

Associations between parenthood, relationship, and sexual satisfaction in sex therapy patients

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Parenthood has often been associated with lower levels of relationship and sexual satisfaction. However, this effect has rarely been studied beyond transition to parenthood and/or in clinical samples and few studies have examined parenthood as a moderator between relationship satisfaction and sexual satisfaction. Therefore, the objective of this study was to examine whether parenthood (being a parent or not) acts as a moderator of the relationship between relationship satisfaction and sexual satisfaction among women and men consulting in sex therapy ($n = 219$). Results indicated that mothers report lower levels of relationship satisfaction compared to non-parent women, whereas no difference was found for sexual satisfaction. Results also showed that parenthood acts as a moderator between relationship and sexual satisfaction, with differing effects for men and women. More precisely, relationship satisfaction was associated with increased sexual satisfaction in men and in non-parent women only. For mothers, relationship satisfaction was not linked to sexual satisfaction. Findings suggest that relationship satisfaction is lower in mothers compared to non-parent women and is also unrelated to sexual satisfaction in mothers, indicating specificities regarding sexual satisfaction and its correlates in others. These results have implications, particularly for interventions with mothers attending sex therapy.

KEYWORDS: Men, parenthood, relationship satisfaction, sexual satisfaction, women

Although having a child contributes to parents' life satisfaction and happiness (Nelson et al., 2013), many parents feel upset, stressed, and overwhelmed by their daily lives as parents (Nyström & Ohrling, 2004; Rosander et al., 2021; Umberson et al., 2010). Parents' management of these challenges and parental stressors are likely to affect their personal and relational life, leading to a decline in their relationship and sexual satisfaction (Khajehei, 2016). Mothers' relationship and sexual satisfaction seem to be particularly affected by parenthood (Behzadipour et al., 2021; Don & Mickelson, 2014; Fallah et al., 2018; Khajehei, 2016; Nezhad & Goodarzi, 2011). However, studies have largely focused on the transition to parenthood, a period generally recognized as the child's first year, and few have targeted parents passed this stage. Yet, the results of the few studies that have targeted parents beyond this period suggest that the effects of parenthood on relationship and sexual satisfaction continue for

many years (e.g., Doss et al., 2009; Hansson & Ahlberg, 2012; Keizer & Schenk, 2012), demonstrating the importance of examining these variables in an inclusive way among parents (i.e., not limited to parents in transition to parenthood). Furthermore, a limited number of studies have investigated these effects in clinical populations of adults seeking sex therapy. Yet, these individuals are at risk of experiencing high levels of disturbance in relationship and sexual satisfaction and study in such clinical sample may offer useful insights on this population for therapists. In brief, studies are lacking on the role of parenthood on relationship and sexual satisfaction in clinical populations of adults who seek sex therapy.

Relationship and sexual satisfaction are important as they have multiple implications for individuals' well-being and quality of life (Davison et al., 2009; Flynn et al., 2016; Fuller-Iglesias, 2015) as well as for the quality of the parent-child relationship

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(Bernier et al., 2014; Bonds & Gondoli, 2007). Although relationship satisfaction is associated with sexual satisfaction (Farr et al., 2010, 2017; Nezhad & Goodarzi, 2011; Witting et al., 2008), studies and theoretical conceptualizations suggest this association diverges depending on gender or life period (e.g. Byers, 2005; Vowels & Mark, 2020; Witting et al., 2008). As parenthood leads to a redefinition of parental sexuality (Lévesque et al., 2021; Stavdal et al., 2019) and considering the effect of parenthood on relationship and sexual satisfaction, it is essential to examine how parenthood interacts with these variables in men and women.

The present study aimed to compare levels of relationship and sexual satisfaction in women and men, parents and non-parents, who seek sex therapy, and to examine the moderating role of parenthood in the association between relationship and sexual satisfaction, for mothers and fathers.

RELATIONSHIP SATISFACTION

A consensus emerges from empirical studies, highlighting the negative impacts of parenthood on parents' relationship satisfaction (Bäckström et al., 2018; Doss et al., 2009; Huss & Pollmann-Schult, 2020). This decline in satisfaction tends to fluctuate, ranging from a low decline in the first months surrounding pregnancy to a moderate decrease after 12 months following childbirth (Mitnick et al., 2009). A study indicated that most mothers (79.4%) and about half of fathers (51.0%) experienced a moderate decline in their relationship satisfaction during their transition to parenthood (Don & Mickelson, 2014). This is consistent with studies indicating that declines in relationship satisfaction after childbirth are more pronounced for mothers than for fathers (e.g. Twenge et al., 2003). The few studies that have examined parents' relationship satisfaction beyond the transition to parenthood (e.g., during the child's first year of life) report that this decline continues, although these changes are variable (Gorchoff et al., 2008; Hansson & Ahlberg, 2012; Hirschberger et al., 2009; Keizer & Schenk, 2012; Trillingsgaard et al., 2014; Whiteman et al., 2007). Moreover, studies comparing parent couples with non-parent couples concluded that parents report comparatively lower levels of relationship satisfaction (Keizer & Schenk, 2012; Kluwer, 2010; Lawrence et al., 2008; Meyer et al., 2016; Twenge et al., 2003; Urbano-Contreras et al., 2018).

SEXUAL SATISFACTION

Although much less studied, sexual satisfaction has also been found to be negatively associated with parenthood (Ahlberg et al., 2008; Behzadipour et al., 2021; Fallah et al., 2018; Leavitt et al., 2017; Maas et al., 2018). New parents tend to report being dissatisfied with their sex life (Ahlberg et al., 2005; Maas et al., 2018), especially mothers (Behzadipour et al., 2021; Fallah et al., 2018; Khajehei, 2016; Nezhad & Goodarzi, 2011). In a study among 119 new mothers, about 50% of them rated their sex life as "bad" or "not very good" eight months after the birth of their child (Dixon et al., 2000). This low sexual satisfaction is found to persist several years after childbirth (Ahlberg et al.,

2008; Hansson & Ahlberg, 2012). A study comparing parent couples and non-parent couples showed that new parents report significantly lower sexual satisfaction than non-parent couples (Schwenck et al., 2020), although the number of studies comparing parents to non-parents remains limited. Nonetheless, parents' sexual experiences are heterogeneous (de Pierrepont et al., 2016; Fox, 2009; Huebner et al., 2012; Rosen et al., 2021) and some report no decrease in sexual satisfaction (Lévesque et al., 2021; Witting et al., 2008).

ASSOCIATION BETWEEN RELATIONSHIP AND SEXUAL SATISFACTION

A positive association between relationship satisfaction and sexual satisfaction was reported in a number of studies (e.g., Byers, 2005; Dixon et al., 2000; Farr et al., 2010, 2017; Nezhad & Goodarzi, 2011; Witting et al., 2008). However, some studies and theoretical conceptualizations suggest the link between relationship and sexual satisfaction diverge depending on gender or life period (e.g. Byers, 2005; Vowels & Mark, 2020; Witting et al., 2008). This association was hypothesized to be stronger for women because relationship satisfaction is deemed to be more important for their sexuality (Byers, 2005; Rosen & Bachmann, 2008; Schwartz & Young, 2009). However, no clear empirical evidence is found to support this assertion (e.g., Byers, 2005; Cao et al., 2019; Sprecher, 2002). Moreover, since parenthood leads to a redefinition of parental sexuality (Lévesque et al., 2021; Stavdal et al., 2019) and studies indicate that parenthood affects both relationship and sexual satisfaction, parenthood could be a key factor in explaining the effect of gender or life period. In fact, parenthood (being a parent or not) might have an effect on the association between relationship and sexual satisfaction. Parenthood may bring emphasis on different determinants of sexual satisfaction, making relationship satisfaction an important determinant for parents' sexual satisfaction. Empirical studies are needed to support this assumption.

In sum, studies have shown that parenthood can affect relationship and sexual satisfaction. Several studies have focused on the transition to parenthood and few have examined the effects of parenthood in an inclusive fashion, regardless of the age of their children. Parents from a clinical population have also been understudied, and studies on patients consulting in sex therapy are critically lacking. Consequently, understanding the links between parenthood, sexual satisfaction, and relationship satisfaction would be useful to understand parents who seek sex therapy and guide therapeutic interventions. Moreover, since the literature suggests that mothers may be affected differently than fathers in terms of relationship and sexual satisfaction, it appears relevant to examine men and women separately. Finally, relationship satisfaction is positively associated with sexual satisfaction, but how parenthood affects this relationship in women and men is not clear. We, therefore, examined the role of parenthood on sexual satisfaction in adults consulting for sexual or relationship difficulties (i.e., in sex therapy), including parents past the transition to parenthood.

OBJECTIVES

This study aimed to examine the relationships between parenthood, relationship satisfaction, and sexual satisfaction in adults seeking sex therapy. The first objective was to compare the levels of sexual and relationship satisfaction among women and men consulting in sex therapy who are parents and non-parents. The second objective was to examine whether parenthood acts as a moderator on the association between relationship satisfaction and sexual satisfaction among women and men. Based on the literature, our first hypothesis was that parents will report lower levels of relationship and sexual satisfaction than non-parents. Our second hypothesis was that parenthood will act as a moderator between relationship and sexual satisfaction in men and women, so that the link between relationship satisfaction and sexual satisfaction will be stronger in parents.

METHOD

Sample

The sample consisted of 221 individuals who reported being in a couple's relationship. All consulted in sex therapy with interns in clinical sexology training in the province of Quebec. Of these, 120 identified as female (54.3%) and 99 as male (44.8%), with an mean age of 37 years (ranged 30 to 45 years, $SD = 0.30$). The majority of participants were employed (75.6%, $n = 158$), with a personal income below \$59,999 (71.4%, $n = 155$) and reported being born in Canada (83.3%), whereas the others reported being born in Western Europe (1.8%), Africa (1.4%), South America (1.8%) or elsewhere (10%). Participants reported using French or English (85.1%), Spanish (7.2%) or another language (5.9%) as their mother tongue. Participants with at least one child (51.6%, $n = 114$) slightly outnumbered non-parent participants (48.4%, $n = 99$). Among the participants who reported having children, 31.6% reported one child, 38.6% two children, 25.4% three children and 4.4% four or five children.

Procedure

Participants consulting in sex therapy with interns were invited to complete self-reported questionnaires within the first weeks following their admission (i.e., during the assessment phase, before treatment). With the consent of the participants, a summary of the results of the questionnaires was sent to their interns to be used as part of their evaluation to guide the sex therapy. Interns were completing a graduate program in sex therapy leading to a psychotherapy practice licence and doing their sex therapy internship in different settings (university clinics, hospitals, community organizations, and private clinics). The interns explained the research project and provided access to the consent form and to the link to complete the questionnaires online (i.e., approximately one hour on the Qualtrics platform). Inclusion criteria were to seek sex therapy with an intern, to be able to complete questionnaires in French or English, to be in a couple relationship (i.e., to respond to a measure assessing relationship satisfaction)

and be 18 years or older. The consent form informed them of their rights to refuse to participate or to withdraw without affecting the services received. The study received ethical approval from the university's ethics committee.

Measures

Demographics

The first section of the questionnaire collected participants' socio-demographic information (e.g., age, gender, place of birth, mother tongue, marital status, sexual orientation, family income, etc.). As part of the demographic questionnaire, participants had to answer a question about the number of children they have. From this question, a binary variable was created separating participants who had no children from those who had at least one child.

Sexual Satisfaction

Sexual satisfaction was measured using the Global Measure of Sexual Satisfaction (GMSEX) (Lawrance & Byers, 1995). This scale is widely used to assess sexual satisfaction and has received strong psychometric support (Mark et al., 2014). Respondents rate their sexuality on five 7-point bipolar scales: good/bad, pleasant/unpleasant, positive/negative, satisfying/unsatisfying, and valuable/worthless. The total score ranges from 5 to 35, with a higher score indicating higher sexual satisfaction. For this study, Cronbach's alpha was high ($\alpha = .87$).

Relationship Satisfaction

Relationship satisfaction was measured using the 32-items Dyadic Adjustment Scale (Spanier, 1976, translated in French by Baillargeon et al., 1986). This questionnaire assessed relationship satisfaction (e.g., the degree to which the couple agrees on matters of importance to the relationship, level of satisfaction toward their relationship, degree of closeness and shared activities experienced and demonstrations of affection). This scale is frequently used to measure relationship satisfaction and shows good psychometric qualities (Vandeleur et al., 2003). Items are answered on multi-point scales or dichotomous scales (yes or no) and are summed. The total score ranges from 0 to 151, with a higher score indicating a higher relationship satisfaction. In this study, Cronbach's alpha was high ($\alpha = .88$).

Data Analysis Strategy

Preliminary analyzes were performed using IBM SPSS Version 27 software. We computed descriptive statistics (means and SDs) and intercorrelations among study variables. ANOVAs were performed for men and women separately to determine if there were significant differences regarding the relationship and sexual satisfaction between parents and non-parents (Objective 1). Subsequently, moderation analyzes were performed using the PROCESS macro for SPSS from Preacher and Hayes (2008) to examine, separately for women and men, whether the relation between relationship satisfaction and sexual satisfaction varied as a function of having a child or not (Objective 2). Since studies

have reported that sociodemographic variables can be correlated with our variables of interest (e.g., Sánchez-Fuentes et al., 2014; Tavakol et al., 2017; Twenge et al., 2003), bivariate correlations were performed on our sample to validate the need to control for any sociodemographic variables. Variables found to be related to the study's variables were included as covariates to control for their potential effects in the moderation analysis. This procedure used a bootstrapping method ($n = 5\,000$) to compute confidence intervals for direct and indirect effects (Preacher & Hayes, 2008). Effects are considered significant when the 95% confidence interval does not contain zero.

RESULTS

Bivariate correlations showed that parenthood was negatively associated with relationship satisfaction ($r = -.21, p = .002$) and the latter was positively associated with sexual satisfaction ($r = .23, p = .001$). Furthermore, parenthood was not associated with sexual satisfaction ($r = .07, p = .334$). Bivariate correlations between the sociodemographic variables and the variables

of interest indicated that higher age was associated with parenthood ($r = .19, p = .007$) and lower relationship satisfaction ($r = -.21, p = .002$). Higher family income was also related to parenthood ($r = .28, p = .001$) and lower relationship satisfaction ($r = -.15, p = .043$). Therefore, the present study controlled for the influence of age and family incomes in the analyses.

Table 1 displays the means and standard deviations for relationship and sexual satisfaction. The results of an ANOVA indicate a significant difference for relationship satisfaction between mothers and non-parent women, showing that mothers reported a lower relationship satisfaction compared to non-parent women. No significant difference was found between mothers and non-parent women for sexual satisfaction. Furthermore, results indicated no significant difference for relationship satisfaction and sexual satisfaction in fathers and non-parent men.

Moderation Model

The first model tested the moderating role of parenthood in the link between relationship satisfaction and sexual satisfaction in

TABLE 1. Descriptive Statistics for Relationship and Sexual Satisfaction

	All Sample		Mothers ($n = 67$)		Non-Parent Women ($n = 47$)		F	η^2	Fathers ($n = 46$)		Non-Parent Men ($n = 47$)		F	η^2
	M	SD	M	SD	M	SD			M	SD	M	SD		
RelSat	101.33	18.61	96.44	15.72	104.83	18.33	6.57**	.06	98.74	23.40	106.31	14.96	3.37	.03
SexSat	21.54	6.62	21.43	6.41	20.47	7.96	.47	.01	22.70	6.59	21.34	5.94	1.02	.01

Notes. RelSat = relationship satisfaction, SexSat = sexual satisfaction.

* $p < .05$, ** $p < .01$.

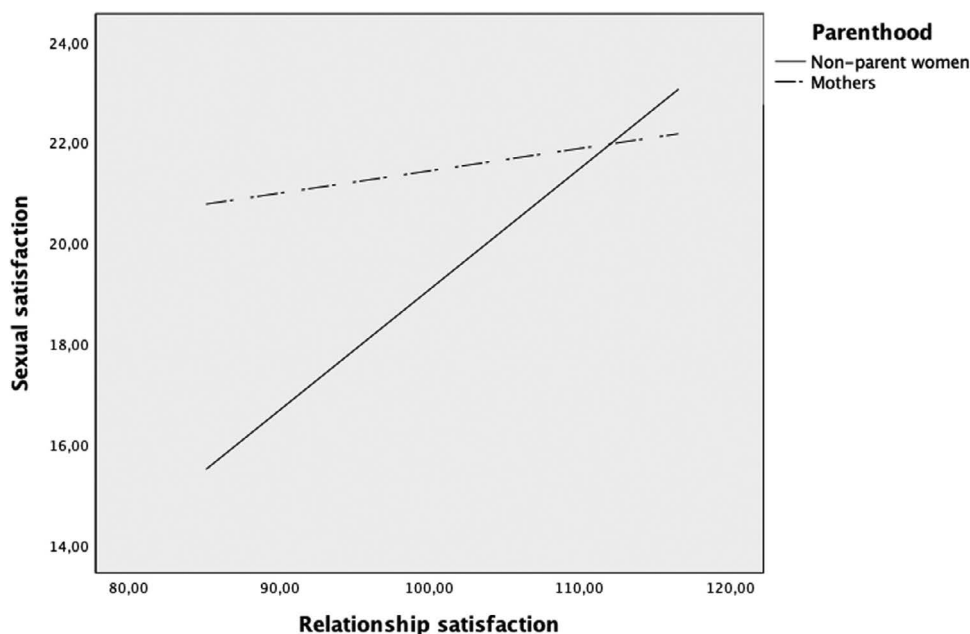


Figure 1. Moderation effect of parenthood in the association between relationship satisfaction and sexual satisfaction in women.

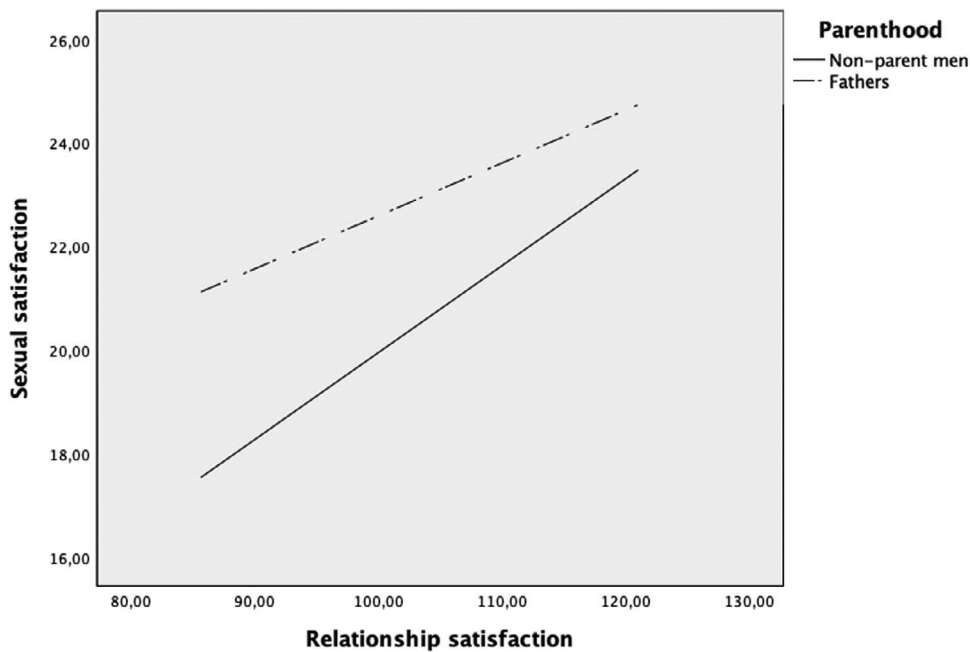


Figure 2. Moderation effect of parenthood in the association between relationship satisfaction and sexual satisfaction in men.

women $F(5,79) = 2.54, p = .035, R^2 = .14$. Results showed that relationship satisfaction ($b = .24, SE = .07, 95\%$ confidence interval [CI] = [.10, .38], $p = .001$) and parenthood status ($b = 21.95, SE = 9.98, 95\%$ CI = [2.07, 41.82], $p = .03$) are associated with sexual satisfaction. The interaction between relationship satisfaction and parenthood was found to be significant ($b = -.20, SE = .10, 95\%$ CI = [-.39, -.001], $p = .045$), accounting for a change of $R^2 = .05$. Results showed that relationship satisfaction is positively associated with sexual satisfaction for non-parent women ($b = .24, SE = .07, 95\%$ CI = [.10, .38], $p = .001$), but this association no longer holds for mothers ($b = .04, SE = .07, 95\%$ CI = [-.09, .18], $p = .50$).

A second regression model examined the moderating role of parenthood on the association between relationship satisfaction and sexual satisfaction in men $F(5,70) = 2.19, p = .065, R^2 = .14$. Results indicated that relationship satisfaction is associated with sexual satisfaction ($b = .17, SE = .08, 95\%$ CI = [.02, .32], $p = .03$), but the effect of parenthood ($b = 9.21, SE = 9.86, 95\%$ CI = [-10.45, 28.88], $p = .35$) and the effect of the interaction between parenthood and relationship satisfaction were not significant ($b = -.07, SE = .09, 95\%$ CI = [-.25, .12], $p = .48$).

DISCUSSION

The present study aimed to examine relationship and sexual satisfaction as a function of parenthood status and gender in adults consulting in sex therapy. The first objective was to compare the levels of relationship and sexual satisfaction in parent and non-parent patients for both men and women. The second objective was to examine the moderating role of parenthood on the relationship between relationship satisfaction and sexual satisfaction.

As hypothesized, mothers reported significantly lower levels of relationship satisfaction than non-parent women. These results

are in line with previous studies on parents (in transition to parenthood or not) from community samples (Keizer & Schenk, 2012; Meyer et al., 2016; Twenge et al., 2003; Urbano-Contreras et al., 2018) and suggest that this difference between mothers and non-parent women is also found in clinical population seeking sex therapy. However, this was not the case for men. This finding is not consistent with previous studies showing that fathers, in transition to parenthood or not, reported lower levels of relationship satisfaction compared to non-parent men in community samples (Keizer & Schenk, 2012; Lawrence et al., 2008; Meyer et al., 2016; Urbano-Contreras et al., 2018). This result suggests that this difference between fathers and non-parent men might not hold in a clinical sample of men consulting in sex therapy. Men who are not parents and who consult in sex therapy probably report low levels of relationship satisfaction, thus reducing the difference in the relationship satisfaction of fathers as compared to non-parent men seeking sex therapy. Our results support the postulate that women are more likely to report that their relationship satisfaction is affected by parenthood and that their relationship satisfaction is more impacted by parenthood (Don & Mickelson, 2014; Urbano-Contreras et al., 2018). The results also highlight that relationship satisfaction in parents and non-parents might differ in specific populations, especially in men versus women, and in clinical versus community populations.

Contrary to our hypothesis, parents consulting in sex therapy reported similar levels of sexual satisfaction to those of non-parent patients. Previous studies were centred on parents in the transition to parenthood and reported contradictory results, yielding that parents report lower sexual satisfaction than non-parents (e.g., Schwenck et al., 2020), report similar levels of sexual satisfaction than non-parents (Witting et al., 2008), or that only some parents experience a decrease in sexual satisfaction (Rosen et al., 2021). Participants in this study were consulting in

sex therapy and, therefore, probably experiencing higher sexual difficulties than individuals from the community, which may have contributed to a lack of differences in sexual satisfaction between parents and non-parents.

Results also showed parenthood and interaction between parenthood and relationship satisfaction were associated with sexual satisfaction only for women, confirming our second hypothesis. For men, data showed that parenthood has no effect on the association between relationship satisfaction and sexual satisfaction. More precisely, higher relationship satisfaction was related to higher sexual satisfaction regardless of parenthood status (being a father or not). In women, parenthood changed the relationship between relationship satisfaction and sexual satisfaction. Specifically, in mothers, the association between relationship and sexual satisfaction was no longer significant, in opposition to our hypothesis stating that the association between these variables would be stronger for parents. These results suggest that the sexual satisfaction of mothers is less affected by their relationship satisfaction. This result could be explained by the possible influence of other factors on the sexual satisfaction of mothers, including parental stress (Leavitt et al., 2017) and the division of labour (Maas et al., 2018).

Taken together, these results suggest that, even in a clinical sample, mothers have lower levels of relationship satisfaction, but these levels do not affect their sexual satisfaction, unlike non-parent women and parent and non-parent men. These results can be explained by a possible redefinition of sexuality (Lévesque et al., 2021; Stavdal et al., 2019) occurring in mothers (e.g., different expectations towards sexuality with their partner). In fact, several factors are associated with sexual changes in parenthood and could foster a redefinition of mother's sexuality and sexual satisfaction. Apart from factors related to biological changes or directly to parenthood (e.g., lack of sleep and fatigue), changes in the relationship might also influence the sexual satisfaction of parents, including less time for intimacy and the loss of individuality/couple life (Ahlborg et al., 2005; Drozdowskyj et al., 2019; Lévesque et al., 2020; Maas et al., 2018; Montemurro & Siefken, 2012; Olsson et al., 2005; Woolhouse et al., 2012). Therefore, it is possible that these factors related to parenthood are preponderant in mothers, thus changing their expectations about sexuality and sexual satisfaction within their relation context as parents and decreasing the association between relationship satisfaction and sexual satisfaction. Furthermore, mothers' sexual satisfaction is influenced by factors related to their reality as mothers (e.g., increased parental duties, etc.) leaving less room for the influence of relational satisfaction. For example, mothers typically report being overload in their parental role compared to fathers (Maas et al., 2018) and mothers' dissatisfaction with division of labour is related to lower satisfaction with their sex life (Maas et al., 2018). Other moderators might also alter the relationship between relationship satisfaction and sexual satisfaction in mothers, including intimacy (Nezhad & Goodarzi, 2011).

LIMITATIONS AND FUTURE RESEARCH

It's important to interpret the present results in light of their limitations. First, the sample was relatively small and came from a

clinical population, implying that these participants were consulting because of existing sexual or relationship difficulties, which is a strength of the study but also limits generalizations of the findings to the general population. Moreover, since the sample of this study was composed of patients seeking sex therapy, links with previous studies targeting non-clinical samples should be considered with caution since the distinctions could, at least in part, be explained by sampling differences. Subsequently, a cross-sectional design using self-reported questionnaires limits the interpretation of the results. Further study should also examine the effects of children's age and number of children on the studied variables to provide a richer and more in-depth analysis of the impact of parenthood on sexual and relationship satisfaction. Therefore, future research is needed to replicate these findings, using larger and more diverse samples (clinical and non-clinical, representative of cultural and sexual diversity, etc.) and examining the role of complementary variables (e.g., parental stress and coparenting) to better understand parents' and non-parents' relationship and sexual satisfaction.

CONCLUSION

This study highlights that mothers seeking sex therapy reported lower levels of relationship satisfaction compared to non-parent women, whereas no difference was found between mothers and non-parent women regarding their sexual satisfaction. Moreover, more relationship satisfaction was associated with increased sexual satisfaction in men (both fathers and non-parent men) and in non-parent women, whereas this association was not significant in mothers. Implications of the results of this study are numerous. First, studies examining outcomes associated with relationships would benefit from considering the effect of parenthood status. Second, parenthood seems to affect outcomes as a function of gender, as evidenced by the difference between mothers and fathers. Clinicians will often work on the couple's relationship to improve sexual satisfaction, but in light of this study, sex therapists are invited to assess the etiology of mothers' sexual dissatisfaction carefully to provide well-tailored interventions.

REFERENCES

- Ahlborg, T., Dahlöf, L. G., & Hallberg, L. R. M. (2005). Quality of the intimate and sexual relationship in first-time parents six months after delivery. *The Journal of Sex Research*, 42(2), 167–174. <https://doi.org/10.1080/00224490509552270>. Medline:16123847
- Ahlborg, T., Rudeblad, K., Linnér, S., & Linton, S. (2008). Sensual and sexual marital contentment in parents of small children—A follow-up study when the first child is four years old. *The Journal of Sex Research*, 45(3), 295–304. <https://doi.org/10.1080/00224490802204423>. Medline:18686158
- Bäckström, C., Kåreholt, I., Thorstensson, S., Golsäter, M., & Mårtensson, L. B. (2018). Quality of couple relationship among first-time mothers and partners during pregnancy and the first six months of parenthood. *Sexual & Reproductive Healthcare*,

- 17, 56–64. <https://doi.org/10.1016/j.srhc.2018.07.001>. Medline:30193721
- Baillargeon, J., Dubois, G., & Marineau, R. (1986). Traduction française de l'échelle d'ajustement dyadique. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement*, 18(1), 25–34. <https://doi.org/10.1037/h0079949>
- Behzadipour, S., Daneshpour, M., Damreihani, N., & Aflatooni, L. (2021). Sexual satisfaction and intimacy during pregnancy and after childbirth. *Sexologies*, 30(2), e111–e117. <https://doi.org/10.1016/j.sexol.2020.10.002>
- Bernier, A., Jarry-Boileau, V., & Lacharité, C. (2014). Marital satisfaction and quality of father–child interactions: The moderating role of child gender. *The Journal of Genetic Psychology: Research and Theory on Human Development*, 175(2), 105–117. <https://doi.org/10.1080/00221325.2013.799059>. Medline:24796158
- Bonds, D. D., & Gondoli, D. M. (2007). Examining the process by which marital adjustment affects maternal warmth: The role of coparenting support as a mediator. *Journal of Family Psychology*, 21(2), 288–296. <https://doi.org/10.1037/0893-3200.21.2.288>. Medline:17605551
- Byers, E. S. (2005). Relationship satisfaction and sexual satisfaction: A longitudinal study of individuals in long-term relationships. *The Journal of Sex Research*, 42(2), 113–118. <https://doi.org/10.1080/00224490509552264>. Medline:16123841
- Cao, H., Zhou, N., Fine, M. A., Li, X., & Fang, X. (2019). Sexual satisfaction and marital satisfaction during the early years of chinese marriage: A three-wave, cross-lagged, actor-partner interdependence model. *Journal of Sex Research*, 56(3), 391–407. <https://doi.org/10.1080/00224499.2018.1463503>. Medline:29746180
- Davison, S. L., Bell, R. J., LaChina, M., Holden, S. L., & Davis, S. R. (2009). The relationship between self-reported sexual satisfaction and general well-being in women. *The Journal of Sexual Medicine*, 6(10), 2690–2697. <https://doi.org/10.1111/j.1743-6109.2009.01406.x>. Medline:19817981
- de Pierrepont, C., Polomeno, V., Bouchard, L., & Reissing, E. (2016). Que savons-nous sur la sexualité périnatale? Un examen de la portée sur la sexopérinatalité—Partie 2. *Journal de Gynécologie Obstétrique et Biologie de la Reproduction*, 45(8), 809–820. <https://doi.org/10.1016/j.jgyn.2015.11.001>. Medline:26989006
- Dixon, M., Booth, N., & Powell, R. (2000). Sex and relationships following childbirth: A first report from general practice of 131 couples. *The British Journal of General Practice: The Journal of the Royal College of General Practitioners*, 50(452), 223–224.
- Don, B. P., & Mickelson, K. D. (2014). Relationship satisfaction trajectories across the transition to parenthood among low-risk parents. *Journal of Marriage and Family*, 76(3), 677–692. <https://doi.org/10.1111/jomf.12111>
- Doss, B. D., Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2009). The effect of the transition to parenthood on relationship quality: An 8-year prospective study. *Journal of Personality and Social Psychology*, 96(3), 601–619. <https://doi.org/10.1037/a0013969>. Medline:19254107
- Drozdzowskyj, E. S., Castro, E. G., López, E. T., Taland, I. B., & Actis, C. C. (2019). Factors influencing couples' sexuality in the puerperium: A systematic review. *Sexual Medicine Reviews*, 8(1), 38–47. <https://doi.org/10.1016/j.sxmr.2019.07.002>. Medline:31447412
- Fallah, M., Ghare, M., Ozgoli, G., Mehrabi, Y., Farnam, F., & Bakhtyari, M. (2018). Correlation of women's marital and sexual satisfaction in different family life cycle stages in Khorram Abad, Iran. *International Journal of Women's Health and Reproduction Sciences*, 6(4), 432–437. <https://doi.org/10.15296/ijwhr.2018.72>
- Farr, R. H., Forssell, S. L., & Patterson, C. J. (2010). Gay, lesbian, and heterosexual adoptive parents: Couple and relationship issues. *Journal of GLBT Family Studies*, 6(2), 199–213. <https://doi.org/10.1080/15504281003705436>
- Farr, R. H., Simon, K. A., & Bruun, S. T. (2017). LGBTQ relationships: Families of origin, same-sex couples, and parenting. In *Family dynamics and romantic relationships in a changing society* (pp. 110–135). Information Science Reference/IGI Global. <https://doi.org/10.4018/978-1-5225-2404-5.ch006>
- Flynn, K. E., Lin, L., Watkins Bruner, D., Cyranowski, J. M., Hahn, E. A., Jeffery, D. D., Barsky Reese, J., Reeve, B. B., Shelby, R. A., & Weinfurt, K. P. (2016). Sexual satisfaction and the importance of sexual health to quality of life throughout the life course of U.S. adults. *The Journal of Sexual Medicine*, 13(11), 1642–1650. <https://doi.org/10.1016/j.jsxm.2016.08.011>. Medline:27671968
- Fox, B. (2009). A new life and changed relationships. In *When couples become parents* (pp. 249–284). University of Toronto Press. <http://www.jstor.org.proxy.bibliotheques.uqam.ca/stable/10.3138/9781442697515.12>
- Fuller-Iglesias, H. R. (2015). Social ties and psychological well-being in late life: The mediating role of relationship satisfaction. *Aging & Mental Health*, 19(12), 1103–1112. <https://doi.org/10.1080/13607863.2014.1003285>. Medline:25621882
- Gorchoff, S. M., John, O. P., & Helson, R. (2008). Contextualizing change in marital satisfaction during middle age: An 18-year longitudinal study. *Psychological Science*, 19(11), 1194–1200. <https://doi.org/10.1111/j.1467-9280.2008.02222.x>. Medline:19076493
- Hansson, M., & Ahlberg, T. (2012). Quality of the intimate and sexual relationship in first-time parents—A longitudinal study. *Sexual & Reproductive Healthcare*, 3(1), 21–29. <https://doi.org/10.1016/j.srhc.2011.10.002>. Medline:22325798
- Hirschberger, G., Srivastava, S., Marsh, P., Cowan, C. P., & Cowan, P. A. (2009). Attachment, marital satisfaction, and divorce during the first fifteen years of parenthood. *Personal Relationships*, 16(3), 401–420. <https://doi.org/10.1111/j.1475-6811.2009.01230.x>. Medline:21430791
- Huebner, D. M., Mandic, C. G., Mackaronis, J. E., Beougher, S. C., & Hoff, C. C. (2012). The impact of parenting on gay

- male couples' relationships, sexuality, and HIV risk. *Couple and Family Psychology: Research and Practice*, 1(2), 106–119. <https://doi.org/10.1037/a0028687>. Medline:25674355
- Huss, B., & Pollmann-Schult, M. (2020). Relationship satisfaction across the transition to parenthood: The impact of conflict behavior. *Journal of Family Issues*, 41(3), 383–411. <https://doi.org/10.1177/0192513x19876084>
- Keizer, R., & Schenk, N. (2012). Becoming a parent and relationship satisfaction: A longitudinal dyadic perspective. *Journal of Marriage and Family*, 74(4), 759–773. <https://doi.org/10.1111/j.1741-3737.2012.00991.x>
- Khajehei, M. (2016). Parenting challenges and parents' intimate relationships. *Journal of Human Behavior in the Social Environment*, 26(5), 447–451. <https://doi.org/10.1080/10911359.2015.1083509>
- Kluwer, E. S. (2010). From partnership to parenthood: A review of marital change across the transition to parenthood. *Journal of Family Theory & Review*, 2(2), 105–125. <https://doi.org/10.1111/j.1756-2589.2010.00045.x>
- Lawrence, E., Rothman, A. D., Cobb, R. J., Rothman, M. T., & Bradbury, T. N. (2008). Marital satisfaction across the transition to parenthood. *Journal of Family Psychology*, 22(1), 41–50. <https://doi.org/10.1037/0893-3200.22.1.41>. Medline:18266531
- Lawrance, K.-A., & Byers, E. S. (1995). Sexual satisfaction in long-term heterosexual relationships: The interpersonal exchange model of sexual satisfaction. *Personal Relationships*, 2(4), 267–285. <https://doi.org/10.1111/j.1475-6811.1995.tb00092.x>
- Leavitt, C., McDaniel, B., Maas, M., & Feinberg, M. (2017). Parenting stress and sexual satisfaction among first-time parents: A dyadic approach. *Sex Roles*, 76(5–6), 346–355. <https://doi.org/10.1007/s11199-016-0623-0>. Medline:29479133
- Lévesque, S., Bisson, V., Charton, L., & Fernet, M. (2020). Parenting and relational well-being during the transition to parenthood: Challenges for first-time parents. *Journal of Child and Family Studies*, 29(7), 1938–1956. <https://doi.org/10.1007/s10826-020-01727-z>
- Lévesque, S., Bisson, V., Fernet, M., & Charton, L. (2021). A study of the transition to parenthood: New parents' perspectives on their sexual intimacy during the perinatal period. *Sexual and Relationship Therapy*, 26(2–3), 238–255. <https://doi.org/10.1080/14681994.2019.1675870>
- Maas, M. K., McDaniel, B. T., Feinberg, M. E., & Jones, D. E. (2018). Division of labor and multiple domains of sexual satisfaction among first-time parents. *Journal of Family Issues*, 39(1), 104–127. <https://doi.org/10.1177/0192513x15604343>
- Mark, K. P., Herbenick, D., Fortenberry, J. D., Sanders, S., & Reece, M. A. (2014). Psychometric comparison of three scales and a single-item measure to assess sexual satisfaction. *Journal of Sex Research*, 51(2), 159–169. Epub 2013 Oct 10. <https://doi.org/10.1080/00224499.2013.816261>. Medline:24112135
- Meyer, D., Robinson, B., Cohn, A., Gildenblatt, L., & Barkley, S. (2016). The possible trajectory of relationship satisfaction across the longevity of a romantic partnership: Is there a golden age of parenting? *The Family Journal*, 24(4), 344–350. <https://doi.org/10.1177/1066480716670141>
- Mitnick, D. M., Heyman, R. E., & Smith Slep, A. M. (2009). Changes in relationship satisfaction across the transition to parenthood: A meta-analysis. *Journal of Family Psychology*, 23(6), 848–852. <https://doi.org/10.1037/a0017004>. Medline:20001143
- Montemurro, B., & Siefken, J. M. (2012). MILFS and matrons: Images and realities of mothers' sexuality. *Sexuality & Culture*, 16(4), 366–388. <https://doi.org/10.1007/s12119-012-9129-2>
- Nelson, S. K., Kushlev, K., English, T., Dunn, E. W., & Lyubomirsky, S. (2013). In defense of parenthood: Children are associated with more joy than misery. *Psychological Science*, 24(1), 3–10. <https://doi.org/10.1177/0956797612447798>. Medline:23201970
- Nezhad, M. Z., & Goodarzi, A. M. (2011). Sexuality, intimacy, and marital satisfaction in iranian first-time parents. *Journal of Sex & Marital Therapy*, 37(2), 77–88. <https://doi.org/10.1080/0092623x.2011.547336>. Medline:21400332
- Nyström, K., & Ohrling, K. (2004). Parenthood experiences during the child's first year: Literature review. *Journal of Advanced Nursing*, 46(3), 319–330. <https://doi.org/10.1111/j.1365-2648.2004.02991.x>. Medline:15066113
- Olsson, A., Lundqvist, M., Faxelid, E., & Nissen, E. (2005). Women's thoughts about sexual life after childbirth: Focus group discussions with women after childbirth. *Scandinavian Journal of Caring Sciences*, 19(4), 381–387. <https://doi.org/10.1111/j.1471-6712.2005.00357.x>. Medline:16324063
- Preacher, K. J., & Hayes, A. F. (2008). Contemporary approaches to assessing mediation in communication research. In A. F. Hayes, M. D. Slater, & L. B. Snyder (Eds.), *The Sage sourcebook of advanced data analysis methods for communication research* (pp. 13–54). Sage Publications, Inc. <https://doi.org/10.4135/9781452272054.n2>
- Rosander, M., Berlin, A., Forslund Frykedal, K., & Barimani, M. (2021). Maternal depression symptoms during the first 21 months after giving birth. *Scandinavian Journal of Public Health*, 49(6), 606–615. <https://doi.org/10.1177/1403494820977969>. Medline:33308010
- Rosen, N. O., Dawson, S. J., Leonhardt, N. D., Vannier, S. A., & Impett, E. A. (2021). Trajectories of sexual well-being among couples in the transition to parenthood. *Journal of Family Psychology*, 35(4), 523–533. <https://doi.org/10.1037/fam0000689>. Medline:32915002
- Rosen, R. C., & Bachmann, G. A. (2008). Sexual well-being, happiness, and satisfaction, in women: The case for a new conceptual paradigm. *Journal of Sex & Marital Therapy*, 34(4), 291–297. <https://doi.org/10.1080/00926230802096234>. Medline:18576229
- Sánchez-Fuentes, M. D. M., Santos-Iglesias, P., & Sierra, J. C. (2014). A systematic review of sexual satisfaction. *International Journal of Clinical and Health Psychology*, 14(1), 67–75. [https://doi.org/10.1016/s1697-2600\(14\)70038-9](https://doi.org/10.1016/s1697-2600(14)70038-9)

- Schwartz, P., & Young, L. (2009). Sexual satisfaction in committed relationships. *Sexuality Research & Social Policy*, 6(1), 1–17. <https://doi.org/10.1525/srsp.2009.6.1.1>
- Schwenck, G. C., Dawson, S. J., Muise, A., & Rosen, N. O. (2020). A comparison of the sexual well-being of new parents with community couples. *The Journal of Sexual Medicine*, 17(11), 2156–2167. <https://doi.org/10.1016/j.jsxm.2020.08.011>. Medline:32943374
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family*, 38(1), 15–28. <https://doi.org/10.2307/350547>
- Sprecher, S. (2002). Sexual satisfaction in premarital relationships: Associations with satisfaction, love, commitment, and stability. *Journal of Sex Research*, 39(3), 190–196. <https://doi.org/10.1080/00224490209552141>. Medline:12476266
- Stavdal, M. N., Skjævestad, M. L. L., & Dahl, B. (2019). First-time parents' experiences of proximity and intimacy after childbirth—A qualitative study. *Sexual & Reproductive Healthcare*, 20, 66–71. <https://doi.org/10.1016/j.srhc.2019.03.003>. Medline:31084821
- Tavakol, Z., Nasrabadi, A. N., Moghadam, Z. B., Salehiniya, H., & Rezaei, E. (2017). A review of the factors associated with marital satisfaction. *Galen Medical Journal*, 6(3), 197–207. <https://doi.org/10.22086/gmj.v0i0.641>
- Trillingsgaard, T., Baucom, K. J. W., & Heyman, R. E. (2014). Predictors of change in relationship satisfaction during the transition to parenthood. *Family Relations*, 63(5), 667–679. <https://doi.org/10.1111/fare.12089>
- Twenge, J. M., Campbell, W. K., & Foster, C. A. (2003). Parenthood and marital satisfaction: A meta-analytic review. *Journal of Marriage and Family*, 65(3), 574–583. <https://doi.org/10.1111/j.1741-3737.2003.00574.x>
- Umberson, D., Pudrovska, T., & Reczek, C. (2010). Parenthood, childlessness, and well-being: A life course perspective. *Journal of Marriage and Family*, 72(3), 612–629. <https://doi.org/10.1111/j.1741-3737.2010.00721.x>. Medline:21869847
- Urbano-Contreras, A., Martínez-González, R.-A., & Iglesias-García, M.-T. (2018). Parenthood as a determining factor of satisfaction in couple relationships. *Journal of Child and Family Studies*, 27(5), 1492–1501. <https://doi.org/10.1007/s10826-017-0990-3>
- Vandeleur, C. L., Fenton, B. T., Ferrero, F., & Preisig, M. (2003). Construct validity of the french version of the dyadic adjustment scale. *Swiss Journal of Psychology*, 62(3), 167–175. <https://doi.org/10.1024//1421-0185.62.3.167>
- Vowels, L. M., & Mark, K. P. (2020). Relationship and sexual satisfaction: A longitudinal actor-partner interdependence model approach. *Sexual and Relationship Therapy*, 35(1), 46–59. <https://doi.org/10.1080/14681994.2018.1441991>
- Whiteman, S. D., McHale, S. M., & Crouter, A. C. (2007). Longitudinal changes in marital relationships: The role of offspring's pubertal development. *Journal of Marriage and Family*, 69(4), 1005–1020. <https://doi.org/10.1111/j.1741-3737.2007.00427.x>
- Witting, K., Santtila, P., Alanko, K., Harlaar, N., Jern, P., Johansson, A., Von Der Pahlen, B., Varjonen, M., Ålgars, M., & Sandnabba, N. K. (2008). Female sexual function and its associations with number of children, pregnancy, and relationship satisfaction. *Journal of Sex & Marital Therapy*, 34(2), 89–106. <https://doi.org/10.1080/00926230701636163>. Medline:18224545
- Woolhouse, H., McDonald, E., & Brown, S. (2012). Women's experiences of sex and intimacy after childbirth: Making the adjustment to motherhood. *Journal of Psychosomatic Obstetrics & Gynecology*, 33(4), 185–190. <https://doi.org/10.3109/0167482x.2012.720314>. Medline:22973871