

# Descriptive analysis of mental health difficulties across gender and sexual minorities

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## Abstract

Background: Differences among the lesbian, gay, bisexual, transgender, queer and intersex (LGBTQI+) individuals and heterosexual individuals in mental distress and well-being have been previously identified. However, there are only a few studies that include emerging identities such as pansexual and asexual. Current study explores prevalence of mental health difficulties among a wide range of different gender identities and sexual orientations. Methods: Descriptive analysis has been conducted on data from 3,302 Year 11 adolescents. Results: Findings point towards differences in mental health difficulties experienced by marginalised groups where sexually marginalised adolescents having higher mental health difficulties.

Conclusions: The results highlight the need for clinical services that are sensitive to emergent and more nuanced gender and sexual identities and to understand the impact of belonging to multiple marginalised groups.

## Introduction

Previous research has revealed mental health disparities between lesbian, gay, bisexual, transgender, queer and intersex (LGBTQI+) individuals and heterosexual individuals in mental distress and well-being (1, 2). According to minority stress theory, individuals from marginalised groups experience higher levels of mental health difficulties due to the exposure to stress and adversity arising from oppression, structural inequity, and systemic discrimination (3). From an intersectional perspective, individuals from multiple marginalised groups experience this mental health disadvantage for each marginalised identity, and the effect of the interplay between identities is greater than the combined effect of individual identities (4). Hence, it is important to consider gender identity while investigating the impact of sexual orientation on mental health difficulties. Moreover, majority of the studies that investigate the mental health difficulties of adolescents do not focus on non-binary identity (1). Non-binary can be defined as: an individual whose gender identity falls between or outside male and female identities, an individual who can experience being a man or woman at separate times, or an individual who does not experience having a gender identity or rejects having a gender identity (5). Lastly, while there are studies investigating mental health difficulties of lesbian, gay or transgender adolescents, there are only a few studies that include emerging identities such as pansexual and asexual (5).

To address these issues, the current study draws on a recent, large-scale survey of a community-based sample of adolescents that contained specific gender and sexual orientation information, to explore prevalence of mental health difficulties among different groups.

## Data source

Data were collected for an evaluation of HeadStart, a programme that focused on improving mental health difficulties and wellbeing, and preventing serious mental health difficulties, for children and young people aged 10 to 16 years (funded by The National Lottery Community Fund) and for an

evaluation of Mercers' Wellbeing Evaluation Programme – an evaluation programme undertaken with a subset of the Mercers' Company's Associated Schools and Colleges. For the present analysis, the dataset was collected between 2021 from 63 schools in England. The sample of schools was not drawn to be representative of all school children in England; it was based on local areas that were part of evaluations. Every year, children and young people from specific year groups in participating schools completed surveys using a secure online system during a usual school day as part of a teacher-facilitated session. Consent was obtained from parents/carers; children and young people provided assent prior to starting the survey, and ethical approval was received by the UCL ethics committee (HeadStart evaluation reference: 8097/003; Mercer's evaluation reference: 18991/001).

## Method

The current study is based on 3,302 adolescents (out of 3,936 adolescents) who completed gender identity and sexual orientation questions in Year 11 (age 15-16) in 60 secondary (out of 63 schools) schools in England. Out of the 3,926 adolescents who were given the survey, 339 (8.6%) did not complete both the gender identity and sexual orientation questions, 63 (1.6%) did not complete gender identity questions and 232 (5.9%) did not complete the sexual orientation questions.

## Measures

Based on adolescents' self-report, gender identity was constructed as three broad groupings: female (cis and trans young women), male (cis and trans young men), and non-binary or questioning. It was possible from our sample to distinguish between cis and trans young people as in addition to asking them to describe their gender we also asked them whether their gender was different from the gender they were assigned at birth. However, we have chosen to prioritise young person's description of their gender as 'male' or 'female' over categorisation as trans or cis. Sexual identity was constructed using adolescents' self-report responses: completely/mainly heterosexual,

completely/mainly gay or lesbian, bisexual or pansexual, and combined responses to asexual, no label or questioning.

Mental health difficulties were assessed using child self-report Strengths and Difficulties Questionnaire (SDQ) (6). The SDQ is a 25-item measure comprising four problem scales (emotional symptoms, conduct problems, peer-relationship problems, hyperactivity/ inattention problems) and a prosocial behaviour scale. The four difficulties subscales are used to create an overall total difficulties score, with higher scores indicating higher levels of difficulties. This study focussed on the emotional, behavioural, and total difficulties scores.

## Analysis

Descriptive analysis was conducted based on gender identity, sexual orientation and mental health difficulties.

## Results

93.2% (n=1,327) of males classified themselves as heterosexual, 2.0% (n=28) as gay or lesbian, 4.3% (n=62) as bisexual or pansexual, and 0.5% as asexual or as having no label or questioning. 81.7% (n=1,460) of females classified themselves as heterosexual, 4.5% (n=80) as gay or lesbian, 12.7% (n=227) as bisexual or pansexual, and 1.2% (n=21) as asexual or as having no label or questioning. Lastly, 5.6% of nonbinary adolescents classified themselves as heterosexual, 26.7% (n=24) as gay or lesbian, 53.3% (n=48) as bisexual or pansexual and 14.4% (n=13) as asexual or as having no label or questioning.

Heterosexual males had the lowest levels of difficulties, followed by heterosexual females (see Figure 1 and Table 1). Non-binary gay or lesbian adolescents had higher levels of difficulties compared to gay/lesbian males/females. Bisexual or pansexual males had higher difficulties than

bisexual or pansexual females. Males regardless of sexual orientation had the lowest levels of emotional difficulties. Asexual or no label or questioning females had the highest levels of emotional difficulties. Bisexual or pansexual males had the highest levels of behavioural difficulties.

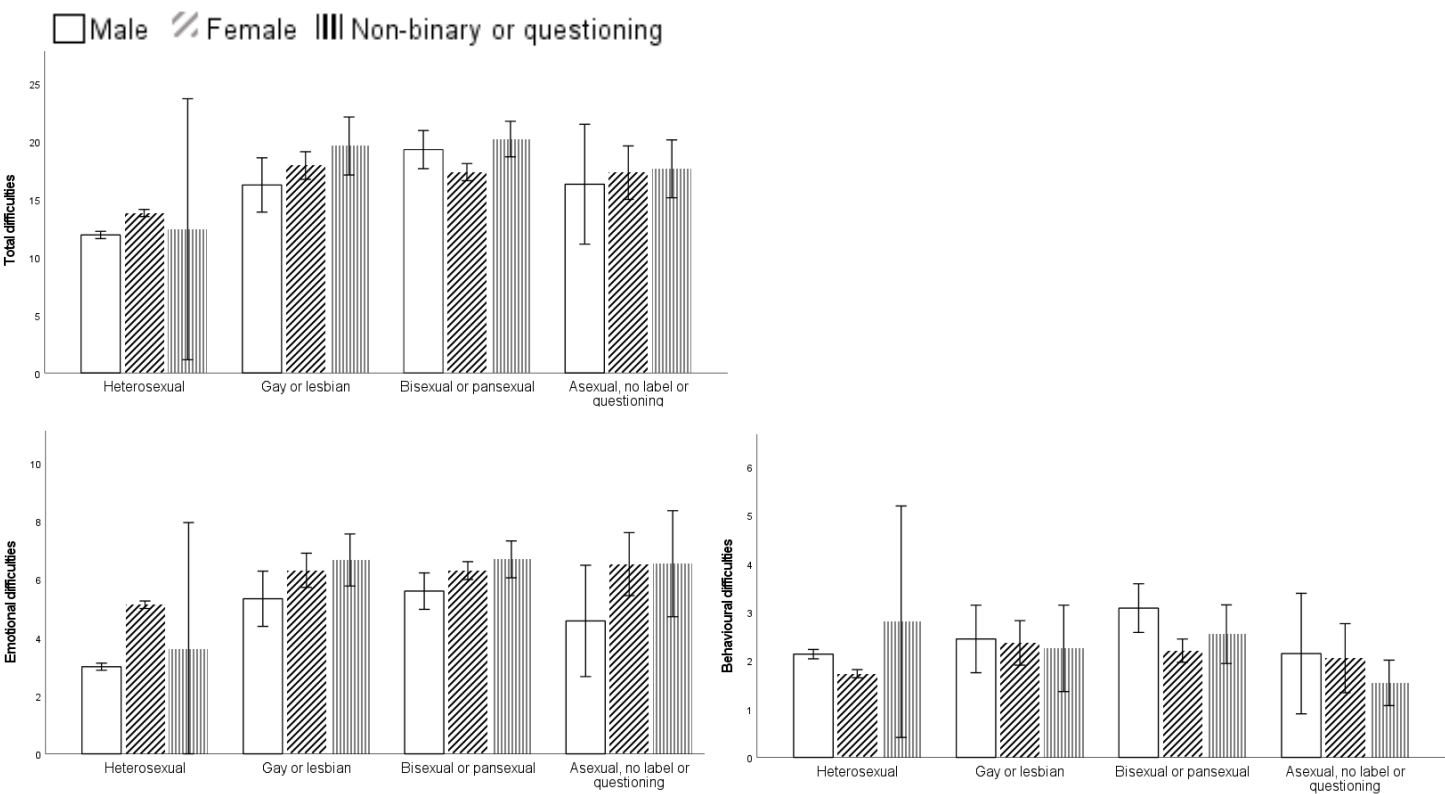


Figure 1. Mental health difficulties based on gender and sexuality

Table 1: Gender Identity and Sexual Orientation: Mental Health Difficulties

	Total Difficulties			Emotional Difficulties		Behavioural Difficulties	
	N	N with SDQ score	Mean (SD)	N with SDQ score	Mean (SD)	N with SDQ score	Mean (SD)
Heterosexual male	1,327	1,325	11.91 (5.82)	1,325	3.00 (2.25)	1,325	2.13 (1.80)
Heterosexual female	1,460	1,457	13.81 (5.96)	1,459	5.13 (2.51)	1,459	1.73 (1.64)
Heterosexual nonbinary or questioning	< 10	< 10	12.40 (9.07)	< 10	3.60 (3.51)	< 10	2.80 (1.92)
Gay male	28	27	16.22 (5.91)	27	5.33 (2.40)	27	2.44 (1.76)
Lesbian female	80	80	17.90 (5.36)	80	6.31 (2.64)	80	2.36 (2.06)
Gay or lesbian nonbinary or questioning	24	24	19.58 (5.93)	24	6.67 (2.12)	24	2.25 (2.11)
Bisexual or pansexual male	62	62	19.27 (6.48)	62	5.60 (2.47)	62	3.08 (1.98)
Bisexual or pansexual female	227	227	17.33 (5.64)	227	6.30 (2.34)	227	2.20 (1.83)
Bisexual or pansexual nonbinary or questioning	48	48	20.18 (5.29)	48	6.69 (2.18)	48	2.54 (2.08)
Asexual, no label or questioning male	< 10	< 10	16.29 (5.59)	< 10	4.57 (2.07)	< 10	2.14 (1.35)
Asexual, no label or questioning female	21	21	17.28 (5.07)	21	6.52 (2.38)	21	2.05 (1.56)
Asexual, no label or questioning nonbinary or questioning	13	13	17.61 (4.13)	13	6.54 (3.02)	13	1.54 (0.78)



## Discussion

This study examined mental health disparities across individuals identifying in several gender and sexual minority groups. Findings reported here point towards differences in mental health difficulties experienced by marginalised groups. Consistent with past literature, sexually marginalised adolescents had higher mental health difficulties (1). Those who were gay or lesbian or bisexual or pansexual adolescents with non-binary or questioning gender identity had the highest mental health difficulties. These findings support the notion of a synergistic, interactive relationship between gender identity, sexual orientation and mental health whereby adolescents who had minority status membership for both identities had the highest levels of mental health difficulties. Additionally, bisexual or pansexual males had the highest levels of behavioural difficulties. The present findings can be explained via the minority stress model where unaccepting social environment results in external (i.e., prejudice) and internal (e.g., concealment, internalised heterosexism) stress processes contribute to mental health difficulties (1, 7). Over time, these experiences may interact with internal thoughts and feelings, resulting in the anticipation or expectation of discrimination or rejection (8). In turn, this may lead to hypervigilance toward threat and pressure to conceal one's identity to protect from harm. From an intersectional perspective, individuals from multiple marginalised groups experience this mental health disadvantage for each marginalised identity, and the effect of the interplay between identities is greater than the combined effect of individual identities (4).

It is important to note the methodological limitations of the study. Firstly, the study sample was not representative of all school children in England. Secondly, adolescents filled the surveys during lesson time on a computer while other people were around them; hence some may have not felt comfortable enough to reveal their gender identity or sexual orientation.

Notwithstanding these limitations, the findings of this study highlight the need for clinical services that are sensitive to emergent and more nuanced gender to understand the impact of belonging to multiple marginalised groups. Many individuals report never being asked about their sexual or gender identities (9). It is important for those providing direct services to be mindful of the intersectionality of identities and allow individuals to self-define their own gender and sexuality. Academicians conducting research should include demographic questions that go beyond “male,” “female,” and “transgender” and include non-binary identities such as genderqueer and gender fluid, as well as an “other gender identity” category with a write-in option for individuals to describe their identity using their own words. Qualitative studies may allow for detailed examination of differences between sexual and gender minorities and heterosexual and cisgender individuals. Furthermore, studies are required to elucidate the specific mechanisms by which non-heterosexual individuals experience minority stress.

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