

Master thesis Clinical Psychology

**Body Appreciation and Sexual Satisfaction in Young Adult Women: The Mediating
Role of Entitlement To Sexual Pleasure**



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Abstract

Sexual satisfaction has been associated to overall quality of life and seems an important component of sexual health. Body appreciation has been identified as an important determinant of sexual satisfaction. However, underlying mechanisms explaining the relationship between body appreciation and sexual satisfaction remain understudied. The present study investigated the relation between body appreciation and sexual satisfaction, and the mediating role of entitlement to sexual pleasure (i.e. from the self and from a partner). In a cross-sectional design, 1680 Dutch females completed an online survey measuring body appreciation (BAS-2), sexual satisfaction (NSSS-S), and entitlement to sexual pleasure (FSSI). Correlation analyses showed that body appreciation was positively associated with both facets of entitlement to sexual pleasure. Entitlement to sexual pleasure from a partner was also positively associated with sexual satisfaction, whereas entitlement to sexual pleasure from the self was not. A mediation analysis revealed that higher levels of body appreciation were indirectly related to greater sexual satisfaction through more entitlement to sexual pleasure from a partner. Entitlement to sexual pleasure from the self did not mediate the relationship between body appreciation and sexual satisfaction. A direct effect of body appreciation on sexual satisfaction was also found. These findings indicate that interventions focusing on adopting and maintaining a positive body image may enhance entitlement to sexual pleasure in partnered sexual encounters, which contributes to a more pleasurable and satisfying sex life.

Keywords: body appreciation, entitlement to sexual pleasure, sexual satisfaction

Body Appreciation and Sexual Satisfaction in Young Adult Women: The Mediating Role of Entitlement To Sexual Pleasure

Research concerning sexual satisfaction has been a growing area of inquiry because of its contribution to overall quality of life and well-being, and its importance to sexual health (Anderson, 2013; Rutgers, 2017; World Health Organization, 2010). There are many women that are not (fully) sexually satisfied with their sex lives (25-45%; Frederick et al., 2017; Rutgers, 2017), despite the fact that the majority of women find sexual satisfaction important to a general feeling of well-being (Rutgers, 2017; van den Brink et al., 2013). Sexual satisfaction could be generally defined as a subjective evaluation of the degree to which one is satisfied with his or her sex life (Pinney et al., 1987). Nowadays it has been understood as a more complex construct (Anderson, 2013) focusing on positive aspects of individual's sexual experiences (e.g. pleasure, orgasm, and arousal) and relational dimensions (e.g. acting out desires, frequency of sexual activity, and romance; Pascoal et al., 2014).

In line with the positive psychology movement, it is essential to acknowledge the importance of positive traits that contribute to and maintain overall psychological health by uncovering individual strengths and protective factors (Seligman & Csikszentmihalyi, 2000). Recently, it has become clear that sexual satisfaction is positively associated with mental, physical and relationship well-being (Anderson, 2013; Holmberg et al., 2010; Levin, 2007). For example, Laumann and colleagues (2006) have shown that sexually active adult across 29 countries reported the most overall happiness when they were most satisfied with their sex lives. Furthermore, it has been increasingly recognised that pleasure is associated with safety, indicating that sexual pleasure and satisfaction may be essential in promoting safe sex behaviours (Higgins, 2007; Philpott et al., 2006). Considering the positive influence of sexual satisfaction on overall quality of life and safe sex behaviours, identifying determinants and underlying mechanisms is therefore important.

An important determinant of sexual satisfaction appears to be body appreciation. Given the fact that the body is highly as exposed and vulnerable to another individual during sexual activity, women's sexuality can be greatly affected by the way women feel about their bodies (Woertman & van den Brink, 2012). Body appreciation is an important component of positive body image (Tylka & Wood-Barcalow, 2015a) and encompasses different components: (1) holding favourable opinions of the body, (2) accepting the body despite of body shape, weight, and potential imperfections, (3) respecting the body by attending to its needs and engaging in healthy behaviours, and (4) protecting the body by the rejection of unrealistic body ideals illustrated in the media (Avalos et al., 2005). Taken together, these four aspects represent an unconditional positive view on an individual's physical appearance (Avalos et al., 2005), which may have a positive influence on women's sexual experiences. Research indeed implies that body image is positively associated with sexual satisfaction (Holt & Lyness, 2007; Hoyt & Kogan, 2001; Pujols et al., 2010; Træen et al., 2016; Winter et al., 2020). Moreover, body appreciation was found to be a unique predictor of sexual satisfaction, above and beyond the effect of appearance dissatisfaction (Robbins & Reissing, 2017). Other studies also showed that body appreciation is positively associated with a more pleasurable sex life and greater sexual satisfaction (e.g. Grower & Ward, 2018; Satinsky et al., 2012; van den Brink et al., 2018).

A mechanism through which sexual satisfaction could be connected to body appreciation can be found in the objectification theory (Fredrickson & Roberts, 1997). This theoretical framework proposes that women in Western cultures are socialized into developing an observer's perspective of their physical selves, which is referred to as self-objectification, and is leading to appearance-related self-consciousness (Fredrickson & Roberts, 1997). This means that women view themselves primarily in terms of physical appearance, which implies that attractiveness and body image is highly relevant to women in

daily life, including sexual situations (Woertman & van den Brink, 2012). Self-objectification has been associated with various negative outcomes, such as impaired sexual functioning and lower sexual satisfaction (Fredrickson & Roberts, 1997; Sanchez & Kiefer, 2007).

In addition, a theoretical model that could further explain the relation between body appreciation and sexual experiences is the acceptance model of intuitive eating (Avalos & Tylka, 2006). According to this model, women who appreciate and respect their bodies report awareness of their body's needs and respond adequately to these cues (Wood-Barcalow et al., 2010). In a broader perspective, sexual satisfaction could also be seen as a bodily need (Kenrick et al., 2010; Maslow, 1943). Body appreciation, meaning that individuals are connected and attentive to their bodies, can be seen as a direct alternative to self-objectification (Fredrickson & Roberts, 1997). When applying this model to a sexual context, body appreciation may serve as a protective factor against appearance-related self-consciousness and negative appearance-related thoughts during sexual activity (van den Brink, 2017), which, in turn, facilitates positive sexual experiences by focussing on sexual pleasure, and thus leading to greater sexual satisfaction.

Considering that women who appreciate their bodies are more attentive to their body's needs, such as sexual satisfaction, and tend to respond to these needs, it may be possible that these women experience greater sexual satisfaction because they feel more entitled to sexual pleasure. Entitlement to sexual pleasure refers to an individual's belief that one has the right to pleasure and to have their needs and desires acknowledged and recognised in a sexual context (Chmielewski et al., 2020; Horne & Zimmer-Gembeck, 2005; McClelland, 2010). The acceptance model of intuitive eating suggests that body appreciation may have a unique beneficial effect on sexual satisfaction through entitlement to sexual pleasure.

Recent research seems to support this connection. Findings of Grower and Ward (2018) have suggested that women with higher levels of body appreciation reported more

sense of entitlement to sexual pleasure. Entitlement to sexual pleasure, in turn, has been positively associated with sexual satisfaction (Grose, 2016; Grower & Ward, 2018). Women who express higher levels of body appreciation may be more capable of putting Western beauty norms and objectification of women's bodies in perspective and see them as sources to develop body dissatisfaction (Murnen & Smolak, 2009; Peterson et al., 2008). These women may have a certain self-awareness about cultural views of women's bodies and normative body dissatisfaction (Grower & Ward, 2018). Those who are capable of appreciating their bodies despite dominant body norms, may be empowered to overcome other dominant cultural norms, such as those which do not recognise the importance of women's sexual pleasure and satisfaction (Satinsky et al., 2012; Tolman, 1994). Therefore, it seems plausible that women who experience higher levels of body appreciation may be better capable of being conscious of their sexual needs and desires and prioritizing their sexual pleasure, which subsequently results in greater sexual satisfaction.

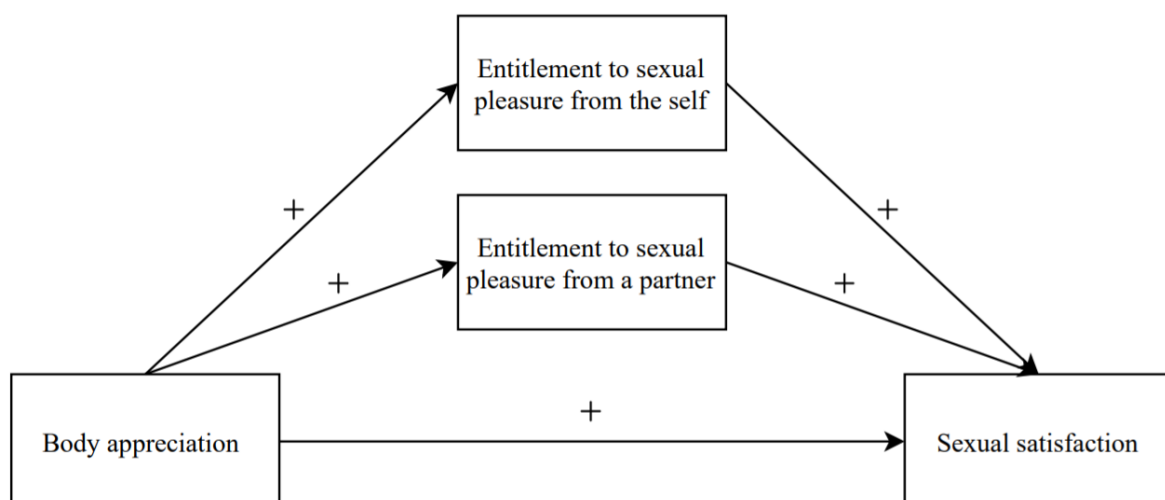
To summarise, there is a growing body of empirical evidence suggesting that body appreciation is positively associated with sexual satisfaction. Further, entitlement to sexual pleasure could possibly mediate this relationship, because women who appreciate their bodies may be able to resist the internalisation of body norms, are attentive to their body's needs and focus on their sexual pleasure. Although sexual satisfaction is an important indicator of overall quality of life and well-being, sexual dissatisfaction is common among women. Further research focusing on related factors and underlying mechanisms of positive sexual experiences is valuable as results may provide implications for sexual health interventions. Subsequently, entitlement to sexual pleasure may be a yet underappreciated but important potential target for building a more satisfying sex life (Bond et al., 2020).

The present study

The present study investigates the relationships between body appreciation, entitlement to sexual pleasure, and sexual satisfaction in young adult women. First, based on prior research (e.g., Robbins & Reissing, 2017; Satinsky et al., 2012; van den Brink et al., 2018), it is hypothesized that body appreciation is positively associated with sexual satisfaction. Second, in line with previous findings (Grose, 2016; Grower & Ward, 2018), it is hypothesized that entitlement to sexual pleasure serves as a mediator in the positive relationship between body appreciation and sexual satisfaction. More specially, it is expected that women who express higher levels of body appreciation, feel more entitled to sexual pleasure, which, in turn, will be associated with greater sexual satisfaction. As prior findings indicated that entitlement to sexual pleasure appears to be a two-facets construct (Horne & Zimmer-Gembeck, 2006), both facets, i.e. entitlement to sexual pleasure from the self and entitlement to sexual pleasure from a partner, will be taken into account.

Figure 1

Schematic Summary of the Hypothesized Relationship Between Body Appreciation and the Mediating Role of Both Facets of Entitlement To Sexual Pleasure



Method

Participants and procedure

Participants were recruited through the internet. The program Qualtrics was used to create the online questionnaires and provided a link that was distributed on Facebook, LinkedIn, TikTok, and the SONA system of Utrecht University (i.e. a student website which provides an overview of all ongoing research projects). Criteria for participants were female gender, being heterosexual, age between 18 and 30 years, and being sexually active with one partner. After accessing the survey's link, participants were provided with information about the study and were asked to give informed consent by ticking a box, in order to proceed. Voluntary and anonymous participation of the study were explicitly mentioned. Next, demographic questions regarding gender, sexual orientation, age, sexual relation status, duration of their sexual relationship, and highest completed education were asked. Subsequently, the questionnaires measuring body appreciation, sexual satisfaction, and entitlement to sexual pleasure were presented. Finally, social science students from Utrecht University were given the opportunity to receive course credits for their participation. There was no compensation for other participants. It took approximately 10 minutes to complete the survey. The study was approved by the Ethics Committee of the Faculty of Social and Behavioural Sciences of Utrecht University, the Netherlands (FETC # 20-0374).

A total of 1680 heterosexual females with a sexual partner (age range 18-30, $M = 20.55$, $SD = 2.72$) fully completed the survey. Highest level of education (current or completed) was university in 13.6% ($n = 229$), university of applied sciences in 27.0% ($n = 453$), secondary vocational education in 32.6% ($n = 548$), senior general secondary education/pre-university education in 19.9% ($n = 334$), and pre-vocational secondary education in 6.9% ($n = 116$) of the participants. The large majority of the participants (95.8%, $n = 1610$) were born in the Netherlands, 3.2% ($n = 53$) were born in another Western country, and 1.0% ($n =$

17) were born in a non-Western country. In this sample 42.3% ($n = 711$) of the women were in a sexual relationship for longer than two years, 26.7% ($n = 449$) between one and two years, 17.1% ($n = 287$) between six months and one year, 11.0% ($n = 185$) between two and six months, and 2.9% ($n = 48$) less than two months.

Measures

Body appreciation

The Dutch translation (Allewaert et al., 2016) of the Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015b) was used to measure body appreciation. This self-report questionnaire consists of 13 items (e.g. "I feel good about my body") rated on a 5-point Likert scale ranging from 1 (*never*) to 5 (*always*). Responses were averaged to obtain a mean score, with higher scores indicating higher levels of body appreciation. High reliability ($\alpha = .97$) and validity have been found for the BAS-2 in prior studies (e.g. Tylka & Wood-Barcalow, 2015b). In the present study, Cronbach's alpha was $\alpha = .91$.

Entitlement to sexual pleasure

Two subscales of the Female Sexual Subjectivity Inventory (FSSI; Horne & Zimmer-Gembeck, 2006) were used to measure entitlement to sexual pleasure from the self and entitlement to sexual pleasure from a partner. The two subscales were translated from English to Dutch by several students independently. All translations were compared for inconsistencies and concessions about differences were made. The scale "sense of entitlement to sexual pleasure from the self" contains 3 items (e.g. "I believe self-masturbating can be an exciting experience") and the second scale "sense of entitlement to sexual pleasure from a partner" consists of 4 items (e.g. "I think it is important for a sexual partner to consider my sexual pleasure"). Each item was rated on a 5-point Likert scale from 1 (*not at all true for me*) to 5 (*very true for me*). The third item of the subscale "sense of entitlement to sexual pleasure from the self" was reverse-coded and therefore recoded. For each subscale a mean was

computed, with higher scores indicating more sense of entitlement to sexual pleasure. Both subscales showed high internal consistency, with Cronbach's $\alpha = .82$ and $.75$ respectively and good convergent validity in the study of Horne and Zimmer-Gembeck (2006). In the current study, Cronbach's alpha for both subscales was $\alpha = .74$ and $.79$ respectively.

Sexual satisfaction

Sexual satisfaction was measured using the Dutch version (Schlaman, 2015) of the New Sexual Satisfaction Scale-Short (NSSS-S; Štulhofer et al., 2011). This self-report questionnaire consists of 12 items (e.g. "The intensity of my sexual arousal") and is comprised of two subscales: the ego-centered subscale and the partner and activity-centered subscale. Each item was rated on a 5-point Likert scale ranging from 1 (*not at all satisfied*) to 5 (*extremely satisfied*). Item scores were averaged to obtain a mean score, with higher scores reflecting greater sexual satisfaction. The NSSS-S has been reported to have high reliability ($\alpha = .90$) and validity in prior studies (e.g. Štulhofer et al., 2011). In this study, Cronbach's alpha was $\alpha = .89$.

Statistical Analysis

All statistical analyses were performed with IBM SPSS Statistics Version 26. First, bivariate associations between the study variables were analysed using Pearson correlation coefficients. Then, a mediation analysis was conducted using Hayes' Process Macro tool for SPSS (Model 4; Hayes, 2018), with body appreciation as independent variable, entitlement to sexual pleasure from the self and entitlement to sexual pleasure from a partner as mediators, and sexual satisfaction as dependent variable. The mediation analysis comprises a number of sub-analyses that estimated the total, direct, and indirect effects of body appreciation on sexual satisfaction. First, to estimate the effects of body appreciation on both facets of entitlement to sexual pleasure, simple regression analyses were calculated. Second, the total and direct effects of body appreciation on sexual satisfaction were estimated by means of a

hierarchical regression analysis in which body appreciation was entered in the first step and entitlement to sexual pleasure from the self and entitlement to sexual pleasure from a partner were entered in the second step. The total effect refers to the relationship between body appreciation and sexual satisfaction (step 1). The direct effect refers to the relationship between body appreciation and sexual satisfaction while controlling for entitlement to sexual pleasure from the self and entitlement to sexual pleasure from a partner (step 2). Third, as recommended by Hayes (2012), the indirect effects of body appreciation on sexual satisfaction through both facets of entitlement to sexual pleasure were estimated using bootstrap analysis with 5000 bootstrap samples to calculate bias-corrected 95% confidence intervals. Significance was based on the absence of the value 0 within the confidence intervals. All coefficients are reported in standardized form.

Results

Bivariate associations between body appreciation, entitlement to sexual pleasure from the self, entitlement to sexual pleasure from a partner, and sexual satisfaction

The results of the correlation analyses of the study variables are presented in Table 1. As expected, body appreciation was significantly positively related to sexual satisfaction. Specifically, higher levels of body appreciation were associated with greater sexual satisfaction. Body appreciation also was significantly positively related to both facets of entitlement to sexual pleasure. Furthermore, entitlement to sexual from the partner was significantly positively related to sexual satisfaction, whereas entitlement to sexual pleasure from the self was not.

Table 1*Means, SDs, Minimum and Maximum Scores, and Bivariate Correlations Between Study Variables**(N = 1680)*

| Variable | <i>M</i> | <i>SD</i> | <i>Min.</i> | <i>Max.</i> | 1 | 2 | 3 |
|--|----------|-----------|-------------|-------------|-------|-------|-------|
| 1. Body appreciation | 3.37 | .64 | 1.30 | 5.00 | - | - | - |
| 2. Entitlement to sexual pleasure from the self | 3.74 | .67 | 1.00 | 5.00 | .12** | - | - |
| 3. Entitlement to sexual pleasure from a partner | 4.10 | .55 | 1.25 | 5.00 | .13** | .13** | - |
| 4. Sexual satisfaction | 3.57 | .67 | 1.33 | 5.00 | .30** | .01 | .14** |

Note. Scale range was for all variables 1-5. Higher scores indicate higher levels of the construct they intended to measure. Body appreciation was measured by the Body Appreciation Scale-2 (BAS-2), entitlement to sexual pleasure from the self and entitlement to sexual pleasure from a partner by the two subscales of the Female Sexual Subjectivity Inventory (FSSI), and sexual satisfaction by the New Sexual Satisfaction Scale-Short (NSSS-S).

*** $p < .001$, ** $p < .01$, * $p < 0.05$.

Total, direct, and indirect effects of body appreciation on sexual satisfaction through entitlement to sexual pleasure from the self and entitlement to sexual pleasure from a partner

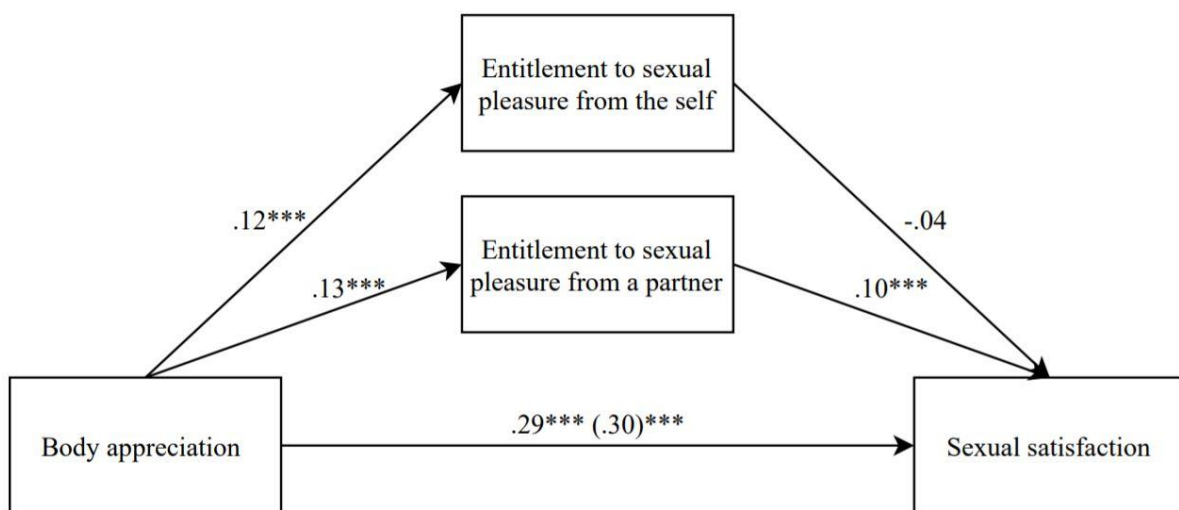
The assumptions of the multiple regression analysis (i.e. normality, linearity, multicollinearity, and homoscedasticity) were tested and were all met. The results of the regression analyses are displayed in Figure 2. The simple regression analyses revealed significant positive effects of body appreciation on both facets of entitlement to sexual pleasure. The hierarchical regression analysis showed a significant total effect of body appreciation on sexual satisfaction (step 1), which indicated that higher levels of body

appreciation were related to greater sexual satisfaction. A total of 9% of the variance in sexual satisfaction could be explained by body appreciation, $F(1, 1678)= 163.94, p < .001$.

In addition, a significant direct effect (step 2) of body appreciation on sexual satisfaction was found. Also, a significant direct effect (step 2) of entitlement to sexual pleasure from the partner on sexual satisfaction was found. There was no significant direct effect (step 2) of entitlement to sexual pleasure from the self on sexual satisfaction. A total of 10% of the variance in sexual satisfaction could be explained by body appreciation and both facets of entitlement to sexual pleasure, $F(3, 1676)= 61.90, p < .001$.

Figure 2

Results of the Hierarchical Regression Analysis That Was Conducted as Part of the Mediation Analysis Linking Body Appreciation With Sexual Satisfaction via the Two Facets of Entitlement To Sexual Pleasure



Note. The total effect derived from Step 1 of the hierarchical regression analysis is displayed in parentheses. All coefficients are reported in standardized form.

*** $p < .001$, ** $p < .01$, * $p < 0.05$.

Furthermore, the bootstrap analyses revealed a significant indirect effect of body appreciation on sexual satisfaction through entitlement to sexual pleasure from a partner, .013, 95% BCa CI [.006, .022]. Thus, as expected, higher levels of body appreciation were related to more entitlement to sexual pleasure from a partner, which, in turn, was related to greater sexual satisfaction. No significant indirect effect of body appreciation on sexual satisfaction via entitlement to sexual pleasure from the self was found, -.004, 95% BCa CI [-.011, .022].

Discussion

The present study investigated the relationships between body appreciation, entitlement to sexual pleasure, and sexual satisfaction in young adult women. As expected and in line with previous studies (e.g. Robbins & Reissing, 2017; Satinsky et al., 2012), higher levels of body appreciation found to be related to greater sexual satisfaction. The current study expanded previous research on body appreciation and sexual satisfaction by investigating the role of entitlement to sexual pleasure in this relationship.

The results of the mediation analysis revealed that, as expected and in line with the objectification theory (Fredrickson & Roberts, 1997), the acceptance model of intuitive eating (Avalos & Tylka, 2006), and the results of previous studies (Grose, 2016; Grower & Ward, 2018), that the relationship between body appreciation and sexual satisfaction was mediated by entitlement to sexual pleasure from the partner. These findings suggest that body appreciation may enable women to feel entitled to sexual pleasure from a partner, which, in turn, leads to greater sexual satisfaction. Body appreciation may serve as a protective factor against appearance related self-consciousness and negative appearance related thoughts during sexual activity (van den Brink, 2017). Instead of focusing how women present themselves to their partner and how the partner evaluates them during sexual activities, women who appreciate their bodies are able to focus on sexual pleasure and satisfaction. In addition, body appreciation encompasses respecting the body by attending to its needs (Tylka

& Wood-Barcalow, 2015a), including sexual satisfaction (Kenrick et al., 2010; Maslow, 1943). By being conscious of their body's needs, they may be more likely to report that they deserve access to sexual pleasure and have their sexual desires acknowledged, despite dominant cultural views of women's bodies that dictate they objectify themselves (Grower & Ward, 2018) and women's sexual pleasure that is not recognised as being important (Satinsky et al., 2012; Tolman, 1994). Women who feel entitled to sexual pleasure prioritize their sexual desires and needs, and may represent higher sexual agency in the service of pleasure (Horne & Zimmer-Gembeck, 2006). This may facilitate positive sexual experiences, which, in turn, contributes to a more satisfying sex life.

However, the results showed that entitlement to sexual pleasure from the self did not mediate the relation between body appreciation and sexual satisfaction. This finding may be explained by the fact that entitlement to sexual pleasure from the self refers to sexual pleasure during solo sex activities. Feeling entitled to sexual pleasure in individual's terms appears to be distinct from feelings of entitlement to sexual pleasure in partnered sexual encounters. Many women seem to view their sexual desires and needs secondary to their partner's (Fahs & Swank, 2011), whereas this issue is not existing in a solo sexual situation. It may be possible that sexual satisfaction is therefore not related to entitlement to sexual pleasure from the self. Further, it seems plausible that appearance-related self-consciousness and negative appearance-related thoughts are less present during solo sex, indicating that body appreciation may be less relevant for feeling entitled to sexual pleasure in solo sex activities.

Although the current findings suggest a meaningful role of entitlement to sexual pleasure from a partner in the relation between body appreciation and sexual satisfaction, it is important to note that entitlement to sexual pleasure from a partner only partially accounted for this association, given the direct effect of body appreciation on sexual satisfaction. In addition, the explained variance of sexual satisfaction was limited in the current study. This

indicates that additional determinants and underlying mechanisms also contribute to sexual satisfaction. Future studies should include other potentially relevant variables, such as sexual assertiveness. It may be the case that women who appreciate their bodies, may not only feel more entitled to sexual pleasure, but are also more able to pursue sexual pleasure. As mentioned previously, women who appreciate their bodies are more attentive to their bodily needs, such as sexual satisfaction. This may lead to seeking sexual encounters that satisfy their sexual desires and needs, such as being able to ask a sexual partner to provide the sexual stimulation they need (Horne & Zimmer-Gembeck, 2006). It seems plausible that sexual assertiveness facilitates positive sexual experiences, such as better quality of orgasms, which, in turn, results in more sexual satisfaction (del Mar Sanchez-Fuentes et al., 2016; Grose, 2016).

Practical implications

The findings of this study have relevant practical implications. Given the importance of body appreciation to positive sexual experiences, it would be relevant to help clients developing a positive body image in order to improve their levels of sexual satisfaction. Learning how to respect and appreciate their bodies may contribute to more effective and lasting treatment (Tylka & Wood-Barcalow, 2015a). Helping clients to reduce appearance-related self-consciousness and change non-helping negative appearance-related thoughts into helping positive body-functionality thoughts during sexual activity, may enhance their sense of entitlement to sexual pleasure by focusing on their sexual desires and needs. This may help clients to obtain more positive sexual experiences, leading to greater sexual satisfaction. Therefore, effective body image interventions in developing and maintaining a positive body image could possibly be helpful in establishing a more pleasurable and satisfying sex life (van den Brink, 2017).

Limitations

Some limitations need to be acknowledged. The current sample consisted of heterosexual young adult women. Because of the homogeneous sample, results may therefore not be representative to the general Dutch population of women. Further studies would benefit from more heterogeneous samples by including gay and bisexual women, and more various age groups.

Second, given the cross-correlational design of the current study, the direction of causality could not be determined. Therefore, it is not possible to assume that higher levels of body appreciation cause greater sexual satisfaction. The direction of the relationships could also be reversed, where sexual satisfaction may result in a more positive body image (Tantleff-Dunn & Gokee, 2002). Further longitudinal research is needed to study the direction of these associations (Maxwell et al., 2011).

Furthermore, in the present study, within-person effects have been researched. Given the dyadic nature of sexual relationships, perceptions and behaviours of the sexual partner seem to play an important role in the quality to sexual experiences, such as the partner's satisfaction with the individual's body or one's satisfaction with the partner's body (Zhaoyang & Cooper, 2013). Future studies should incorporate dyadic designs to take the influence of the partner into account.

Lastly, we only measured one aspect of positive body image, while there are many variables related to body image, such as embodiment. Embodiment refers to the experience of perceiving, living in, and experiencing the world from the physical and material place of our bodies (Tolman et al., 2014). Positive body image includes most of the domains of embodiment, but the dimension of agency is not taken into account in positive body image (Tylka & Piran, 2019). It may be possible that embodiment has different relationships to entitlement to sexual pleasure and sexual satisfaction (Chmielewski et al., 2020).

Conclusion

Despite the limitations, this study adds to the current literature of sexual satisfaction. The results revealed that body appreciation is positively related to sexual satisfaction, and that entitlement to sexual pleasure from a partner partially mediated this relationship. Understanding how body appreciation is related to sexual satisfaction will be valuable in selecting relevant targets for interventions in the context of sexual health. Improving positive body image in therapy may have positive effects in building a more pleasurable and satisfying sex life, which contributes to overall quality of life and well-being (e.g. Rutgers, 2017; World Health Organization, 2010). However, additional research is needed that further examine underlying mechanisms and determinants of sexual satisfaction.

References

- Alleva, J. M., Martijn, C., Veldhuis, J., & Tylka, T. L. (2016). A Dutch translation and validation of the Body Appreciation Scale-2: An investigation with female university students in the Netherlands. *Body Image, 19*, 44-48.
<https://doi.org/10.1016/j.bodyim.2016.08.008>
- Anderson, R. M. (2013). Positive sexuality and its impact on overall well-being. *Bundesgesundheitsblatt-Gesundheitsforschung-Gesundheitsschutz, 56*(2), 208-214.
<https://doi.org/10.1007/s00103-012-1607-z>
- Avalos, L. C., & Tylka, T. L. (2006). Exploring a model of intuitive eating with college women. *Journal of Counseling Psychology, 53*(4), 486-497.
<https://doi.org/10.1037/0022-0167.53.4.486>
- Avalos, L., Tylka, T. L., & Wood-Barcalow, N. (2005). The body appreciation scale: Development and psychometric evaluation. *Body Image, 2*(3), 285-297.
<https://doi.org/10.1016/j.bodyim.2005.06.002>
- Bond, J. C., Morrison, D. M., & Hawes, S. E. (2020). Sexual Self-Efficacy and Entitlement to Pleasure: The Association of the Female Sexual Subjectivity Inventory with Sexual Risk Taking and Experience of Orgasm. *Archives of Sexual Behavior, 49*(3), 1029-1038. <https://doi.org/10.1007/s10508-019-01563-3>
- Chmielewski, J. F., Bowman, C. P., & Tolman, D. L. (2020). Pathways to Pleasure and Protection: Exploring Embodiment, Desire, and Entitlement to Pleasure as Predictors of Black and White Young Women's Sexual Agency. *Psychology of Women Quarterly, 44*(3), 307-322. <https://doi.org/10.1177/0361684320917395>
- del Mar Sanchez-Fuentes, M., Salinas, J. M., & Sierra, J. C. (2016). Use of an ecological model to study sexual satisfaction in a heterosexual Spanish sample. *Archives of Sexual Behavior, 45*(8), 1973-1988. <https://doi.org/10.1007/s10508-016-0703-9>

- Fahs, B., & Swank, E. (2011). Social identities as predictors of women's sexual satisfaction and sexual activity. *Archives of Sexual Behavior, 40*(5), 903-914.
<https://doi.org/10.1007/s10508-010-9681-5>
- Frederick, D. A., Lever, J., Gillespie, B. J., & Garcia, J. R. (2017). What keeps passion alive? Sexual satisfaction is associated with sexual communication, mood setting, sexual variety, oral sex, orgasm, and sex frequency in a national US study. *The Journal of Sex Research, 54*(2), 186-201. <https://doi.org/10.1080/00224499.2015.1137854>
- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*(2), 173-206. <https://doi.org/10.1111/j.1471-6402.1997.tb00108.x>
- Grose, R. G. (2016). *Critical Consciousness and Sexual Pleasure: Evidence for a Sexual Empowerment Process for Heterosexual and Sexual Minority Women* [Doctoral dissertation, University of California]. California Digital Library.
<https://escholarship.org/uc/item/3mh413h2>
- Grower, P., & Ward, L. M. (2018). Examining the unique contribution of body appreciation to heterosexual women's sexual agency. *Body Image, 27*, 138-147.
<https://doi.org/10.1016/j.bodyim.2018.09.003>
- Hayes, A. F. (2012). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling* [White paper].
<http://www.afhayes.com/public/process2012.pdf>
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (second edition)*. Guilford publications.
- Higgins, J. A. (2007). Sexy feminisms & sexual health: Theorizing heterosex, pleasure, and constraint in public health research. *Atlantis: Critical Studies in Gender, Culture & Social Justice, 31*(2), 72-81.

- Holmberg, D., Blair, K. L., & Phillips, M. (2010). Women's sexual satisfaction as a predictor of well-being in same-sex versus mixed-sex relationships. *Journal of Sex Research*, 47(1), 1-11. <https://doi.org/10.1080/00224490902898710>
- Holt, A., & Lyness, K. P. (2007). Body image and sexual satisfaction: Implications for couple therapy. *Journal of Couple & Relationship Therapy*, 6(3), 45-68. https://doi.org/10.1300/J398v06n03_03
- Horne, S., & Zimmer-Gembeck, M. J. (2005). Female sexual subjectivity and well-being: Comparing late adolescents with different sexual experiences. *Sexuality Research and Social Policy*, 2(3), 25-40. <https://doi.org/10.1525/srsp.2005.2.3.25>
- Horne, S., & Zimmer-Gembeck, M. J. (2006). The female sexual subjectivity inventory: Development and validation of a multidimensional inventory for late adolescents and emerging adults. *Psychology of Women Quarterly*, 30(2), 125-138. <https://doi.org/10.1111/j.1471-6402.2006.00276.x>
- Hoyt, W. D., & Kogan, L. R. (2001). Satisfaction with body image and peer relationships for males and females in a college environment. *Sex Roles*, 45(3-4), 199-215. <https://doi.org/10.1023/A:1013501827550>
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science*, 5(3), 292-314. <https://doi.org/10.1177/1745691610369469>
- Laumann, E. O., Paik, A., Glasser, D. B., Kang, J. H., Wang, T., Levinson, B., Moreira, E. D., Nicolosi, A., & Gingell, C. (2006). A cross-national study of subjective sexual well-being among older women and men: Findings from the Global Study of Sexual Attitudes and Behaviors. *Archives of Sexual Behavior*, 35(2), 143-159. <https://doi.org/10.1007/s10508-005-9005-3>

- Levin, R. J. (2007). Sexual activity, health and well-being—the beneficial roles of coitus and masturbation. *Sexual and Relationship Therapy, 22*(1), 135-148.
<https://doi.org/10.1080/14681990601149197>
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–96.
<https://doi.org/10.1037/h0054346>
- Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research, 46*(5), 816-841.
<https://doi.org/10.1080/00273171.2011.606716>
- McClelland, S. I. (2010). Intimate justice: A critical analysis of sexual satisfaction. *Social and Personality Psychology Compass, 4*(9), 663-680.
<https://doi.org/10.1111/j.17519004.2010.00293.x>
- Murnen, S. K., & Smolak, L. (2009). Are feminist women protected from body image problems? A meta-analytic review of relevant research. *Sex Roles, 60*(3), 186-197.
<https://doi.org/10.1007/s11199-008-9523-2>
- Pascoal, P. M., Narciso, I. D. S. B., & Pereira, N. M. (2014). What is sexual satisfaction? Thematic analysis of lay people's definitions. *Journal of Sex Research, 51*(1), 22-30.
<https://doi.org/10.1080/00224499.2013.815149>
- Peterson, R. D., Grippo, K. P., & Tantleff-Dunn, S. (2008). Empowerment and powerlessness: A closer look at the relationship between feminism, body image and eating disturbance. *Sex Roles, 58*(9-10), 639-648. <https://doi.org/10.1007/s11199-007-9377-z>
- Philpott, A., Knerr, W., & Boydell, V. (2006). Pleasure and prevention: When good sex is safer sex. *Reproductive Health Matters, 14*(28), 23-31.
[https://doi.org/10.1016/S0968-8080\(06\)28254-5](https://doi.org/10.1016/S0968-8080(06)28254-5)

- Pinney, E. M., Gerrard, M., & Denney, N. W. (1987). The Pinney sexual satisfaction inventory. *Journal of Sex Research, 23*(2), 233-251.
<https://doi.org/10.1080/00224498709551359>
- Pujols, Y., Meston, C. M., & Seal, B. N. (2010). The association between sexual satisfaction and body image in women. *The Journal of Sexual Medicine, 7*(2), 905-916.
<https://doi.org/10.1111/j.1743-6109.2009.01604.x>
- Robbins, A. R., & Reissing, E. D. (2018). Appearance dissatisfaction, body appreciation, and sexual health in women across adulthood. *Archives of Sexual Behavior, 47*(3), 703-714. <https://doi.org/10.1007/s10508-017-0982-9>
- Rutgers. (2017). *Seksuele gezondheid in Nederland 2017*. <https://www.rutgers.nl/feiten-en-cijfers/seksuele-gezondheid-en-gedrag/seksuele-gezondheid-nederland-2017>
- Sanchez, D. T., & Kiefer, A. K. (2007). Body concerns in and out of the bedroom: Implications for sexual pleasure and problems. *Archives of Sexual Behavior, 36*(6), 808-820. <https://doi.org/10.1007/s10508-007-9205-0>
- Satinsky, S., Reece, M., Dennis, B., Sanders, S., & Bardzell, S. (2012). An assessment of body appreciation and its relationship to sexual function in women. *Body Image, 9*(1), 137-144. <https://doi.org/10.1016/j.bodyim.2011.09.007>
- Schlaman, K. J. T. (2015). *Hoe tevreden ben jij in je relatie? De invloed van 'positive illusions' en de 'love-is-blind bias' op de seksuele en relatietevredenheid van beide partners in een hetero relatie* [Master thesis, Utrecht University]. Utrecht University Repository.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist, 55*(1), 5-14. <https://doi.org/10.1037/0003-066X.55.1.5>

- Štulhofer, A., Buško, V., & Brouillard, P. (2011). The new sexual satisfaction scale and its short form. In T. D. Fisher, C. M. Davis, W. L. Yarber, & S.L. Davis (Eds.), *Handbook of sexuality-related measures* (3rd ed., pp. 530–532). Routledge.
- Tantleff-Dunn, S., & Gokee, J.L. (2002). Interpersonal influences on body image development. In T. F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp. 108-116). Guilford Press.
- Træen, B., Markovic, A., & Kvalem, I. L. (2016). Sexual satisfaction and body image: A cross-sectional study among Norwegian young adults. *Sexual and Relationship Therapy, 31*(2), 123-137.
<https://doi-org.proxy.library.uu.nl/10.1080/14681994.2015.1131815>
- Tolman, D. L. (1994). Doing desire: Adolescent girls' struggles for/with sexuality. *Gender & Society, 8*(3), 324–342. <https://doi.org/10.1177/089124394008003003>
- Tolman, D. L., Bowman, C. P., & Fahs, B. (2014). Sexuality and embodiment. In D. L. Tolman & L. M. Diamond (Eds.), *APA handbook of sexuality and psychology* (pp. 759–804). American Psychological Association.
- Tylka, T. L. & Piran, N. (2019). *Handbook of Positive Body Image and Embodiment: Constructs, Protective Factors, and Interventions*. Oxford University Press.
- Tylka, T. L., & Wood-Barcalow, N. L. (2015a). What is and what is not positive body image? Conceptual foundations and construct definition. *Body Image, 14*, 118-129.
<https://doi.org/10.1016/j.bodyim.2015.04.001>
- Tylka, T. L., & Wood-Barcalow, N. L. (2015b). The Body Appreciation Scale-2: item refinement and psychometric evaluation. *Body Image, 12*, 53-67.
<https://doi.org/10.1016/j.bodyim.2014.09.006>

- van den Brink, F. (2017). *Body Image in a Sexual Context: The Relationship between Body Image and Sexual Experiences* [Doctoral dissertation, Utrecht University]. Utrecht University Repository.
- van den Brink, F., Smeets, M. A., Hessen, D. J., Talens, J. G., & Woertman, L. (2013). Body satisfaction and sexual health in Dutch female university students. *Journal of Sex Research, 50*(8), 786-794. <https://doi.org/10.1080/00224499.2012.684250>
- van den Brink, F., Vollmann, M., Smeets, M. A., Hessen, D. J., & Woertman, L. (2018). Relationships between body image, sexual satisfaction, and relationship quality in romantic couples. *Journal of Family Psychology, 32*(4), 466-474. <https://doi.org/10.1037/fam0000407>
- Winter, V. R., O'Neill, E. A., Cook, M., Rose, K. L., & Hood, A. (2020). Sexual function in hook-up culture: The role of body image. *Body Image, 34*, 135-144. <https://doi.org/10.1016/j.bodyim.2020.05.010>
- Woertman, L., & van den Brink, F. (2012). Body image and female sexual functioning and behavior: a review. *Journal of Sex Research, 49*(2-3), 184-211. <https://doi.org/10.1080/00224499.2012.658586>
- Wood-Barcalow, N. L., Tylka, T. L., & Augustus-Horvath, C. L. (2010). "But I like my body": Positive body image characteristics and a holistic model for young-adult women. *Body Image, 7*(2), 106-116. <https://doi.org/10.1016/j.bodyim.2010.01.001>
- World Health Organization. (2010). *Measuring sexual health: Conceptual and practical considerations and related indicators*. http://whqlibdoc.who.int/hq/2010/who_rhr_10.12_eng.pdf
- Zhaoyang, R., & Cooper, M. L. (2013). Body satisfaction and couple's daily sexual experience: A dyadic perspective. *Archives of Sexual Behavior, 42*(6), 985-998. <https://doi.org/10.1007/s10508-013-0082-4>

Appendixes

Information Letter and Informed Consent

Welkom bij dit online onderzoek.

Dit onderzoek wordt uitgevoerd vanuit de master Clinical Psychology aan de Universiteit Utrecht.

Let op: voor dit onderzoek zijn wij uitsluitend op zoek naar heteroseksuele vrouwen tussen de 18 en 30 jaar met een vaste seksuele partner.

Er wordt in dit onderzoek gebruik gemaakt van vragenlijsten met betrekking tot gedachten en gevoelens die je hebt over je lichaam en bepaalde aspecten van seksualiteit. Het invullen van de vragenlijsten zal maximaal 15 minuten in beslag nemen.

Deelname aan dit onderzoek is vrijwillig. Er kan op ieder moment zonder opgave van reden gestopt worden met het onderzoek. Er wordt op vertrouwelijke wijze omgegaan met de ingevulde gegevens en de anonimiteit van de verstrekte informatie zal gewaarborgd worden. De resultaten van dit onderzoek zullen enkel gebruikt worden voor wetenschappelijke doeleinden.

FSW studenten van de Universiteit Utrecht kunnen 0.5 PPU ontvangen met deelname aan dit onderzoek.

Alvast hartelijk dank voor je deelname!

Ik verklaar hierbij dat ik bovenstaande informatie heb gelezen en begrepen en ik ga akkoord met de vrijwillige deelname aan dit onderzoek.

Ja

Demographics

1. Om aan dit onderzoek te kunnen deelnemen, dien je van het vrouwelijk geslacht te zijn. Klik 'ja' om te bevestigen dat je een vrouw bent.
 Ja Nee
2. Om aan dit onderzoek te kunnen deelnemen, dien je je als heteroseksueel te identificeren.
Klik 'ja' om te bevestigen dat je je als heteroseksueel identificeert.
 Ja Nee
3. Om aan dit onderzoek te kunnen deelnemen, dien je tussen de 18 en 30 jaar te zijn.
Wat is jouw leeftijd?
 18 25
 19 26
 20 27
 21 28
 22 29
 23 30
 24
4. Om aan dit onderzoek te kunnen deelnemen, dien je een vaste seksuele partner te hebben. Klik 'ja' om te bevestigen dat je een vaste seksuele partner hebt.
 Ja Nee
5. Hoelang heb je op dit moment een vaste seksuele relatie?
 Minder dan twee maanden
 Tussen de twee en zes maanden
 Tussen de zes maanden en een jaar
 Tussen de één en twee jaar
 Langer dan twee jaar
6. Wat is je hoogst genoten of afgeronde opleidingsniveau?
 Vmbo
 Havo/ vwo
 Middelbaar beroepsonderwijs (mbo)
 Hoger beroepsonderwijs (hbo)
 Wetenschappelijk onderwijs (wo)
7. Wat is jouw geboorteland?
 Nederland
 Een ander westers land
 Een niet-westers land

Body Appreciation Scale-2 (BAS-2; Tylka & Wood-Barcalow, 2015b)

De volgende 10 stellingen gaan over je gedachten, gevoelens en mening over je lichaam. Geef voor elke stelling aan in hoeverre ze voor jou waar zijn.

Antwoordmogelijkheden:

- 1= Nooit
- 2= Zelden
- 3= Soms
- 4= Vaak
- 5= Altijd

1. Ik respecteer mijn lichaam
2. Ik voel me goed over mijn lichaam
3. Ik vind dat mijn lichaam op zijn minst een aantal goede kwaliteiten bezit
4. Ik heb een positieve houding ten opzichte van mijn lichaam
5. Ik besteed aandacht aan wat mijn lichaam nodig heeft
6. Ik voel liefde voor mijn lichaam
7. Ik waardeer de verschillende en unieke eigenschappen van mijn lichaam
8. Uit mijn gedrag blijkt mijn waardering voor mijn lichaam bijvoorbeeld, ik loop met opgeheven hoofd en glimlach
9. Ik voel me op mijn gemak met mijn lichaam
10. Ik vind mezelf mooi al zie ik er anders uit dan de beelden in de media van aantrekkelijke mensen (bijv. modellen, actrices en acteurs)

New Sexual Satisfaction Scale – Short (NSSS-S; Štulhofer et al., 2011).

De volgende 12 stellingen gaat over tevredenheid met betrekking tot je seksuele relatie. Geef aan in hoeverre je tevreden bent met de volgende eigenschappen van je seksuele relatie.

Antwoordmogelijkheden:

- 1= Helemaal niet tevreden
- 2= Een beetje tevreden
- 3= Tevreden
- 4= Erg tevreden
- 5= Extreem tevreden

1. De kwaliteit van mijn orgasmes.
2. Mijn 'loslaten' en overgave aan seksueel genot tijdens de seks
3. De manier waarop ik seksueel reageer op mijn partner
4. Het seksueel functioneren van mijn lichaam
5. Mijn stemming na seksuele activiteiten
6. Het genot dat ik mijn partner geef
7. De balans tussen wat ik geef en wat ik krijg tijdens de seks
8. Het emotioneel openstellen van mijn partner tijdens de seks
9. Het vermogen van mijn partner om orgasmes te krijgen
10. De seksuele creativiteit van mijn partner
11. De verscheidenheid van mijn seksuele activiteiten
12. De frequentie van mijn seksuele activiteiten

Female Sexual Subjectivity Inventory (FSSI; Horne & Zimmer-Gembeck, 2006)

De volgende 7 stellingen gaan over opvattingen en verwachtingen met betrekking tot seksueel verlangen en plezier. Geef aan in hoeverre je het eens of oneens bent met elke stelling.

Antwoordmogelijkheden:

1= Helemaal mee oneens

2= Mee oneens

3= Noch mee oneens, noch mee eens

4= Mee eens

5= Helemaal mee eens

1. Zelfbevrediging is een juiste manier om mijn seksuele behoeften te vervullen.
2. Ik vind dat zelfbevrediging een opwindende ervaring kan zijn.
3. Ik vind zelfbevrediging verkeerd.
4. Ik zou mij gekwetst voelen als mijn seksuele partner mijn seksuele behoeften en verlangens zou negeren.
5. Het zou mij dwars zitten als mijn seksuele partner mijn seksuele behoeften en verlangens verwaarloosd.
6. Ik verwacht dat mijn seksuele partner inspeelt op mijn seksuele behoeften en gevoelens.
7. Ik vind het belangrijk dat mijn seksuele partner rekening houdt met mijn seksuele genot.