Romantic attachment and sexual dissatisfaction in young adult males:

The role of perceived partner responsiveness.

Sanne Goes

University of Utrecht

Supervisor: dr. Femke van den Brink

Abstract

Sexual satisfaction is found to be an important contributor to healthy, happy relationships, yet surprisingly little research has focused on the male experience of sexuality. The present research investigated the relationship between attachment avoidance and attachment anxiety and sexual dissatisfaction in young adult males and the mediating role perceived partner responsiveness (PPR) has in this relationship. A total of 152 Dutch males, all aged between 18 and 35 years old and all currently in a sexually active relationship, filled out an online questionnaire with questions regarding attachment avoidance, attachment anxiety, PPR, and sexual dissatisfaction. Hypothesis were tested using correlation and mediation analyses with attachment avoidance and attachment anxiety as predictors, PPR as mediator, and sexual dissatisfaction as outcome variable. Correlation analyses showed that both attachment dimensions and PPR were related to sexual dissatisfaction. The mediation analyses showed that both attachment dimensions were indirectly related to sexual dissatisfaction via PPR. Both attachment dimensions were also directly related to sexual dissatisfaction. These findings showed that in the context of couplesor sex therapy, PPR might be a valuable treatment target in increasing sexual satisfaction in males.

Introduction

Sexual satisfaction is an essential part of overall quality of life. It contributes to a higher quality of life, both subjective and objective, and leads to satisfaction in the areas of intimacy, safety and emotional well-being (McCabe & Cummins, 1998; Robinson & Molzahn, 2007). Sexual satisfaction is also associated with higher relationship satisfaction (e.g. Byers, Demmons & Lawrance, 1998). However, studies show that a large percentage of men are not fully satisfied with their sex life. For example, a study amongst more than 6.000 men worldwide showed that 57% of men were not completely satisfied with their sex life (Mulhall, King, Glina & Hvidsten, 2008). Sexual dissatisfaction is a main reason for seeking marriage counselling (Doss, Simpson & Christensen, 2004), is often (25-40%) named as a major contributing factor in divorce (De Graaf & Kalmijn, 2006; Hawkins, Willoughby & Doherty, 2012), and in general relates to overall relationship dissatisfaction (Butzer & Campbell, 2008). It is important to gain understanding of the determinants of sexual dissatisfaction to increase our understanding and determine appropriate targets for treatment intervention in the context of sexual problems.

Attachment theory

A frequently researched factor in relation to sexual (dis)satisfaction is attachment. According to attachment theory (Bowlby, 1969), based on early interactions with caregivers, humans develop internal working models of the self and of significant others. While attachment was first introduced as a term to refer to the bond between a child and their parents or caregivers, later works have extended the term to refer to all types of attachments humans form throughout their lives, including romantic love (Hazan & Shaver, 1987). The working models an individual develops as a result of attachment influence the development and functioning of the human being and both their current and future behaviour. More specific, these internal working models shape expectations and understanding of relationships and social interactions (Hazan & Shaver, 1987).

Attachment is conceptualized as a dimensional construct with two continuous dimensions: anxiety and avoidance. Attachment avoidance is characterized by a negative view of significant others, seeing them as possibly hurting or abandoning them, discomfort with closeness and dependency and reluctance to be intimate with others (Brennan, Clark & Shaver, 1998; Fraley & Shaver, 2000). In romantic relationships, these individuals show behaviour that is theorized to come from the deactivation of the attachment system (Mikulincer & Shaver, 2003, 2007). To avoid becoming dependent on someone who might be critical or hurtful, they try to maintain autonomy and to avoid discussing needs, vulnerability and emotions (Hazan &

Shaver, 1987; Feeney & Noller, 2004). Attachment anxiety is characterized by a negative view of the self, seeing themselves as not worthy of love, and anxiety concerning rejection and abandonment (Brennan et al., 1998; Fraley & Shaver, 2000). In romantic relationships, individuals with high attachment anxiety show a set of behaviours in relationships with others that is theorized to come from the hyperactivation of the attachment system (Mikulincer & Shaver, 2003, 2007). They often seek evidence of loyalty and love as a reassurance of their partners' love for them and push their partner for greater closeness (Feeney & Noller, 2004). Low levels of both attachment dimensions indicate a more secure attachment.

Attachment theory and sexual dissatisfaction

Although the underlying dimensions of attachment may be the same, there are differences between attachment in childhood and romantic attachment in adulthood. The biggest difference is that adult romantic attachment involves reciprocal caregiving, sexual attraction and mating. It is therefore proposed that romantic love could be conceptualized in terms of three behavioural systems working together: attachment, caregiving and sexual mating (Shaver, Hazan & Bradshaw, 1988). The sexual system includes motives for sexuality and concerns emotions and behaviour related to sexuality. This sexual system and the attachment system are conceptualized as influencing each other in romantic relationships (Mikulincer & Shaver, 2007; Birnbaum, 2010). For example, sexuality influences attachment when it is used to foster intimacy and closeness and thereby contributes to forming or maintaining attachment bonds (Birnbaum, 2010). On the other hand, attachment also influences sexuality when attachment dimensions influence the way sexuality is experienced. Attachment avoidance or attachment anxiety relate to certain types of sexual patterns. Men with attachment anxiety can use sexuality as a way of satisfying their need for proximity and reassurance, whereas men with attachment avoidance tend to engage in more casual, emotionless sex and use sex to reduce stress, enhance self-esteem or image among peers or simply physical pleasure (Davis et al., 2006; Brassard, Péloquin, Dupuy, Wright & Shaver, 2012). These sexual patterns also influence the satisfaction experienced from sexuality.

Sexual satisfaction is defined as "the emotional response resulting from one's subjective assessment of the positive and negative aspects of one's sexual relationship" (Byers et al., 1998). When attachment anxiety leads an individual to use sexuality as a way of securing proximity, this may lead to prioritizing their partners' desire over their own and being overly preoccupied with their performance. This limits their ability to fully attend to the sexual act, reducing sexual arousal and pleasure and leading to sexual dissatisfaction (Birnbaum, 2010;

Brassard et al., 2012). Likewise, attachment avoidance leads an individual to try to avoid sexual intercourse in a relationship, feel uncomfortable with too much intimacy and closeness with their partner and to have emotional barriers put up to remain independent, which will also lead to sexual dissatisfaction (Feeney & Noller, 2004; Brassard et al., 2012). When an individual is low in both attachment avoidance and attachment anxiety, they hold a positive view of both themselves and the other, which allows them to comfortably engage in sex and use it in a positive way to establish and maintain closeness and intimacy, therefore leading to sexual satisfaction (Birnbaum, 2010).

A few studies have confirmed these assumptions, although the results are not conclusive. An absence of attachment avoidance or anxiety has been found to be related to higher sexual satisfaction in men (e.g., Bogaert & Sadava, 2002). However, the findings about the relationship between anxious and avoidant attachment and relationship satisfaction are not as conclusive. Some studies have found attachment avoidance and attachment anxiety to be positively related to sexual dissatisfaction (Brassard, Shaver & Lussier, 2007; Butzer & Campbell, 2008; Brassard et al., 2012), whereas others found this relationship only for attachment avoidance (Péloquin, Brassard, Delisle & Bédard, 2013; Birnie-Porter & Hunt, 2015).

Taken together, attachment theory and previous research suggest that both attachment anxiety and attachment avoidance in romantic relationships are associated with sexual dissatisfaction.

Perceived partner responsiveness

A mechanism that might underlie the relationship between attachment anxiety or attachment avoidance and sexual dissatisfaction in romantic relationships, may be perceived partner responsiveness, a term that is best explained in the framework of what makes up romantic love. According to the interpersonal process model of intimacy by Reis and Shaver (1988), intimacy is one of the most important factors in romantic love. They described intimacy as a transactional, interpersonal process with self-disclosure and partner responsiveness as key components. According to this theory, intimacy develops when one partner discloses personal information, thoughts and feelings to the other partner, and receives a response from this partner and interprets that response as understanding and validating. However, the person's interpretation of their partner's response and the degree to which this response will be seen as validating, is far more important to the development of intimacy than the factual response. The speaker's perceptions of and feelings about the partner's response is what is called perceived

partner responsiveness. Reis, Clark and Holmes (2004) defined perceived partner responsiveness "as a process by which individuals come to believe that relationship partners both attend to and react supportively to central, core defining features of the self" (p. 203).

Attachment theory is relevant to this interpersonal process model of intimacy because the working models of the self and significant others that an individual has, that are shaped by attachment, shape expectations and interpretations of social interactions in relationships with significant others. These working models contain expectations about the level of emotional availability a romantic partner may show in response to needs and thereby play an important role in the interpretation of support behaviour (Bartholomew, Cobb & Poole, 1997; Collins & Feeney, 2000), thus influencing the perceived partner responsiveness. Research confirms this, as studies show that attachment avoidance and attachment anxiety predispose men to perceive social cues in ways that are consistent with their working models of attachment (Collins & Read, 1990; Collins & Feeney, 2004). Perceived partner responsiveness is also theorized to play a role in sexual dissatisfaction. Since sexual satisfaction is defined by the subjective perception of positive and negative aspects of one's sexual relationship (Byers et al., 1998), it can by hypothesized that low perceived partner responsiveness will lead to negative perceptions regarding the relationship.

For men with attachment avoidance, their internal working model of significant others makes them expect their partner to be unresponsive and untrustworthy. This makes them perceive their partners' responsiveness in a congruent way, which deactivates their attachment strategies and confirms their internal working model. This negative perception of their partners' responsiveness will lead them to feel less intimacy in their relationship, to try and remain independent and to avoid sexual intercourse, leading to sexual dissatisfaction (Birnbaum, Reis, Mikulincer, Gillath & Orpaz, 2006; Brassard et al., 2012). For men with attachment anxiety, their internal working model of significant others makes them fear their partner will think they are not deserving of love or will abandon them. This will make them perceive their partners' responsiveness in this way, for example, meaning they no longer love them are about to leave them. This leads to hyperactivation of their their attachment strategies such as seeking more intimacy and validation of their love. In a sexual context, this leads to frustration, prioritising their partner's wants and needs and not being able to fully enjoy the sexual encounter, leading to sexual dissatisfaction (Birnbaum et al., 2006; Brassard et al., 2012).

Part of this theorized relationship has been studied. Research has shown that intimacy and perceived partner responsiveness is related positively to sexual desire (Birnbaum & Reis, 2012), and to relationship satisfaction (Gadassi et al., 2016) in men. However, no research up

to this point has investigated the specific relationship between perceived partner responsiveness and sexual dissatisfaction.

To summarize, attachment theory and research results indicated that both attachment avoidance and attachment anxiety are related to greater sexual dissatisfaction. According to the interpersonal process model of intimacy, perceived partner responsiveness may be a mediator in this relationship, given that avoidant and anxious attached people are likely to view their partner as less responsive. This may in turn be a contributing factor to sexual dissatisfaction. However, the role of perceived partner responsiveness in the relationship of attachment avoidance and attachment anxiety with sexual dissatisfaction has never been empirically studied. Since perceived partner responsiveness has been coined as an important target in couples therapy (Johnson & Zuccarini, 2010; Zuccarini, Johnson, Dalgleish & Makinen, 2013) and sexual dissatisfaction is often a reason for seeking couples counselling (Doss, Simpson & Christensen, 2004), further research on relationships with attachment may be of contributing value to relationship counselling. Also, since only a few studies have focussed solely on males in researching sexual dissatisfaction, this research can add to the knowledge about male sexuality.

The present study

The present study investigated the relationships between attachment anxiety and avoidance in romantic relationships, sexual dissatisfaction and perceived partner responsiveness in men. Based on the theorized relationship between the behavioural systems of attachment and sexual mating and on previous research (e.g., Butzer & Campbell, 2008; Brassard et al., 2012), it was expected that both attachment anxiety and attachment avoidance would be positively related to sexual dissatisfaction. Additionally, based on the interpersonal process model of intimacy, it was expected that perceived partner responsiveness would mediate the relationship between both types of attachment and sexual dissatisfaction. Figure 1 shows these hypotheses schematically.

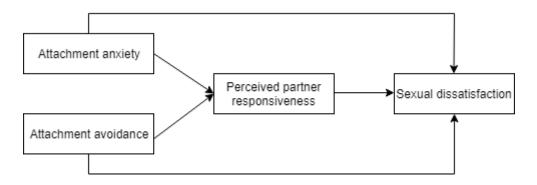


Figure 1. Schematic summary of the hypothesized links between attachment anxiety and avoidance and sexual dissatisfaction with the mediating role of perceived partner responsiveness.

Methods

Participants and procedure

Participants were recruited in the social network of the researcher and from a university community. Students were either being approached in person in different department buildings of the Utrecht University and asked to participate, or they could find the study on the Utrecht University student website that lists all ongoing research projects. Interested men received a short description of the online study "Sexuality and Relationships in Young Adult Males", and a link to the online questionnaire. Inclusion criteria for participation were having a current heterosexual relationship, being sexually active within the current relationship, and being aged between 18 and 35 years old. After opening the link to the study, all participants had to complete an informed consent form in which their voluntary participation and the anonymity of their information was emphasized. A question followed to assure all participants fit the inclusion criteria. Subsequently, the questions regarding attachment, perceived partner responsiveness, and sexual dissatisfaction were presented. Demographic questions (i.e. age, duration of current relationship and educational level) followed. Social science students were rewarded course credit for participation. Other participants received no compensation for participation. On average, the questionnaire took 15 minutes to complete.

A priori power analyses indicated that, to detect small to medium effect sizes (under guidelines from Cohen, 1988, p. 412) with power = .80 and α = .05, a sample size of 148 participants was required for this research (Faul, Erdfelder, Lang, & Buchner, 2007; Fritz & MacKinnon, 2007). These effect size estimations were based on the effects found in similar past research (Collins & Feeney, 2004; Birnbaum & Reis, 2012)

In total, 152 men fully completed the questionnaire. Participants' age ranged from 18 to 34 years with a mean age of 23.45 years (SD=3.17). From these participants, 17.8% (n=27) had a romantic relationship with a duration of less than six months, 13.2% (n=20) of six to twelve months, 23% (n=35) of one to two years, and 46.1% (n=70) of longer than two years. The highest level of education (either current or completed) was lower secondary school in 0.7% (n=1), higher secondary school in 2.0% (n=3), lower vocational education in 3.3% (n=5) and higher vocational education or university in 94.1% (n=143) of the participants.

Measures

Romantic attachment avoidance and anxiety. Romantic attachment was measured using the Experiences in Close Relationships – Relationship Structures Questionnaire (ECR-RS, Fraley, Heffernan, Vicary & Brumbaugh, 2011) which was previously translated to Dutch (Van den Brink, Smeets, Hessen, & Woertman, 2016). This questionnaire consists of nine items, with six items measuring attachment avoidance (e.g. "I don't feel comfortable opening up to my partner") and three items measuring attachment anxiety (e.g. "I often worry that my partner doesn't really care for me"). Answers were given on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. Items were recoded if necessary and mean scores were computed for attachment anxiety and attachment avoidance separately, where higher scores are indicative to more attachment anxiety or avoidance. Previous research showed good validity and reliability for both the attachment avoidance ($\alpha \ge .81$) and attachment anxiety ($\alpha \ge .83$) subscale of the ECR-RS (Fraley et al., 2011). Cronbach's alpha in the current study was .87 for attachment avoidance and .89 for attachment anxiety.

Perceived partner responsiveness. The Dutch version (Naraškevičiūtė, 2017) of the Perceived Responsiveness Scale (PRS; Reis, 2006; Reis, Maniaci, Caprariello, Eastwick & Finkel, 2011) was used to measure the perceived responsiveness in partners. This questionnaire consists of 12 items (e.g. "I get the feeling that my partner seems interested in what I am thinking and feeling") that are answered on a 7-point Likert scale ranging from 1 = not at all true to 7 = completely true. Item scores were averaged, with higher scores indicating more perceived responsiveness from the partner. Previous research showed good validity and reliability ($\alpha \ge .93$) for this scale (Reis et al., 2011). Cronbach's alpha in the current study was .95.

Sexual dissatisfaction. The Dutch version (Ter Kuile, Lankveld, Kalkhoven & van Egmond, 1999) of the Golombok Rust Inventory of Sexual Satisfacion (GRISS; Rust & Golombok, 1986)

for males was used as a measure of sexual dissatisfaction. This questionnaire consists of 28 items (e.g., "Are you dissatisfied with the amount of variety in your sex life with your partner?") that are answered on a 5-point Likert scale ranging from 1 = always to 5 = never. Items were recoded if necessary and an average score was computed where a higher score would indicate greater dissatisfaction. Previous research (Ter Kuile et al., 1999) has shown this scale to have good reliability and validity ($\alpha = .87$). Cronbach's alpha in the current study was .85.

Statistical analysis

All statistical analyses were performed using IBM SPSS Statistics Version 20. First, bivariate correlations between the study variables were analysed using Pearson correlations. Second, a mediation analysis was carried out with the two attachment dimensions (attachment avoidance and attachment anxiety) as independent variables, perceived partner responsiveness as mediator and sexual dissatisfaction as dependent variable. Within the mediation analysis, multiple subanalyses were applied to calculate the total, direct and indirect effects via perceived partner responsiveness of the two attachment dimensions on sexual dissatisfaction. Total effects refer to the specific relationships between the two dimensions of attachment and sexual dissatisfaction, while controlling for the other dimension of attachment. Direct effects refer to the specific relationships between the two dimensions of attachment and sexual dissatisfaction, while not only controlling for the other dimension of attachment, but also for perceived partner responsiveness. The indirect effects of the dimensions of attachment on sexual dissatisfaction through perceived partner responsiveness were determined, as recommended by Hayes (2013), using bootstrap analyses with 5000 bootstrap samples and bias corrected and accelerated 95% confidence intervals (BCa 95% CI). To this end, the PROCESS macro for SPSS (Hayes, 2013) was used. All coefficients will be reported in standardized form.

Results

Bivariate associations between attachment avoidance, attachment anxiety, perceived partner responsiveness and sexual dissatisfaction

Means, standard deviations, minimum and maximum scores of the study variables and the results of the correlation analyses are shown in Table 1. As expected, both attachment avoidance and attachment anxiety were significantly related to greater sexual dissatisfaction. The results also showed significant negative relationships of attachment avoidance and attachment anxiety with perceived partner responsiveness and of perceived partner responsiveness and sexual dissatisfaction.

Table 1

Means, Standard Deviations, Minimum and Maximum Scores, and Bivariate Associations

Between Attachment Avoidance, Attachment Anxiety, Perceived Partner Responsiveness, and

Sexual Dissatisfaction

	M	SD	Min.	Max.	1	2	3
1. Attachment avoidance ^a	2.28	0.99	1.00	6.17	-	-	-
2. Attachment anxiety ^a	2.26	1.39	1.00	6.67	.46***	-	-
3. Perceived partner responsiveness	5.54	1.00	2.50	7.00	68***	63***	-
4. Sexual dissatisfaction	1.81	0.37	1.14	3.29	.55***	.51***	65***

Note. ^a Scale range: 1-7 with higher scores indicating more attachment avoidance or anxiety, ^b Scale range: 1-7 with higher scores indicating more perceived partner responsiveness, ^c Scale range: 1-5 with higher scores indicating more sexual dissatisfaction.

Total, direct and indirect effects through perceived partner responsiveness of attachment on sexual dissatisfaction

The results of the stepwise repression analysis are shown in Table 2. These results showed a significant direct negative effect (step 2) of perceived partner responsiveness on sexual dissatisfaction. The bootstrap analyses also showed significant indirect effects of attachment avoidance, .21, BCa 95% CI [.111, .310], and attachment anxiety, .17, BCa 95% CI [.080, .268], on sexual dissatisfaction via perceived partner responsiveness (step 2). Thus, as expected, more attachment avoidance and attachment anxiety was related to less perceived partner responsiveness, which was in turn related to greater sexual dissatisfaction. In total, 45% of the variance in sexual dissatisfaction could be explained

^{***} *p* < .001

Table 2

Results of the Stepwise Regression Analysis with Sexual Dissatisfaction as Outcome: Total and

Direct Effects of Attachment Anxiety and Attachment Avoidance and Perceived Partner

Responsiveness on Sexual Dissatisfaction.

Predictors	β step 1	β step 2
Step 1: adj. $R^2 = .38$, $F(2, 149) = 46.71^{***}$		
Attachment avoidance	.40***	.20*
Attachment anxiety	.32***	.16*
Step 2: $\Delta R^2 = .07$, $F(1, 148) = 19.30^{***}$; adj. $R^2 = .45$, $F(3, 148) = 41.40^{***}$		
Perceived partner responsiveness		42***

Note. β 's in step 1 represent total effects of attachment avoidance and attachment anxiety on sexual dissatisfaction. β 's in step 2 represent direct effects of attachment avoidance and attachment anxiety on sexual dissatisfaction.

Discussion

The aim of this study was to investigate the relationships between the two dimensions of adult romantic attachment (i.e., attachment avoidance and attachment anxiety) and sexual dissatisfaction in men, and the mediating role of perceived partner responsiveness. In line with attachment theory and the theorized relationship between attachment and sexuality, it was expected that both attachment anxiety and attachment avoidance would be positively related to sexual dissatisfaction. The results of this study replicated previous study results (e.g., Butzer & Campbell, 2008; Brassard et al., 2012) by indeed finding significant positive relationships between both attachment avoidance and attachment anxiety and sexual dissatisfaction.

This study expanded previous research by taking perceived partner responsiveness into account as a mediator. Based on the interpersonal process model of intimacy and the hypothesized relationship of perceived partner responsiveness with sexual dissatisfaction, it was expected that perceived partner responsiveness would mediate the relationship between both types of attachment and sexual dissatisfaction. As expected, the results showed a significant negative relationship between attachment avoidance and attachment anxiety with perceived partner responsiveness, and a significant negative relationship between perceived partner responsiveness and sexual dissatisfaction. These results suggest that the less a partner is perceived to be responsive to a person's needs and wants, the more sexual dissatisfaction is reported.

Most importantly, results of the mediation analysis suggests that perceived partner responsiveness mediated the relationship between both attachment dimensions and sexual dissatisfaction. More specifically, attachment avoidance and attachment were associated with lower perceived responsiveness of a partner, which in turn was associated with greater sexual dissatisfaction. Although this relationship has been found for both attachment avoidance and attachment anxiety, the pathways and mechanisms through which these relationships work may differ greatly.

With both attachment avoidance and attachment anxiety, individuals have developed internal working models of themselves and significant others. However, seeing their partner as negative and untrustworthy leads men with attachment avoidance to deactivation of the attachment system. This means they will try to keep a distance from others and remain independent (Mikulincer & Shaver, 2003). On the other hand, men with attachment anxiety see themselves as not worthy of love and fear their partner will abandon them, leading to hyperactivation of the attachment system. They will try to keep their partner close and search for confirmation of their love. These attachment strategies influence the way they perceive the responsiveness of their partner (Bartholomew et al., 1997; Collins & Feeney, 2000). Because their working models of themselves and significant others lead them to expect their partners to be unresponsive, they will perceive their partners in this way as well (Reis & Shaver, 1988). Then, the perceived unresponsiveness of their partner will lead avoidant attached men to keep psychological barriers up, not experience intimacy and see sex only as a physical pleasure (Davis et al., 2006; Brassard et al., 2012), thus leading to greater sexual dissatisfaction. In anxious attached men, however, the perceived unresponsiveness of their partner will lead them to prioritise their partner's needs and wants over their own and focus on their own performance, thus limiting their arousal and leading to greater sexual dissatisfaction (Brassard et al., 2012).

Future research and implications

As discussed, the pathways through which attachment avoidance and attachment anxiety lead to sexual dissatisfaction through perceived partner responsiveness are very different. They come from different working models, different activation strategies of the attachment system and different perceptions of the responsiveness of a partner. Combined with the fact that some studies have not found an effect of attachment anxiety on sexual (dis)satisfaction, but did find this relationship for attachment avoidance, these differences call for more research into the different pathways of attachment avoidance and attachment anxiety and the relationships of both these dimensions with sexual dissatisfaction.

The results of the present study showed that, when taking the mediating role of perceived partner responsiveness into account, the relationship between attachment dimensions and sexual dissatisfaction remains significant. This could mean that the relationship of both attachment dimensions with sexual dissatisfaction might be direct. The internal working models corresponding with the attachment dimensions might directly influence sexual dissatisfaction. When an avoidant attached individual feels like their partner is untrustworthy and it is therefore better to keep a distance, this might directly lead to less sexual satisfaction. When an anxious attached individual feels like their partner might abandon them, this also might directly lead to les sexual satisfaction. Another option is that there are other variables mediating the relationships between both attachment dimensions and sexual dissatisfaction. For example, past studies have looked at the level of communication regarding sex as a potential mediator in this relationship (Davis et al., 2006). It is worth studying other factors regarding this relationship, since they might be valuable targets for clinical treatments.

The results of this study may implicate potential targets for future clinical treatments such as marriage or sexual counselling. Emotionally focussed couples therapy is a valuable form of therapy to look into the interactions between partners. Attachment dimensions and sexuality are already being targeted in emotionally focussed couples therapy (Johnson & Zuccarini, 2010) and perceived partner responsiveness could be a valuable addition in these types of interventions for men. Since attachment is something that is developed so early in life and can be very pervasive (Mikulincer & Shaver, 2007) and therefore hard to change, perceived partner responsiveness might be an better treatment target. The negative interactions between partners with attachment avoidance or anxiety can be worked through in order to develop a more satisfying sex life (Johnson & Zuccarini, 2010). Since men are typically socialized to conform to masculine norms of being independent and self-reliant (Halford, Owen, Duncan, Anker & Sparks, 2016) they might have more trouble talking about wanting more responsiveness out of their partner. This is something to pay attention to in men when treating couples in therapy.

Limitations

There are some limitations in this study that need to be acknowledged. First, the used study sample consists of only heterosexual men. Since research suggests that sexual scripts, sexual relationships and sexual acts differ in gay men and heterosexual men (McDonagh, Steward, Morrison & Morrison, 2016), the results from this study cannot be generalised to the whole population of men. Another limitation is the fact that only one side of the interaction, the male

perspective, has been taken into account in this study, whereas other studies (e.g. Gadassi et al., 2016) used a dyadic design, meaning that the perspective of both partners have been taken into consideration. This allows for a more detailed examination of interactions between the partners. Especially with a variable such as perceived partner responsiveness, which is an evaluation of something a partner says or does, looking at both partners and their interaction could give more insight into the exact mechanisms. A last limitation, that is inherent to this type of cross-sectional design, is that the direction of causality cannot be determined. Like other studies (e.g., Brassard et al., 2012), this study has found significant relationships between attachment dimensions and sexual satisfaction. Although this study suspected attachment orientations to influence sexual dissatisfaction, it could be argued that the relationship is reversed. For example, Birnbaum (2010) found that sexual satisfaction fosters feelings of intimacy and closeness, thereby contributing to secure attachment. To determine the causal relationships and address these issues, longitudinal studies are needed.

Conclusions

In conclusion, this study found attachment avoidance and attachment anxiety to be related to sexual dissatisfaction. The results also showed this relationship to be partially mediated by perceived partner responsiveness. This study adds to the literature on male sexuality and identifies a possible helpful target for future treatment for sexual dissatisfaction, such as couples therapy. Discussing the attachment dimensions and perceived partner responsiveness and examining the interactions between partners can help develop more stable bonds and increase sexual satisfaction in men. Given the focus on female sexuality in research in the past decades, it is important to keep researching the sex differences regarding factors such as sexuality and attachment. This will improve both scientific as well as clinical knowledge about the relationships between these and other variables in both men and women.

References

- Bartholomew, K., Cobb, R. J., & Poole, J. (1997). Adult attachment patterns and social support processes. In G. R. Pierce, B. Lakey, I. Sarason, & B. Sarason (Eds.), *Sourcebook of social support and personality* (pp. 359–378). doi: 10.1007/978-1-4899-1843-7_16
- Birnbaum, G. E. (2010). Bound to interact: The divergent goals and complex interplay of attachment and sex within romantic relationships. *Journal of Social and Personal Relationships*, 27, 245–252. doi: 10.1177/0265407509360902
- Birnbaum, G. E., & Reis, H. T. (2012). When does responsiveness pique sexual interest? Attachment and sexual desire in initial acquaintanceships. *Personality and Social Psychology Bulletin*, *38*, 946-958. doi: 10.1177/0146167212441028
- Birnbaum, G. E., Reis, H. T., Mikulincer, M., Gillath, O., & Orpaz, A. (2006). When sex is more than just sex: Attachment orientations, sexual experience, and relationship quality. *Journal of Personality and Social Psychology*, 91, 929. doi: 10.1037/0022-3514.91.5.929
- Birnie-Porter, C., & Hunt, M. (2015). Does relationship status matter for sexual satisfaction? The roles of intimacy and attachment avoidance in sexual satisfaction across five types of ongoing sexual relationships. *Canadian Journal of Human Sexuality*, 24, 174-183. doi: 10.3138/cjhs.242-A5
- Bogaert, A. F., & Sadava, S. (2002). Adult attachment and sexual behavior. *Personal Relationships*, 9, 191-204. doi: 10.1111/1475-6811.00012
- Bowlby, J. (1969). Attachment and loss, Vol. 1. Attachment. doi: 10.2307/2798963
- Brassard, A., Péloquin, K., Dupuy, E., Wright, J., & Shaver, P. R. (2012). Romantic attachment insecurity predicts sexual dissatisfaction in couples seeking marital therapy. *Journal of Sex & Marital Therapy*, *38*, 245-262. doi: 10.1080/0092623x.2011.606881
- Brassard, A., Shaver, P. R., & Lussier, Y. (2007). Attachment, sexual experience, and sexual pressure in romantic relationships: A dyadic approach. *Personal Relationships*, *14*, 475-493. doi: 10.1111/j.1475-6811.2007.00166.x
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford Press.
- Butzer, B., & Campbell, L. (2008). Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples. *Personal Relationships*, *15*, 141-154. doi: 10.1111/j.1475-6811.2007.00189.x

- Byers, E. S., Demmons, S., & Lawrance, K. A. (1998). Sexual satisfaction within dating relationships: A test of the interpersonal exchange model of sexual satisfaction. *Journal of Social and Personal Relationships*, *15*, 257-267. doi: 10.1177/0265407598152008
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences, second edition. Lawrence Erlbaum Associates, Inc; US.
- Collins, N. L., & Feeney, B. C. (2000). A safe haven: An attachment theory perspective on support-seeking and caregiving in intimate relationships. *Journal of Personality and Social Psychology*, 78, 1053–1073. doi: 10.1037//0022-3514.78.6.1053
- Collins, N. L., & Feeney, B. C. (2004). Working models of attachment shape perceptions of social support: evidence from experimental and observational studies. *Journal of personality and social psychology*, 87, 363. doi: 10.1037/0022-3514.87.3.363
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, *58*, 644. doi: 10.1037//0022-3514.58.4.644
- Davis, D., Shaver, P. R., Widaman, K. F., Vernon, M. L., Follette, W. C., & Beitz, K. (2006). "I can't get no satisfaction": Insecure attachment, inhibited sexual communication, and sexual dissatisfaction. *Personal Relationships*, 13, 465-483. doi: 10.1111/j.1475-6811.2006.00130.x
- De Graaf, P. M., & Kalmijn, M. (2006). Divorce motives in a period of rising divorce: Evidence from a Dutch life-history survey. *Journal of Family Issues*, 27, 483-505. doi: 10.1177/0192513x05283982
- Doss, B. D., Simpson, L. E., & Christensen, A. (2004). Why do couples seek marital therapy? *Professional Psychology: Research and Practice*, 35, 608. doi: 10.1037/0735-7028.35.6.608
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior research methods*, 39, 175-191. doi: 10.3758/bf03193146
- Feeney, J. A., & Noller, P. (2004). Attachment and sexuality in close relationships. In J. Feeney & P. Noller (Eds.), *The handbook of sexuality in close relationships*, 183-201. doi: 10.4135/9781452220437.n14
- Fraley, R. C., Heffernan, M., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships-relationship structures questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23, 615–625. doi: 10.1037/a0022898

- Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: theoretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, *4*, 132-154. doi: 10.1037/1089-2680.4.2.132
- Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science*, 18, 233-239. doi: 10.1111/j.1467-9280.2007.01882.x
- Gadassi, R., Bar-Nahum, L. E., Newhouse, S., Anderson, R., Heiman, J. R., Rafaeli, E., & Janssen, E. (2016). Perceived partner responsiveness mediates the association between sexual and marital satisfaction: A daily diary study in newlywed couples. *Archives of sexual behavior*, 45, 109-120. doi: 10.1007/s10508-014-0448-2
- Halford, T. C., Owen, J., Duncan, B. L., Anker, M. G., & Sparks, J. A. (2016). Pre-therapy relationship adjustment, gender and the alliance in couple therapy. *Journal of Family Therapy*, *38*, 18-35. doi: 10.1111/1467-6427.12035
- Hawkins, A. J., Willoughby, B. J., & Doherty, W. J. (2012). Reasons for divorce and openness to marital reconciliation. *Journal of Divorce & Remarriage*, 53, 453-463. doi: 10.1080/10502556.2012.682898
- Hayes, A. F. (2013). *Introduction to Mediation, Moderation, and Conditional Process Analysis*. New York: Guilford Press.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524. doi: 10.1037//0022-3514.52.3.511
- Johnson, S., & Zuccarini, D. (2010). Integrating sex and attachment in emotionally focused couple therapy. *Journal of Marital and Family Therapy*, *36*, 431-445. doi: 10.1111/j.1752-0606.2009.00155.x
- McCabe, M. P., & Cummins, R. A. (1998). Sexuality and quality of life among young people. *Adolescence*, *33*, 761-774. doi: 10.1080/10502556.2012.682898
- McDonagh, L. K., Stewart, I., Morrison, M. A., & Morrison, T. G. (2016). Development and Psychometric Evaluation of the Gay Male Sexual Difficulties Scale. *Archives of Sexual Behavior*, 45, 1299-1315. doi: 10.1007/s10508-015-0664-4
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. *Advances in Experimental Social Psychology*, *35*, 56-152. doi: 10.1016/s0065-2601(03)01002-5
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change.* New York: Guilford Press.

- Mulhall, J., King, R., Glina, S., & Hvidsten, K. (2008). Importance of and satisfaction with sex among men and women worldwide: Results of the global better sex survey. *The journal of sexual medicine*, *5*, 788-795. doi: 10.1111/j.1743-6109.2007.00765.x
- Naraškevičiūtė, E. (2017). The relationship between perceived partner's responsiveness and sexual satisfaction: The role of positive body image. Utrecht University [Unpublished master thesis].
- Péloquin, K., Brassard, A., Delisle, G., & Bédard, M. M. (2013). Integrating the attachment, caregiving, and sexual systems into the understanding of sexual satisfaction. *Canadian Journal of Behavioural Science*, 45, 185. doi: 10.1037/a0033514
- Reis, H. T. (2006). The Perceived Responsiveness Scale. *Unpublished manuscript, University of Rochester, NY*.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck (Ed.), *Handbook of personal relationships* (pp. 367-389). Chichester, England: Wiley
- Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Mahwah, NJ: Erlbaum.
- Reis, H. T., Maniaci, M. R., Caprariello, P. A., Eastwick, P. W., & Finkel, E. J. (2011). Familiarity does indeed promote attraction in live interaction. *Journal of Personality and Social Psychology*, 101, 557-570. doi: 10.1037/a0022885
- Robinson, J. G., & Molzahn, A. E. (2007). Sexuality and quality of life. *Journal of Gereontological Nursing*, 33, 19-29. doi: 10.1037/a0033514
- Rust, J., & Golombok, S. (1986). The GRISS: a psychometric instrument for the assessment of sexual dysfunction. *Archives of Sexual Behavior*, 15, 157-165. doi: 10.1007/bf01542223
- Shaver, P. R., Hazan, C., & Bradshaw, D. (1988). The integration of three behavioral systems. *The psychology of love*, 68-99.
- Ter Kuile, M. M., van Lankveld, J. J. D. M., Kalkhoven, P., & van Egmond, M. (1999). The Golombok Rust Inventory of Sexual Satisfaction (GRISS): Psychometric properties within a Dutch population. *Journal of Sex and Marital Therapy*, 25, 59–71. doi: 10.1080/00926239908951183
- Van den Brink, F., Smeets, M. A., Hessen, D. J., & Woertman, L. (2016). Positive body image and sexual functioning in Dutch female university students: The role of adult romantic attachment. *Archives of Sexual Behavior*, 45, 1217-1226. doi: 10.1007/s10508-015-0511-7

Zuccarini, D., Johnson, S. M., Dalgleish, T. L., & Makinen, J. A. (2013). Forgiveness and reconciliation in emotionally focused therapy for couples: The client change process and therapist interventions. *Journal of Marital and Family Therapy*, *39*, 148-162. doi: 10.1111/j.1752-0606.2012.00287.x