



UvA-DARE (Digital Academic Repository)

Attachment avoidance and parenthood desires in gay men and lesbians and their heterosexual counterparts

Shenkman, G.; Bos, H.; Kogan, S.

DOI

[10.1080/02646838.2019.1578872](https://doi.org/10.1080/02646838.2019.1578872)

Publication date

2019

Document Version

Final published version

Published in

Journal of Reproductive and Infant Psychology

License

Article 25fa Dutch Copyright Act (<https://www.openaccess.nl/en/policies/open-access-in-dutch-copyright-law-taverne-amendment>)

[Link to publication](#)

Citation for published version (APA):

Shenkman, G., Bos, H., & Kogan, S. (2019). Attachment avoidance and parenthood desires in gay men and lesbians and their heterosexual counterparts. *Journal of Reproductive and Infant Psychology*, 37(4), 344-357. <https://doi.org/10.1080/02646838.2019.1578872>

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

UvA-DARE is a service provided by the library of the University of Amsterdam (<https://dare.uva.nl>)



Attachment avoidance and parenthood desires in gay men and lesbians and their heterosexual counterparts

Geva Shenkman ^a, Henny Bos^b and Shir Kogan^a

^aSchool of Psychology, Interdisciplinary Center (IDC), Herzliya, Israel; ^bResearch Institute of Child Development and Education (CDE), Faculty of Social and Behavioral Sciences, University of Amsterdam, Amsterdam, the Netherlands

ABSTRACT

Objective: We explored the desire to be a parent, attachment avoidance and their associations in a sample of gay men and lesbians and their heterosexual counterparts.

Background: Previous research suggested a link between minority stress and higher attachment avoidance. However, the association between attachment avoidance and parenthood desires as a function of sexual orientation was not studied.

Methods: The sample was composed of 883 community-dwelling participants (51.1% women, 30.57% identified as gay men and 14.15% as lesbians) that were recruited through convenience sampling.

Results: Gay men and lesbians reported less desire to be parents than their heterosexual counterparts and higher attachment avoidance. However, the association between attachment avoidance and less desire for parenthood was moderated by sexual orientation, such that the correlation between attachment avoidance and lesser desire for parenthood was only found for heterosexual men and women.

Conclusion: These findings pinpoint the potential vulnerability of gay men and lesbians to develop greater attachment avoidance and the impact of sexual orientation on the association between attachment avoidance and the desire to be a parent. The moderation effect is discussed in terms of the specific reproductive alternatives available to gay men and lesbians vs. the heterosexual population.

ARTICLE HISTORY

Received 25 September 2018
Accepted 29 January 2019

KEYWORDS

Parenthood desires;
attachment avoidance;
sexual orientation; gay men;
lesbian women

Introduction

The family structure has dramatically changed as a result of shifts in societal attitudes and advances in technology such that more gay men and lesbians (GL) are becoming parents (Blake et al., 2017; Carone, Baiocco, & Lingiardi, 2017; Goldberg, 2010). Although parenthood in GL has attracted growing research attention in recent years at diverse cultures (e.g. Baiocco, Carone, Ioverno, & Lingiardi, 2018; Carone et al., 2018; Carone, Lingiardi, Chirumbolo, & Baiocco, 2018; Carneiro, Tasker, Salinas-Quiroz, Leal, & Costa, 2017; Patterson & Riskind, 2010; Rubio et al., 2017; Shenkman & Shmotkin, 2014), the

association between attachment styles and the desire to be a parent as a function of sexual orientation has not been explored.

The sociocultural context of Israel makes it a particularly interesting arena to explore issues of parenthood desires and attachment avoidance (the tendency to rely on avoidant strategies to minimise attachment needs due to expectations of rebuff or rejection), as Israeli society takes contradictory stances on same-sex parenthood. On the one hand, childbearing and parenting are valued more highly than in many other Western nations and consecrates parenthood as the chief path to social acceptance (Shenkman & Shmotkin, 2014). On the other hand, Israel imposes multiple legal hardships on gay men who wish to become parents. For example, surrogacy services are not legal for same-sex couples in Israel although they are legal for heterosexual couples, and their adoption opportunities are extremely restricted. This dissonance regarding parenthood and homosexuality in an era characterised by a growing number of same-sex couples who become parents makes it even more crucial to better understand the possible predictors of parenthood desires among GL in comparison to their heterosexual counterparts.

Most people become parents and consider parenthood to be necessary for personal fulfillment (Gallup, Inc, 1997). GL individuals, however, are much less likely than their heterosexual counterparts to adhere to this belief (Romero, Rosky, Badgett, & Gates, 2008). Similarly, GL have been found to display less of a desire to become parents than heterosexual men and women (Gates, Badgett, Macomber, & Chambers, 2007).

It was suggested that the lesser desire for parenthood in GL reflects an internalisation of the negative social stigma surrounding family formation outside of heterosexual marriage (Baiocco & Laghi, 2013; Costa & Salinas-Quiroz, 2018; D’Emilio, 2002; Ioverno et al., 2018), alongside heterosexual couples facing more pressure to have children and conform to traditional gender roles in comparison to GL (Allen & Mendez, 2018). A lesser desire for parenthood was also linked to the awareness that GL may encounter numerous legal and social hurdles when attempting to become parents. These include restrictions on adoption (Blake et al., 2017; Patterson, 2009), refusals of service from reproductive health providers (Gurmankin, Caplan, & Braverman, 2005; Stenfelt, Armuand, Wånggren, Skoog Svanberg, & Sydsjö, 2018) and the financial hardship associated with surrogacy and adoption (Shenkman & Shmotkin, 2016). Although studies have examined the associations between the desire to become a parent and intentions, estimates of likelihood, age, subjective well-being and depression among GL (Costa & Bidell, 2017; Shenkman, 2012), no study has directly investigated the association between attachment styles and the desire to become a parent as a function of sexual orientation.

The current study fills this gap by exploring the association between attachment avoidance and the desire to be a parent among GL versus heterosexual men and women. It aims to contribute to a clearer understanding of the variables linked to the desire to be a parent among GL in today’s era of social and political change (greater legitimisation of same-sex marriage and same-sex parenting), which make research on parenthood desires and family formation among GL extremely important.

Attachment avoidance and sexual orientation

According to attachment theory, individuals' repeated experiences with their significant others as of infancy result in the formation of relatively stable patterns of hopes, needs, feelings and behaviours in interpersonal interactions (Hazan & Shaver, 1987), and have a continuing effect on the individual's interpsychic organisation (Mikulincer & Shaver, 2016). Attachment researchers categorise attachment into a secure attachment orientation and two insecure orientations known as attachment anxiety and attachment avoidance (Hazan & Shaver, 1994). Research has shown that secure attachment helps a person maintain emotional balance in the face of distress (Bowlby, 1973). By contrast, anxiously attached individuals tend to rely on emotionally based coping mechanisms that increase distress and reduce their ability to regulate emotions (Mikulincer & Shaver, 2016). Attachment avoidance results in a loss of trust in others during times of need and subsequent excessive self-reliance strategies in situations of deficiency (Bowlby, 1988; Mikulincer & Shaver, 2016).

Although adult attachment research was traditionally grounded on the assumption that attachment style is relatively stable, researchers have become interested in the notion of attachment instability and predictors of attachment style change in response to significant experiences with caregivers throughout the lifespan (e.g. Davila, Burge, & Hammen, 1997).

In the context of sexual orientation, it has been argued that parental negative reactions to an LGB (lesbian, gay and bisexual) child's coming-out process may alter his or her working models of attachment, leading to the adoption of a more vigilant and avoidant perspective on the world (Mohr & Fassinger, 2003; Mohr & Jackson, 2016). In addition, displays of minority stress (Meyer, 2003) specific to GL (e.g. rejection by peers and family members, discrimination, internalised homonegativity and being subjected to violence) may also lead to less reliance on significant others, who may be perceived as hostile and may lead to increased use of avoidant behaviours, which may affect relationship quality through greater avoidance of intimacy and interdependence (Landolt, Bartholomew, Saffrey, Oram, & Perlman, 2004; Wilson, Zeng, & Blackburn, 2011). It has been suggested that avoidant attachment may serve as a coping mechanism when faced with oppression and discrimination, because it often allows the person to maintain positive feelings of self and ignore the discriminatory event (Zakalik & Wei, 2006).

Scant empirical work on attachment styles has directly compared heterosexuals to GL. The findings have tended to reveal no differences in attachment styles between these populations (Kurdek, 2002; Ridge & Feeney, 1998). Given the recent literature on possible attachment style change, the theoretical assumptions of a link between attachment avoidance and oppression and discrimination, and the preliminary findings suggesting more insecure attachment among GL in comparison to heterosexual controls (Nematy & Oloomi, 2016), the current study expected there should be greater attachment avoidance among GL than in their heterosexual counterparts

Attachment avoidance and the desire to be a parent

Although attachment style among GL has been studied in the context of gay identity formation (Elizur & Mintzer, 2003), minority stress (Zakalik & Wei, 2006), relationship

quality (Mohr, Selterman, & Fassinger, 2013) and commitment (Kurdek, 2002), it has not been examined in the context of parenthood desires. Among heterosexual men and women, studies have shown that insecure attachment was related to less desire to have children among non-parents (e.g. Nathanson & Manohar, 2012; Scharf & Mayseless, 2011), and that high attachment avoidance was related to lesser parenthood desires (Cheng, Zhang, Sun, Jia, & Ta, 2015). Because individuals with high levels of attachment avoidance are characterised by a detached attitude towards others and usually find it difficult to provide supportive care to other adults as well as to children, it was suggested that they may exhibit less desire to become parents and may perceive child care as stressful and less satisfying (Rholes, Simpson, & Friedman, 2006).

The literature suggests that there is less desire for parenthood among GL than in heterosexual men and women (Riskind & Tornello, 2017). In light of the possible link between minority stress, the effects of discrimination and oppression and higher attachment avoidance (Mohr & Jackson, 2016), in addition to the association between attachment avoidance and lesser parenthood desires (Scharf & Mayseless, 2011), we also expected to find a moderating effect of sexual orientation on the association between attachment avoidance and parenthood desires, such that among GL there should be a stronger association between higher attachment avoidance and less of a desire for parenthood in comparison to heterosexual men and women.

Aim of the study and research hypotheses

The aim of this study was to compare parenthood desires, attachment avoidance and their association between a group of GL and a group of heterosexual men and women. Four hypotheses were formulated:

- (1) GL will report less of a desire to become parents in comparison to heterosexual men and women.
- (2) GL will report higher attachment avoidance in comparison to heterosexual men and women.
- (3) Higher attachment avoidance will be associated with a lesser desire to be a parent.
- (4) The association between attachment avoidance and parenthood desires will be moderated by sexual orientation; namely, it will be stronger among GL than in the heterosexual counterparts.

Method

Participants

The sample was composed of 883 individuals (51.1% women) ranging in age from 18 to 49 ($M_{\text{age}} = 28.30$, $SD_{\text{age}} = 4.80$). Almost 45% (44.7%, $n = 395$) of the total group self-reported to be predominantly or exclusively gay or lesbian. Slightly more than half (54.6%, $n = 482$) of the total sample did not have a partner; 61.3% ($n = 541$) had a college degree or higher. Most participants (88.3%, $n = 779$) lived in a city, and had a mean score of 3.32

($SD = 0.95$) on their self-rated economic status, indicating average income on a five-point scale ranging from 1, 'low economic status' to 5, 'high economic status'.

Preliminary analyses were conducted to identify potential covariates by examining sexual orientation differences in the demographic variables using chi-square tests (for gender, being in a relationship, educational level and place of residency) and univariate analyses (for age and self-rated economic status). The findings are presented in [Table 1](#). Among men there were more participants who reported to be predominantly or exclusively gay than those who reported to be heterosexual, and among women there were more heterosexual than predominantly or exclusively lesbian participants. This difference between men and women on sexual orientation was significant. Compared to the heterosexual participants, the group of gay and lesbian (GL) participants was significant older, were less likely to be in a partner relationship, lived more often in a city and fewer had a college degree or higher education (see [Table 1](#)). No significant difference was found between GL and heterosexual participants on their self-rated economic status.

Recruitment

The current study was conducted in Israel. GL and heterosexual participants were recruited via announcements on internet forums, social media and an online newspaper which published an article asking both GL and heterosexual individuals to participate voluntarily and anonymously in a survey dealing with psychological coping with hardships. The announcement also included a link to an online web survey (using the Qualtrics online platform, www.qualtrics.com) that was filled out by 1189 people.

Procedure

For the present study only childless individuals below the age of 50 (older age is no longer commonly considered of 'childbearing age', see for example Guo, Robakis, Miller,

Table 1. Participants' demographics.

	Heterosexual participants	Gay and lesbian participants	χ^2/F	p
Gender, n (%)				
Men	162 (33.2%)	270 (68.4%)	107.98	< .001
Women	326 (66.8%)	125 (31.6%)		
Age				
M	27.02	29.88	84.86	< .001
SD	03.30	05.81		
Currently in a relationship, n (%)				
No	251 (51.5%)	231 (58.5%)	4.24	.039
Yes	236 (48.5%)	164 (41.5%)		
Level of education, n (%)				
No college degree	169 (34.7%)	172 (43.5%)	7.19	.007
College degree or higher	318 (65.3%)	223 (56.5%)		
Place of residence, n (%)				
Not in a city	70 (14.4%)	33 (8.4%)	7.66	.006
City	417 (85.6%)	362 (91.6%)		
Economic status (1–5)				
M	3.34	3.28	0.91	.338
SD	0.89	1.00		

The tests for age and self-rated economic status compared the respective means of the groups. Economic status ranges from 1, 'low economic status' to 5, 'high economic status'.

& Butwick, 2018; Shenkman, 2012) who completed the questions on attachment avoidance and the desire to be a parent, and also identified themselves as predominantly or exclusively gay/lesbian or exclusively heterosexual were included in the analyses. Seventy-four percent of the 1189 people who filled in the online questionnaire met these inclusion criteria, which resulted in a total sample of 883. This study received ethical approval by the institutional review board at the Interdisciplinary Center (IDC).

Measures

Sexual orientation

Participants indicated their sexual orientation identities on a seven-point Kinsey scale (Kinsey, Pomeroy, & Martin, 1948) which ranged from 'exclusively heterosexual' (0) to 'exclusively homosexual/lesbian' (6). Individuals who self-reported to be exclusively homosexual (6 on the Kinsey scale) or predominantly homosexual (5 on the Kinsey scale) were identified as being GL. The heterosexual participants in the study were those who indicated they were exclusively heterosexual.

Desire to be a parent

To assess the desire for parenthood, participants answered the following question: 'If you are not a parent, please rank how strongly you want to become a parent'. Responses ranged from 1 (*not at all*) to 10 (*very much*). This question was previously used to assess parenthood desire (e.g. Shenkman, 2012).

Attachment avoidance

Attachment avoidance was assessed by a subscale of the Experiences in Close Relationships questionnaire (ECR; Brennan, Clark, & Shaver, 1998). Originally the ECR assessed experiences with recent romantic partners; however, researchers have broadened the ECR to 'close relationships' (Mikulincer & Shaver, 2016). In the current study, this version of the ECR indicated close relationships more broadly. The attachment avoidance scale consisted of 18 items (e.g. 'I don't feel comfortable opening up to other people in close relationships'). Participants rated the extent to which they agreed with each statement on a seven-point scale (1 = *not at all* to 7 = *very much*). The Cronbach alpha coefficient for attachment avoidance was .91. This instrument has been extensively used for research and clinical purposes worldwide (Mikulincer & Shaver, 2016).

Data analysis

Data analyses were conducted using SPSS 25. Univariate analyses of covariance (ANCOVAs) were performed to examine differences between the heterosexual and GL participants on attachment avoidance and the desire to be a parent. Partial Pearson *r* correlations were conducted to examine the association between attachment avoidance and the desire to be a parent. To investigate whether the association between an attachment avoidant orientation and the desire to be a parent differed between heterosexual and GL participants, a regression analysis was conducted using the PROCESS macro to test for a moderation effect for dichotomous moderators (model 1; Hayes,

2013). In this analysis the desire to be a parent was used as the dependent variable. In this case, a significant interaction term would suggest that the association between attachment avoidance and desire to be a parent differed between GL and heterosexual participants. The variables were mean-centred in order to avoid multicollinearity. In all the analyses mentioned above, gender, age, involvement in a relationship, education and place of residence were included as control variables since preliminary analyses revealed that for these demographics the differences between GL and heterosexual participants were significant (see Table 1).

Results

Desire to be a parent and attachment avoidance

The scores on the desire to be a parent question ranged from 1 to 10 for all participants, with an average of 7.71 ($SD = 2.59$). For attachment avoidance the scores for all participants ranged from 1.06 and 6.89 with an average score of 3.13 ($SD = 1.04$). Table 2 depicts the mean scores and standard deviations for the desire to be a parent and attachment avoidance separately for GL and heterosexual participants. ANCOVAs showed significant differences between GL and heterosexual participants on the desire to be a parent and attachment avoidance. The GL participants reported lesser desire to be a parent and had higher levels of attachment avoidance than the heterosexual participants (see Table 2). For the total sample, partial Pearson r correlations showed a significant association between desire to be a parent and attachment avoidance ($r = -0.16$, $df = 875$, $p < .001$). Overall, participants who had higher scores on attachment avoidance reported significantly lower scores on the desire to be a parent.

Sexual orientation as a moderator

Results from the PROCESS macro (Hayes, 2013) for the moderation analysis are shown in Table 3. The primary focus in the PROCESS moderation model is the coefficient for the product of the independent variable (i.e. attachment avoidance) and the moderator (i.e. sexual orientation; 1 = heterosexual and 2 = GL), while accounting for the identified covariates; i.e. gender, age, involvement in a relationship, education and place of residence. The results of the final hierarchical regression model in the PROCESS macro indicated a significant main effect for attachment avoidance ($B = -0.41$, $p < .001$) on the

Table 2. Univariate analyses of covariance for attachment avoidance and desire to become a parent comparing gay and lesbian and heterosexual participants.

	Heterosexual participants	Gay and lesbian participants	F	p
Attachment avoidance				
M	2.99	3.30	9.71	.011
SD	0.97	1.09		
Desire to become a parent				
M	8.11	7.22	7.41	.008
SD	2.27	2.87		

Note: Gender, age, currently in a relationship, level of education and place of residence were included in the analyses as control variables.

Table 3. Regression and follow-up analyses predicting the desire to be a parent.

	Coefficients	SE	<i>t</i>	<i>p</i>
Regression model				
Constant	8.98	0.59	15.33	< .001
Gender	0.34	0.18	1.83	.068
Age	-0.58	0.02	-2.87	.004
Currently in a relationship	0.02	0.17	0.12	.904
Level of education	0.23	0.19	1.17	.244
Place of residence	-0.23	0.27	-0.85	.398
Attachment avoidance	-0.41	-0.08	-4.91	< .001
Sexual orientation	-0.45	0.19	-2.35	.019
Attachment avoidance × sexual orientation	0.42	0.17	2.53	.012
Follow-up analyses (conditional effects)				
Heterosexual participants	-0.60	0.12	-5.10	< .001
GL participants	-0.18	0.12	-1.55	.123

desire to be a parent, such that high attachment avoidance was associated with a lower desire to be a parent. However, this effect was qualified by a significant attachment avoidance by sexual orientation interaction (R^2 change = .01, $p = .02$, $B = .42$, $p = .012$). For a significant interaction, PROCESS provides the conditional effects of the independent variable at each value of the moderation (i.e. ‘simple slopes’). As displayed in Table 3, these conditional effects indicated that the negative correlation between attachment avoidance and the desire to be a parent was only significant for heterosexual participants ($B = -.60$, $p < .001$) and not for the GL ($B = -0.18$, $p = .123$) participants in this study.

We have also run the moderation analysis mentioned above separately for men and women in order to better examine the role of gender in this moderation effect. Results revealed that for women, high attachment avoidance was associated with a lower desire to be a parent ($B = -.43$, $p < .001$) and that this effect was qualified by a significant attachment avoidance by sexual orientation interaction ($B = .61$, $p = .009$). As shown in Figure 1, the simple slope analyses indicated that the association of attachment avoidance with lower parenthood desires was only significant for heterosexual women

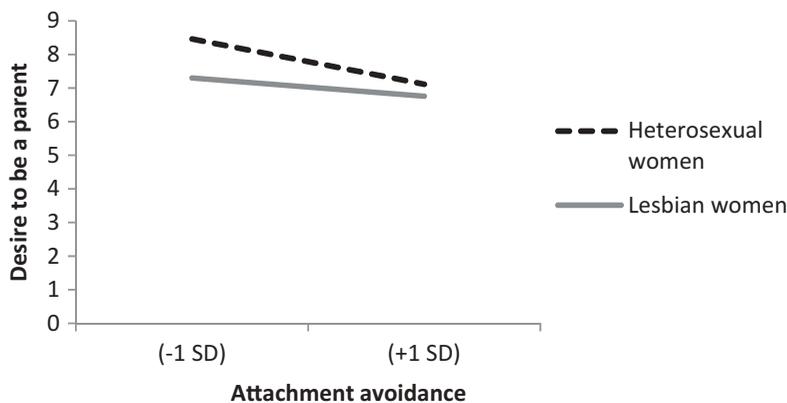


Figure 1. Moderation of sexual orientation on the association between attachment avoidance and desire to be a parent among lesbian and heterosexual women.

Note: Low attachment avoidance = mean - 1 SD. High attachment avoidance = mean + 1SD.

($B = -.60, p < .001$) and not for lesbian women ($B = .01, p = .964$). For men, results revealed that high attachment avoidance was associated with a lower desire to be a parent ($B = -.42, p = .001$); however, this effect was not qualified by a significant attachment avoidance by sexual orientation interaction ($B = .40, p = .152$), indicating that the association of attachment avoidance with lower parenthood desires did not differ between gay and heterosexual men.

We have also run a moderation analysis only for the heterosexual group examining whether gender moderated the association between attachment avoidance and parenthood desires. Results revealed that high attachment avoidance was associated with a lower desire to be a parent ($B = -.65, p < .001$), and this effect was not qualified by a significant attachment avoidance by gender interaction ($B = .08, p = .737$), indicating that the association of attachment avoidance with lower parenthood desires did not differ between heterosexual men and women.

Discussion

In line with predictions, gay men and lesbians (GL), in comparison to their heterosexual counterparts, reported less of a desire to become parents and higher attachment avoidance. As expected, there was an association between higher attachment avoidance and less of a desire to be a parent, and a moderation effect for sexual orientation. Further analyses revealed that the moderation of sexual orientation was evident only for women. However, contrary to expectations, attachment avoidance only correlated with a lesser desire for parenthood in heterosexual women, whereas no significant association was found for the lesbian participants.

The finding of less of a desire to become parents among GL in comparison to their heterosexual counterparts echoes previous patterns of results (Riskind & Patterson, 2010; Riskind & Tornello, 2017); however, our current results are the first in Israel to compare parenthood desires between a group of GL and a group of heterosexual counterparts. The lesser desire for parenthood in GL is usually accounted for by the internalisation of negative stigma and barriers to parenthood such as fertility treatments, adoption and surrogacy. Studies have reported less support from reproductive and legal agencies which may not be willing to work with prospective sexual minority parents (Goldberg, Gartrell, & Gates, 2014; Ioverno et al., 2018; Riskind, Patterson, & Nosek, 2013; Stenfelt et al., 2018).

Higher attachment avoidance in GL as shown here is consistent with recent preliminary findings indicating more insecure attachment among GL in comparison to heterosexual counterparts (Nematy & Oloomi, 2016). However, our results are the first to directly pinpoint the attachment avoidance vulnerability that may characterise gay men and lesbians. These findings may reflect the recent claims that working models of attachment can change in response to experiences with significant others throughout the lifespan (Davila et al., 1997) and the possible links between minority stress, discrimination and oppression and higher attachment avoidance (Mohr & Jackson, 2016). It was suggested that the adversities that GL people may endure due to their sexual orientation, such as harassment from peers and family, discrimination, bullying and rejection, may lead to increased adoption of avoidant behaviours and perceptions, which may eventually affect relationships through greater avoidance of intimacy and interdependence (Landolt et al., 2004).

The higher attachment avoidance among GL reported here contrasts with previous work that found no difference in attachment styles between GL and heterosexual counterparts (Kurdek, 2002; Ridge & Feeney, 1998). This suggests that there is a complex interplay between variables relating to stigma, family rejection, internal working models and cultural context, and that more research is needed in the relatively recent field of attachment processes and sexual orientation to delineate the effects of sexual orientation on attachment (Mohr & Jackson, 2016).

The association reported here between attachment avoidance and the lesser desire for parenthood in heterosexual men and women echoes previous findings showing that attachment avoidance was linked with a lesser parenting motivation in a sample of 228 heterosexual childless participants (Cheng et al., 2015). It also coheres with findings showing that in 106 heterosexual couples undergoing the transition to parenthood, attachment avoidance was negatively related to the desire to have children and that prenatal avoidance predicted the extent to which parenting was perceived as stressful 6 months after birth (Rholes et al., 2006).

The moderation effect of sexual orientation on the association between attachment avoidance and a lesser desire for parenthood reported here is the first to explore these variables in a sexual minority sample. However, contrary to the moderation hypothesis, there was no significant association between attachment avoidance and parenthood desires among the GL group. More specifically, and when focusing separately on each gender, the mentioned moderation effect was qualified only for women, indicating a significant association between higher attachment avoidance and less of a desire to be a parent for heterosexual women but not for lesbian women. This may suggest that sexual orientation does not increase the association between the two variables. Rather, for heterosexual women, becoming a parent usually involves some measure of dependency on another person, whereas lesbian women are less dependent on a partner when becoming mothers. This is because sperm donation for lesbians is becoming increasingly common and in many cases does not require being in a relationship. In Israel, for example, where the current study was conducted, lesbians frequently turn to sperm donation from sperm banks especially as there is financial coverage for insemination procedures and in-vitro fertilisation by health maintenance organizations (Birenbaum-Carmeli, 2016). When there is less dependency on a close other when becoming a parent, it may be less likely that features of attachment avoidance will contribute to parenting desires (Rholes et al., 2006). Thus, among lesbian women, other variables may explain the variance in parenthood desires, and more research is needed to further explore this intriguing area. For men, the lack of moderation effect for sexual orientation in the association between attachment avoidance and parenthood desires could be related to their inherent dependency in another person who will carry the baby when wishing to become parents, regardless of their sexual orientation.

Strengths and limitations

The current study has a number of strengths. First, to the best of our knowledge, this is the first examination of the association between attachment avoidance and the desire to be a parent in the context of sexual orientation. Second, the results showing attachment avoidance vulnerability among GL are novel, and support the relatively new literature on possible attachment style change during adulthood (Davila et al., 1997), especially in the

context of discrimination and oppression (Mohr & Jackson, 2016). A further strength of this study lies in the fact that it was conducted in Israel, where the sociocultural environment makes it an interesting context for studying GL, because Israeli society has a progressive legal system but also disapproves of homosexuality on religious grounds, which poses fundamental difficulties for GL who want to become parents (Shenkman, 2012; Shenkman & Shmotkin, 2010). These findings on the attachment orientation of childless Israeli GL and their desire to become parents contribute to the literature conducted in Europe and the USA, and thus broadens the multicultural perspective on parenthood desires, attachment styles and sexual orientation.

Certain limitations of this study should also be noted. First, the groups were not based on a random, or otherwise representative, sample. Second, the analyses relied solely on self-reports, thus incurring the risk of self-presentation biases. Third, the measure of the desire to become a parent consisted of only one item, which may pose reliability and validity problems. Fourth, including people who self-identified as predominantly or exclusively gay/lesbian in the same group reflects one strategy of categorising by sexual orientation, while other options are also optional and could affect the results. Fifth, given the correlational design of the study, causal links cannot be inferred. Sixth, the current study did not assess participants' recalling of their coming-out experience and responses from parents and peers, thus a link between higher attachment avoidance in GL people and negative responses or rejection by parents, peers or significant others after coming out could not be defined. Another limitation is the possibility that participants might have participated in the survey more than once, although that is very unlikely as we used the Qualtrics online platform, which implements cookie files to identify past users. Finally, while the uniqueness of Israeli society may be seen as one of the strengths of this study, it may also impose culture-bound restrictions on the generalisability of the results. Unfortunately, all these limitations reflect prevalent difficulties in investigating gay populations (e.g. McCormack, 2014).

Implications for practice

This study suggests that despite improvements in the social and political climate relating to gay rights, and despite significant improvements in fertility technologies, GL are still more likely to report lower parenting desires than their heterosexual counterparts. Reproductive health-care professionals should be alert to these tendencies and provide more education on alternate pathways to parenthood in sexual minorities.

The findings also indicated that GL were more likely to report an attachment avoidant style than their heterosexual counterparts. This vulnerability appears especially crucial to clinicians working with GL, as attachment avoidance has been linked to adverse mental health outcomes (Mikulincer & Shaver, 2016). To cope with the additional vulnerability of a population which is already more prone to mental health difficulties due to minority stress (Meyer, 2003) requires psychoeducation programmes to deal with the potential risks of rejection, discrimination and oppression on attachment styles. Psychotherapists who work with GL should pay closer attention to issues relating to attachment avoidance, such as difficulties with interdependency and minimising attachment needs due to expectations of rebuff or rejection. Researchers should further explore the unique paths in which sexual orientation is linked to attachment avoidance and how this relates to

parenthood desires and psychological well-being. The current study thus contributes to the growing body of international research exploring sexual orientation in the context of the psychology of family formation and reproduction in this era of social and legal changes for sexual minorities.

Disclosure statement

No potential conflict of interest was reported by the authors.

ORCID

Geva Shenkman  <http://orcid.org/0000-0002-5263-8888>

References

- Allen, S. H., & Mendez, S. N. (2018). Hegemonic heteronormativity: Toward a new era of queer family theory. *Journal of Family Theory & Review*, 10, 70–86.
- Baiocco, R., Carone, N., Ioverno, S., & Lingiardi, V. (2018). Same-sex and different-sex parent families in Italy: Is parents' sexual orientation associated with child health outcomes and parental dimensions? *Journal of Developmental & Behavioral Pediatrics*, 39, 555–563.
- Baiocco, R., & Laghi, F. (2013). Sexual orientation and the desires and intentions to become parents. *Journal of Family Studies*, 19, 90–98.
- Birenbaum-Carmeli, D. (2016). Thirty-five years of assisted reproductive technologies in Israel. *Reproductive Biomedicine & Society Online*, 2, 16–23.
- Blake, L., Carone, N., Raffanella, E., Slutsky, J., Ehrhardt, A. A., & Golombok, S. (2017). Gay fathers' motivations for and feelings about surrogacy as a path to parenthood. *Human Reproduction*, 32, 860–867.
- Bowlby, J. (1973). *Attachment and loss: Vol 2. Separation: Anxiety and anger*. New York, NY: Basic Books.
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- 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, NY: Guilford.
- Carneiro, F. A., Tasker, F., Salinas-Quiroz, F., Leal, I., & Costa, P. A. (2017). Are the fathers alright? A systematic and critical review of studies on gay and bisexual fatherhood. *Frontiers in Psychology*, 8, 1636.
- Carone, N., Baiocco, R., & Lingiardi, V. (2017). Single fathers by choice using surrogacy: Why men decide to have a child as a single parent. *Human Reproduction*, 32, 1871–1879.
- Carone, N., Baiocco, R., Manzi, D., Antonucci, C., Caricato, V., Pagliarulo, E., & Lingiardi, V. (2018). Surrogacy families headed by gay men: Relationships with surrogates and egg donors, fathers' decisions over disclosure and children's views on their surrogacy origins. *Human Reproduction*, 33, 248–257.
- Carone, N., Lingiardi, V., Chirumbolo, A., & Baiocco, R. (2018). Italian gay father families formed by surrogacy: Parenting, stigmatization, and children's psychological adjustment. *Developmental Psychology*, 54, 1904–1916.
- Cheng, G., Zhang, D., Sun, Y., Jia, Y., & Ta, N. (2015). Childless adults with higher secure attachment state have stronger parenting motivation. *Personality and Individual Differences*, 87, 39–44.
- Costa, P. A., & Bidell, M. (2017). Modern families: Parenting desire, intention, and experience among Portuguese lesbian, gay, and bisexual individuals. *Journal of Family Issues*, 38, 500–521.

- Costa, P. A., & Salinas-Quiroz, F. (2018). A Comparative study of attitudes toward same-gender parenting and gay and lesbian rights in Portugal and in Mexico. *Journal of Homosexuality*, 1–18. doi:10.1080/00918369.2018.1519303
- D'Emilio, J. (2002). *The world turned: Essays on gay history, politics, and culture*. Durham, NC: Duke University Press.
- Davila, J., Burge, D., & Hammen, C. (1997). Why does attachment style change? *Journal of Personality and Social Psychology*, 73, 826–838.
- Elizur, Y., & Mintzer, A. (2003). Gay males' intimate relationship quality: The roles of attachment security, gay identity, social support, and income. *Personal Relationships*, 10, 411–435.
- Gallup, I. (1997). *1997 global study of family values*. Washington, DC: Gallup, Inc.
- Gates, G. J., Badgett, M. L., Macomber, J. E., & Chambers, K. (2007). *Adoption and foster care by gay and lesbian parents in the United States*. Washington, DC: The Urban Institute.
- Goldberg, A. E. (2010). *Lesbian and gay parents and their children: Research on the family life cycle*. Washington, DC: American Psychological Association. doi:10.1037/12055-000
- Goldberg, A. E., Gartrell, N. K., & Gates, G. J. (2014). *Research report on LGB-parent families*. Los Angeles, CA: Williams Institute. Retrieved from <https://williamsinstitute.law.ucla.edu/research/parenting/lgbparent-families-jul-2014/>
- Guo, N., Robakis, T., Miller, C., & Butwick, A. (2018). Prevalence of depression among women of reproductive age in the United States. *Obstetrics & Gynecology*, 131, 671–679.
- Gurmankin, A. D., Caplan, A. L., & Braverman, A. M. (2005). Screening practices and beliefs of assisted reproductive technology programs. *Fertility and Sterility*, 83, 61–67.
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford.
- Hazan, C., & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.
- Hazan, C., & Shaver, P. R. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry*, 5, 1–22.
- Ioverno, S., Carone, N., Lingiardi, V., Nardelli, N., Pagone, P., Pistella, J., ... Baiocco, R. (2018). Assessing prejudice toward two-father parenting and two-mother parenting: The beliefs on same-sex parenting scale. *The Journal of Sex Research*, 55, 654–665.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia, PA: W. B. Saunders.
- Kurdek, L. A. (2002). On being insecure about the assessment of attachment styles. *Journal of Social and Personal Relationships*, 19, 803–826.
- Landolt, M. A., Bartholomew, K., Saffrey, C., Oram, D., & Perlman, D. (2004). Gender nonconformity, childhood rejection, and adult attachment: A study of gay men. *Archives of Sexual Behavior*, 33, 117–128. Retrieved from <https://link-springer-com.ezprimo1.idc.ac.il/article/10.1023/B:ASEB.0000014326.64934.50>
- McCormack, M. (2014). Innovative sampling and participant recruitment in sexuality research. *Journal of Social and Personal Relationships*, 31, 475–481.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129, 674–697.
- Mikulincer, M., & Shaver, P. R. (2016). *Attachment in adulthood: Structure, dynamics and change* (2nd ed., pp. 3–26). New York, NY: Guilford Press.
- Mohr, J., & Jackson, S. (2016). same-sex romantic attachment. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment, third edition: Theory, research, and clinical applications* (pp. 484–506). New York, NY: Guilford Publications.
- Mohr, J. J., & Fassinger, R. E. (2003). Self-acceptance and self-disclosure of sexual orientation in lesbian, gay, and bisexual adults: An attachment perspective. *Journal of Counseling Psychology*, 50, 482–495.
- Mohr, J. J., Selterman, D., & Fassinger, R. E. (2013). Romantic attachment and relationship functioning in same-sex couples. *Journal of Counseling Psychology*, 60, 72–82.
- Nathanson, A. I., & Manohar, U. (2012). Attachment, working models of parenting, and expectations for using television in childrearing. *Family Relations*, 61, 441–454.

- Nematy, A., & Oloomi, M. (2016). The comparison of attachment styles among Iranian lesbian, gay, and bisexual and heterosexual people. *Journal of Gay & Lesbian Social Services, 28*, 369–378.
- Patterson, C. J. (2009). Children of lesbian and gay parents: Psychology, law, and policy. *American Psychologist, 64*, 727–736.
- Patterson, C. J., & Riskind, R. G. (2010). To be a parent: Issues in family formation among gay and lesbian adults. *Journal of GLBT Family Studies, 6*, 326–340.
- Rholes, W. S., Simpson, J. A., & Friedman, M. (2006). Avoidant attachment and the experience of parenting. *Personality and Social Psychology Bulletin, 32*, 275–285.
- Ridge, S. R., & Feeney, J. A. (1998). Relationship history and relationship attitudes in gay males and lesbians: Attachment style and gender differences. *Australian and New Zealand Journal of Psychiatry, 32*, 848–859.
- Riskind, R. G., & Patterson, C. J. (2010). Parenting intentions and desires among childless lesbian, gay, and heterosexual individuals. *Journal of Family Psychology, 24*, 78–81.
- Riskind, R. G., Patterson, C. J., & Nosek, B. A. (2013). Childless lesbian and gay adults' self-efficacy about achieving parenthood. *Couple and Family Psychology: Research and Practice, 2*, 222–235.
- Riskind, R. G., & Tornello, S. L. (2017). Sexual orientation and future parenthood in a 2011–2013 nationally representative United States sample. *Journal of Family Psychology, 31*, 792–798.
- Romero, A. P., Rosky, C. J., Badgett, M. L., & Gates, G. J. (2008). *Census snapshot: Massachusetts*. Los Angeles: Williams Institute at UCLA.
- Rubio, B., Vecho, O., Gross, M., van Rijn-van Gelderen, L., Bos, H., Ellis-Davies, K., ... Lamb, M. E. (2017). Transition to parenthood and quality of parenting among gay, lesbian and heterosexual couples who conceived through assisted reproduction. *Journal of Family Studies, 1*–19. doi:10.1080/13229400.2017.1413005
- Scharf, M., & Mayseless, O. (2011). Buds of parenting in emerging adult males: What we learned from our parents. *Journal of Adolescent Research, 26*, 479–505.
- Shenkman, G. (2012). The gap between fatherhood and couplehood desires among Israeli gay men and estimations of their likelihood. *Journal of Family Psychology, 26*, 828–832.
- Shenkman, G., & Shmotkin, D. (2010). Mental health among Israeli homosexual adolescents and young adults. *Journal of Homosexuality, 58*, 97–116.
- Shenkman, G., & Shmotkin, D. (2014). "Kids are joy": Psychological welfare among Israeli gay fathers. *Journal of Family Issues, 35*, 1926–1939.
- Shenkman, G., & Shmotkin, D. (2016). The association between self-perceived parental role and meaning in life among gay and heterosexual fathers. *Journal of Family Psychology, 30*, 552–561.
- Stenfelt, C., Armuand, G., Wånggren, K., Skoog Svanberg, A., & Sydsjö, G. (2018). Attitudes toward surrogacy among doctors working in reproductive medicine and obstetric care in Sweden. *Acta Obstetricia Et Gynecologica Scandinavica, 97*, 1114–1121.
- Wilson, G. A., Zeng, Q., & Blackburn, D. G. (2011). An examination of parental attachments, parental detachments and self-esteem across hetero-, bi-, and homosexual individuals. *Journal of Bisexuality, 11*, 86–97.
- Zakalik, R. A., & Wei, M. (2006). Adult attachment, perceived discrimination based on sexual orientation, and depression in gay males: Examining the mediation and moderation effects. *Journal of Counseling Psychology, 53*, 302–313.