The Wellbeing of LGBTQ+ Students

Michael Sanders[1]

TASO Transforming Access and Student Outcomes in Higher Education

[1] Academic Lead, TASO, Professor of Public Policy, King's College London

About the Centre for Transforming Access and Student Outcomes in Higher Education (TASO)

TASO is a what works centre dedicated to reducing gaps in participation and success in higher education through the collation, creation and translation of evidence around what works.

We work with partners throughout the higher education sector to help understand what evidence already exists, to build more and higher quality evidence, and to see policy and practice led change informed by that evidence.

TASO website

About the author

Michael Sanders is a Professor of Public Policy at King's College London's Policy Institute, and Academic Lead for TASO. His research has three main strands; the use of causal methods and particularly randomised trials to evaluate policy interventions; the use of behavioural science in policy design; and increasing social mobility and opportunity. Michael has previously served as the Founding Chief Executive of What Works for Children's Social Care, and Chief Scientist at the Behavioural Insights Team, where he has led diverse teams of researchers, policy specialists and practitioners to improve outcomes for vulnerable people in the UK and overseas.

Acknowledgements

We are grateful to Advance HE and the Higher Education Policy Institute for sharing the data used in this project with us, for their comments on an earlier draft, and for commissioning the Student Academic Experiences Survey in the first place. We are particularly grateful to Jonathan Neves and Nick Hillman for their comments, and to Elspeth Kirkman for her support.

A note on terminology

There are a number of groups of people who are referred to in this document. Capturing the particular experiences of unique individuals is a task for which statistical analysis is poorly suited. However, learning from groups of individuals and their experiences allows us to understand common issues, challenges and triumphs that form the tapestry of people's lives.

In this paper we will use the term LGBTQ+ to refer broadly to all people who self-identify in any, and any combination, of the terms that this group covers. We recognise that different people might mean different things by some of these terms, and for simplicity we take the steer given us by the survey participants themselves, and their understanding. The majority of the analysis in this paper is split along the lines of the questions asked in the SAES, and so sexual orientation is considered separately to whether someone identifies as trans. Whilst we recognise that being gay-and-trans is likely to be different to being straight-and-trans, the sample sizes available at the moment do not permit analysis at this level - though we hope that they one day will.

Throughout the paper, we will sometimes exclude some groups from analysis due to small sample sizes, or aggregate multiple groups together. Where we do this, we will use a version of the LGBTQ+ acronym that captures the groups to whom we (and our findings) are referring at that moment. For example, we will sometimes not include people identifying as Queer in our analysis due to the small size of this group in our sample. Where this is the case, but we *are* considering people are who Lesbian, Gay, Bisexual and Asexual, we will use the acronym LGBA.

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Introduction

LGBTQ+ people throughout British society experience life differently to their peers. Although there have been notable improvements in recent years and decades to the rights and status of LGBTQ+ people in Britain, it is widely recognised that there remains a substantial journey to tackle discrimination and enable everyone to live a safe and fulfilling life, regardless of their sexual orientation or gender identity. The annual Pride month reminds us both that there is much to be celebrated, and of how far we still have to go.

People's time at university can be a transformative one, in which they are able to explore and understand their identity, in many cases for the first time. However, we cannot pretend that student wellbeing and mental health are perfect. Living independently for the first time, under often challenging financial circumstances and in a high stakes academic environment, is undoubtedly challenging.

Our understanding of wellbeing in the UK has experienced very substantial growth over the last decade or so. This is due to wider adoption of wellbeing measures, including the Office for National Statistics' ONS4 measures (life satisfaction, worthwhile, happiness, and anxiety), and with the creation of the What Works Centre for Wellbeing in 2014.

In this short paper, we analyse data from the Student Academic Experience Survey[2], which has been conducted annually by YouthSight on behalf of Advance HE and the Higher Education Policy Institute since 2005, with Wellbeing data collected since the 2013-2014 academic year, people's sexual orientation captured since the 2016-2017 year, and their Trans identity since the 2020-2021 academic year.

Using this data, we will attempt to provide an account of the wellbeing of LGBTQ+ people, where it is appropriate to do so; how it has both changed over time; how it compares to straight cisgendered people, and what we can learn about the LGBTQ+ student experience.

2 https://www.advance-he.ac.uk/reports-publications-and-resources/student-academic-experience-survey-saes

About the data

The Student Academic Experiences Survey (SAES) has been conducted since the 2011-2012 academic year, but is of primary concern to us since the 2013-2014 academic year in which participants' sexual orientation were recorded for the first time. A more detailed description of the methodology used in the survey itself can be found in the main reporting on the analysis, conducted by AdvanceHE and the Higher Education Policy Institute (HEPI)[3]. However, tables 1 and 2 below show the sample sizes of each group relevant for people's sexual orientation, first in raw terms (Table 1) and then for percentage of the sample. For ease of understanding, we have converted the year data in the dataset itself into an 'academic year'.

Survey data collection takes place in February and March of each year, meaning that the 2019-2020 data refer to a period prior to the major onset of the Coronavirus pandemic, and that the 2020-2021 data refer to a period after almost a year of various lockdown restrictions.

Table 1: Sexual Orientation

Year	**2016-2017**	**2017-2018**	**2018-2019**	**2019-2020**	**2020-2021**	**2021-2022**
Straight	11,423	11,265	11,024	7,878	7,792	7,697
Gay man	333	295	289	176	166	145
Gay woman / Lesbian	243	238	221	173	192	224
Bisexual	1,147	1,233	1,274	1,112	1,109	1,163
Asexual	229	211	194	160	149	162
Queer	0	0	122	525	143	177

[3] The Survey was designed and developed in partnership between Advance HE and the Higher Education Policy Institute (HEPI), with online panel interviews independently conducted by YouthSight and Pureprofile. YouthSight's Student Panel is made up of over 45,000 undergraduate students in the UK. These students are primarily recruited through a partnership with the Universities and Colleges Admissions Service (UCAS), which invites a large number of new first-year students to join the Panel each year. To maximise the overall sample size, further responses were sourced from Pureprofile. Between 9 February 2022 and 21 March 2022, 45,141 members of the YouthSight Panel and 10,000 from Pureprofile were invited to complete the Survey. In total, 10,142 responses were collected, representing a response rate of 18%. Of the 10,142 total responses, 9,258 were sourced from the YouthSight Panel and 884 were sourced from Pureprofile. On average, the Survey took 11 minutes 12 seconds to complete.

Other	215	181	98	129	76	104
Prefer not to say	467	623	850	74	559	470
Total	14,057	14,046	14,072	10,227	10,186	10,142

Table 2: Sexual Orientation: Percentages

Year	**2016-2017**	**2017-2018**	**2018-2019**	**2019-2020**	**2020-2021**	**2021-2022**
Straight	81.26	80.20	78.34	77.03	76.50	75.89
Gay man	2.37	2.10	2.05	1.72	1.63	1.43
Gay woman / Lesbian	1.73	1.69	1.57	1.69	1.88	2.21
Bisexual	8.16	8.78	9.05	10.87	10.89	11.47
Asexual	1.63	1.50	1.38	1.56	1.46	1.60
Queer	0.00	0.00	0.87	5.13	1.40	1.75
Other	1.53	1.29	0.70	1.26	0.75	1.03
Prefer not to say	3.32	4.44	6.04	0.72	5.49	4.63
Total	100	100	100	100	100	100

As we can see, the proportion of participants identifying as LGBQA rises steadily over the course of time covered by this data. Compared with other surveys the proportion identifying as anything other than straight is higher, even when adjusting for participants' approximate age (2.7% of all respondents to the ONS' annual population survey (APS) identified as LGB, compared to 6.6% of 16-24 year olds responding to the same survey).

The alignment with the ONS data varies by category. 1.6% of APS respondents identify as gay (male or female), which is close to the percentage found in the SAES. Other categories, particularly bisexuality are widely different in the SAES compared to ONS data (1.1% vs 11.47% in the most recent year available). Asexuality and Queerness are flattened in APS data into "other" but these categories pick up a larger proportion of the sample here than "other" does in ONS data.

The trend, in gay men in particular, shows a reversal of the trend seen in society more broadly, with a consistent fall in representation over the years in our data.

Overall, samples of LGBQA people in the data are of a reasonable size for analysis, and sample proportions are fairly stable. With the absence of a 'ground truth' of analysis,we consider it safe to continue with analysis.

The period covered by questions about whether or not a person considers themselves to be, or to have been, trans, are much scarcer, having only been asked in two years. Table 3, below, shows the raw distribution of answers to this question, while table 4 shows the proportions.

Table 3: Gender identity raw distribution

Year	**2020-2021**	**2021-2022**
Trans	205	245
Cis	9,638	9,612
I don't know	82	89
Prefer not to say	261	186
Total	10,186	10,142

Table 4: Gender identity proportions

Year	**2020-2021**	**2021-2022**
Trans	2.01	2.42
Cis	94.62	94.77
I don't know	0.81	0.88
Prefer not to say	2.56	1.83
Total	100	100

Unlike sexual orientation, gender identity data are not published routinely by the ONS due to the difficulty of accurately estimating the proportion of people who are trans. However, according to Stonewall[4], the best estimate we currently have is that 1% of the population may be trans. Data from the 2021 census data will provide a more accurate picture, but is not yet available. By this measure, either students are

[4] https://www.stonewall.org.uk/truth-about-trans#trans-people-britain

more likely to be trans, more likely to be comfortable identifying this way, or trans students are overrepresented in the SAES sample. It is certainly unlikely in our view that trans people are more numerous than gay men, and the shortness of the time series of data means that these data must be caveated.

Measuring wellbeing

Wellbeing is measured in the SAES using the ONS 4 wellbeing questions. These questions relate to life satisfaction, worthwhileness, happiness and anxiety, and are shown in the table overleaf.

In addition to the raw scores for each of these measures, scores of 0-4 are classed as low wellbeing, 7-8 is high and 9-10 is very high. These values are reverse ordered for anxiety questions.

Wellbeing questions have been asked across a number of datasets, including the Annual Population Survey, Understanding Society and the Living Costs and Food Survey since 2012, and have been included in the SAES since the 2013-2014 academic year.

Measures of personal wellbeing

Table 5: the ONS4 questions

Next I would like to ask you four questions about your feelings on aspects of your life. There are no right or wrong answers. For each of these questions I'd like you to give an answer on a scale of 0 to 10, where 0 is "not at all" and 10 is "completely".

Measure	Question
Life Satisfaction	Overall, how satisfied are you with your life nowadays?
Worthwhile	Overall, to what extent do you feel that the things you do in your life are worthwhile?
Happiness	Overall, how happy did you feel yesterday?
Anxiety	On a scale where 0 is "not at all anxious" and 10 is "completely anxious", overall, how anxious did you feel yesterday?

Source: Office for National Statistics

Measuring gender identity and sexual orientation

In addition to measuring participants wellbeing, it is important to be clear how the survey measures people's gender identity and sexual orientation. For this, we make use of two questions, which can be seen below.

1: What is your sexual orientation?

- Heterosexual/straight
- Gay man
- Gay woman/Lesbian
- Bi/Bisexual
- Asexual
- Queer
- Other
- Prefer not to say

2: Are you trans or do you have a trans history?

- Yes
- No
- I don't know
- Prefer not to say

How does wellbeing differ?

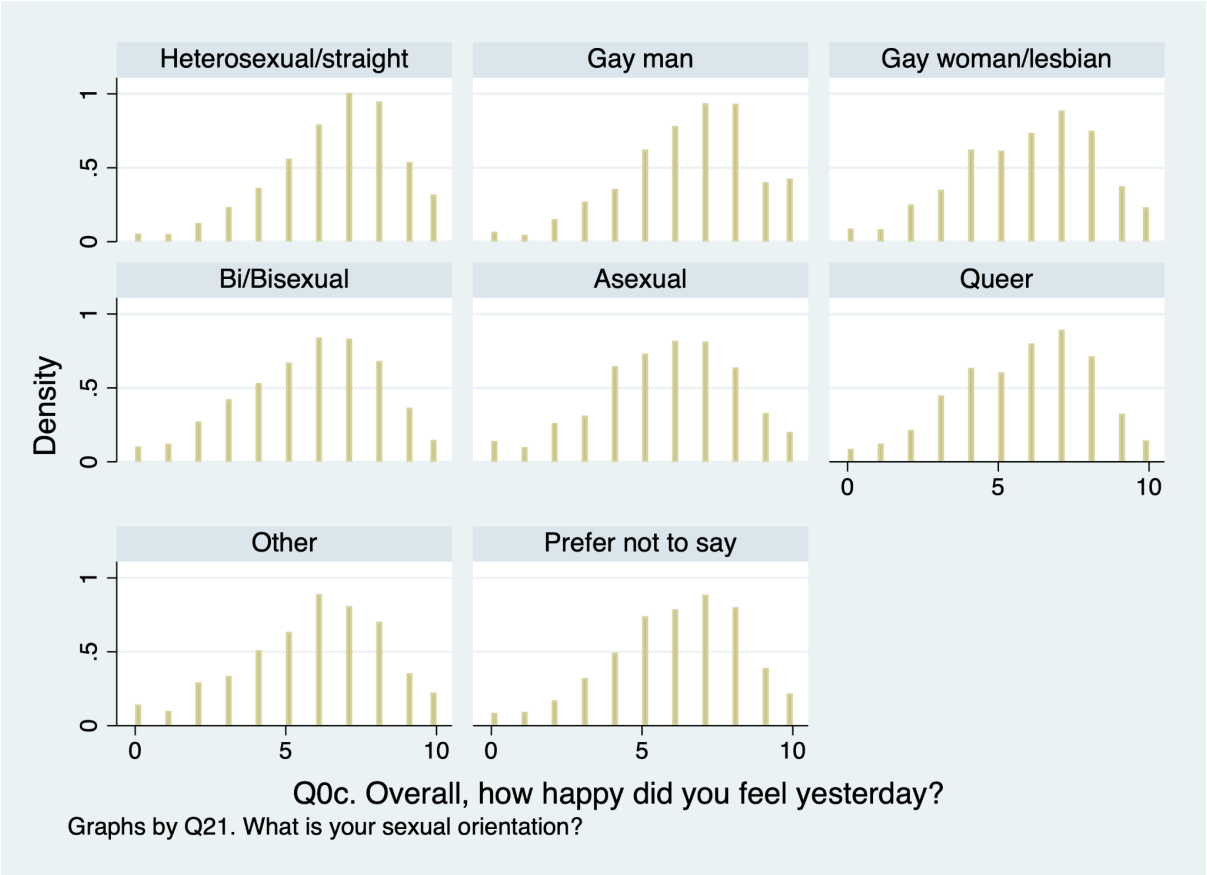
The first question we ask of the data is how people's wellbeing varies according to their sexual orientation or gender identity. For this, we show the distribution of each of the four wellbeing scores for people of different sexual orientation.

The distributions of the four wellbeing questioned split by sexual orientation look cosmetically similar - see for example the figure below. However, formal tests show that the distributions are actually significantly different[5].

Through regression analysis, we are able to determine that straight people have the highest wellbeing and lowest anxiety of any sexual orientation in our group. Asexual students have systematically the lowest wellbeing, while bisexual respondents have the higher anxiety - although all LGBAQ groups levels are not significantly different to

[5] Kolmogorof Smirov tests for equalities of distribution show consistently signifiant differences in distribution.

each other. Gay men have the closest wellbeing scores to straight people, with no significant difference between their happiness and that of straight people.



However, this similarity is in part driven by the fact that gay men have two charateristics that are associated with wellbeing - their sexual orientation and their gender. When we control for participants' identified gender, gay men's wellbeing is significantly worse than the straight male counterparts. Similarly, some of the poor wellbeing of gay women and bisexual people is explained by their gender. When controlling for stated gender, the gap between the wellbeing of asexual participants and all other sexual orientations becomes larger and statistically significant.

The findings described thus far relate to a large number of regressions, with and without controls. For simplicity, the figures below show for each of the ONS 4 wellbeing questions, the likelihood of having a "High" or "Low" score, split by sexual orientation.

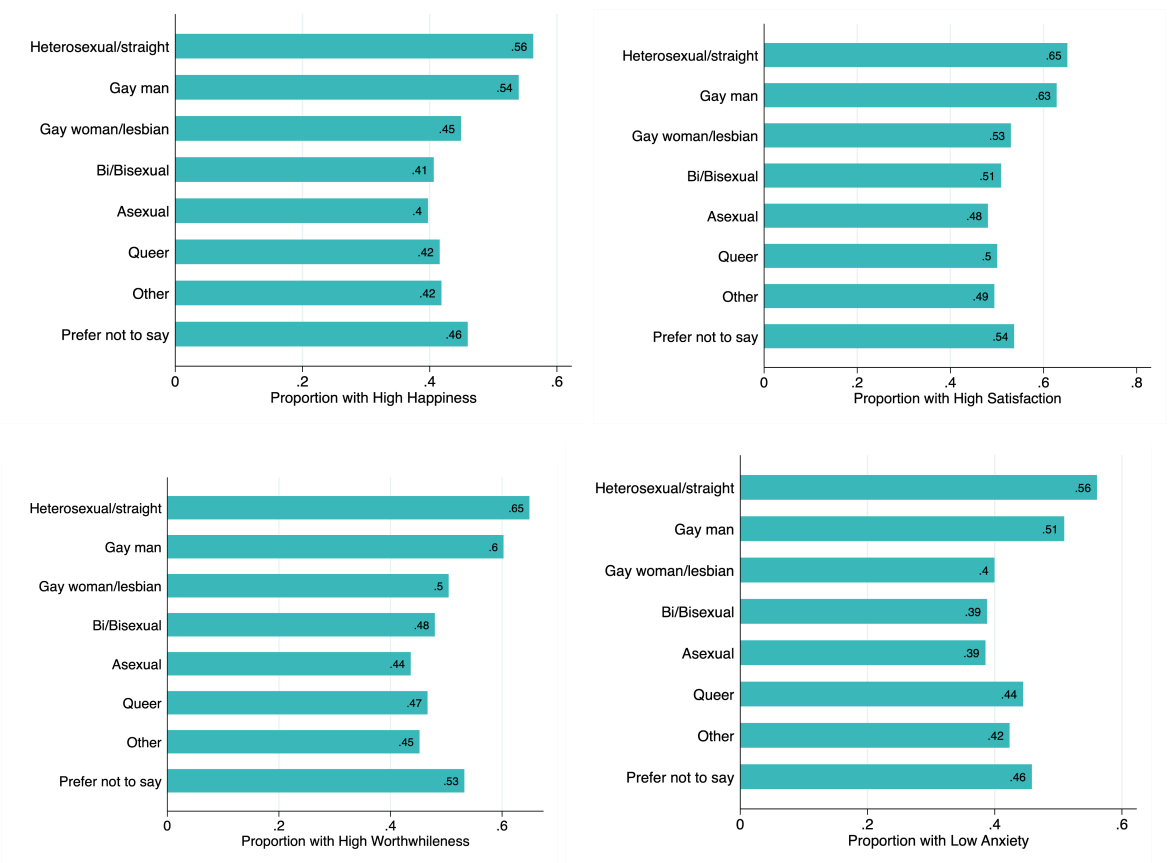


Figure 2: High wellbeing/low anxiety by sexual orientation

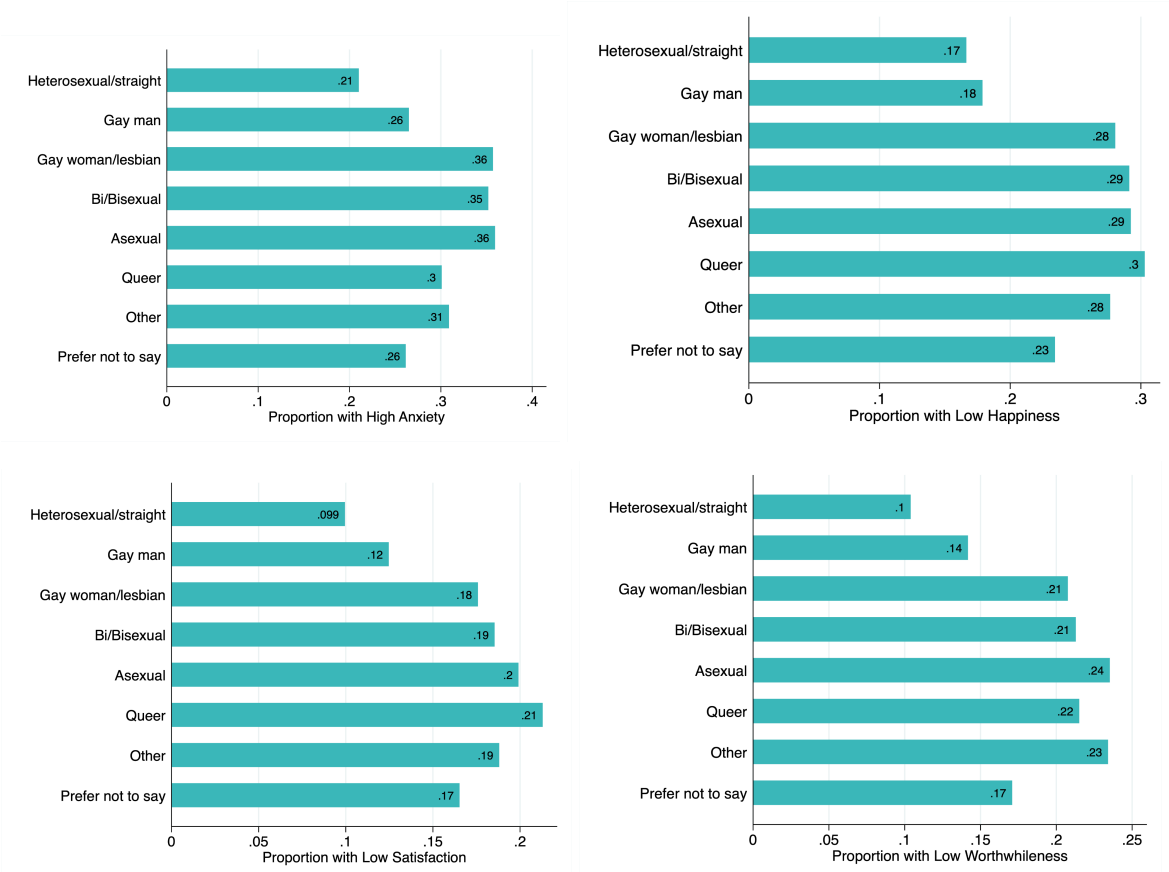


Figure 3: Low wellbeing/high anxiety by sexual orientation

As indicated earlier, there are many fewer observations to make use of in understanding the wellbeing of trans people, however, the graphs below report the same information as those above. Our regression results find that there are relatively few significant differences between trans students and cis students on average in terms of their wellbeing overall, or their propensity to have high wellbeing (see figure 4 below), but that they are much more likely to experience low wellbeing and high anxiety. Whereas around one in four cis respondents reported high anxiety, roughly half of trans respondents did so.

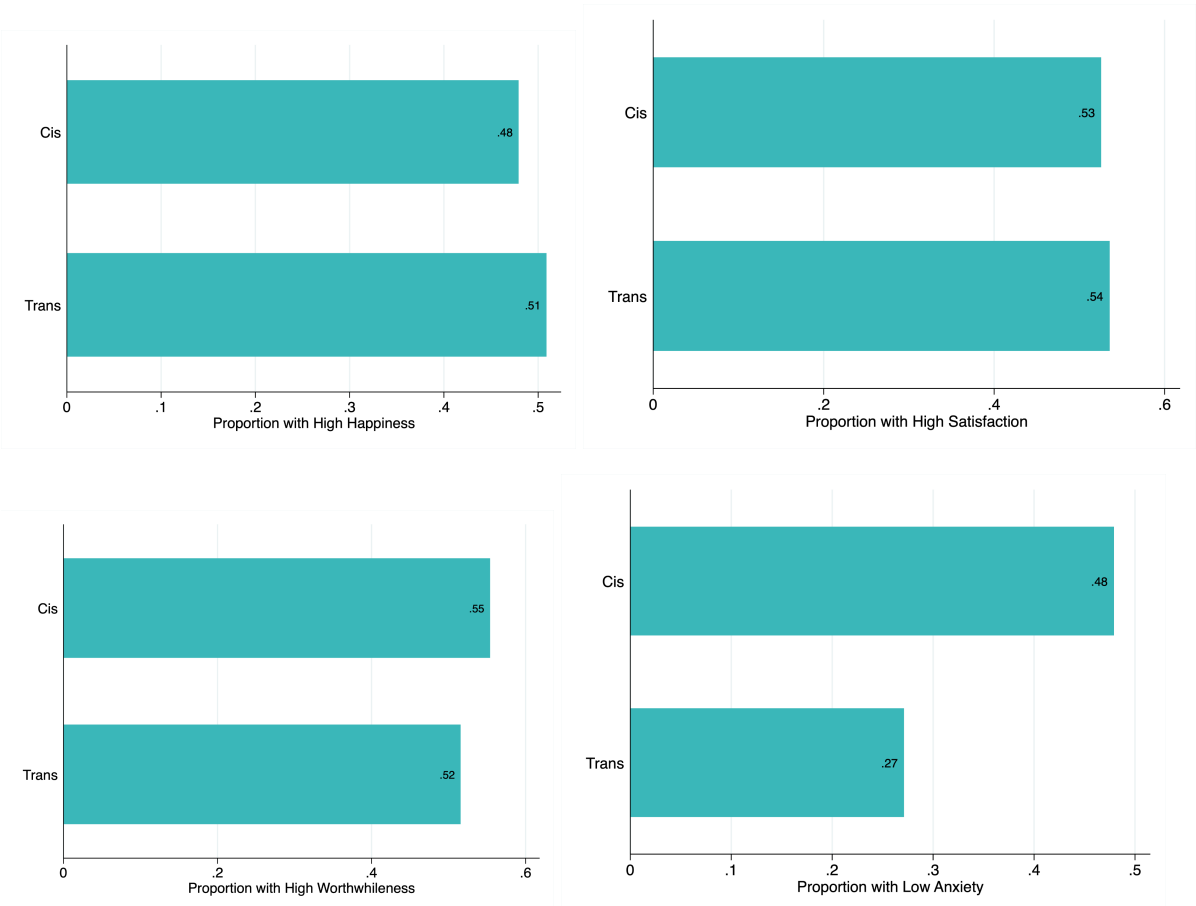


Figure 4: High wellbeing and low anxiety by cis/trans

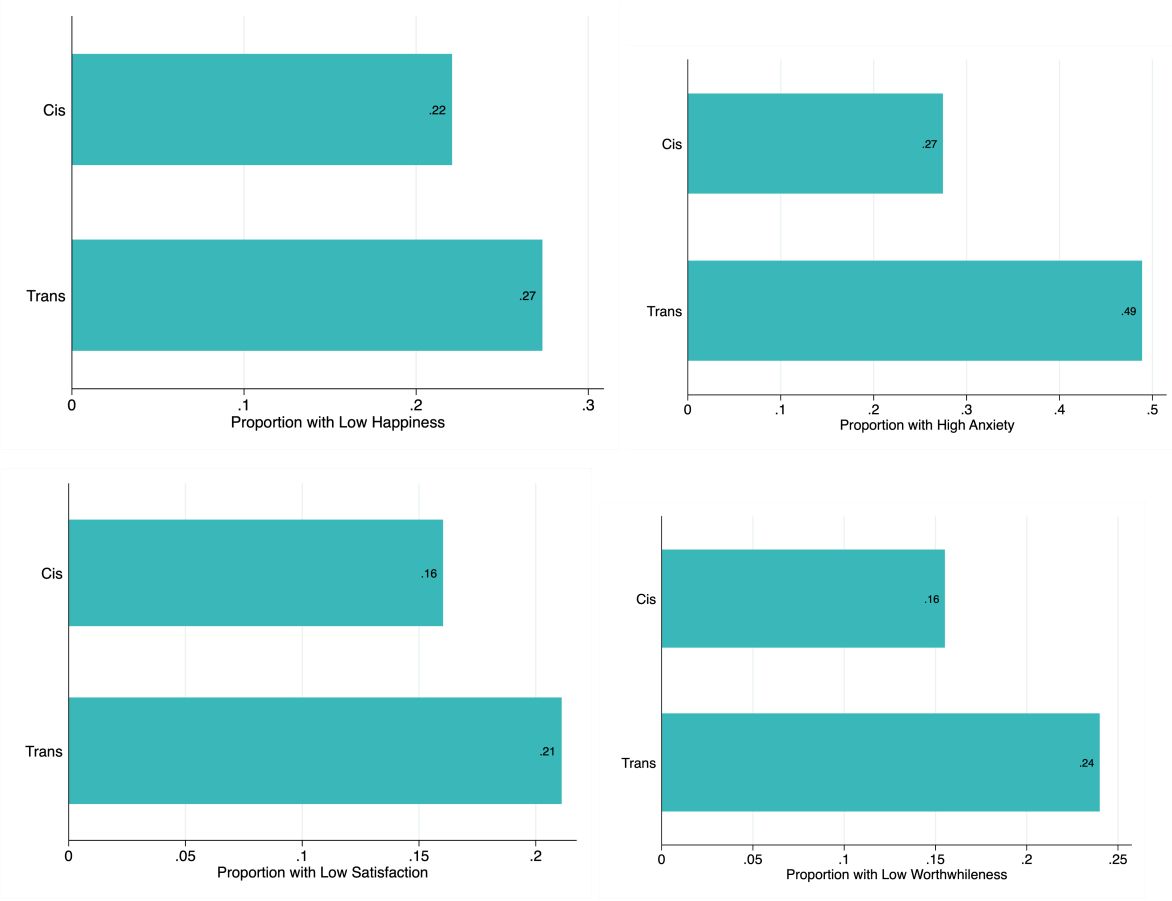


Figure 5: Low wellbeing/high anxiety by cis/trans

How has wellbeing changed over time?

The results we have presented so far look across all of the waves of data available for participants - from 2016-2017 for analysis of sexual orientation, and from 2020-2021 for trans identity.

However, even the last two years have seen very substantial changes in students' lives (with the arrival of virtual and hybrid learning during Covid), and of the wellbeing of LGBTQ+ people in society more generally.

In this section, we consider how wellbeing has changed over time for our different groups, starting with figure 6, below, which shows how wellbeing scores have changed for the different sexual orientation groups over time.

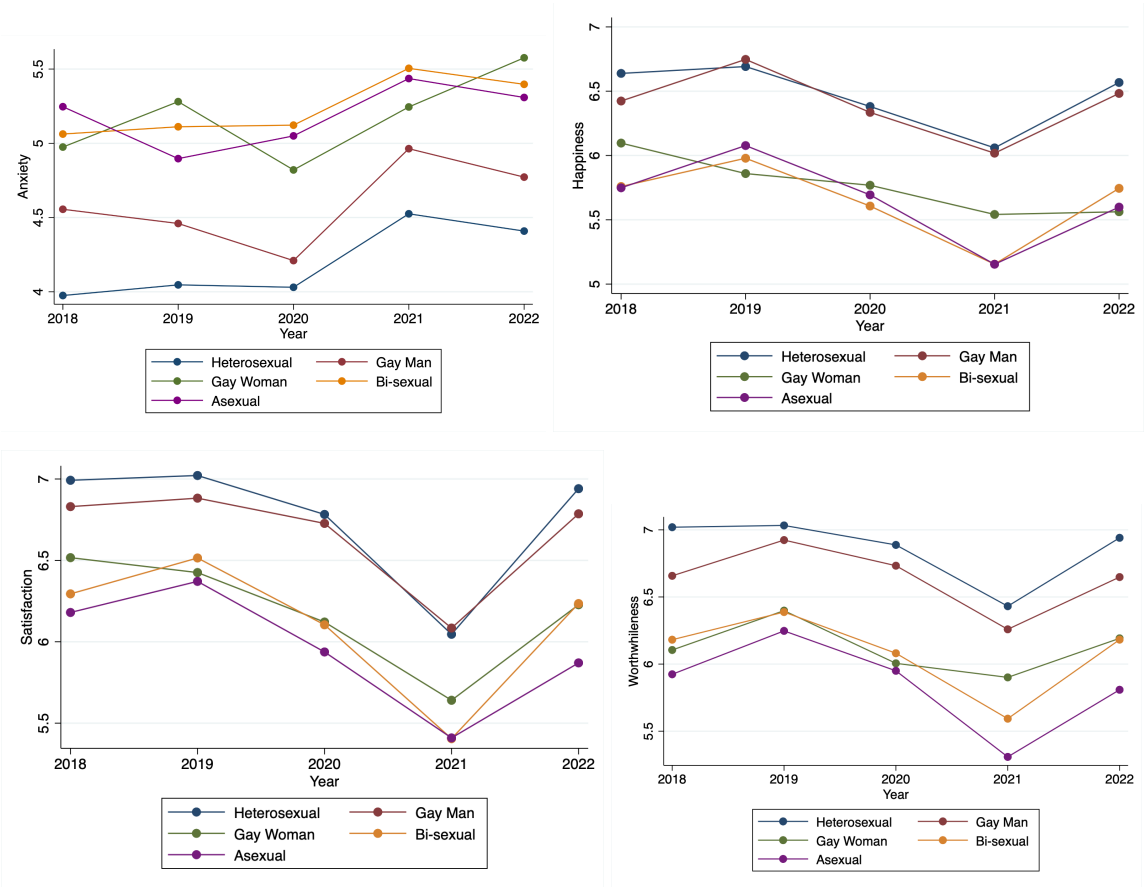


Figure 6: Raw wellbeing scores over time, by sexual orientation groups[6]

As we can see, LGBA[7] people experience much the same patterns of wellbeing as their peers - a generally fairly flat curve with slight downward slope in overall wellbeing (upward curve in anxiety) prior to the Coronavirus pandemic (which starts in the 2021 year in our data, which substantially reduces wellbeing, followed by some evidence of recovery in the most recent year.

This pattern does not differ meaningfully across different LGBA groups, nor does it differ substantially between LGBA students and straight students, when tested within regression analysis. We find that anxiety among straight students is rising faster than among LGBA students, but that this trend would need to continue for more than 20 years for the two groups to be equal. In general, (although this is not statistically significant), the pattern is that the wellbeing of LGBA students is declining at a (slightly) slower rate than that of their straight peers.

[6] Note that here we exclude the 'Other' and 'Queer' sexual orientation groups as sample sizes *per year* are small, leading to high volatility.

[7] For regression analysis here we have combined analyses broken down by different sexual orientation category data, and aggregating data to an LGBQA level. This is to maintain statistical tractability and interpretability, and to lend statistical power to the analyses, while still aiming to preserve the integrity and diversity of the LGBQA experience.

Nor, on overall scores, are there significant differences between groups' wellbeing response to the pandemic.

When we look at our indicators for high/low wellbeing the picture is more or less the same, with some notable exceptions.

Straight people are on average getting less likely to be classed as low anxiety by about 1% point each year, or classed as high anxiety at the same rate, while LGBA people are on average remaining at the same level on both measures. This is a negative story for straight people, rather than a positive story for LGBA people, and must be put into the context of LGBA people being 21 percentage points less likely to have low anxiety.

LGBA people experienced significant increases in their likelihood of having low happiness or low worthwhileness in the 2020-2021 academic year data which is most strongly associated with Covid. In both cases, both straight and LGBA students experienced a significant increase in their rates of low happiness and worthwhileness, but these were approximately 50% larger for LGBA students. When accounting for the already higher rates among LGBA students, this is a cause for some concern.

This concern is exacerbated by a slower recovery from Covid by LGBQA respondents. Although it is too soon to be certain, if rates of recovery do not change, this widening of the gap between LGBA students and others could become permanent. The figures below show the change in rates of low happiness (figure 7) and worthwhileness (figure 8) for LGBQA and straight students pre-covid, during Covid, and during recovery. During Covid, nearly 1 in 4 LGBQA students reported low worthwhileness, nearly double the rate for straight students, while 18% still report low worthwhileness in the more recent Recovery period.

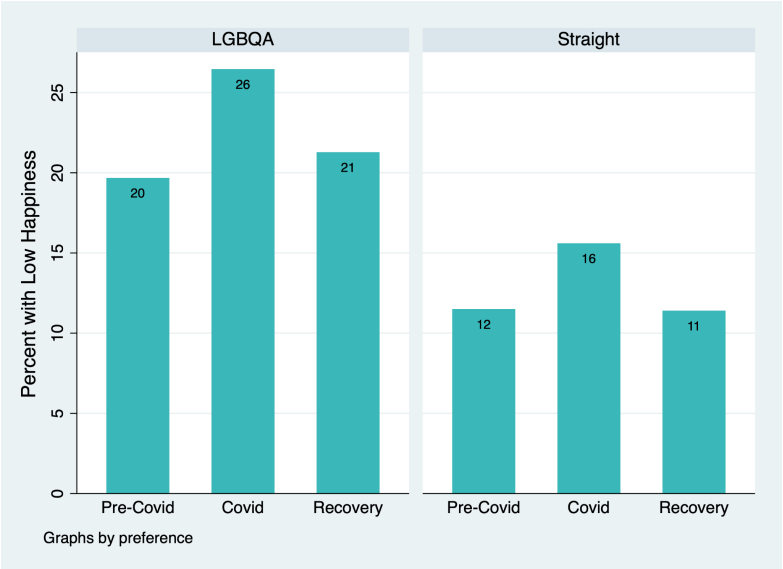


Figure 7: Low happiness before, during and after Covid.

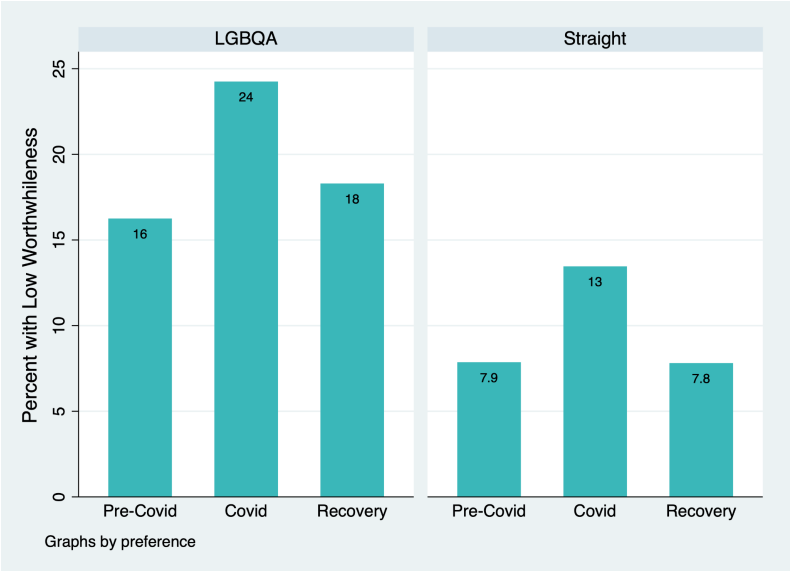


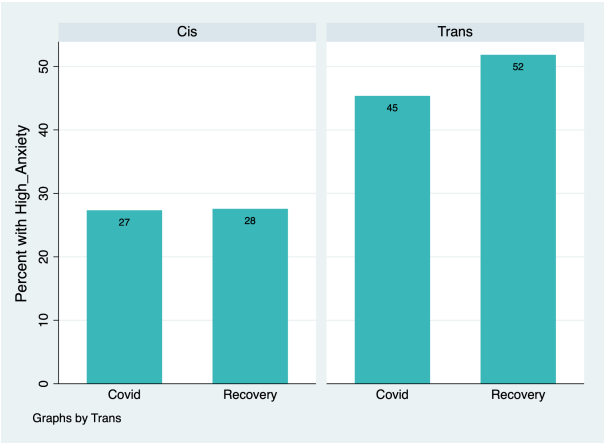
Figure 8: Low worthwhileness before, after and during Covid.

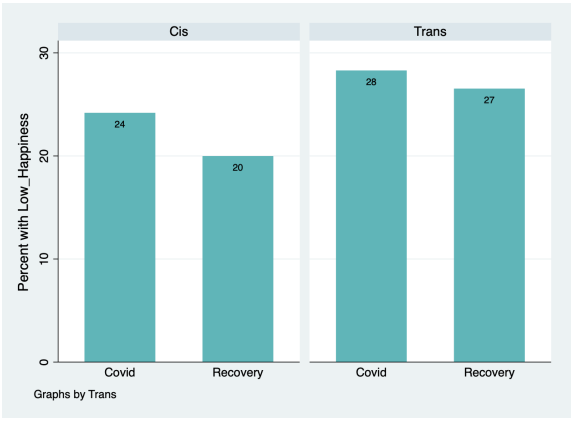
Analysing wellbeing over time for trans students yields substantially less insights at this stage, for two overlapping the reasons. The first is that questions of trans status only started to be asked in 2021, and so, at this stage, we only have two years of data which is too little to establish a trend. The second is that the first year of data collection on students' trans identity coincides with the incredibly unusual year of the pandemic - and as such, we cannot look at how wellbeing changed over the course of (or as a result of), the changes in student experience as a result of the pandemic.

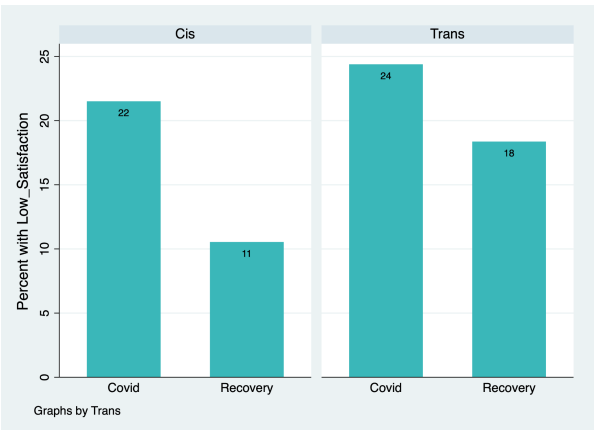
Nonetheless, there are some striking changes even over the time period covered by the data on trans students, and even considering the relatively small number of trans students in the data.

As can be seen in Figure 9, and from the corresponding regression analysis, the gap between trans people's likelihood of experiencing poor wellbeing (low wellbeing, high anxiety) is both consistently higher than that of their cis-gendered peers, and is widening for all measures. These findings are not consistent in their clearing the threshold of statistical significance - the baseline differences are significant for rates of worthwhileness and anxiety only, and none of the changes in these gaps from year to year are statistically significant at conventional levels.

However, given the absolute magnitude of the differences, and the consistency across the various measures we have looked at, the lack of statistical significance does not alter our overall conclusion that the extent to which trans students are experiencing poor wellbeing is both very substantial, and substantially worse than that of their cis peers, and that in the last two years this difference has become worse. One particularly striking finding is that over half trans students reported high anxiety in the most recent year, a higher proportion than did so during Covid.







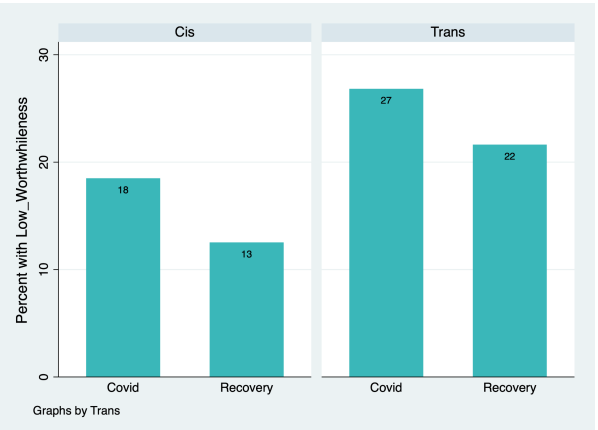


Figure 9: Trans and Cis Students' experiences of low wellbeing/high anxiety over time.

How does wellbeing change over a student's studies?

The final dimension at which we look at differences in LGBTQ+ students' wellbeing at university is how their experiences change over the course of their studies. The SAES data indicate what year of their studies a student is in, from first to ninth, but in practice the vast majority of students are in their fourth year or earlier, and so we limit our analysis to these students here.

The figure overleaf (Figure 10), shows how students' wellbeing scores change over the course of their first four years of study . It should of course be noted that most students only undertake three years of study in a typical undergraduate degree, and hence that samples for some groups become especially small when considering the fourth year of study.

Students in general get more anxious over the course of their degree, and while the inverse is true for gay women, the difference is not statistically significant. Straight students and gay men experience lower wellbeing over the course of their studies, albeit only fairly small declines in each year, while bisexual students and gay women experience modest gains on these wellbeing measures. For asexual students the picture is more mixed - although this may reflect their relatively modest numbers.

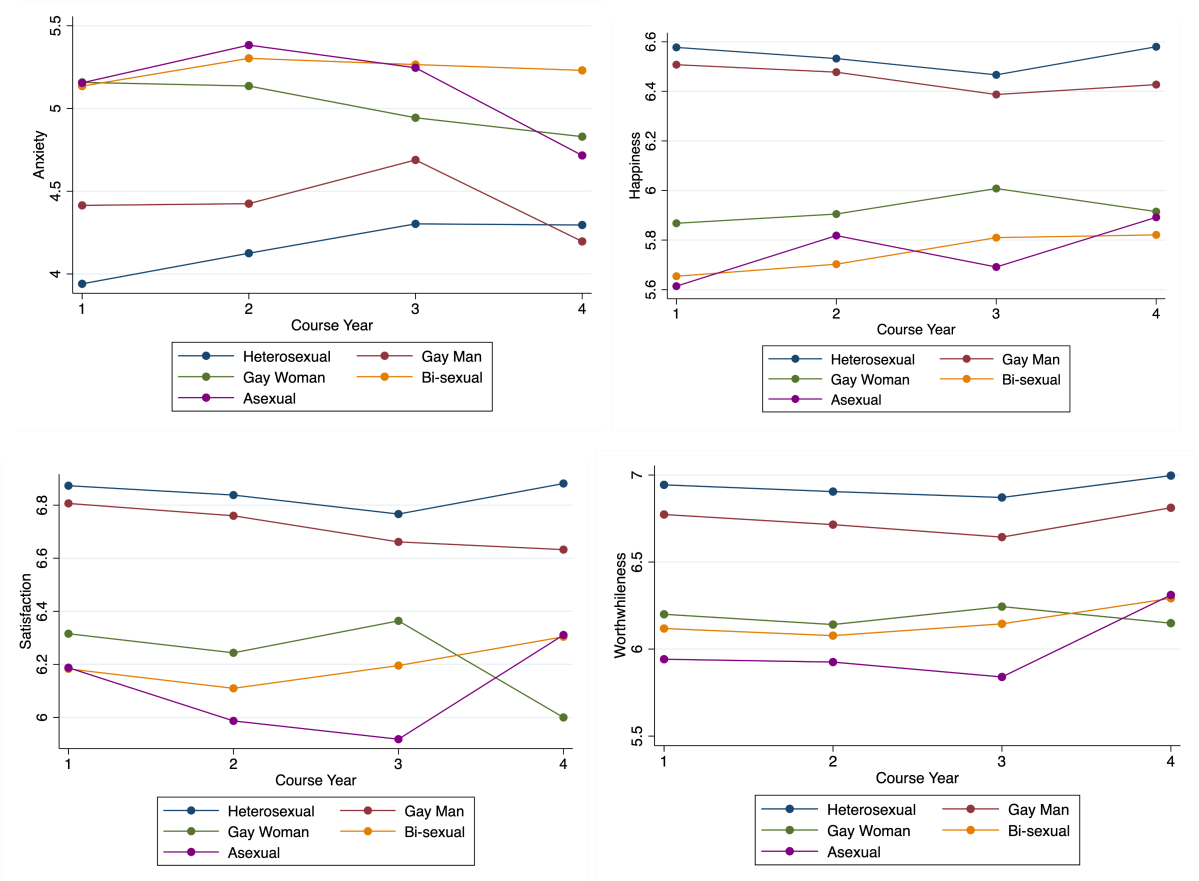


Figure 10: Wellbeing scores over year for study for LGBA students

For trans students, the most interesting findings are again to be found in the extremes - those experiencing particularly high or low wellbeing. In common with our previous findings on anxiety, the trans students are much more likely to experience high anxiety than their cis peers, and this appears to get worse over the course of their studies.

However, there are also hopeful findings here. Over the course of the three years of an undergraduate degree, the proportion of trans students experiencing high wellbeing rises gradually, narrowing the gap between trans and cis students on this metric. In the case of life satisfaction, third year trans students are actually more likely to score highly than cis students. On the other end of the spectrum, there is a reduction in the gap in proportion of people experiencing low worthwhileness. These findings must be interpreted with some caution. Our data contain 391 trans students in their first three years of study, with fewer students in each year.

Proportionate variables are particularly prone to small sample biases - 20 students moving from a 6 to a 7 on their happiness appears as a 20% point shift in the proportion of trans students who are very happy. Given that people are attempting

to put a cardinal value on a subjective concept, this kind of measurement wobble is commonplace for small groups, but can meaningfully impact on our findings.

Nonetheless, there is some reason for optimism within this data, which should be picked up for further analysis in subsequent years.

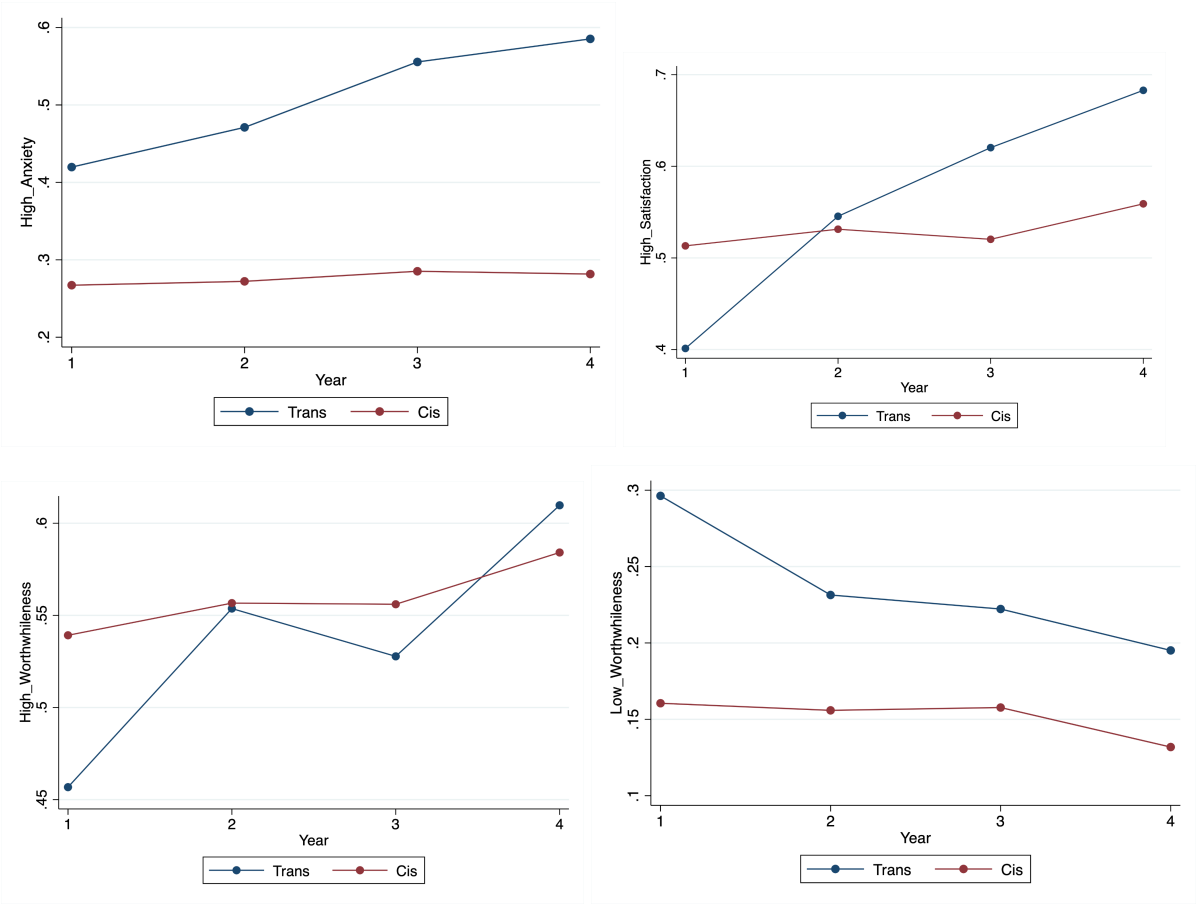


Figure 11: Examples of gaps widening and contracting for trans students in wellbeing measures

Conclusions

In this short paper we have used data from the Student Academic Experiences Survey (SAES) administered on behalf of Advance HE and the Higher Education Policy Institute to dig more deeply into the wellbeing of LGBTQ+ students.

We have found very substantial inequalities in wellbeing. LGBTQ+ in general experience lower wellbeing and higher anxiety than their straight and cis-gendered peers. Gay men's experiences are closer to that of straight people overall, but we find that this is attributable in part to their maleness, and that when this is taken into account, their experiences are more similar to other LGBTQ+ people.
LGBTQ+ students, and particularly trans students, are more likely to experience acutely low wellbeing (high anxiety), than their peers. This has important implications for the role that universities and students' unions must play in attempting to reduce these inequalities.

This dataset is impressive in its richness, and in the number of students surveyed. Although this does not always allow for statistical significance to be found in relationships, it allows us, for the majority of our analyses, to consider the component letters of LGBTQA+ separately, and not to treat LGBTQA+ people as a monolith (although, for statistical tractability, we do aggregate responses in some cases). From this, while we are able to see that LGBTQA+ people's wellbeing has more in common with each-other than they do with straight participants, they *do* differ from each-other. Asexual students, a group who are in our view less commonly considered and studied, do experience worse wellbeing than other groups. Importantly, asexual people's experiences of their degrees is much more mixed than other LGBTQ groups, who in general appear to experience improving wellbeing over the course of their degrees. Without more than 1,100 Asexual respondents, this picture could not have been developed.

Finally, the timeline of the data has allowed us to look at how different groups have responded to the Coronavirus pandemic and its aftermath. For this analysis we have relied on aggregated LGBQA data in order to achieve sufficient observations for more robust analysis. Here we see a concerning picture emerge - of LGBQA people experiencing a significantly larger reduction in wellbeing in the year of the pandemic, *and* a slower recovery from it in the 2021-2022 academic year.

Overall, our findings show the value of including both wellbeing questions and those about sexual preference and gender identity in these large surveys. They show that achieving wellbeing equality for students in UK Higher Education regardless of the

various components of their identity is a way off, and that there is work for all organisations involved in students' life to do to help bring this about. Most worrying, we have found that the effects of the pandemic have both widened the gap the wellbeing of cis-gendered striaght people and LGBTQ+ people, and that these gaps have at least partially persisted - and at levels which could take decades to close if we continue on pre-pandemic trends.