred benefits on men over human evolutionary history. These benefits may include, for example, an increase in the certainty that the man is genetically related to his partner's future child (Buss, 2015), which is especially relevant if the female partner was recently sexually unfaithful (Goetz & Shackelford, 2006). In contrast, a man's manipulative behaviors—such as sexual coercion and violence, but also more subtle manipulations, such as controlling what a partner wears (e.g., "what to wear")—can be costly to women, affecting her social, physical, mental, and sexual health (Buss, 2015). Consistent with this interpretation, our results revealed that the frequency with which couples disagree about Control and Dominance is negatively correlated with relationship satisfaction and sexual satisfaction for women (but not for men).

The component Future Plans and Money includes reason for disagreement associated with ability and willingness to invest resources in the relationship (e.g., "children"). Discrepancies regarding future plans (e.g., "goals in life") can be costly for both men and women—for example, a man's lack of industriousness (e.g., pursuit of a better job) may signal inability to invest in a female partner and her offspring, and a woman's lack of ambition may impose threats to the offspring's development (e.g., neglectful parenting; Mandara & Murray, 2002). Industriousness and ambition are characteristics valued by both sexes in a romantic partner (although women place a higher premium than do men on both; Buss, 1989). Corroborating this interpretation, our results revealed that the frequency with which couples disagree about Future Plans and Money is negatively correlated with both men's and women's relationship satisfaction. Additionally, the frequency with which couples disagree about Future Plans and Money is positively correlated with men's but not women's probability of having an affair within five years, perhaps because Future Plans and Money includes items indicating financial exploitation (e.g., "One uses all of the other's money"), which may represent a cost inflicted on a man by his partner, thus encouraging him to implement mate-switching tactics (Buss et al., 2017).

Men more than women reported to disagree about Future Plans and Money. Specifically, men more than women reported to disagree about the items "children" and "future plans." The RDRRS assesses the frequency with which couples disagree about several specific issues. Our results therefore suggest that men (relative to women) may perceive more frequent disagreement regarding "children" and "future plans." Because the inability to provide resources to the offspring affects men's more than women's desirability as a romantic partner (Buss, 2015), men (relative to women) may be more sensitive about disagreements regarding children and future plans, for example. The RDRRS does not assess who initiated the disagreement, and therefore we cannot comment on whether men or women initiate disagreements about these issues. Future research may investigate sex differences in the initiation of disagreement. Additionally, our results revealed that more (vs. less) liberal women more frequently report disagreement regarding Chores and Responsibilities and less frequently report disagreement regarding

Jealousy and Infidelity. More (vs. less) liberal women may expect their partners to contribute more (vs. less) on domestic chores, for example (e.g., more vs. less egalitarian women expect a more balanced division of housework; Lachance-Grzela & Bouchard, 2010), and therefore may perceive more frequent disagreement regarding Chores and Responsibilities (e.g., "Housekeeping"). Additionally, women endorsing more liberal (vs. conservative) values also report to be more sexually liberal (Guerra, Gouveia, Sousa, Lima & Freires, 2012), suggesting that more (vs. less) liberal women may be less sensitive to disagreement regarding Jealousy and Infidelity (e.g., "Being possessive").

The current research has several limitations. The sample size may not be sufficient to detect small effects—for example, some correlations of moderate effect size were not statistically significant (e.g., men's probability of having an affair within five years was not significantly correlated with the frequency with which couples disagree about Control and Dominance). Nonetheless, the results are consistent with evolutionarily-informed hypotheses about the reasons for disagreement in romantic relationships (e.g., Buss & Schmitt, 1993), and our sample size is above the minimum recommended for Principal Component Analysis (Kline, 1979). Future research may benefit from investigating reasons for disagreement in romantic relationships using larger samples and samples from different contexts, for example.

In the current study, we secured evidence of construct validity and criterion reliability of the RDRRS. Nonetheless, multiple assessments of reliability may provide valuable information about the psychometric properties of an instrument. Test-retest reliability is a useful estimate of reliability that is secured by administering the same test to the same participants at different times (DeVon et al., 2007). To investigate the test-retest reliability of the RDRRS, and to investigate changes in the reasons for and occurrence frequency of disagreement in romantic relationships, we re-assessed and compared responses of participants from Study 2 three years later, in the fourth year of marriage (Study 3).

8. Study 3

8.1. Method

8.1.1. Participants

The original dataset included responses from 214 individuals (see Study 2), but long-term test-retests often suffer from participant attrition (DeVon et al., 2007). The current study included responses from 138 individuals (i.e., 69 couples). The spouses who had lived together before marriage (66.7%) did so on average for 20.1 months ($SD = 22.7$). The male participants were between 25 and 38 years old ($M = 29.4$; $SD = 3.0$), and the female participants were between 23 and 39 years old ($M = 28.8$; $SD = 4.1$). Our sample size ($n = 138$) can detect a correlation of at least 0.280 and a mean difference of at least 0.220 with 80% power at an overall two-sided p -value of 0.0499.

8.2. Materials

Study 2 participants in the fourth year of marriage completed a survey with several sections similar to materials completed in Study 2, during the newlywed year. Specifically, participants answered the items that composed the preliminary version of the RDRRS, and questions about the relationship (see Study 1).

8.3. Procedure

We followed-up with participants by mailing a survey that included many of the same measures they completed three years earlier. Participants were instructed to complete the survey on their own, and to return completed surveys to the researchers in the stamped, pre-addressed envelope provided. Participants were paid \$25 each for their participation. Because responses in Study 2 and Study 3 occurred at separate times—the newlywed year and after three years of marriage,

Table 3
Correlation and comparison in spouses' average responses to the RDRRS components between Time 1 and Time 2 ($n = 69$).

Pearson's correlation		Time 2					
		IAA	JI	CR	S	CD	FM
Time 1	Inadequate Attention or Affection (IAA)	0.50***	0.24*	0.37**	0.23	0.43***	0.50***
	Jealousy and Infidelity (JI)	0.43***	0.54***	0.28*	0.18	0.38**	0.41**
	Chores and Responsibilities (CR)	0.33**	0.12	0.62***	0.24*	0.39**	0.42***
	Sex (S)	0.28*	0.16	0.33**	0.46***	0.33**	0.42***
	Control and Dominance (CD)	0.25*	0.14	0.33**	0.14	0.50***	0.37**
	Future Plans and Money (FM)	0.31**	0.26*	0.50***	0.24*	0.48***	0.66***
Repeated measures t-test		Time 1		Time 2		t	p
	M	SD	M	SD			
Inadequate Attention or Affection	0.99	0.59	1.11	0.63	1.61	0.112	
Jealousy and Infidelity	0.41	0.41	0.28	0.33	3.01	0.004	
Chores and Responsibilities	1.27	0.63	1.33	0.63	0.90	0.371	
Sex	0.84	0.51	0.98	0.54	2.27	0.026	
Control and Dominance	0.55	0.50	0.48	0.48	1.09	0.278	
Future Plans and Money	0.63	0.47	0.76	0.59	2.40	0.019	

Note: Bolded numbers refer to correlation coefficients of each RDRRS component (Time 1) to itself (Time 2);

* $p < 0.05$.

** $p < 0.01$.

*** $p < 0.001$.

respectively—we will refer to Study 2 as “Time 1,” and the current study as “Time 2.”

9. Results

Spouses' responses to the 30 items of the RDRRS were moderately correlated at Time 2 (average $r = 0.42$; $p < 0.05$), indicating that spouses remain concordant on the frequency with which they disagree for specific reasons. As in Study 2, we averaged the responses of spouses in each couple, and constructed the RDRRS components by averaging the spouses' averaged responses to the five items of each of the six components. Next, we correlated partners' averaged responses at Time 1 and Time 2. The results indicated that the responses are moderately correlated (average $r = 0.55$; $p < 0.001$). Because test-retest correlation coefficients do not take into account the presence of systematic biases over time, we conducted repeated measures t -tests to investigate differences in the frequency of disagreements at Time 1 and Time 2. The results revealed, for example, that the frequencies with which couples disagree about Jealousy and Infidelity and Sex at Time 2 were significantly lower than at Time 1. These results are summarized in Table 3.

Next, we correlated the spouses' averaged responses to the RDRRS components with the spouses' separate responses to questions about their relationship at Time 2. We found, for example, that the frequency with which couples disagree about Control and Dominance is positively correlated with men's but not women's reported annual income. Additionally, the results revealed a smaller number of significant correlations with relationship satisfaction, suggesting that the overall effect of disagreements on men's and women's relationship satisfaction in Time 2 is smaller than in Time 1. These results are summarized in Table 4.

We next investigated and did not find sex differences in the reported frequency of disagreement for each component at Time 2 (analyses available from the first author on request). Additionally, we correlated each component with religiosity and political liberalism, for men and women separately. More (vs. less) religious men report less frequent disagreement about Jealousy and Infidelity ($r = -0.34$; $p = 0.20$) (other analyses available from the first author on request).

10. Discussion and conclusion

In the current research, we identified the reasons for disagreement in romantic relationships (Study 1), investigated the component structure of these reasons (Study 2), and re-assessed and compared responses

of newlywed participants to their responses three years later, during the fourth year of marriage (Study 3). Spouses' averaged responses to the RDRRS components at Time 1 and Time 2 were moderately correlated, providing evidence of the reliability of the RDRRS. Correlation coefficients for each component were slightly below the minimum suggested as acceptable for reliability (0.70; Kline, 1979). The occurrence frequency of reasons for disagreement may have changed over time, and reliability coefficients less than 0.70 are expected for test-retests occurring at considerably different times (e.g., > 1 month; Kline, 1979). Changes in spouses' behaviors and physical appearance over time may affect their disagreements—for example, the frequency with which couples disagree about Jealousy and Infidelity is negatively correlated with women's age (see Study 2), and the frequency with which couples disagree about Jealousy and Infidelity at Time 2 is significantly lower than at Time 1 (see Table 3), suggesting that disagreements about Jealousy and Infidelity decrease over time. Additionally, more (vs. less) religious men report less frequent disagreement about Jealousy and Infidelity at Time 2, but not at Time 1. Because a person's likelihood of committing infidelity is negatively associated with that person's religiosity (Ziv, Lubin, & Asher, 2018), and because perceived risk of infidelity decreases over time (e.g., the use of mate retention behaviors is negatively associated with relationship length; Barbaro, Sela, Atari, Shackelford & Zeigler-Hill,), it is possible that more (vs. less) religious couples perceive less risk of infidelity over time, and therefore report less frequent disagreement regarding Jealousy and Infidelity over time, which may explain why we documented this set of results at Time 2, but not at Time 1.

The frequency with which couples disagree about Control and Dominance is positively correlated with annual income for men but not women. That is, the higher is men's annual income, the more men report disagreements about Control and Dominance. One possible explanation is that men who earn more (vs. less) are more vulnerable to their partner's financial exploitation (e.g., women may engage in conspicuous consumption to signal that their romantic partner is especially devoted to them; Wang & Griskevicius, 2013), and therefore men may be more likely to react by engaging in manipulative and dominating behaviors (e.g., “who's in control”). In contrast, women's annual income did not affect the occurrence frequency of disagreements about Control and Dominance. Women who earn more (vs. less) are more financially independent of their partner (e.g., household decisions are more frequently made based on pooled resources when the woman earns more; Jianakoplos & Bernasek, 2008) and, therefore, may be less affected by their partner's manipulative and dominating behaviors (e.g., “what to wear”).

Table 4Correlation between spouses' average responses to the RDRRS components and spouses' separate responses to questions about the relationship (Time 2; $n = 69$).

		IAA	JI	CR	S	CD	FM
Male partner	Time lived together before marriage	0.01	-0.18	0.31*	0.07	0.04	0.19
	Annual income (excluding spouse)	0.19	0.27	0.21	0.20	0.29*	0.20
	Relationship satisfaction	-0.17	-0.25	-0.19	-0.31*	-0.06	-0.14
	Probability of affair within 5 years	0.05	-0.03	0.09	0.05	-0.07	0.14
	Sexual satisfaction	-0.19	-0.18	-0.09	-0.39**	-0.11	-0.26
	Age	0.12	0.21	0.09	-0.15	0.15	0.13
Female partner	Time lived together before marriage	-0.04	-0.22	0.23	0.02	0.02	0.21
	Annual income (excluding spouse)	0.11	0.12	0.13	0.00	0.06	0.09
	Relationship satisfaction	0.01	0.01	-0.03	-0.12	0.03	-0.15
	Probability of affair within 5 years	0.42**	0.50***	0.05	0.17	0.16	0.31*
	Sexual satisfaction	-0.41**	-0.38**	-0.11	-0.37**	-0.17	-0.35**
	Age	-0.20	-0.39**	0.20	-0.18	0.16	0.08

Note: IAA = Inadequate Attention or Affection; JI = Jealousy and Infidelity; CR = Chores and Responsibilities; S = Sex; CD = Control and Dominance; FM = Future Plans and Money;

* $p < 0.05$.** $p < 0.01$.*** $p < 0.001$.

The associations between frequency of disagreements and relationship satisfaction for men and women at Time 2, during the fourth year of marriage, are smaller than at Time 1, during the newlywed year, suggesting that relationship satisfaction for both sexes is less affected by disagreements over time. Partners in longer-duration romantic relationships may have had more time to reach consensus regarding aspects of the relationship that were previously a source of disagreement (Levenson, Carstensen & Gottman, 1993). For example, disagreements regarding Chores and Responsibilities may have affected couples in the newlywed year (as revealed in the results of Study 2). Over time, however, *some* couples may have negotiated compromises regarding each other's behaviors, or modified their behaviors to accommodate each other's needs, reducing the effects of disagreements on their relationship satisfaction (e.g., the partner who previously did not cooperate as much on everyday tasks begins to cooperate more often). Previous research corroborates this interpretation—for example, older (vs. younger) couples report reduced conflict, greater potential for pleasure in several areas, and equivalent levels of mental and physical health (Levenson et al., 1993).

The RDRRS integrates facets of disagreement in romantic relationships represented across several individual previous measures. For example, Mitchell et al. (1962) included items assessing interference of in-laws in the couple's relationship (e.g., "wife's mother"), but did not include items regarding a partner's control and dominance. In contrast, Geiss and O'Leary (1981) included items assessing control and dominance (e.g., "power struggles"), but did not include items regarding interference of in-laws in the couple's relationship. The RDRRS integrates these facets in the component Control and Dominance (e.g., "who's in control"), and with an item in the component Sex (i.e., "in-laws"). Additionally, although several measures included items assessing financial problems (e.g., Levinger, 1965; Mitchell et al., 1962), most of these measures did not include items assessing future plans. Dissimilarity of future plans such as career goals and having children may cause relationship dissolution (Arránz Becker, 2013). The RDRRS assesses this facet by combining issues regarding future plans and financial problems in the component Future Plans and Money (e.g.,

"Goals in life," "Who should pay for something").

The current research has several limitations. For example, we did not control for measurement error and "true change" in our assessment of test-retest reliability. Nonetheless, the results of Study 3 are consistent with evolutionarily-informed hypotheses about reasons for disagreements in romantic relationships (e.g., Buss & Schmitt, 1993). Future research also may estimate test-retest correlations over shorter and longer intervals, for example. Moreover, we were unable to secure data from both members of over one-third of couples at the four-year follow-up. Reasons for attrition may include disinterest and divorce, but we did not secure data on the reasons for attrition. Future research may follow-up with divorcees to investigate the incremental effect of predictors of divorce, for example (e.g., survival analysis).

The RDRRS has advantages over previously developed measures. First, the RDRRS assesses specific (vs. broad) reasons for disagreement in romantic relationships—for example, "one wants sex, other doesn't" is more specific than "sex," and "who should pay for something" is more specific than "money." Second, the RDRRS assesses facets of disagreement commonly reported in romantic relationships, but not previously included in assessments of conflict or disagreement—for example, the RDRRS captures specific disagreements related to Sex and Control and Dominance. Third, the RDRRS reflects disagreements commonly reported in a wide range of couples as opposed to specific couples, such as divorce applicants (Levinger, 1965) and participants in marital therapy (Geiss & O'Leary, 1981). Finally, the RDRRS is brief compared to previously developed measures, in line with a growing demand for brief scales as an alternative to longer, more time-intensive scales in social sciences research (Ziegler, Kemper & Krueger, 2014).

In conclusion, in a series of studies, we developed a psychometrically sound assessment of the specific reasons for disagreement in romantic relationships, the Reasons for Disagreement in Romantic Relationships Scale (RDRRS). The RDRRS may be useful in practical contexts such as in developing educational programs, marital counseling, and marital therapy, and we recommend the RDRRS for assessing reasons for disagreement in romantic relationships.

Appendix

Reasons for Disagreement in Romantic Relationships Scale (RDRRS)

Instructions. Below is a list of issues that couples sometimes disagree about. Please read each one and circle on the rating scale whether or not you and your spouse have disagreed about this issue within the past 6 months, and if so, how often.

01	Not showing enough love of affection	Never	Rarely	Sometimes	Often
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02	Lack of communication	Never	Rarely	Sometimes	Often
03	One not paying enough attention to the other	Never	Rarely	Sometimes	Often
04	Not being appreciated	Never	Rarely	Sometimes	Often
05	Feelings	Never	Rarely	Sometimes	Often
06	Jealousy	Never	Rarely	Sometimes	Often
07	Talking to an ex-girlfriend or ex-boyfriend	Never	Rarely	Sometimes	Often
08	Being possessive	Never	Rarely	Sometimes	Often
09	Past relationships	Never	Rarely	Sometimes	Often
10	Whose friends we hang around more	Never	Rarely	Sometimes	Often
11	Housekeeping	Never	Rarely	Sometimes	Often
12	Chores	Never	Rarely	Sometimes	Often
13	Who does more work	Never	Rarely	Sometimes	Often
14	Not showing up when supposed to	Never	Rarely	Sometimes	Often
15	Sharing responsibilities	Never	Rarely	Sometimes	Often
16	One wants sex, other doesn't	Never	Rarely	Sometimes	Often
17	Frequency of sex	Never	Rarely	Sometimes	Often
18	Sexual acts	Never	Rarely	Sometimes	Often
19	Telling private information about relationship to others	Never	Rarely	Sometimes	Often
20	In-laws	Never	Rarely	Sometimes	Often
21	Who's boss	Never	Rarely	Sometimes	Often
22	Who's in control	Never	Rarely	Sometimes	Often
23	Dominance	Never	Rarely	Sometimes	Often
24	What to wear	Never	Rarely	Sometimes	Often
25	Religion	Never	Rarely	Sometimes	Often
26	Goals in life	Never	Rarely	Sometimes	Often
27	Future plans	Never	Rarely	Sometimes	Often
28	Children	Never	Rarely	Sometimes	Often
29	Who should pay for something	Never	Rarely	Sometimes	Often
30	One uses all of the other's money	Never	Rarely	Sometimes	Often

Inadequate Attention or Affection = 01, 02, 03, 04, 05.

Jealousy and Infidelity = 06, 07, 08, 09, 10.

Chores and Responsibilities = 11, 12, 13, 14, 15.

Sex = 16, 17, 18, 19, 20.

Control and Dominance = 21, 22, 23, 24, 25.

Future Plans and Money = 26, 27, 28, 29, 30.

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