

Relationships between Body Image, Sexual Satisfaction, and Relationship Quality in
Romantic Couples

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Abstract

Previous studies found important associations between body image, sexual satisfaction, and perceived romantic relationship quality, but mainly focused on one individual's perceptions rather than both partners. In order to take the interdependency of romantic partners into account, the present study examined these associations in romantic couples with a dyadic approach. In a cross-sectional design, 151 Dutch heterosexual couples completed an online survey measuring body image, sexual satisfaction, and perceived relationship quality.

Hypotheses were tested using the Actor-Partner Interdependence Model (APIM) and an APIM extended with a mediator (APIMeM), with couple members' body image as predictors, couple members' sexual satisfaction as mediators, and couple members' relationship quality as outcomes. Results indicated that within individuals, a more positive body image was linked to higher perceived romantic relationship quality through greater sexual satisfaction. No gender differences were found, implying that body image and sexual satisfaction are equally strongly associated with perceived relationship quality in women and men. Results revealed no associations of an individual's body image and sexual satisfaction with the partner's perceived relationship quality. These findings implicate that interventions focusing on developing and maintaining a positive body image may be helpful in building on a more satisfying sex life and higher perceived relationship quality.

Keywords: body image, sexual satisfaction, perceived relationship quality, romantic couples, dyadic approach

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In adulthood, romantic relationships are among the most important relationships in an individual's life. Individuals whose relationship is high in quality typically experience satisfaction, commitment, intimacy, trust, passion, and love (Fletcher, Simpson, & Thomas, 2000). Since sexuality is a key component of many romantic relationships (Muise, Kim, McNulty, & Impett, 2016), it is not surprising that a couple's sexual experiences can be linked to the perceived quality of their romantic relationship.

Theoretical perspectives on social exchange provide a framework from which sexuality in romantic relationships can be understood (Byers & Wang, 2004). For example, interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959) proposes that perceived relationship quality is predicted by relational outcomes, comparison levels, and comparison level of alternatives. Relational outcomes are the perceived ratio of rewards (i.e., exchanges experienced as pleasant and gratifying) and costs (i.e., exchanges that demand effort or negative experiences) within the relationship and the comparison level represents what rewards and costs an individual expects from the relationship. The theory posits that perceived relationship quality is higher when the rewards overshadow the costs and experiences of the relationship meet or exceed an individual's expectations. Following this perspective, Fallis, Rehman, Woody, and Purdon (2016) argued that positive and satisfying sexual experiences may be experienced as rewards, whereas negative and dissatisfying sexual experiences may be experienced as costs, and may therefore influence one's perceived quality of the romantic relationship. Previous research supports this assumption by providing empirical evidence of a relationship between sexual satisfaction and perceived relationship quality in dating, cohabitating, and married women and men (e.g., Fallis et al., 2016;

McNulty, Wenner, & Fisher, 2016; Sprecher, 2002; Yeh, Lorenz, Wickrama, Conger, & Elder, 2006).

Identifying factors that impact sexual satisfaction and perceived relationship quality is important for selecting the appropriate targets for treatment intervention in the context of sexual and relational problems in romantic couples. As many women and men that undergo sex and couple therapy are struggling with their physical appearance (Wiederman, 2002), body image might be one of the factors influencing both sexual satisfaction and perceived relationship quality. Body image is a multidimensional construct encompassing self-perceptions, attitudes, feelings, and behaviors about one's physical appearance (Cash & Pruzinsky, 2002). An extensive amount of research demonstrated that body image is consistently and meaningfully related to sexual satisfaction in both women and men (e.g., Sanchez & Kiefer, 2007; Træen, Markovic, & Kvaem, 2016; Woertman & Van den Brink, 2012).

An explanation for the link between body image and sexual satisfaction can be found in Fredrickson and Roberts' (1997) objectification theory. Although objectification theory was originally developed to explain women's experiences, it is now considered relevant for understanding men's experiences as well given the increased cultural emphasis on men's appearance (e.g., Strelan & Hargreaves, 2005). The theory posits that the treatment of women and men as sexual objects by others and in the media, leads to treating oneself as an object to be evaluated based upon bodily appearance (i.e., self-objectification). Self-objectification is manifested as persistent consciousness of the body and habitual body monitoring. Negative body-related evaluations and body self-consciousness during sexual activity with a partner can be distracting, thereby interfering with pleasure of the experience and sexual satisfaction (Frederickson & Roberts, 1997). In contrast, women and men with a positive body image may have few concerns over appearing unattractive to their partner during physical intimacy.

The absence of these concerns can prevent exaggerated body self-consciousness that hinders positive sexual experiences, and thus, facilitate sexual satisfaction (e.g., Carvalheira, Godinho, & Costa, 2017).

Given the close connection between sexual satisfaction and perceived relationship quality (e.g., Yeh et al., 2006), it is plausible that the link between body image and sexual satisfaction has implications for the perceived relationship quality as well. According to Murray and colleagues' risk regulation model (Murray, Derrick, Leder, & Holmes, 2008), individuals with a negative self-concept are typically involved in less satisfying and less stable relationships than individuals with a positive self-concept. Specifically, the model proposes that individuals need to feel accepted by their partners in order to experience the sense of security that is necessary to engage in emotionally risky, relationship-enhancing behaviors, such as engaging in sexual intimacy, that contribute to relationship satisfaction. Individuals with a negative self-concept experience low confidence regarding their partners' acceptance and fear of being rejected, resulting in a lack of confidence in oneself as a partner and the avoidance of relationship-enhancing behaviors. As body image is an integral aspect of the global self-concept (Rodin, Silberstein, & Striegel-Moore, 1985), negative body-related cognitions and evaluations may cause fear of rejection. This may lead individuals to avoidance of sexual activity with a partner and not experiencing the satisfaction normally associated with sexual intimacy, consequently resulting in a poorer experience of the relationship in general.

Previous research supports this assumption by providing empirical evidence that body image is related to perceived relationship quality in women and men (Ambwani & Strauss, 2007; Boyes, Fletcher, & Latner, 2007; Friedman, Dixon, Brownell, Whisman, & Wilfley, 1999). Meltzer and McNulty (2010) found that this relationship was mediated by sexual satisfaction. In their sample of 53 recently-married couples, they found that wives who

perceived themselves as more sexually attractive reported increased sexual satisfaction, which in turn was associated with higher marital satisfaction. Since husbands' body image was not measured in this study, there is not yet empirical evidence supporting this mediating role of sexual satisfaction in men. However, as is the case for women, positive associations between body image and sexual satisfaction (e.g., Carvalheira et al., 2017; Van den Brink et al., 2017), sexual satisfaction and perceived relationship quality (e.g., Sprecher, 2002), and body image and perceived relationship quality (Friedman et al., 1999) were demonstrated in men, which provides no reason to assume substantial gender differences.

These results overall suggest that body image and perceived relationship quality can be linked through sexual satisfaction within women and men involved in a romantic relationship. However, in studying romantic relationships it is also important to take the dyadic nature of romantic relationships into account. Couple members' sexual and relationship experiences are expected to be associated with each other since both aspects are part of the same social system. Moreover, in line with the social relations model (Back & Kenny, 2010), couple members mutually influence each other's cognitions, emotions, and behavior through social interaction processes. For example, an individual with a positive body image may be less distracted by body concerns during sexual activity and therefore be able to focus more on sexual pleasure, which increases own sexual satisfaction (intrapersonal effect). Likewise, he or she is likely to be more self-assured, more comfortable with trying new sexual activities and giving the partner sexual pleasure, and to initiate and engage in sex more frequently (e.g., Ackard, Kearney-Cooke, & Peterson, 2000; Faith & Share, 1993). The individual may therefore be perceived as a more attentive and better sexual partner, which increases the partner's sexual satisfaction (interpersonal effect). Furthermore, a satisfying sexual relationship can lead to increased feelings of intimacy, love, and commitment towards the partner (e.g., Sprecher & Cate, 2004) (intrapersonal effect). Subsequently, expressing

love and affection to the partner may enhance the partner's perceived relationship quality as well (e.g., Sprecher, Metts, Burleson, Hatfield, & Thompson, 1995) (interpersonal effect).

The few empirical studies that used a dyadic design provided inconsistent results. With regard to interpersonal effects (i.e., partner effects) of body image on sexual satisfaction, results varied from a positive association between women's body image and partner's sexual satisfaction (Meltzer & McNulty, 2010) to no association between an individual's body image and partner's sexual satisfaction in both women and men (Zhaoyang & Cooper, 2013). Results concerning partner-effects of sexual satisfaction on relationship quality showed that if significant partner effects were found, there was a positive effect of women's, but not men's, sexual satisfaction on their partner's perceived relationship quality (Fallis et al., 2016; Gadassi et al., 2016; Stanik & Bryant, 2012; Yoo, Bartle-Haring, Day, & Gangamma, 2014). With respect to partner effects of body image on relationship quality, Boyes et al. (2007) found that women, but not men, who were more satisfied with their bodies had partners who were more satisfied with their romantic relationship. Furthermore, Meltzer and McNulty (2010) found that the positive association between women's body image and partner's perceived relationship quality was mediated by the partner's sexual satisfaction. Overall, the few empirical studies that examined partner-effects indicate that women's body image and sexual satisfaction may be more influential on the perceived relationship quality of men than are men's body image and sexual satisfaction on the perceived relationship quality of women.

To summarize, previous studies based on different theories found important associations between body image, sexual satisfaction, and perceived romantic relationship quality, but most of these studies focused on individuals rather than couples. Given the interdependency of romantic partners, these findings may not present the full picture of how body image, sexual satisfaction, and perceived relationship quality interact within and

between romantic partners. Since satisfying and stable romantic relationships protect individuals from various negative mental and physical health outcomes (e.g., Holt-Lunstad, Birmingham, & Jones, 2008), further research focusing on couple's dynamics would be valuable.

The present study

The present study investigated associations between body image, sexual satisfaction, and perceived romantic relationship quality in heterosexual couples with a dyadic approach in which intrapersonal and interpersonal effects of dyadic couple members were examined simultaneously. Based on previous findings (e.g., Boyes et al., 2007; Meltzer & McNulty, 2010; Sanchez & Kiefer, 2007; Sprecher, 2002; Yoo et al., 2014), it was expected that a positive body image was associated with greater sexual satisfaction, that greater sexual satisfaction was associated with higher perceived relationship quality, and that a positive body image was indirectly associated with higher perceived relationship quality through greater sexual satisfaction within both women and men. Additionally, it was expected that a positive body image in women was associated with greater partner's sexual satisfaction and that greater sexual satisfaction in women was associated with higher perceived relationship quality in the partner. Furthermore, an indirect partner effect of women's body image on their partners' relationship quality via their partner's sexual satisfaction was expected.

Method

Procedure and Participants

Couples were recruited through the Internet and flyers. Undergraduate students of Utrecht University, The Netherlands, were invited to take part in an online study on 'body image and sexual experiences in committed romantic relationships'. Thus, at least one individual of each couple was affiliated with the university. Criteria for participation were: 18 years old or older, being heterosexual, being involved in a committed romantic relationship

for a minimum of six months, and being sexually active with the partner. Before getting access to the questionnaire, participants had to complete an informed consent form, in which voluntary participation and anonymity were emphasized. Couple members were matched by a unique couple code that was provided to the first couple member that filled out the questionnaire. Students from Utrecht University received course credit for participation, while the other participants were not compensated for participation. On average, it took 25 minutes for each couple member to complete the questionnaire.

Of the 168 couples that completed the questionnaire, one hundred and fifty-one couples met the inclusion criteria. Of the female couple members, age ranged from 18 to 44 years with a mean age of 22.01 years ($SD = 3.00$). Of the male couple members, age ranged from 18 to 49 years with a mean age of 24.26 years ($SD = 4.47$). Highest level of education (completed or current) was lower secondary school in 0 %, higher secondary school or lower vocational education in 21.2 % ($n = 32$), and higher vocational education or university in 78.8 % ($n = 119$) of the female couple members. In the male couple members, these percentages were 3.3% ($n = 5$), 23.2 ($n = 35$), and 73.5 ($n = 111$), respectively.

Measures

All questionnaires were translated from English to Dutch using the translate-retranslate method (re-translation by a native speaker), unless otherwise stated. Means, standard deviations, and intercorrelations between the variables for the whole sample are shown in Table 1.

Body Image. Body image was measured using the 13-item female and 13-item male version of the Body Appreciation Scale (BAS; Avalos, Tylka, & Wood-Barcalow, 2005). The items of the two versions are identical (e.g., 'I respect my body'), except for the sex-specific item 12, which refers to the impact of media images (i.e., unrealistically thin images for women versus unrealistically muscular images for men; Swami, Stieger, Haubner, &

Voracek, 2008). The items were answered on a 5-point Likert scale ranging from 1 = never to 5 = always. Items were recoded if appropriate and averaged so that higher subscale scores indicate more body appreciation (i.e. a more positive body image). Previous research indicated good internal consistency, construct validity (Swami et al., 2008), and construct equivalently between women and men (Tylka, 2013). In the present study, Cronbach's alpha for this measure was .88 for the female couple members and .81 for the male couple members.

Sexual satisfaction. The Dutch translation (Ter Kuile, Lankveld, Kalkhoven, & van Egmond, 1999) of the Golombok Rust Inventory of Sexual Satisfaction (GRISS; Rust & Golombok, 1986) was used to assess sexual satisfaction. The questionnaire has separate versions for women and men. Both versions consist of 28 items (e.g., 'Do you find your sexual relationship with your partner satisfactory?' in the female version and 'Do you enjoy having sexual intercourse with your partner?' in the male version). Items are scored on a 5-point Likert scale, where 1 = always and 5 = never. Items were recoded if appropriate and averaged so that higher scores indicate greater sexual satisfaction. Previous research indicated good internal consistency and validity (Ter Kuile et al., 1999). Cronbach's alpha in the current study was .86 for the female couple members and .79 for the male couple members.

Perceived relationship quality. The short, six-item version of the Perceived Relationship Quality Components Inventory (PRQC; Fletcher et al., 2000) measures six components of relationship quality: satisfaction, commitment, intimacy, trust, passion, and love (e.g., 'How satisfied are you with your relationship?'). Participants' responses were measured on a 7-point Likert scale, where 1 = not at all and 7 = extremely. Items were averaged so that higher scores indicate higher relationship quality. Previous research indicated good internal reliability and construct validity (Fletcher et al., 2000). In the present study, Cronbach's alpha for this scale was .77 for both the female and male couple members.

Relationship duration. In the female version of the questionnaire, relationship duration was assessed with a single item (i.e., ‘How long (in months) have you and your current partner been involved in a romantic relationship?’). Since previous research indicated that relationship duration, rather than age, should be considered relevant when exploring sexual experiences within romantic relationships (e.g., Murray & Milhausen, 2012), relationship duration was entered as a control variable in the analyses.

Statistical analysis

Data were analyzed by using the Actor-Partner Interdependence Model (APIM; Cook & Kenny, 2005; Kenny, Kashy, & Cook, 2006). The APIM was developed to deal with violations of statistical independence associated with dyadic data, for example of romantic couples. Using the APIM, intrapersonal effects (i.e., actor effects) and interpersonal effects (i.e., partner effects) can be estimated separately while controlling for confounding due to partner similarity. Actor effects refer to effects of an individual’s own predictor variable on his/her own outcomes and partner effects refer to the effects of an individual’s predictor variable on his/her partner’s outcome variable. An APIM with couple members’ body appreciation as predictors and couple members’ perceived relationship quality as outcomes was estimated to examine the total actor effect (i.e., the effect of a couple member's body appreciation on his/her own perceived relationship quality) and the total partner effect (i.e., the effect of a couple member’s body appreciation on his/her partner’s perceived relationship quality).

Mediation in dyadic data can be tested by extending the standard APIM by a mediator variable (APIMeM; Ledermann, Macho, & Kenny, 2011). An APIMeM with couple members’ body appreciation as predictors, couple members’ sexual satisfaction as mediators, and couple members’ perceived relationship quality as outcomes was estimated to examine the direct actor effect (i.e., the effect of an individual’s body appreciation on his or her own

perceived relationship quality after controlling for sexual satisfaction) and the direct partner effect (i.e., the effect of an individual's body appreciation on his/her partner's perceived relationship quality after controlling for sexual satisfaction). The APIMeM further enables the assessment of indirect actor effects: actor-actor mediation (i.e., effect of an individual's body appreciation on his/her own perceived relationship quality through his/her own sexual satisfaction) and partner-partner mediation (i.e., effect of an individual's body appreciation on his/her perceived relationship quality through his/her partner's sexual satisfaction), as well as indirect partner effects: actor-partner mediation (i.e., effect of an individual's body appreciation on his/her partner's perceived relationship quality through his/her own sexual satisfaction) and partner-actor mediation (i.e., effect of an individual's body appreciation on his/her partner's perceived relationship quality through his/her partner's sexual satisfaction).

To estimate the APIM and APIMeM, structural equation modelling (SEM) was performed using Mplus 7.3.1 (Muthén & Muthén, 2012). To facilitate interpretation (i.e., provide interpretable standardized coefficients), prior to the analyses, all variables were standardized based on the mean and standard deviation calculated across the entire sample. Before estimating the models, it was tested whether dyad members were empirically distinguishable by gender using the omnibus test of distinguishability (Kenny et al., 2006). The omnibus test simultaneously evaluates gender differences in means, variances as well as intrapersonal and intrapersonal correlations. When the omnibus test indicates that couple members could not be distinguished by gender, the API(Me)M was specified for interchangeable dyads by constraining the means, variances, and correlations to the same value across gender (Kenny et al., 2006; Olsen & Kenny, 2006). Additionally, as recommended by Shrout and Bolger (2002), mediation effects (i.e., indirect effects) were estimated by bootstrap analyses using 5000 bootstrap samples. The fit of the models was evaluated using the chi-square statistic, the Tucker-Lewis index (TLI), the comparative fit

index (CFI), and the root-mean-square error of approximation (RMSEA). Values greater than or equal to .95 for TLI and CFI, and less than or equal to .06 for RMSEA suggest a good fit (Hu & Bentler, 1999; Schreiber, Nora, Stage, Barlow, & King, 2006).

Results

APIM linking body appreciation to perceived relationship quality

Results of the omnibus test constraining means, variances, and correlations indicated that the couple members were distinguishable by gender, $\chi^2[6] = 39.57, p < .001$. However, a subsequent omnibus test constraining only the correlations indicated no difference between couple members, $\chi^2[2] = 1.37, p = .51$. Therefore, the couples were treated as indistinguishable by constraining the male actor effect with the female actor effect and the male partner effect with the female partner effect, while controlling for the differences in means and variances.

The fit of the constrained APIM was good ($\chi^2[2] = 0.43, p = .81$; CFI = 1.00; TLI = 1.13; RMSEA = .00). The results revealed a significant total actor effect, $\beta = .14, p < .05$ (paths *a*, Figure 1), and a marginally significant total partner effect of body appreciation on relationship quality, $\beta = .10, p = .05$ (paths *b*, Figure 1), indicating that a couple member's body appreciation was positively associated with his/her own perceived relationship quality as well as with his/her partner's perceived relationship quality. The correlation between couple members' body appreciation was $r = .08, p = .29$, and the correlation between residuals of relationship quality was $r = .44, p < .001$. The control variable relationship duration was not significantly related to couple members' body appreciation ($r = -.13, p = .19$ for female couple member, $r = -.12, p = .08$ for male couple members) and did not significantly predict couple members' perceived relationship quality ($\beta = -.01, p = .93$ for female couple members, $\beta = -.13, p = .09$ for male couple members).

APIMeM linking body appreciation to perceived relationship quality through sexual satisfaction

Results of the omnibus test constraining means, variances, and correlations indicated that the couple members were distinguishable by gender, $\chi^2[12] = 84.23, p < .001$. However, a subsequent omnibus test constraining only the correlations indicated no difference between couple members, $\chi^2[6] = 7.64, p = .27$. Therefore, the couples were treated as indistinguishable by constraining the male actor effects with the female actor effects and the male partner effects with the female partner effects, while controlling for the differences in means and variances.

The fit of the constrained APIMeM was good ($\chi^2[6] = 7.49, p = .28$; CFI = .99; TLI = .97; RMSEA = .04). The results (see Figure 1) revealed a significant actor effect of body appreciation on sexual satisfaction (paths *c*), and of sexual satisfaction on perceived relationship quality (paths *e*), while the corresponding partner effects (paths *d* and paths *f*, respectively) were not significant. This indicates that body appreciation was positively associated with sexual satisfaction and that sexual satisfaction was positively associated with relationship quality within but not across couple members. The actor effects (paths *a*) and partners effects (paths *b*) of body appreciation on perceived relationship quality were reduced compared to the APIM and no longer (marginally) significant. Thus, there were no direct effects of a couple member's body appreciation neither on his/her own perceived relationship quality nor on his/her partner's perceived relationship quality.

Rather, the bootstrap analysis revealed a significant indirect effect of a couple member's body appreciation on his/her own perceived relationship quality through his/her own sexual satisfaction (i.e. actor-actor mediation), .09, BC 95% CI (0.041, 0.166) (paths *c* x *e*), indicating that a couple member's body appreciation was positively related to his/her own perceived relationship quality due to a higher own sexual satisfaction. The other indirect

effects were not significant, 00, BC 95% CI (-0.003, 0.024) (paths $d \times f$, i.e., partner-partner mediation), .02, BC 95% CI (-0.004, 0.058) (paths $c \times f$, i.e., actor-partner mediation), and .02, BC 95% CI (-0.021, 0.064) (paths $d \times e$, i.e., partner-actor mediation).

Discussion

Using a dyadic design, the present study examined intra- and interpersonal associations between body image, sexual satisfaction, and perceived relationship quality in romantic couples. First, the results showed that body image, sexual satisfaction, and perceived relationship quality are meaningfully related within individuals. In line with Murray and colleagues' (2008) risk regulation model and previous findings (e.g., Friedman et al., 1999), the results of the APIM indicated that body image was positively associated with perceived relationship quality. Furthermore, results of the APIMeM suggested that individuals with a more positive body image report greater sexual satisfaction, and that greater sexual satisfaction is associated with a higher perceived quality of the romantic relationship. These expected intrapersonal findings are consistent with objectification theory (Fredrickson & Roberts, 1997) and interdependence theory (Kelley & Thibaut, 1978) and replicate results of a large number of previous studies (e.g., Gadassi et al., 2016; Træen et al., 2016; Yoo et al., 2014). The results of the AMIPeM also offered further insight in the interplay of body image and sexual satisfaction in affecting perceived relationship quality within individuals. As expected, sexual satisfaction mediated the association between body image and perceived relationship quality. More specifically, a positive body image was related to higher perceived relationship quality through greater sexual satisfaction. These findings are in line with results of Meltzer and McNulty (2010), who studied the mediating role of sexual satisfaction in the association between female body image and relationship quality, and expands this study by incorporating male body image.

It is important to note that our results revealed no gender differences in the strength and direction of the associations between an individual's body image, sexual satisfaction, and perceived relationship quality. The vast majority of prior body image research attended to women, largely because social pressures on women to conform to the unrealistic cultural body ideal were more pronounced than pressures on men (Byrd-Bredbenner & Murray, 2003; Rodin et al., 1985). Although there has been increasing recognition that a male body-ideal is much more dominant in modern society than in the past and that many men experience negative feelings towards their bodies (Pope, Phillips, & Olivardia, 2000), outcomes of body image in men still receive less scientific attention compared to women. The current findings emphasize that a positive body is equally important in shaping positive sexual and relational experiences for men and women. Furthermore, previous literature has suggested that sex may be more important for men than women in valuing their romantic relationship. For example, women tend to value emotional intimacy with their partner more than men while men tend to value more sexual intimacy with their partner than women (e.g., Greeff & Mahlerbe, 2001). There is a widely held stereotype that women focus on emotional intimacy in a romantic relationship and men focus exclusively on sexual activity (Canary, Emmers-Sommer, & Faulkner, 1997). Although it is possible that the level of sexual satisfaction is perhaps more based on emotional experiences in women and more on physical experiences (e.g., achieving an orgasm) in men (e.g., Leiblum, 2002), our results did not show a stronger association between sexual satisfaction and perceived relationship quality in men. These findings underline the importance of a more nuanced view of these gender differences in which the association between satisfaction with sexual experiences and overall relationship quality equally applies to both men and women.

Unlike our findings of intrapersonal effects, the current study provided only little evidence for the existence of interpersonal effects. The results of the APIM suggested that a

positive body image was marginally associated with the partner's perceived relationship quality. However, as indicated by the APIMeM results, this association was not due to the own and/or the partner's sexual satisfaction. The APIMeM results showed a direct association neither between body image and partner's sexual satisfaction, nor between sexual satisfaction and the partner's perceived relationship quality. These results are in line with previous findings of no partner effects from men to women (Boyes et al., 2007; Yoo et al., 2014), but the previously found partner effects from women to men (Meltzer & McNulty, 2010; Yoo et al., 2014) could not be replicated. These findings suggest that, as for women, intrapersonal effects seem to be the key mechanism in predicting perceived relationship quality in men. The inconsistent findings may also be accounted for by differences in study methods, such as the various aspects of body image assessed across the studies. For example, Meltzer and McNulty (2010) studied self-perceived sexual attractiveness. As described by Wade (2000), self-perceived sexual attractiveness for women is not only based on feelings about their appearance, but also on feelings about their sex drive and physical strength. Sexual attractiveness was found to be associated with higher sexual self-esteem (Wiederman & Hurst, 1998), which in turn is related to sexually-related behaviors such as more sexual openness and higher coital frequency (Hensel, Fortenberry, O'Sullivan, & Orr, 2011). Women who feel sexually attractive may therefore be experienced as better sexual partner, resulting into greater sexual satisfaction in their partner. Possibly, aspects of sexual female body image, such sexual attractiveness, are more strongly linked to sexual experiences of the male partner than more global measures of body image, such as body appreciation, which was assessed in the present study. Besides, body appreciation is an aspect of positive body image (e.g., Tylka, 2011). Although low BAS scores indicate an absence of positive feelings and appreciation towards one's body, this does not automatically imply negative body image, which is reflected by the absence of positive feelings towards one's body *and* the presence of

negative feelings such as dissatisfaction and dysphoria. Perhaps a positive body image in women influences the male partner to a lesser degree than a negative body image. For example, body image issues can cause women to experience stress and depressive feelings (e.g., Stice, Hayward, Cameron, Killen, & Taylor, 2000), which may affect their partners' feelings about the quality of the relationship to a greater extent.

Overall, the results indicated that an individual's body image is meaningfully associated with his or her own romantic relationship quality through his or her own sexual satisfaction, and that this equally applies to both women and men. These findings have practical implications, since body image problems are common in women and men (Pope, Phillips, & Olivardia, 2000; Wiederman, 2002). Given the close connection between sexual and general relationship experiences, interventions that are effective in developing and maintaining a positive body image may be helpful for women and men in building on a more satisfying sex life, which in turn can result in a more positive experience of the romantic relationship. For example, cognitive-behavioral body image therapy is found to be an efficacious treatment of body image problems (for a meta-analysis see Jarry & Ip, 2005), with outcomes shown to reduce negative body-related feelings during physical intimacy with a partner (Grant & Cash, 1996). However, the fact that the effectiveness of body image interventions is primarily studied in women (Jarry & Ip, 2005) suggests that therapeutic interventions in sex and couple therapy may be strongly based on the assumption that only women's sexual experiences can be negatively affected by body image concerns. For therapists, women's body image concerns are more easily identified than men's, because women more openly and frequently discuss these concerns with others (e.g., Barwick, Bazzini, Martz, Rocheleau, & Curtin, 2012). Besides, body image is often seen as a women's issue (Tantleff-Dunn, Barnes, & Larose, 2011) and men may be therefore unlikely to disclose distress related to feelings about the appearance of their body. Thus, it is important that

therapists pay attention to potential body image issues in men, and should acknowledge and address these issues equally with both male and female clients.

Limitations

There were several limitations to this study that future research could address. The present sample consisted of heterosexual and primarily college-aged couples with relatively short average relationship duration. The sample generally reported relatively high levels of sexual satisfaction and perceived relationship quality, which might be associated with being in an early stage of the relationship, when partners are still madly in love and tend to idealize each other. The extent to which the results also apply to non-college students, individuals involved in more established relationships, and adults of all ages and sexual orientations remains uncertain. For example, although body evaluations were found to be relatively stable across the adult life span the importance placed on body shape, weight and appearance is likely to decrease as people age (for a review, see Tiggemann, 2004). Besides, people older than the typical college student (age 18-25 years) are likely to represent greater diversity with regard to past sexual and relationship experiences. The possibility that such differences affect the relationships between body image, sexual satisfaction, and perceived relationship quality seems likely. Because of the homogeneous sample, results of this study may not be representative for the general Dutch population. Future research would benefit from more heterogeneous samples.

Furthermore, only one aspect of body image (i.e., body appreciation) was assessed in the present study. Future researchers may use more comprehensive body image measures in order to differentiate between the role of various aspects of body image in associations with sexual and relational experiences.

Lastly, given the cross-sectional nature of this study, direction of causality could not definitely be determined. Although previous findings demonstrated that greater sexual

satisfaction uniquely predicted higher perceived relationship quality (Yeh et al., 2006), other study results (Lawrance & Byers, 1995) and theories (e.g., the interpersonal exchange model of sexual satisfaction; Lawrance & Byers, 1995) suggested a reversed causal direction.

General relationship quality may also enhance sexual satisfaction in a way that a satisfying romantic relationship promotes satisfying sexual experiences. Furthermore, the relationship between body image and sexual satisfaction may also be in the reverse direction. Equally, sexual satisfaction may positively affect one's body image (Tantleff-Dunn & Gokee, 2002). Longitudinal studies are needed to further address these issues.

Conclusions

This study adds to the literature by targeting the mediating role of sexual satisfaction in the association between body image and relationship quality within individuals involved in romantic relationships, by taking both partners' perspective into account. No gender difference were found, implying that body image, sexual satisfaction, and perceived relationship quality are equally strongly associated for women and men. Given the fact that romantic relationships are dyadic in nature, it is important to further study these complex dynamics in order to improve scientific as well as clinical knowledge about how body image, sexuality, and relationship quality interact in romantic relationships.

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Table 1

Means, Standard Deviations, and bivariate correlations between body appreciation, sexual satisfaction, perceived relationship quality, and relationship duration (N = 302).

	1	2	3	<i>M (SD)</i>
1. Body appreciation ^a	-	-	-	3.64 (0.49)
2. Sexual satisfaction ^a	.32**	-	-	4.18 (0.36)
3. Perceived relationship quality ^b	.16*	.44**	-	6.15 (0.45)
4. Relationship duration	-.13*	-.10	-.19*	33.14 (24.68)

Note. Body appreciation was measured by the BAS (scale range 1-5), sexual satisfaction by the GRISS (scale range 1-5), perceived relationship quality by the PRQC (scale range 1-7), and relationship duration (in months) by a single item.

** $p < .001$, * $p < .05$.

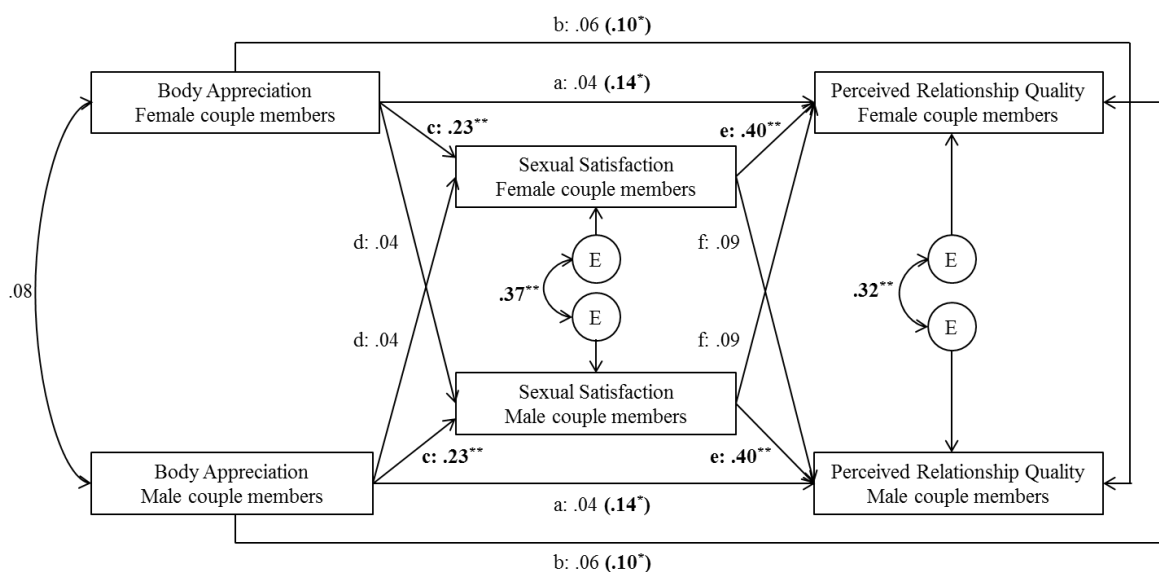


Figure 1. Actor-partner interdependence mediation model linking body appreciation to perceived relationship quality via sexual satisfaction.

Paths with the same letter were constrained to the same value (as a result of the omnibustest).

Total effects from the simple actor-partner interdependence model are displayed in parentheses. Standardized path coefficients are reported. Control paths for relationship duration on sexual satisfaction ($\beta = -.09, p = .30$ for female couple members and $\beta = -.22, p < .01$ for male couple members) and on perceived relationship quality ($\beta = .05, p = .56$ for female couple members and $\beta = -.04, p = .64$ for male couple members) were omitted for figure clarity. ** $p < .001$, * $p \leq .05$.