

Aligning Mars and Venus: The Social Construction and Instability of Gender Differences in Romantic Relationships

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Abstract An evolutionary approach to gender differences in romantic relationships has pervaded the scientific literature, a trend mirrored in popular culture by Mars-Venus stereotyping. Three studies tested the accuracy of the popular notion that gender differences would emerge for the behaviors women and men want and receive from romantic partners in a sample of 375 students at a southeastern U.S. public university. Across the three studies, only one stable and robust gender difference emerged (desires regarding relationship support), as did several unstable gender differences. However, gender-role identity significantly accounted for nearly half of the variance in this one stable gender difference, challenging the viability of some evolutionary conceptualizations of gender differences and instead providing support for social constructionist and feminist perspectives.

Keywords Gender roles · Evolutionary psychology · Romantic relationships · Stereotypes

Introduction

In Lord Byron's satirical poem, *Don Juan*, the character Donna Julia concludes that "Man's love is of his life a thing

apart, 'Tis woman's whole existence" (Byron, 1819/2004, p. 94). This view of gender differences in love—that love is central to a woman and peripheral to a man—persists even today in the Mars-Venus writings of John Gray (1993, 2002) and Deborah Tannen (1990, 2001), and in popular culture more generally. This view has also resounded in scientific journals and theoretical books through the voice of evolutionary-essentialist perspectives on human mating. For example, sexual strategies theory (Buss and Schmitt 1993), perhaps the most eminent such theory of innate gender differences, posits that women and men behave according to gender-specific sets of mating instincts that have evolved and differentiated over hundreds of thousands of years to make women and men maximally and independently successful in reproduction. According to this perspective, selection pressures and genetically facilitated adaptations gave rise to fundamental differences in the psychological dispositions of women and men that dictate mating behaviors.

Viewing gender differences from an evolutionary-essentialist perspective such as that of Buss and Schmitt (1993) has several limitations. Foremost, these theories perhaps too ambitiously and reductionistically attempt to explain all gender differences in behavior as manifestations of instinct or evolved psychological disposition (Rose and Rose 2000). Research has shown that not only do contextual variables (such as ethnicity, race, and social class) explain significant amounts of variance above and beyond gender effects, but that dichotomous cultural differences can override gender effects found within a single culture (e.g., North America and China; Sprecher and Toro-Morn 2002). In addition, these perspectives have the potential to uphold and reinforce harmful gender stereotypes and gender-based oppression. Research has shown

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that women are stereotyped as innately emotionally communicative, hyper-emotional, caring, relationship-oriented, and asexual, while men are stereotyped as innately emotionally inept, hypo-emotional, insensitive, individually-oriented, and overtly sexual (e.g., Deaux 1984; Deaux and Major 1987; Broverman et al. 1972). Such stereotypes indeed reflect those of the larger culture, but nonetheless polarize behavioral expectations in women and men, feeding restrictive and minimally overlapping gender roles in romantic relationships. Feminist psychologists have often asserted that when these stereotyped gender differences do exist, they do so according to misperceptions, prejudices, gender-role conformity (LaFrance and Banaji 1992; Unger 1998), social conditioning, modeling, and reinforcements (Chrisler and Smith 2004) rather than because of innate biological underpinnings, as Buss and Schmitt's (1993) theory suggests.

Essential differences hypotheses from evolutionary psychology in fact bear a striking resemblance to the Mars-Venus popular literature, with both suggesting that women and men, in romantic relationships in particular, are separate species or are from two different planets. Although empirical work has largely discredited Mars-Venus stereotypes of ubiquitous behavioral differences between women and men (e.g., Sprecher and Toro-Morn 2002), hypotheses from evolutionary psychology such as sexual strategies theory, though strikingly similar to the popular literature, have not received similar empirical scrutiny. Feminist and social constructivist perspectives, however, offer possible solutions to the aforementioned limitations of evolutionary thinking. Acknowledging the power of gender-role conformity, for example, calls for a more multifaceted and contextual account of gender differences and does not reinforce gender stereotypes. Furthermore, sexual strategies theory posits an etic account of human mating that potentially fails to acknowledge evidence of meaningful cultural differences in these behaviors, whereas feminist/social constructivist perspectives proffer a more emic, social explanation.

However, it is important to note that evolutionary psychology and feminist/social constructionist perspectives on gender differences are not mutually exclusive. Researchers have pointed out that the two perspectives can be compatible when gender-role conformity is viewed as a mechanism of evolution proposed by evolutionary psychologists (e.g., Eagly and Wood 1999; Harris 2003; Miller and Fishkin 1997). The foundation of essentialist perspectives such as sexual strategies theory rests upon the fundamental and pervasive nature of innate gender differences, so it is important to determine just how fundamental and pervasive these differences truly are. Sexual strategies theory predicts that gender differences will emerge as stable trait-like patterns in the realm of romantic relationships with only

limited contextual variation (such as short-term versus long-term mating strategies; Buss and Schmitt 1993). Finding less-stable, more contextually driven, or extraneously mediated results in these domains (especially within different cultures), however, might call into question the veracity of such essentialist theories.

Accordingly, the current article empirically examines four domains of romantic relationships in which both the Mars-Venus popular literature and evolutionary psychological theories of gender difference assert that behaviors and desires should differ across gender lines: sexuality, relationship support, verbal behaviors, and caring actions. These domains constitute the four subscales of the Desired Loving Behavior Scale (DLBS; Heesacker et al. 1998). The current article describes three studies that each utilized the four subscales of the DLBS as dependent variables and gender as an independent variable to assess what U.S. undergraduate women and men wanted and received from their romantic partners in order to feel loved. To assess whether women's and men's behaviors would conform to the popular stereotypes argued for by evolutionary theories such as that of Buss and Schmitt (1993), each study tested the general hypothesis that women and men would differ in what they wanted and/or received in the context of a heterosexual romantic relationship. From a social constructionist perspective, we expected these differences to be minimal or inconsistent. The following four sections of the literature review address the four domains of interest, identify the parallels between the Mars-Venus literature and evolutionary psychological theories such as sexual strategies theory, and review the scientific evidence supporting or refuting gender differences in those domains.

Sexuality

Although gender stereotypes about sexuality permeate mainstream culture (e.g., Deaux 1984; Deaux and Major 1987; Broverman et al. 1972), they hardly reflect science. Several of John Gray's Mars-Venus assertions illustrate these unsupported stereotypes. For example, Gray proposed that men are interested primarily in physical aspects of sex, such as reaching orgasm; whereas women are interested in its emotional components, such as foreplay and interpersonal closeness (e.g., Gray 1993, 1996). Accordingly, Gray argued that women value touching as much as men value sex (Gray 1996, p. 135). Buss and Schmitt (1993) also argued for gender differences in sexuality, suggesting that mating strategies have evolved at the biological level in the best interest of reproduction for each gender separately. Buss and Schmitt (1993) asserted: "For men, one major reproductive constraint has been the number of reproductively valuable or fertile women they can successfully inseminate. For women, one major reproductive constraint

has been obtaining as mates men who showed an ability and willingness to invest resources in themselves and their offspring” (p. 225). Therefore, men can father as many children as the number of women they can impregnate, but gestation limits the number of children women can bear. Because of this, according to Buss and Schmitt, a man seeks to impregnate as many women as possible, but a woman seeks resources for her children via a long-term relationship with a well-resourced mate.

Moving from conceptualization to data collection, Hatfield et al. (1988) found, in a sample of college students and newly married couples, that men indeed tended to seek sex for physical reasons, whereas women tended to seek sex for emotional intimacy. In support, Canary et al. (1997) reviewed a number of studies suggesting that men preferred sexual intimacy over emotional intimacy and women just the reverse (consistent with Abbey 1982; and Bell 1981). Canary et al. (1997) review echoed the stereotypes of men as the initiators of sexual activity and women as its gatekeepers (see also Allgeier and Royster 1991; and McCormick and Jesser 1983). In a related meta-analysis of 177 studies, Oliver and Hyde (1993) found that, compared to women, men were more sexually permissive, masturbated more often, and endorsed casual sex at higher rates.

Though these empirical studies seem to have supported gender differences in sexuality, they do not represent a *de facto* scientific consensus. Many other studies suggest that the sexual behaviors of women and men are actually much more alike than different. Comparing U.S. undergraduate women and men, Hendrick and Hendrick (1995) found that while men reported more sexual partners, and women rated love as more important than the number of sexual encounters, 49 of their 60 gender comparisons showed no differences. Specifically looking at romantic relationships in U.S. undergraduates, Sprecher and Regan (2002) found no gender effects on ratings of qualities desired in marriage and dating partners, casual sex partners, or friends. Similarly, Tiegs et al. (2007) found that among U.S. undergraduates, compared to women, men saw sex as more personally pleasurable, more personally costly, and less destructive of social norms. However, no gender differences emerged when these authors examined sex in the context of a romantic relationship. Tiegs et al. surmised that if sexual behaviors and attitudes change according to their social context, women and men have more sexual flexibility than some essentialist evolutionary theories of sexuality would suggest.

Other researchers have taken a similar stance to Tiegs et al. (2007) and Canary et al. (1997), for example, suggested that gender effects on sexual behaviors are contextual and may result solely from social pressures and culturally-dictated gender roles. They argue that the ‘cultural’ perception holds

that women emphasize feelings, whereas men emphasize sexual activity. Wood and Eagly (2002) emphasized the importance of separating culture from biology, suggesting that women and men conform to accepted gender roles. The Wood-Eagly model asserts that gender differences change depending on the situation and the cultural context. Moreover, women and men may exhibit stereotypical gender differences depending on how much they identify with the traditional gender roles of sexual restraint for women and unrestraint for men.

Relationship Support

A second relationship domain in which there are clear stereotypes about gender differences is the amount of relationship support that people want from their romantic partners. We define relationship support as verbal and nonverbal behaviors that focus and help solidify a couple’s partnership. John Gray (1993) offered the stereotype that women are more emotional, caring, and nurturing than men, whereas men are rational to the exclusion of emotion. Similarly, Tannen (1990) asserted that men seek independence and women seek intimacy in romantic relationships, so women become frustrated with men’s desire for independence. Put simply, Tannen suggested that relationally men do not need women, but women need men.

In parallel, Buss and Schmitt (1993) provided an evolutionary rationale for gender-stereotyped differences in the need for intimacy. They proposed that the need of women to secure scarce resources while they feed and protect children drives women to seek romantic partners willing and able to give resources. Buss and Schmitt (1993) argued: “Women seeking a long-term mate will value the ability of a man to provide economic and other resources that can be used to invest in her offspring” (p. 223). On the other hand, men avoid commitment, so the Buss-Schmitt argument goes, to hoard scarce resources for possible future investment. Again, according to Buss and Schmitt, women best provide for themselves and their children through a long-term commitment with a well-resourced mate.

In marked contrast to this essentialist evolutionary perspective, social constructionist (e.g., Mead 1935; Gergen 2001) and biosocial (Wood and Eagly 2002) models might predict that women have been taught from a young age to be more nurturing and interpersonally oriented in order to live up to the gender roles they face. Because of these gender roles, women and men may actually differ in scientifically quantifiable ways, such as commitment and emotional closeness in relationships, but such differences may be the result of socialization, not biology or evolution.

Hatfield (1983) summarized the scientific evidence of the day by generally arguing that women are more comfortable with intimacy than men are. Yet Hatfield

(1983) found that men are more comfortable expressing intimacy in a romantic relationship than in other pairs, such as a male-to-male friendship. Though some gender differences in intimacy do exist, Burleson's (2003) review suggested that women and men have a comparable sense of what counts as sensitive emotional support (also see Burleson 1997; and Kunkel and Burleson 1998). It appears that both women and men understand what it means to give relationship support in order to maintain and foster the romantic partnership. Hook et al. (2003) found that among a sample of U.S. undergraduates, compared to men, women more strongly emphasized love, affection, and emotional sharing; however, women and men showed similar comfort levels with giving and receiving emotional support in relationships. From the work of these and other scientists, women and men appear to be aware of how partners should behave in a relationship, and women and men *both* understand and exhibit behaviors they know will communicate their love to their partners.

Verbal Communication

A third domain about which there are clear gender stereotypes involves verbal communication, and especially the different "scripts" that women and men want uttered to them by their romantic partners. We define scripting as a formulaic expression of commitment and love (like a script) that a partner would like to hear (e.g., "My world went from black and white to color when I met you," "I'm so happy you're in my life," or "You mean the world to me"). The strong-but-silent stereotype for men suggests that men lack the motivation to engage in these oral communications and lack the need to receive them. Women, on the other hand, are stereotyped as verbally and emotionally expressive, as well as more vulnerable than men to the positive impact that even a trite and shallow, yet caring, comment creates. An example of these unfounded stereotypes is Tannen's (1990) assertion that men's need for independence causes them to communicate their feelings less often than women do. In contrast, she argued that when women voice their emotions and problems to their romantic partners, they are seeking validation and intimacy. Conflict arises, so Tannen argued, when men attempt to quell women's emotion-laden voices or to solve female partners' problems by offering advice instead of validation (Tannen 1990).

Similarly, an extension of evolutionary arguments such as that of Buss and Schmitt (1993) would assert that because women are so focused on—and in fact dependent on—a relationship with a mate, they are much more concerned than men with telling their partner how they feel in order to maintain or improve the strength of the relationship. Men, on the other hand, are far less relationship-oriented because of their biological need to

impregnate as many women as possible, and prefer an independence marked by emotional reserve. Buss and Schmitt argue: "The reproductive logic of short-term mating strategies of men differs substantially from that of long-term mating strategies. Rather than monopolizing a woman's lifelong reproductive capacity, a short-term strategy entails inseminating a number of fertile women" (p. 225). If inseminating multiple women is men's goal in heterosexual evolutionary mating theory, men have little need for emotional communication to keep a single relationship going.

The empirical literature offers mixed support for gender differences in scripting and verbal communication. Maccoby and Jacklin (1974) reviewed a body of research finding women superior to men in verbal abilities, and Spence et al. (1974) review of research broadly suggested that women were more expressive. In Spence et al.'s review, women broadly preferred to connect with others by expressing their feelings, whereas men tended to solve problems rather than empathize. Similarly, studies in Wood's (1998) review suggested that women preferred to verbalize their feelings; men preferred to express affection through activities with their partners. Wood interpreted these findings to mean that women and men have different ideas about which behaviors communicate love.

Burleson (2003) took issue with Wood's conclusions, arguing that, although significant differences emerged regarding how women and men communicate, the similarities outweighed the differences. Burleson rejected the notion that communication between women and men is a cross-cultural endeavor (see also Burleson et al. 1996). Dindia and Canary's (2006) book on gender differences in communication broadly suggests that while small differences in communication appear in isolated studies, the bulk of research points to similar communication abilities, even in romantic relationships, between women and men. Data from Aylor and Dainton (2004) support this view: U.S. undergraduate women and men in relationships were compared on a number of communication elements, and only one difference emerged in that women used routine openness more frequently than men did.

Caring Actions

A fourth stereotyped domain of gender differences in romantic relationships is caring actions, which are nonverbal behaviors meant to show love or affection. Examples include rubbing a partner's back, cooking a special dinner, or doing chores. Gray (1993) has asserted that men are horrible at doing things for their partner to show how they feel. In fact, he has asserted that men are so inept at these nonverbal indicators of love that he created a list of 101 ways "to score points with a woman" (p. 180).

Again in parallel, some essentialist evolutionary perspectives (e.g., Buss and Schmitt 1993) would argue that women are better at performing small nurturing behaviors for those they love because of the nurturing role they often play in raising children. These apparent gender differences, according to the essentialist evolutionary perspective, stem from long-standing adaptive problems: women had to figure out how to get resources for themselves and their offspring, whereas men were more focused on finding more partners and generating adequate resources. According to this perspective, men did not have to develop a strategy of caring in order to maintain the relationship because their focus was elsewhere.

In contrast to Gray's opinion, research by Wood (1998) suggests that men prefer *doing* things, rather than verbalizing feelings, to express their love. Other research in this area has examined gender differences in caring actions starting as early as elementary school. McNelles and Connolly (1999) found adolescent girls more likely than boys to establish intimacy with their friends through self-disclosure and discussion, and boys more likely than girls to establish intimacy through shared activities. Radmacher and Azmitia (2006) found that this friendship trend continued with a U.S. sample of junior high school students and undergraduates. Their study found no gender differences in notions of intimacy, but compared to men and boys, women and girls experienced more emotional support from their same-sex friends and less intimacy through shared activities. U.S. community-based men in Goleman's (1986) study also tended to believe that *doing* things for their relationship partners was the best way to show their love for them. To date, no research has examined gender differences in the prevalence of or types of caring actions within romantic relationships.

The Current Studies

Ostensible and innate gender differences celebrated in popular books by Tannen and Gray and argued for in evolutionary psychology reinforce pervasive and largely inaccurate cultural stereotypes (e.g., Deaux 1984; Deaux and Major 1987; Spence et al. 1975). These ostensible differences include the following: men are more interested in physical sex, are less intimate, are worse at letting partners know how they feel, and fail to engage in caring actions; women are less interested in physical sex, are more emotionally needy, complain more, and provide more caring actions. These caricatures force both women and men to make a Hobson's choice between the rigidity of a socially approved gender role and the flexibility of a self-determined role that would garner social disapproval.

Pertinent literature across the four domains suggests that when stereotypical differences do emerge, women and men

conform to culturally accepted gender roles, lending support to feminist/social constructivist perspectives on mating behaviors. The literature shows that in romantic relationships, women and men behave differently in some contexts but similarly in others (for literature reviews see Canary et al. 1997; and Oliver and Hyde 1993). Utilizing feminist and social constructivist theories in this article, we examined (a) whether women and men differed in their wants and needs in romantic relationships and (b) why or why not? We conducted three studies to test whether women's and men's behaviors conformed to the popular stereotypes argued for in evolutionary-essentialist theories of gender differences that create dichotomous gender expectations in romantic relationships.

Though the current article espouses a feminist and social constructionist perspective asserting that gender differences in romantic relationships do not exist or are inconsistent, testing a null hypothesis is faulty science. Instead, we will test the alternative hypotheses (Hypotheses 1–2b) which an essentialist and evolutionary perspective would predict. Therefore, each study tested the same general hypothesis: Women and men would differ in what they wanted and/or received from their romantic partners. However, Hypotheses 3a and 3b are in line with the social constructionist viewpoint again in order to avoid testing a null hypothesis. Further, because each study was conducted on a separate random sample, Studies 2 and 3 also re-tested hypotheses from Studies 1 and Studies 1 and 2, respectively. Thus, each study attempts to replicate the previous study's findings as well as introduces novel hypotheses and measures, which are listed below with the hypothesis number corresponding to the study in which it is tested:

- *Hypothesis 1:* Women's *desire* scores on the Relationship Support, Scripting, and Caring Actions subscales of the DLBS will be significantly higher than men's, and men's scores on the Sex subscale will be higher than women's.
- *Hypothesis 2a:* Women's *received* scores on the Relationship Support, Scripting, and Caring Actions subscales of the DLBS will be significantly lower than men's, and men's scores on the Sex subscale will be lower than women's.
- *Hypothesis 2b:* Women's *desire-received discrepancy* scores on the Relationship Support, Scripting, and Caring Actions subscales of the DLBS will be significantly higher than men's, and men's scores on the Sex subscale will be higher than women's.
- *Hypothesis 3a:* DLBS discrepancy scores will inversely predict relationship satisfaction for both women and men.
- *Hypothesis 3b:* Gender differences in the DLBS will be significantly mediated by gender-role identity.

Hypotheses 1–2b will be tested with multivariate analyses of variance (MANOVAs) and follow-up Bonferroni-corrected *t*-tests, Hypothesis 3a with a Person correlation, and Hypothesis 3b with a Baron and Kenny (1986) mediational analysis. Study 1 specifically examined whether women and men differentially rate the importance of the four romantic relationship domains as received behaviors. Study 2 assessed whether the discrepancy between desired and received behaviors in romantic relationships is different across gender lines. Study 3 investigated gender-role conformity and relationship satisfaction as contextual predictors of gender effects. In sum, these studies were designed to determine the extent to which gender differences in desired and received loving behaviors remain constant and stable across multiple samples and contexts. Particular attention was also paid to the pattern of results in Studies 2 and 3—an evolutionary-essentialist perspective would predict a stable pattern of results and acceptable replication from previous studies (assuming true randomness of independent samples). In keeping with the feminist/social constructionist theoretical underpinnings of this article, we expected that these differences would prove less stable and reliable than theorists such as Buss and Schmitt (1993) have predicted, as well as that differences could be accounted for in part by gender-role identity.

Though this article strictly employed U.S. college samples, it has relevance to other diverse populations domestically and internationally because support for a social constructionist perspective on gender differences in romantic relationships would suggest that conformity to the gender roles within a particular culture or country, as opposed to biology or evolution, account for observed gender differences. A social constructionist perspective on gender differences fits well with previous work in *Sex Roles* that has challenged the oppressive notion that women and men behave differently according to their biological or evolutionary wiring (e.g., Sprecher and Toro-Morn 2002; Tiegs et al. 2007). When gender differences change according to context, the process implies that women and men have much more freedom to choose the behavioral and attitudinal traits they exhibit; and when these choices are restricted, oppressive social forces should be scrutinized instead of one's gene pool.

Study 1

Study 1 employed the four subscales of the Desired Loving Behaviors Scale (DLBS) to test whether women and men would differentially rate the importance in their romantic relationships of sex, relationship support, scripting (verbal behavior), and caring actions. To examine

traditional stereotypes and gender roles, Hypothesis 1 asserts that women's scores on the Relationship Support, Scripting, and Caring Actions subscales of the DLBS will be significantly higher than men's, and that men's scores will be higher on the Sex subscale than women's. These predictions are consistent with Buss and Schmitt's (1993) sexual strategies theory, which would predict that women would give higher importance to relationship support, scripting, and caring actions and that men would give higher importance to sex.

Method

Participants

Eighty-two students were recruited from an undergraduate psychology course at a large Southeastern university; 52 were women and 30 were men. Sixty of the participants identified as White/non-Hispanic, 10 identified as Black/non-Hispanic, 7 as Hispanic, 2 as Pacific Islanders, and 3 reported ethnicity as "other." The average age for participants was 19.25 ($SD=1.56$) years. Forty-five of the participants reported that they were currently involved in a romantic relationship. Thirty-five indicated that they were not presently in a romantic relationship. None of the participants reported cohabitation, nor were any of them married. Of participants reporting relationship status, the breakdown of gender by relationship status is as follows: 23 (44%) women were not in a relationship, 29 (56%) women were, 16 (53%) men were not in a relationship, and 14 (47%) men were. Participants were informed during the day's class that there would be an extra credit opportunity at the end of class which would involve completing a relationship questionnaire including demographic questions.

Measure

Desired Loving Behaviors Scale The DLBS (Heesacker et al. 1998, see Appendix A) is a 39-item, five-point, Likert-type scale that assesses the behaviors from a partner in an intimate relationship that the other partner wants in order to feel loved. The items were originally developed by gathering free-response information from 282 participants about which behaviors and words they would like a partner to do or say in order to feel loved. These responses were reduced to 158 non-redundant items then given to another sample of 459 participants to test item endorsement via a five-point, Likert-type scale. A factor analysis of these responses yielded four distinct factors, resulting in four corresponding subscales: Scripting, Relationship Support, Sex, and Caring Actions. The Scripting subscale includes items such as "I enjoy spending time with you" and "You mean so much to me." The Relationship-Support subscale

includes “Create a feeling of security between us” and “Remember my birthday.” The Sex subscale includes “Telling me what he/she likes in bed” and “Oral sex.” The Caring-Actions subscale includes “Leave a rose on my pillow” and “Do my laundry every once in a while.” Responses to items from each of the subscales are straight-summed to create each subscale score or can be summed altogether to create an overall DLBS score.

Heesacker et al. (1998) found the scale to be internally consistent overall (Cronbach $\alpha=.91$), and that test-retest reliability over a 26-day period was high, $r=.65$, $p<.001$. Tiegs et al. (2010) similarly have shown the DLBS to have good construct validity. Cronbach α 's from the current study were as follows: Relationship Support $\alpha=.78$, Scripting $\alpha=.92$, Sex $\alpha=.87$, and Caring Actions $\alpha=.77$.

Procedure and Data Analysis

Participants received the following DLBS instructions: “What do you want your partner to DO or SAY to make you feel loved? Use the following scale to indicate how often you would like your partner to do or say the following things in order for you to feel loved.” Participants indicated their endorsement for each item on a five-point scale. Participants later responded to other love-related measures that are not the focus of the current study. After completing the instruments, participants received extra credit and were thanked and debriefed.

We ran an omnibus multivariate analysis of variance (MANOVA) in which the independent variable was gender and the four dependent variables were the desire scores for each of the four subscales of the DLBS. The purpose of this MANOVA was to control for family-wise error. We then ran follow-up Bonferroni-corrected four t -tests to analyze for the precise locations of possible gender differences on each of the four DLBS subscales. In each of these four t -tests, the independent variable was gender, and the dependent variable was the DLBS subscale score. We performed a power analysis using Soper Power Software (Soper 2009) for an independent samples, one-tailed t -test, finding that we would need a sample size of 42 to detect a large-sized ($d=.8$) effect and 102 to detect a medium-sized ($d=.5$) effect. Therefore, our current sample size is sufficient to detect some, but not all, medium-sized effects and no small-sized effects. A lack of medium or small effects on the dependent variables must be interpreted with caution.

Results and Discussion

The overall omnibus MANOVA revealed a statistically significant main effect for gender, $F(4, 77)=7.35$, $p<.001$,

Wilk's Lambda=.72, suggesting that there were gender differences in the desire scores for the subscales of the DLBS. The MANOVA's significant gender effect allowed for follow-up Bonferroni-corrected t -tests within each subscale. These analyses provided only partial support for Hypothesis 1 (that women's scores on the Relationship Support, Scripting, and Caring Actions subscales of the DLBS would be significantly higher than men's, and that men's scores would be higher on the Sex subscale than women's). Significant gender differences emerged on only one of the four subscales. Women reported greater desire than men on the Relationship Support scale, $t(80)=4.91$, $p<.001$, $d=1.10$. According to Cohen's (1988) standards, this is a large effect. On the other hand, there were no significant differences between women and men in Desires for Caring Actions, Scripting, or Sex in this sample (see Table 1 for means and standard deviations and Table 2 for effect sizes).

Study 1 provides only partial support for gender differences and comparatively larger support for gender similarities. In support of feminist and social constructionist perspectives on gender differences, findings from Study 1 suggest that women and men are more alike than different in three out of four DLBS subscales. The initial data suggest that gender provides little predictive variance in accounting for desired loving behaviors of relationship partners. Though gender differences in romantic relationships are popularly believed to be large and ubiquitous, especially within the evolutionary perspective, these data support this belief in only one of the four examined relationship domains. However, it is important to note that the analyses on the current sample of 80 participants may have overlooked smaller effects, so these findings must be replicated in follow-up studies.

Study 2

Study 2 extended the gender-based examination of *desired* loving behaviors in Study 1 to a gender-based examination of reported *received* loving behaviors. In Study 2, we asked participants to report what behaviors and words they *desired* from their romantic partners in order to feel loved, and then what behaviors they actually *received* from their partners. We calculated a discrepancy score between desired and received loving behavior scores by subtracting the desired from received scores on each item and then summing the discrepancies within each subscale. We wanted to see whether the pattern of similarities and differences found for women and men in Study 1 would replicate with another sample, as well as translate into actual behaviors. Accordingly, Hypothesis 2a predicts that women's received scores on the Relationship Support,

Table 1 Means and standard deviations by gender for Desired Loving Behavior Scale (DLBS) subscale scores.

	Caring Actions	Relationship Support	Scripting	Sex
Study 1				
DLBS Desired				
Women	2.63 (.53)	4.75*** (.25)	3.55 (.86)	3.27 (.78)
Men	2.53 (.73)	4.41*** (.39)	3.27 (.81)	3.54 (.79)
Study 2				
DLBS Desired				
Women	2.79* (.86)	4.63*** (.40)	3.68* (.80)	3.68 (.63)
Men	2.43* (.70)	4.32*** (.56)	3.29* (.79)	3.72 (.64)
DLBS Received				
Women	1.76 (.76)	3.99 (.72)	3.13 (1.06)	3.33 (.88)
Men	1.83 (.60)	3.85 (.77)	3.12 (1.00)	3.16 (.77)
Discrepancy				
Women	1.22** (.61)	0.80 (.58)	1.11 (.69)	0.94 (.54)
Men	.94** (.48)	0.85 (.60)	.99 (.56)	0.95 (.54)
Study 3				
DLBS Desired				
Women	2.82 (.64)	4.64*** (.35)	3.52 (.71)	2.86*** (.74)
Men	2.98 (.58)	4.36*** (.46)	3.28 (.79)	3.37*** (.70)
DLBS Received				
Women	1.76*** (.63)	3.89 (.79)	2.97 (1.06)	2.55 (.71)
Men	2.26*** (.80)	3.77 (.74)	2.87 (1.06)	2.48 (.70)
Discrepancy				
Women	1.21 (.65)	.96 (.68)	1.10 (.69)	.95* (.53)
Men	1.05 (.59)	.85 (.56)	.94 (.66)	1.18* (.61)

Standard deviations are in parenthesis. Significant gender differences: * $p < .05$. ** $p < .01$. *** $p < .001$. Subscale scores were averaged across all items for an individual subscale and have endpoints at 1 (less often) and 5 (most often). Discrepancy scores have endpoints at 0 and 4.

Scripting, and Caring Actions subscales of the DLBS will be significantly lower than men's, and men's scores on the Sex subscale will be lower than women's. Hypothesis 2b predicts that women's desire-received discrepancy scores on the Relationship Support, Scripting, and Caring Actions subscales of the DLBS will be significantly higher than men's, and men's scores on the Sex subscale will be higher than women's.

Method

Participants

One-hundred forty participants were recruited from undergraduate Introductory Psychology, Personal Growth, Psychology of Personality, and Abnormal Psychology classes at a large Southeastern university. All data were collected in

Table 2 Pattern of effect sizes for gender differences in Desired Loving Behaviors Scale (DLBS) subscale scores across the three studies.

	Caring Actions	Relationship Support	Scripting	Sex
Study 1				
Desired behaviors?	–	1.10 ^c	–	–
Study 2				
Desired behaviors?	.41 ^a	.64 ^b	.45 ^a	–
Received behaviors?	–	–	–	–
Discrepancy?	.45 ^a	–	–	–
Study 3				
Desired behaviors?	–	.63 ^b	–	.64 ^b
Received behaviors?	.67 ^b	–	–	–
Discrepancy?	–	–	–	.37 ^a

^a Cohen's $d = .2$ – $.5$, small effect.

^b Cohen's $d = .5$ – $.8$, medium effect.

^c Cohen's $d > .8$, large effect.

out-of-class administrations, and students received extra credit according to the preferences and course design of the particular instructor. Of those reporting gender, 100 were women and 40 were men. Ethnic demographic data were not collected on the sample. Seventy-six participants reported a current romantic relationship, 66 reported no current relationship, but had at least one in the past, and one participant did not respond to the question. If participants reported that they had never been in a relationship, they were not invited to participate in this study. Of participants reporting both gender and relationship status, the breakdown of gender by relationship status is as follows: 41 (41%) women were not in a relationship, 59 (59%) women were, 23 (58%) men were not in a relationship, and 17 (42%) men were. The mean age for participants was 21.19 ($SD=3.39$). Three participants provided incomplete data, so the analyses were run with a final sample of 97 women and 40 men.

Measure

Participants responded to two versions of the DLBS. One version asked what behaviors participants *desired* from their romantic partners in order to feel loved. The second asked what behaviors and actions participants actually *received* from their partners in order to feel loved. The Cronbach α 's for the desired subscales in Study 2 were: Relationship Support=.70, Scripting=.87, Sex=.80, and Caring Actions=.88. The α 's for the received subscales were: Relationship Support=.80, Scripting=.87, Sex=.83, and Caring Actions=.81.

Procedure and Data Analysis

Participants were asked to complete the DLBS indicating both desired and received loving behaviors. After the study, participants received extra credit, and were thanked and debriefed. Discrepancy scores were calculated by subtracting the *received* score on each subscale from the *desired* score on that subscale. We assessed gender differences using three omnibus MANOVAs in which the independent variable for each MANOVA was gender and the dependent variables for each MANOVA were desired subscale scores (MANOVA 1), received subscale scores (MANOVA 2), and discrepancy subscale scores (MANOVA 3). The purpose of these MANOVAs, as in Study 1, was to control for family-wise error. We then ran three sets of follow-up Bonferroni-corrected t -tests. In each of these three sets of t -tests, the independent variable was gender, and the dependent variable was the desired DLBS subscale scores (set 1), the received DLBS subscale scores (set 2), and the discrepancy DLBS subscale scores (set 3). We performed the same power analysis as in Study 1 (Soper 2009), again finding

that we would need a sample size of 42 to detect a large-sized ($d=.8$) effect, 102 to detect a medium-sized ($d=.5$) effect, and 620 to detect a small-sized ($d=.2$) effect. Therefore, our current sample size is sufficient to detect all large, medium, and some, but not all, small-sized effects. A lack of small effects on any of the dependent variables must be interpreted with caution.

Results and Discussion

The overall omnibus MANOVAs revealed statistically significant main effects for gender on desired DLBS subscale scores, $F(4, 131)=7.11$, $p<.001$, Wilk's Lambda=.82, and on desired-received discrepancy DLBS subscale scores, $F(4, 131)=2.67$, $p<.05$, Wilk's Lambda=.92, but not on received DLBS subscale scores, $F(4, 131)=.66$, $p=.63$, Wilk's Lambda=.98. This suggests that there were gender differences in both the desired and desired-received discrepancy sets of DLBS scores, but not in the received scores. The desired and discrepancy MANOVAs' significant gender effects allow for follow-up Bonferroni-corrected t -tests within desired and discrepancy scores within each subscale. Hypothesis 1, that women and men would differ on the *desire* DLBS subscales, received more support in Study 2 than in Study 1. As in Study 1, compared to men's, women's desire ratings were significantly higher on the Relationship Support subscale, $t(135)=3.70$, $p<.001$, $d=.64$, a medium effect, and again, women's and men's desire ratings did not differ significantly on the Sex subscale, $t(135)=.30$, $p=.76$. However, unlike Study 1, women's scores were higher on the Scripting subscale, $t(135)=2.60$, $p<.05$, $d=.45$, a small effect, as well as higher on the Caring Actions subscale, $t(134)=2.39$, $p<.05$, $d=.41$, also a small effect.

Participants' reports of how often they actually *received* desired loving behaviors from their partners (Hypothesis 2a) showed no significant gender differences for any subscale, failing to support the notion that women are more generous in romantic relationships than men. Regarding Hypothesis 2b, that women and men would differ on discrepancy scores, one significant gender effect emerged: compared to men, women had a larger discrepancy between desired and received behaviors on the Caring Actions subscale, $t(134)=2.62$, $p<.01$, $d=.45$, a small effect. This pattern of findings suggests that women and men were similarly effective overall in providing what their romantic partners wanted, in order to feel loved. See Table 1 for means and standard deviations and Table 2 for effect sizes.

If the three gender differences in desires for loving behaviors found in Study 2 were large and stable, all three of them should have emerged in Study 1, but only one did. The effect sizes of the gender difference on both the Scripting and Caring Actions subscales were small according to Cohen's (1988) standards, so perhaps because of the

slightly larger sample size in Study 2, these two effects proved statistically significant. While some variation between samples is expected, the idea that women and men are massively and stably different with regard to their relationship-oriented desires did not receive support in Study 2. Likewise, the findings from Study 2 did not support evolutionary psychology's assertion that women and men engage in vastly different behaviors in relationships to maximize reproductive potential. However, it is important to note that the gender difference for *desires* on the Relationship Support subscale was a medium-sized effect, whereas it was large in Study 1.

These marked variations in effect sizes and significance across samples indicate that gender is unlikely to be the only, or even the largest, factor influencing what people desire and receive in romantic relationships. Beyond the effect of biology, contextual factors may influence how women and men respond, a finding noted by many researchers (e.g., Canary et al. 1997; Wood 1998; Wood and Eagly 2002). The results of Study 2 paint a more complex picture of gender similarities and differences in romantic relationships than the evolutionary perspective or planetary metaphor allows. A striking finding is that, although significant gender differences emerged for three out of four of the types of loving behaviors that women and men *desired* from their relationship partners, there were no significant gender differences in the types of loving behaviors that women and men reported *receiving*. The data suggest that men are just as capable as women in providing for their partner's needs in order to display their love. Moreover, only one small gender effect emerged for the magnitude of the discrepancy between desired and received loving behaviors. In relationships, men are stereotyped as being largely out of touch with their partner's desires. However, the current findings suggest that men are as effective as women at meeting their partners' desires across the four domains of sex, relationship support, scripting, and caring actions.

Study 3

Study 3 examined the reliability of gender effects on desired loving behaviors found in Studies 1 and 2. It also extended those studies by investigating gender-role identity and relationship satisfaction as contextual predictors of the previously observed gender effects. Accordingly, Hypothesis 3a asserts that DLBS discrepancy scores will inversely predict relationship satisfaction for both women and men, and Hypothesis 3b asserts that gender differences in the DLBS will be significantly mediated by gender-role identity as measured by the Personal Attributes Questionnaire (PAQ, Spence et al. 1974). Hypothesis 3b is based on

the body of feminist literature (e.g. Tiegs et al. 2007) which has asserted that gender differences are often a result of conformity to gender norms, as opposed to genuine biological traits. For example, LaFrance and Banaji (1992) and Unger (1998) have identified misperceptions, prejudices, and gender-role conformity as causes of gender differences, and Chrisler and Smith (2004) have identified social conditioning, modeling, and reinforcements rather than biology as causes. Specifically, Wood and Eagly (2002) have argued that women and men may exhibit traditional gender differences as a function of how much they identify with their gender roles.

Method

Participants

One hundred sixty-two students were recruited from Psychology of Personality courses at a large Southeastern university. A research assistant received permission from each of the course instructors to present an opportunity to the students to participate in the study. The research assistant informed the students that the purpose of the study was "to investigate romantic relationships." Students who wanted to participate in the study were asked to respond to a questionnaire that would take less than fifteen minutes to complete. Students were told that their responses would be confidential and that participation was voluntary. If they chose to participate, participants received an amount of extra credit that was predetermined by their course instructor. Questionnaires, answer sheets, and pencils were provided to students who decided to participate.

Seventy-five participants reported no current exclusive dating relationship, but had at least one in the past. Eighty-one participants reported a current exclusive dating relationship. Of participants reporting both gender and relationship status, the breakdown of gender by relationship status is as follows: 44 (41%) women were not in a relationship, 63 (59%) women were, 28 (62%) men were not in a relationship, and 17 (38%) men were. Six participants reported never having had an exclusive dating relationship. Questionnaire responses given by these six participants were excluded from data analysis. Of the remaining participants who reported gender, 108 were women and 45 were men. The mean age for participants was 20.01 ($SD=2.02$).

Measure

Desired Loving Behaviors Scale Participants filled out the both the desired and received versions of the DLBS. The Cronbach α 's for the desired subscales in Study 3 were: Relationship Support=.68, Scripting=.89, Sex=.85, and

Caring Actions=.68. The α 's for the received subscales were: Relationship Support=.86, Scripting=.94, Sex=.73, and Caring Actions=.65.

Relationship Satisfaction Questionnaire Participants filled out the DLBS and a brief, five-point, Likert-type relationship satisfaction that included the following six items: "How satisfied are you (were you) with this relationship?" "How important is (was) this relationship to you?" "When I think about this relationship, I feel content." "This relationship gives (gave) meaning to my life." "When I think about this relationship, I feel pleased." and "This relationship is (was) very significant to my life." The Cronbach α of this scale was acceptably high (α =.91). The responses from all six items were straight-summed to create one overall relationship satisfaction score.

Personal Attributes Questionnaire (PAQ) Participants completed the PAQ (Spence et al. 1974), a 24-item, five-point, Likert-type scale that validly and reliably measures (Helmreich et al. 1981) a person's gender-role identity via his or her levels of self-reported masculinity, femininity, and androgyny. Participants rate their own personalities on bipolar items such as "Not at all aggressive 0.....1.....2.....3.....4 Very aggressive" and "Not at all emotional 0.....1.....2.....3.....4 Very emotional." Spence and Helmreich (1978) have shown the PAQ Femininity and Masculinity subscales to be internally consistent at α =.85 and α =.82, respectively. The overall scale was also high in test-retest reliability at r =.58 for men and r =.67 for women (Yoder et al. 1982). In Study 3, the Cronbach α 's were .54 for the Masculinity subscale, .73 for the Femininity subscale, and .47 for the Androgyny subscale.

Procedure and Data Analysis

Participants responded to both desired and received versions of the DLBS, the relationship satisfaction scale, the PAQ, and a demographic questionnaire. Upon completion, participants were debriefed, thanked, and dismissed. As in Study 2, we examined gender differences on participants' DLBS desired, received, and discrepancy scores first using three MANOVAs and then follow-up Bonferroni-corrected t -tests. We then examined the relationships between relationship satisfaction and overall DLBS discrepancy scores using Pearson correlations. And finally, we used a mediated-variable analysis (Baron and Kenny 1986) to examine the relationships among desired loving behaviors, relationship satisfaction, and gender-role identity. Again, the same power analysis as in Study 2 suggested that our Study-3 sample size was sufficient to detect all large, medium, and some, but not all, small-sized effects using t -tests. A lack of small-sized

effects on any of the dependent variables must be interpreted with caution.

Results and Discussion

The overall omnibus MANOVAs revealed statistically significant main effects for gender on desired DLBS subscale scores, $F(4, 148)=9.43, p<.001$, Wilk's Lambda=.80, on received DLBS subscale scores, $F(4, 148)=7.01, p<.001$, Wilk's Lambda=.84, and on desired-received discrepancy DLBS subscale scores, $F(4, 148)=4.63, p<.002$, Wilk's Lambda=.89, suggesting that there were gender differences in the three sets of scores for the subscales of the DLBS. The MANOVAs' significant gender effects allow for follow-up Bonferroni-corrected t -tests within each type of score and within each subscale. Regarding replication of results from Studies 1 and 2, Study 3 revealed a few significant gender differences. As with Studies 1 and 2, compared to men, women had higher desire scores on the Relationship Support subscale, $t(151)=3.87, p<.001, d=.63$, a medium effect. Unlike Studies 1 and 2, men in Study 3 had higher Sex subscale desire scores than women did, $t(151) 3.94, p<.001, d=.64$, a medium effect. There were no significant differences between women's and men's desires for Caring Actions (replicating the results of Study 2, but not Study 1) or Scripting (replicating the results of Study 1, but not Study 2).

Reports of *received* loving behaviors in Study 3 revealed that men's scores on the Caring Actions subscale were significantly higher than women's, $t(151)=-4.13, p<.001, d=.67$, a medium effect. This finding suggests that men may have received *more* caring actions from women than women received from men. No other gender differences in received loving behaviors achieved statistical significance. These findings largely replicate those of Study 2, in which there were no significant gender differences in received loving behaviors.

The discrepancy between sexual behaviors desired and received in order to feel loved was greater in Study 3 for men than for women, $t(151)=2.25, p=.05, d=.37$, a small effect. This finding failed to replicate Study 2, which showed no gender differences in discrepancy scores for the Sex subscale. Despite the fact that compared to women, men reported a larger discrepancy between the amount of sex they desired and the amount they actually received, women still reported that they were not engaging in as much sex within their romantic relationships as they desired. This finding works against the evolutionary idea that sex is relatively unimportant to women in long-term romantic relationships. No other gender differences appeared in discrepancy scores in Study 3. See Table 1 for means and standard deviations and Table 2 for effect sizes.

Hypothesis 3a asserted that DLBS discrepancy scores would inversely predict relationship satisfaction for both

women and men. The results of Study 3 supported this hypothesis. In order to examine broadly whether the overall discrepancy between what individuals wanted and received from their romantic partners was related to relationship satisfaction, we summed the absolute values of desired-received discrepancy scores for all 39 items of the DLBS to create an overall absolute discrepancy score. These overall scores were inversely correlated with mean ratings of relationship satisfaction, $r=-.65$, $p<.001$, a large effect. Thus, desired-received discrepancy accounted for 42.25% of the variance in the measure of relationship satisfaction. Exploratory correlations run separately for women and men resulted in similar patterns. Both men's and women's overall discrepancy scores inversely correlated with relationship satisfaction, $r=-.59$, $p<.001$ and $r=-.67$, $p<.001$, respectively. To examine this effect further, discrepancy and gender were entered into a simultaneous multiple regression predicting relationship satisfaction. Overall discrepancy scores significantly predicted satisfaction, $F(1, 151)=111.23$, $p<.001$, but neither gender, $F(1, 151)=1.59$, *ns*, nor the gender by discrepancy interaction, $F(1, 151)=1.34$, *ns*, reached or approach statistical significance. These results show that women and men were similarly affected by receiving or not receiving behaviors they desired from their relationship partners. This finding provides further evidence that, despite the stereotype and Lord Byron's view, love is *not* a thing apart for men, and that men are affected by love and loving behaviors just as much as women are.

Hypothesis 3b asserted that gender differences in the desire for loving behaviors would be significantly mediated by gender-role identity as measured by the Personal Attributes Questionnaire (PAQ). Pearson's product-moment correlations revealed no significant associations between the PAQ Masculinity subscale and any of the desire loving behavior subscales. However, a significant positive correlation emerged between the PAQ Femininity subscale and the Desired Relationship Support subscale of the DLBS, $r=.41$, $p<.001$. In other words, feminine gender-role identity accounted for 16.81% of the variance in participants' desires for relationship support. The more that participants identified with a feminine gender role, the more they desired relationship support.

As a follow-up, we performed a test of mediation (Baron and Kenny 1986) to examine the degree to which PAQ Femininity mediated the significant relationship between gender and Desired Relationship Support. Step 1 was to assess whether there was a statistically significant relationship between gender and desired Relationship Support, and there was: $r=-.30$, $p<.0002$, with women desiring more relationship support than men

did. Step 2 was to assess whether there was a statistically significant relationship between gender and PAQ Femininity, and there was: $r=-.27$, $p<.001$, with women identifying as more feminine than men did. Step 3, the final step, was to assess the magnitude and significance of the relationship between gender and desired Relationship Support, with PAQ Femininity statistically controlled. The result of that hierarchical regression analysis revealed what Baron and Kenny (1986) call a partially mediated model, because even with PAQ Femininity statistically controlled, there was a reduced but still statistically significant relationship between gender and desired relationship support: $r=-.22$, $p<.005$, with women desiring more relationship support than men did. The percent of variance accounted for without controlling for PAQ Femininity was 9.00%, whereas with the effect of PAQ Femininity statistically controlled the variance accounted for was only 4.84%, a reduction in variance of 4.16%. This finding reveals that the magnitude of the association between gender and desired Relationship Support was cut nearly in half with the removal of the effect of feminine gender-role identity.

In order to see whether gender differences on desire scores of the DLBS subscales were affected by whether a person was in or not in a relationship, we ran four exploratory analyses of variance (ANOVAs) with gender, relationship status, and the interaction term of gender by relationship status as independent variables and each of the four desire DLBS subscales as a dependent variable. For example, Tieggs et al. (2007) found that men who were not in a relationship reported a greater interest in sex than men who were in a relationship. However, in the current study, none of the interaction terms were significant, meaning that gender differences in desire DLBS subscale scores did not differ as a function of relationship status.

Study 3 examined some specific contextual influences on the presence and magnitude of gender differences by measuring participants' self-reported gender-role identity. In line with predictions based on Wood and Eagly (2002), gender-role identity predicted scores on the only DLBS subscale (desired Relationship Support) that in all three studies had showed consistent gender differences. This finding suggests that gender roles and gender-role identity may be major contextual factors influencing the stable, observed gender differences in desired loving behaviors. However, it is important to note that when controlling for gender-role identity, gender's predictive power was cut nearly in half, but still significantly predicted desired Relationship Support scores. Accordingly, factors in addition to (but also *including*) gender-role identity may be differentially affecting what women and men desire from relationships.

General Discussion

Findings from the three current studies suggest that gender provides little predictive power in accounting for stable *desired* and *received* loving behaviors. Only minimal support was garnered for the dichotomous gender-role stereotypes held steadfastly by some essentialist evolutionary psychologists and popular culture. Results from these three studies present a cautious challenge to many of the conclusions of gender differences predicated on the reproductive strategies of sexual strategies theory in that the only stable gender difference that emerged in relationship behaviors and desires was partially mediated by gender-role identity. Instead, these data seem to support a contextual conceptualization of gender differences within romantic relationships consistent with feminist and social constructivist perspectives.

The patterns that emerged showed only one stable gender difference (desired in relationship support) and three less-stable gender effects that flip-flopped between significant and non-significant (desires for sex, scripting, and relationship support). For example, Study 2 found gender differences in desires for verbal behaviors (scripting), but Studies 1 and 3 did not. Similarly, Study 3 found a significant gender difference on the DLBS Sex subscale, but Studies 1 and 2 did not. If Buss and Schmitt's (1993) sexual strategies theory were correct that relationship needs are the products of selection pressures and genetically facilitated adaptations that differentially affected women and men, our data should have supported consistent gender differences on the sex domain at a much higher rate and with much more supportive evidence than one medium effect size. The results fail to support these essentialist evolutionary perspectives, though of course issues of power in the current sample could have masked potential differences.

The one clear gender difference that emerged across the three studies resides in women's greater desire for relationship support. This effect ranged in magnitude from medium to large according to Cohen's (1988) standards. Though this finding was robust in Study 3, participants' feminine gender-role identity accounted for over 16% of the variance in their desires on this domain. The follow-up mediational analysis suggested that feminine gender-role identity accounted for a large and significant amount of predictive variance, though it did not completely account for the effects of gender on desire for relationship support. Future studies should examine the effects of other contextual and social factors on relationship support.

Thus far, we have compared women's and men's scores on individual subscales of the DLBS *within* three different studies, so it may be worthwhile to step back to see if a pattern of results is revealed *across* the three studies. For

participants' ratings of *desired* loving behaviors in relationships, women and men differed in 50% of our analyses (six out of a possible twelve subscales). Two of these effect sizes were small, three were medium, and one was large. Looking across the three studies, these findings reveal that women and men either did not differ or were only marginally different (with a small effect size) across 67% of our analyses in their self reports of desired loving behaviors from relationships. For participants' ratings of *received* loving behaviors, women and men differed only 13% of the time (one out of a possible eight subscales). This one effect size was medium. Again across studies (with a single exception) women and men did not differ in their self reports of *received* loving behaviors in romantic relationships. For participants' *discrepancy* scores on the DLBS, women and men differed only 25% of the time (two out of a possible eight subscales). Both times these differences were small. Again, across studies, women and men either did not differ or had only a small difference in the discrepancy between the loving behaviors they wanted and received from their partners.

Overall, women and men were mostly similar in their self reports of desired loving behaviors. They were even more similar in their self reports of received loving behaviors and in their self reports of the discrepancy between desired and received loving behaviors. Biological and innate difference models perpetuated by evolutionary theorists and by Mars-Venus popular culture writers argue that men are more interested in sex, are less interested in intimacy, and are worse at sharing how they feel. In contrast, women are stereotyped as less interested in sex, more emotionally needy, and more apt to complain. Data from our three samples failed to support these stereotypes, suggesting instead that the behaviors which women and men desire and receive from romantic relationships are much more alike than different. When a consistent gender difference did emerge, it was significantly, though not completely, mediated by traditional gender-role identity.

Limitations and Future Research

One of the limitations of this research is the use of collegiate samples. It is possible that the use of a college sample may have masked potential gender differences in that a university academic setting tends to be very non-traditional in terms of gender roles and behavior. Further, men who elect to take psychology courses may differ from other college men in their views on gender roles and behaviors, though this idea has not yet been rigorously tested in the research literature. Therefore, this research needs to be replicated with a non-collegiate sample. Relationship-oriented desires may change through stages of life, such as during young adulthood, middle adulthood,

or late adulthood. Replications of the current studies in older samples may prove illuminating. It should be noted, however, that much of the work by evolutionary psychologists in this area (e.g., Buss and Schmitt 1993) has also relied on collegiate samples, and so many of the criticisms of essentialist evolutionary theories outlined here may actually have particular relevance given our sample.

Also, a similar study performed in other cultures besides American culture could reveal different results. For example, Sprecher and Toro-Morn (2002) compared gender differences in desires from romantic relationships in both western and eastern cultures, finding that cultural differences in relationship desires were larger than the gender differences within cultures. Sprecher and Toro-Morn's study highlights the importance of considering ethnic and cultural influences on gender differences in desired loving behaviors. Along the same lines, specifically studying gay, lesbian, or bisexual couples' desired and received loving behaviors may reveal a pattern of differences and similarities departing from that of the current sample. The current studies did not collect data on participants' sexual orientations, though data collected on similar samples at the same university suggested overwhelmingly heterosexual orientations, so more research in this domain is clearly needed.

Another limitation of the current three studies is the inclusion of participants who were not in a current romantic relationship when the studies were conducted. To examine the possibility of different responses from participants who were versus those who were not in a committed relationship, we used *t*-tests to compare the data from both types of participants and found no significant differences.

Yet another possible limitation, more apparent than real perhaps, involves discrepancy in the male and female sample sizes. The discrepancy is simply a function of gender distribution in psychology courses at the university where the studies were conducted. The discrepancy does not threaten the statistical-conclusion validity of the analyses, because each of the three studies involved sufficient numbers of both women and men. Also, the standard deviations of the mean scores for women and men were similar, so heteroscedasticity cannot account for any of the findings in these studies.

Future research should examine other social and contextual factors that affect gender differences in desired loving behaviors. Vogel et al. (1999), for example, showed that contextual factors, such as an intimate conversation topic, can affect subscription to gender-role attitudes for women and men in relationships. Vogel et al. (1999) were able to manipulate with the use of simple contextual primes the degree of traditional gender-role behavior women and men enacted when conversing with one another. A similar approach to either of these two studies could test the

influence of contextual factors on gender differences in desired and received loving behaviors.

Conclusion

The purpose of this article was to examine the accuracy of the evolutionary perspective and Mars-Venus stereotypes regarding gender differences in desired and received loving behaviors within romantic relationships. Put simply, our data did not consistently support the gender stereotypes proposed by either of these widely accepted viewpoints. Rather, it is evident that women and men exhibited similar desires for sex as well as other verbal and non-verbal displays of love. The only consistent gender difference across all three studies turned out to be partially mediated by participants' gender-role identity.

Returning to the statement that began this article, is love a thing apart for men but women's whole existence? Our data seem to suggest "no." Across our three studies, love-related gender differences were fleeting and unstable. When the differences did appear (with women's greater desire for relationship support), they did so in part because of gender-role identity, which by definition is due to socialization rather than innate biological influences. According to our data, more fruitful avenues of future research might be better served by espousing the assumption that love plays an equal role in the lives of women and men.

Appendix A

Desired Loving Behavior Scale

While considering your current relationship or while considering your most recent previous relationship, please answer the following questions. What do you want your partner to DO or SAY to make you feel loved?

Use the following scale to indicate how often you would like your partner to do or say the following things in order to make you feel loved.

- 1 = Never
- 2 = Rarely
- 3 = Sometimes
- 4 = Often
- 5 = Always

-
1. Tell me that I make them happier than anyone else.
 2. Make our relationship a mutual project.
 3. Say to me, "You mean so much to me."
 4. Do my laundry every once in a while.
 5. Tell me what he/she likes and dislikes in bed.
 6. Put a note on my car.

7. Seduce me.
8. Be a good listener to me.
9. Spend time talking with me.
10. Be open to trying new sexual positions.
11. Leave a rose on my pillow.
12. Help me through rough times.
13. Be a good communicator.
14. Take a more active role in sex and foreplay.
15. Say that he/she wants to marry me.
16. Create a feeling of security between us.
17. Cook a special meal just for the two of us.
18. Say, "I love you with all my heart and soul."
19. Accept my imperfections.
20. Remember my birthday.
21. Good sex.
22. Say to me, "Let's make love."
23. Be supportive of me and my decisions.
24. Make a mix tape or CD of songs for me.
25. Talk about our future together.
26. Say to me, "I enjoy spending time with you more than any other person."
27. Say to me, "I want to be with you forever."
28. Take walks with me during the day.
29. Write poems.
30. Be sympathetic to my feelings.
31. Have sex in strange places.
32. Oral sex.
33. Make me cookies and brownies.
34. Encourage me to keep going during sex.
35. Say to me, "You are the best thing that ever happened to me."
36. Say to me, "I'll always love you."
37. Change his/her religion.
38. Say to me, "I think that we make a great couple."
39. Initiate sex.

Scoring:

Relationship Support subscale items – 2, 8, 9, 12, 13, 16, 19, 20, 23, 30.

Scripting subscale items – 1, 3, 15, 18, 25, 26, 27, 35, 36, 38.

Sex subscale items – 5, 7, 11, 14, 21, 22, 31, 32, 34, 39.

Caring Actions subscale items – 4, 6, 10, 17, 24, 28, 29, 33, 37.

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