





REVIEW ARTICLE

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Mental health of children with gender and sexual minority parents: a review and future directions

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This article reviews the literature between 2015 and 2022 on mental health disparities between children with gender and sexual minority parents and children with different-sex parents. Although most studies indicate that children with gender and sexual minority parents do not experience more mental health problems than children with different-sex parents, the results are mixed and depend on the underlying sample. The review highlights important shortcomings that characterize this literature, including cross-sectional survey samples, correlational methods, lack of diversity by country, and a lack of research on children with transgender and bisexual parents. Therefore, substantial caution is warranted when attempting to arrive at an overall conclusion based on the current state of the literature. Suggestions are provided that can guide academic work when studying mental health outcomes of children with gender and sexual minority parents in the future.

Introduction

Almost 50 years have passed since the American Psychiatric Association de-medicalized homosexuality in 1973. Recent estimates indicate that ~4.5% of the adult population, totaling more than 11.3 million adults in the United States, identify as lesbian, gay, bisexual, transgender, or queer—LGBTQ (Conron, 2019). In 2015, the U.S. Supreme Court legalized same-sex marriage in all 50 states (Obergefell v. Hodges, 2015). Currently, between 2 and 3.7 million (about 29%) of LGBTQ individuals have children under the age of 18 (Gates, 2015). However, gender and sexual minority individuals still experience considerable legal and social challenges. For instance, despite long-standing opposition from the American Psychiatric Association, only 18 U.S. states have banned conversion therapy for minors (Streed et al., 2019). Gender and sexual minority individuals also experience workplace discrimination and harassment (Kaufman et al., 2022; Sears et al., 2021), even when they are highly educated (Mazrekaj, 2022). Gender and sexual minority (aspiring) parents often face even larger stressors. For instance, they may be disproportionately impacted by the high costs of adoption (typically between 15,000 and 40,000 USD) and IVF (one cycle may cost up to 13,000 USD) (Bell, 2019). Although different-sex couples can get reimbursed by insurance for IVF in some countries, this is not necessarily the case for lesbian couples, as the absence of a male partner may not count as a medical issue, depending on the situation at hand. Moreover, schools in some states outright deny enrollment of children with same-sex parents (Aviles, 2019).

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The minority stress theory and the family systems theory provide some of the most frequently suggested mechanisms for mental health differences between children with gender and sexual minority parents and children with different-sex parents (see a review of theories by Farr et al., 2017). The minority stress theory posits that gender and sexual minority parents experience stress from navigating heterosexist societies.¹ These parents face unique stressors due to their sexual orientation such as experiences of prejudice, negative feedback from friends and family, and a prohibitive legal environment. Gender and sexual minority parents anticipate rejection not only of themselves, but they expect the rejection of their children, which adds stress unique to gender and sexual minority parents to general stress experienced by all parents (Gato et al., 2020; Jin and Mazrekaj, 2023). According to the family systems theory, families consist of interdependent subsystems, among which are the parental subsystem and the children subsystem (Stroud et al., 2011). As a result of spillover effects, the family systems theory posits that stress experienced by the parents is inextricably linked to the mental health of their children. Combining insights from the minority stress theory and the family systems theory, one can hypothesize that children with gender and sexual minority parents may experience more mental health problems than children with different-sex parents due to excessive stress on the family system.

In this paper, we review the literature between 2015 and 2022 on mental health disparities between children with gender and sexual minority parents and children with different-sex parents. As such, this review contributes to the earlier literature that included studies until 2015 that mostly found no differences in outcomes between children with gender and sexual minority parents and children with different-sex parents (Allen, 2015; Crowl et al., 2008; Fedewa et al., 2015; Manning et al., 2014; Schumm, 2016). This review also contrasts with other literature

reviews about gender and sexual minorities (Imrie and Golombok, 2020; Reczek, 2020; Suárez et al., 2022; Thomeer et al., 2018) by focusing in detail on children’s mental health. Previous literature has shown that gender and sexual minority individuals are at a two- or three-times higher risk for mental disorders than heterosexual individuals (Wittgens et al., 2022). In this review, we aim to answer the question of whether children with gender and sexual minority parents have worse mental health than children with different-sex parents. In consideration of this question, we critically evaluate the methodological rigor with which the studies were conducted and provide suggestions that can guide future academic work on the mental health disparities between children with gender and sexual minority parents and children with different-sex parents.

Methods

We conducted the review following The Preferred Reporting Items for Systematic Review and Meta-Analyses (PRISMA) guidelines (Page et al. 2021) as displayed in Fig. 1. The literature search was performed by the two authors separately. The databases used were PsycInfo, Web of Science, Scopus, PubMed, and Sociological Abstracts. We searched for the terms “same-sex”, “lesbian”, “gay”, “bisexual”, “transgender”, “trans”, and “queer” in combination with “parent* OR child*” and “health OR well-being”. To exclude studies that were reviewed in earlier literature reviews (Allen, 2015; Crowl et al. 2008; Fedewa et al. 2015; Manning et al. 2014; Schumm, 2016), we restricted the period of publishing to the years 2015 until 2022. We applied four more exclusion criteria when assessing the literature for eligibility. First, only peer-reviewed journal articles in English were considered. Second, the article had to explicitly mention a mental health outcome. For instance, articles that considered the total problem behavior score from the Strengths and Difficulties Questionnaire

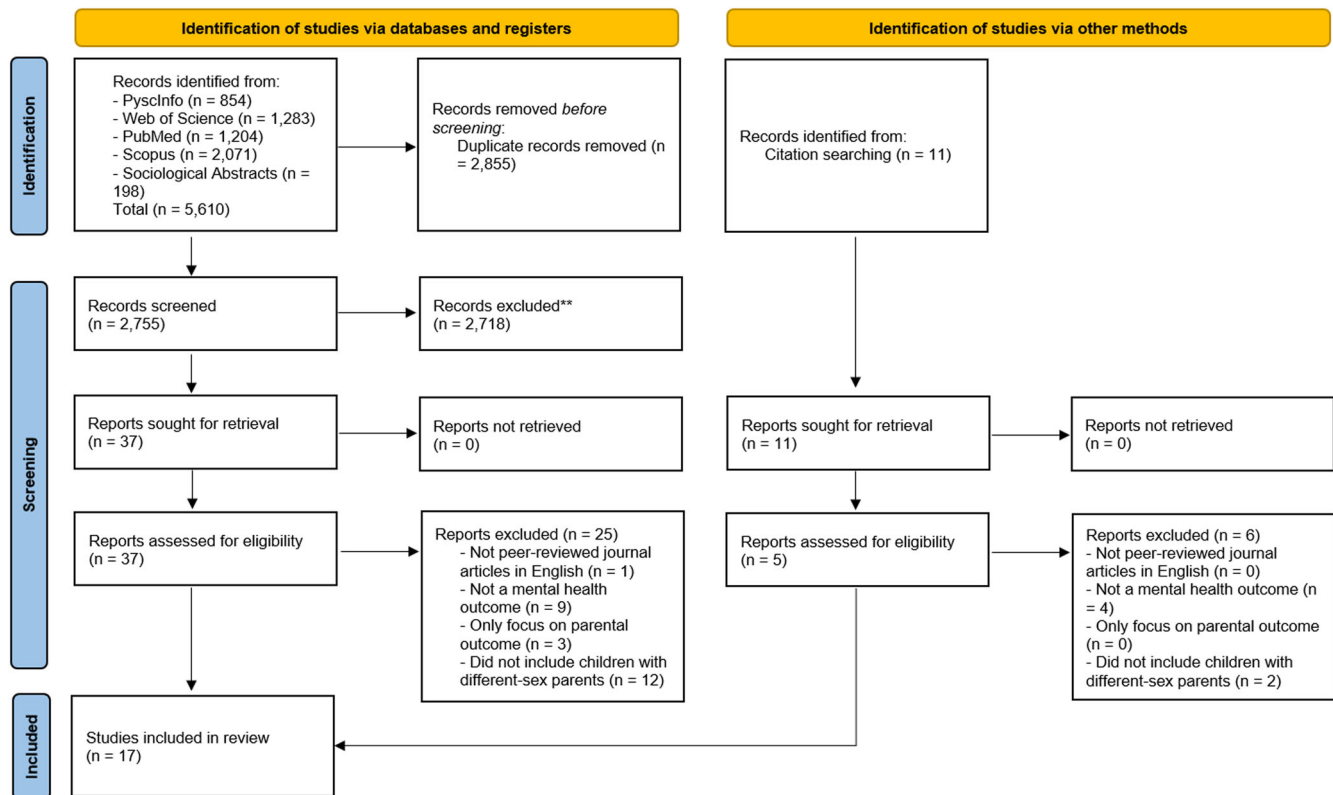


Fig. 1 PRISMA flow diagram describing the process of article identification, screening, eligibility, and inclusion.

(Goodman, 1997) were not included as the total score measures both mental health and other problems. Third, the article should focus on children's outcomes rather than only parental outcomes. Lastly, the article had to include a control group of children with different-sex parents. This led to 12 articles that met the inclusion criteria. In addition to databases, we also identified studies via other methods. Namely, we considered the references in the 12 identified articles, and also articles that cited the identified articles for potential inclusion. For citation searching, we applied the same four exclusion criteria to further assess the eligibility of articles. This led to 5 articles that met the inclusion criteria. In total, we included 17 articles in our review.

Results

Table 1 provides a detailed overview of the included studies. It should be directly noted that almost half of the studies identified sexual minorities by couple composition—such as same-sex or different-sex—as observed in column 5.² Parental sexual or gender identity or orientation was not directly observed in the majority of studies. Eleven out of 17 studies show that there are no statistically significant differences in mental health between children with gender and sexual minority parents and children with different-sex parents. One study (Green et al., 2019) found that children with same-sex male parents have fewer anxiety, depression, and social withdrawal issues than children with different-sex parents. However, the study used a non-representative sample of children conceived via surrogacy and should therefore be interpreted with caution. This is because gay fathers who cannot afford the high medical and legal costs of surrogacy are not represented in the sample. As such, the effects of high socioeconomic status are conflated with the effects of gender and sexual orientation of the parents.

On the other hand, several studies by Paul Sullins (2015a, 2015b, 2017), and also the study by Reczek et al. (2017), using large representative samples, indicate that children with same-sex parents have statistically significantly more emotional problems than children with different-sex parents. However, these large representative studies could only take a cross-sectional snapshot of the family structure in a given year. They were not able to distinguish between children who were raised by same-sex parents from birth and children whose parental situation had changed over time due to separation, the coming out of a parent, or other factors. Many children live with a same-sex couple after a gay parent's separation from a different-sex partner, and therefore they were not raised from birth by same-sex parents. This is an important limitation because events such as parental separation may exert an independent negative effect on mental health outcomes (McLanahan et al., 2013). Consequently, studies based on cross-sectional data may mistakenly attribute a negative coefficient to living with same-sex parents (Mazrekaj et al., 2020).

Further, the only study that considered children with bisexual parents (Calzo et al., 2019) found that children with these parents have more emotional and mental health difficulties than children with different-sex parents, whereas no statistically significant differences were found between children with same-sex parents and children with different-sex parents. The two studies that studied children with transgender parents (Condat et al., 2020; Imrie et al., 2021) suggest no discrepancies with children with cisgender parents.

Discussion

Table 1 has revealed substantial limitations in the current research on mental health outcomes of children with gender and sexual minority parents and children with different-sex parents. We also conduct a more formal risk of bias assessment in

Supplementary Figs. 1 and 2. We rated all the studies to have either a serious or critical risk of bias. These limitations reveal significant areas of improvement that can be addressed by future research. Although we attempted to include studies with a wide range of gender and sexual minorities, almost all studies were about same-sex male and same-sex female parents. Only two studies included transgender parents and only one study included bisexual parents. Even when the studies included both same-sex male and same-sex female parents, they were virtually always grouped, and the vast majority of parents were same-sex female parents. Essentially, this review has brought to light that we know very little about the mental health of children of transgender and bisexual parents, but also same-sex male parents. It is of utmost importance that future research also considers separating different gender and sexual minority groups and puts more emphasis on children with transgender and bisexual parents.

Another important limitation is that most studies, namely 12 out of 17 studies, are situated in the United States. This is problematic as research has shown that country differences may be related to substantial differences in findings in the literature (Schumm, 2018). Hence, future research should include countries other than the United States, particularly countries with a different legal and social environment towards gender and sexual minority parents.

Methodologically, this research is still in its infancy. Many of the studies used rather small samples that were not representative of the population. Only one study (Sullins, 2016) had a longitudinal design. As mentioned previously, without a longitudinal design, it is not possible to separate the influence of gender and sexuality minority parents from the influence of other factors such as parental divorce. Future research should use longitudinal datasets that include information on with whom the child resided each year from birth until the outcomes are measured (see for instance Mazrekaj et al., 2020). This would enable the researcher to study whether children were raised by gender and sexual minority parents from birth or solely after a separation of the gender and sexual minority parent with a previous heterosexual partner.

Further, only one study (Mazrekaj et al., 2022) used a method other than the classic correlational methods such as regression analysis. No attempt was made in any of the studies to characterize potential selection bias. Future research should focus more on innovative quasi-experimental methods such as treatment effect bounds (Mazrekaj et al., 2020) to determine the extent to which the found coefficients have a causal interpretation. Finally, all reviewed studies used survey data that are prone to potential reporting and sampling bias. We recommend that future studies consider administrative data on the use of antidepressants and medical health care that are increasingly becoming available in European countries such as the Netherlands and Nordic countries. These large datasets include the entire population of a country with very little measurement error. As such, these data may prove very useful when studying mental health outcomes of children with gender and sexual minority parents in the future.

With these caveats in mind, the findings of this review mostly indicate that children with gender and sexual minority parents do not experience more mental health problems than children with different-sex parents. This finding suggests that there seems to be considerable resilience within the family systems of minority families to buffer against the negative effects of minority stress (Sarah and MacPhee, 2017). Further research should investigate the coping mechanisms underlying this resilience of both the gender and sexual minority parents and their children. In any case, understanding how children with gender and sexual minority parents fare in terms of mental health can help health

Table 1 Mental health outcomes of children with gender and sexual minority parents.

#	Study	Country	Sample of children	Type parents	Identification of type parents	Method	Representative sample	Longitudinal analysis	Difference
1	Baiocco et al. (2015)	Italy	Age: 41;35 months (SSP), 45;95 months (DSP); 40 SSP, 40 DSP (N = 80)	Same-sex female and same-sex male parents	Self-identified by respondent	MANOVA	No	No	Emotional symptoms: 0
2	Bos et al. (2015)	The Netherlands	Ages 4-17; 51 SSP, 51 DSP (N = 102)	Same-sex female parents	Self-identified by respondent	MANOVA	No	No	Social anxiety: 0
3	Cheng and Powell (2015)	United States	Age 18-39; 51 SSP, 2000 + DSP (N = 2000+)	Same-sex female and same-sex male parents	Parents of the same sex, identified by researcher	Regression analysis	Yes	No	Depression, anxiety, thoughts about suicide, recently or currently in therapy: 0 Emotional problems: +
4	Sullins (2015a)	United States	Ages 4-17; 512 SSP; 206, 495 DSP (N = 207,007)	Same-sex female and same-sex male parents	Respondent and partner of the same sex, identified by researcher	Logistic regression analysis	Yes	No	Depressive symptoms and anxiety: +
5	Sullins (2015b)	United States	Age 12-18; 20 SSP, 20,725 DSP (N = 20,745)	Same-sex female and same-sex male parents	Respondent and partner of the same sex, identified by researcher	T-tests, logistic, and multiple regression analysis	Yes	No	Emotional difficulties: 0
6	Bos et al. (2016)	United States	Age 6-17; 95 SSP, 95 DSP (N = 190)	Same-sex female parents	Respondent and partner of the same sex, identified by researcher	MANOVA, regression analysis	Yes	No	Emotional difficulties: 0
7	Reczek et al. (2016)	United States	Ages 4-17; 633 SSP; 166,414 DSP (N = 167,047)	Same-sex female and same-sex male parents	Respondent and partner of the same sex, identified by researcher	Logistic regression analysis	Yes	No	Emotional difficulties: 0
8	Sullins (2016)	United States	Ages 13-19 in Wave I and 26-32 in Wave IV 20 SSP, 12,268 DSP (N = 12,288)	Same-sex female and same-sex male parents	Identified by both respondent and mother	Logistic regression analysis	Yes	Yes	Depression: Wave I: 0 Wave IV: +
9	Sullins (2017)	United States	Ages 4-17; 397 SSP; 88,967 DSP (N = 109,155)	Same-sex female and same-sex male parents	Respondent and partner of the same sex, identified by researcher	Logistic regression analysis	Yes	No	Emotional difficulties: +
10	Reczek et al. (2017)	United States	Ages 4-17; 165 SSP; 46,861 DSP (N = 47,026)	Same-sex female and same-sex male parents	Respondent and partner of the same sex, identified by researcher	Logistic regression analysis	Yes	No	Emotional difficulties: +
11	Gartrell et al. (2018)	United States	Age 25; 77 SSP, 77 DSP (N = 154)	Same-sex female parents	Self-identified by respondent	ANOVA	No	No	Mental health: 0
12	Calzo et al. (2019)	United States	Ages 4-17; 149 SSP, 147 Bi parents, 20,807 DSP (N = 21,103)	Same-sex female parents, same-sex male parents, bisexual parents	Self-identified by respondent	Chi2 test, regression analysis	Yes	No	Emotional and mental health difficulties: SSP vs. DSP: 0 Bisexual parents vs. DSP: +
13	Green et al. (2019)	United States	Ages 3-10; 68 SSP, 68 DSP (N = 136)	Same-sex male parents	Self-identified by respondent	T-test	No	No	Anxiety, depression, and social withdrawal: - Mental health: 0
14	Condat et al. (2020)	France	Age 2 months to 15 years old; 32 Trans parents, 56 Cis parents (N = 88)	Transgender parents	Self-identified by respondent	ANOVA	No	No	Psychiatric disorder: 0
15	Imrie et al. (2021)	United States	Age 8-18; 34 Trans parents, 12 Cis parents (N = 46)	Transgender parents	Self-identified by respondent	T-test, regression analysis	No	No	Psychiatric disorder: Male SSP vs. DSP: 0
16	McConnachie et al. (2021)	United Kingdom	Age 10-14; 68 SSP, 43 DSP (N = 111)	Same-sex female and same-sex male parents	Self-identified by respondent	Fisher's exact test	No	No	Emotional problems: 0
17	Mazrekaj et al. (2022)	The Netherlands	Age 6-16; 62 SSP, 72 DSP (N = 134)	Same-sex female and same-sex male parents	Respondent and partner of the same sex, identified by researcher	Coarsened exact matching	Yes	No	Emotional problems: 0

0 indicates that there is no significant difference in the outcome between children with gender and sexual minority parents and children with different-sex parents. + (-) indicates that children with gender and sexual minority parents score significantly higher (lower) on the outcome than children with different-sex parents.
 *SSP signifies children with same-sex parents, and *DSP signifies children with different-sex parents. †Trans(gender) parents' signifies children with a parent whose gender identity differs from the sex they were assigned at birth, whereas †(cis)gender parents' signifies children with a parent whose gender identity is aligned with the sex assigned at birth (GLAAD, 2023).

professionals and parents identify and address any issues early. Furthermore, studies that explore this area can help to combat the stigma and discrimination faced by sexual and gender minorities. Thus, it is important to continue to conduct research in this area to gain a clearer understanding of the mental health issues faced by children with gender and sexual minority parents. These studies can help inform policies and practices designed to support and protect these children and their families.

Data availability

This article is a literature review and hence data sharing does not apply to this article as no datasets were generated or analyzed during the current study.

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Notes

- 1 Although the original description of minority stress theory (Meyer, 2003) relates only to sexual minorities (i.e., LGB populations), similar conclusions can be drawn for gender minorities (Bockting et al., 2013; Gamarel et al., 2014; Hendricks and Testa, 2012).
- 2 Note that, for ease of comparisons, we still use the wording same-sex and different-sex regardless of whether the parents were self-identified or identified by the researcher by couple composition, but Column 'Identification' in Table 1 shows how the parents were actually identified.

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Author contributions

DM and YJ have contributed equally to all parts of the research process.

Competing interests

The authors declare no competing interests.

Ethical approval

This article is a literature review and hence the authors of this article did not perform any studies with human participants.

Informed consent

This article is a literature review and hence the authors of this article did not perform any studies with human participants that required informed consent.

Additional information

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