

## **From LGB to LGBTQ+: Earnings and the institutionalization of sexual and gender identities**

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### Short Abstract

Social stratification research often focuses on (binary) gender, class and ethnicity as characteristics that stratify people's lives. Recently, researchers have started drawing attention to sexual orientation as a characteristic that shapes people's opportunities in life. LGB people earn less than heterosexual men, but often more than heterosexual women. However, we believe that previous research has underestimated the role of sexual and gender identity in earnings by only studying a limited set of sexual identities. We aim to address this limitation by including sexual identities that go beyond lesbian, gay and bisexual identities, as well as trans\* and non-binary people.

We use data from a representative survey in Norway that is complemented with earnings data from administrative records on 9,761 individuals out of which 508 have a non-heterosexual identity and 89 persons are trans\* or non-binary. Sexual and gender identities that further challenge norms regarding sexuality and gender, such as queer, pansexual, asexual, trans\* and non-binary are all related to strong earnings penalties, possibly also once compared to gay and lesbian individuals. Because identities available to people change over time and space, using measures that only capture a restricted number of identities complicates comparisons across contexts, especially if people with emerging identities are particularly disadvantaged in the labor market.

## *Extended Abstract*

Social stratification research often focuses on (binary) gender, class and ethnicity as characteristics that stratify people's lives. Recently, researchers have started drawing attention to sexual orientation as a characteristic that shapes people's opportunities in life. Studies on labor market outcomes have come to several important conclusions. Heterosexual men earn more than gay men, lesbian women, bisexual men, and bisexual women across a large variety of contexts (Badgett et al., 2021; Mize, 2016; Valfort, 2017). In general, heterosexual women earn less than all groups of men and lesbian women, but bisexual women often earn even less (Drydakis, 2022). A few studies have also shown that gender identity is related to lower levels of employment (Carpenter et al., 2020).

These observations are of concern, especially in light of studies showing discrimination in hiring based on sexual orientation and gender identity (Drydakis, 2009; Geijtenbeek & Plug, 2018), as well as negative stereotypes related to competency (Mize & Manago, 2018). Despite this already concerning picture, we believe that there are at least two reasons to expect that existing studies have underestimated the disadvantages experienced by the LGBTQ\* population overall.

The first reason why previous research may have underestimated the earnings penalties experienced by the LGBTQ\* population is that existing quantitative measures of sexual orientation only allow for a limited number of identities to be studied. Respondents are usually asked to indicate how they identify, with the options Bisexual, Gay/Lesbian, Heterosexual and sometimes an "Other" answer option (Valfort, 2017). As a consequence, the accumulated body of research on earnings differences by sexual identity is almost exclusively based on the LGB (Lesbian, Gay, Bisexual) population.

This issue is not trivial. Individuals with non-heterosexual identities that go beyond LGB further challenge social norms regarding sexuality. We argue that the less institutionalized identities are, the more likely people with these identities are to experience heightened levels of stigma and discrimination in the labor market, possibly even once compared to LGB individuals. If this is the case (and we will show this is the case in Norway), studies on the LGB population miss particularly disadvantaged parts of the non-heterosexual population, and underestimate the overall importance of sexual identity in the labor market. Furthermore, sexual and gender identities change over time, both within individuals and across historical time. Hence, focusing on a subset of identities complicates making claims about whether disadvantages related to sexual orientation are changing over time or vary across countries with differing levels of discrimination, stigma, and policies; especially when emerging identities are related to disadvantage.

The second reason why previous research is likely to have underestimated the disadvantages of the LGBTQ\* population is that gender identity has been mostly absent from the area of research. Most surveys only collect information on sex/gender in a binary manner and do not have information that allow distinguishing cisgender from trans\* individuals. Trans\* and non-binary individuals face high levels of discrimination and stigma and could therefore have particularly low levels of earnings.

In this paper, we aim to overcome these two shortcomings of previous research by using high-quality representative survey data complemented with registry data from Norway.

This data allows us to study a considerably larger variety of sexual identities (e.g. Pansexual, Queer, Asexual, and Fluid) and gender identities (e.g. non-binary, as well as trans\* persons). Altogether, we therewith hope to push research on earnings gaps beyond LGB identities and to include larger parts of the LGBTQ\* population. To achieve this goal, we ask two main research questions: 1) How do the earnings of non-heterosexual individuals not identifying as LGB compare to the earnings of heterosexual and LGB individuals? 2) Do the earnings of trans\* and non-binary individuals (TNB) differ from those of cisgender individuals? We also ask the question what the consequences are of our findings for the comparability of previous research on the LGB population across time and space.

## **Data and Method**

We use data from the Norwegian Quality of Life Survey, a nationally representative survey collected in 2022 which is complemented with data from administrative records. Our sample is restricted to individuals aged 23 to 62 and consists of 9,761 individuals out of which 508 have a non-heterosexual identity and 89 persons are trans\* or non-binary. The dataset has two main strengths. Firstly, it includes information on sexual identity and offers answer options that go beyond LGB identities. Secondly, the survey is complemented with data from administrative records on earnings. In additional analysis, we also use equivalent surveys for the years 2020 and 2021 where a more limited question on sexual identity was included, and which is comparable to those used in most other representative surveys (i.e. answer options only cover LGB identities). Comparing across surveys allows us to get an understanding of whether and how differences in answer options can affect overall estimates of the earnings penalties experienced by the LGBTQ\* population.

Our main dependent variable is respondent's yearly total salary. Although the dataset is from 2022 it provides figures from Statistics Norway's income and wealth register, providing registered total salary at 31<sup>st</sup> of December 2020. We create a percentile variable of earnings (including 23% of zero-earners) to facilitate interpretability and comparability across surveys.

The 2022 edition of the Norwegian Quality of Life survey provides a rather extensive coverage of different sexual identities. The identities included are: *Heterosexual* ( $n = 9,326$ ), *Lesbian/ Gay* (159), *Bisexual* (203), *Pansexual* (55), *Queer* (21), *Asexual* (23) and *Fluid* (46). Furthermore, a last category 'Other sexual identity' is provided, but only two respondents picked the 'other sexual identities' option, which is a first sign that this question captures non-heterosexual identities more accurately and exhaustively than other surveys which often have large shares of respondents answering "Other" that include large numbers of heterosexual individuals that do not understand the answer options.

Gender diversity is captured through a variety of questions. Firstly, self-reported gender identity with categories 'man', 'woman', 'non-binary' or 'other gender-identity'. Secondly, gender registered in the population register. Thirdly, the survey includes a question if the respondent ever is registered with another gender than they were assigned at birth in the national population register. Combining information from these questions

we create 6 gender categories, namely: *trans\* man* (27), *trans\* woman* (31), *non-binary* (22), *cisgender man* (4710), *cisgender woman* (5403) and *other* (9).

### **Preliminary Results**

Table 1 shows how sexual and gender identity relate to earnings percentile. The model for sexual identity (model 1) controls for birth decade and registered gender, whereas the model for gender identity (model 2) only controls for birth decade.

The results show that all non-heterosexual people earn less than heterosexual people, even though this effect is not statistically significant for gay/lesbian individuals. Individuals with identities beyond LGB such as pansexual, queer or asexual, have particularly low earnings, even though differences with bisexual individuals are not statistically significant (not shown). Model 2 shows that trans\* men, trans\* women, and non-binary individuals experience great earnings gaps with cisgender men as well as cisgender women. There are no major differences between non-binary and trans\* persons in terms of earnings.

In additional analysis, we explore these differences further by distinguishing between differences in employment and wages as well as the inclusion of social background characteristics to control for possible selection into identities. Another goal is to look at the intersection of gender identity and sexual identity.

We also compare results to those from earlier years (2020 and 2021) where respondents could only identify as heterosexual, lesbian, gay, bisexual or other. These results show similar penalties for LGB individuals across the three years. However, the more limited 2020 and 2021 questions underestimate the earnings penalty experienced by non-heterosexual individuals overall. This suggests that non-heterosexual individuals who do not identify as LGB selected “Other” or refused to answer in 2020 and 2021 (rather than selecting an LGB identity). This implies that using limited answer options (i.e. heterosexual and LGB) excludes an important and particularly disadvantaged part of the LGBTQ\* population from our studies.

### **Conclusion**

Our results show how studies on the LGB population underestimate the privileged position of cisgender heterosexual men in the labour market and how including more identities in answer options of survey questions on sexual identity enables better documenting the disadvantages experienced by the non-heterosexual and non-cisgender population.

These observations have important implications for future data collection and the way in which we compare earnings differentials by sexual and gender identity across time and space. If the identities prevalent in the population change across time and space, there will be important differences in the extent to which “traditional” questions about sexual identity (with the sole options of LGB) capture the non-heterosexual population. Especially if novel identities that further break norms regarding gender and sexuality are

related to low earnings, as we observed in Norway, the comparability of traditional sexual measures across time (and space) is compromised. This speaks in favor of adapting measures of sexual and gender identity to the contexts studied.

*Table 1. OLS regressions explaining earnings percentile*

	Earnings Percentile	
	Model 1	Model 2
<i>Sexual identity (ref. Heterosexual)</i>		
Gay/Lesbian	-2.205 (2.198)	
Bisexual	-8.357*** (1.958)	
Pansexual	-12.49*** (3.723)	
Queer	-11.26* (6.000)	
Asexual	-12.49** (5.733)	
Fluid	-9.085** (4.058)	
Other	-29.01 (19.41)	
Refused	-16.00*** (1.554)	
Don't Know	-19.11*** (2.588)	
<i>Gender Identity (Ref. Cisgender man)</i>		
Trans* man		-24.62*** (4.902)
Cisgender woman		-11.68*** (0.554)
Trans* woman		-21.22*** (4.501)
Non-binary		-21.11*** (5.663)
Other		-8.209 (8.341)
Refused		-16.84*** (4.096)
Don't know		-26.77*** (5.146)
Constant	41.82*** (0.676)	40.91*** (0.673)
Observations	10,198	10,198

Note. OLS regression of earnings percentile. Model 1 controls for birth decade and registered gender, whereas Model 2 only controls for birth decade (not shown). \*\*\* p < 0.01; \*\* p < 0.05; \* p < 0.10

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