

# Sexual harassment leads to economic inequality<sup>1</sup>

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## Abstract

This study examines sexual and gender-based harassment by employees and managers in the Swedish labour market. Using data from the work Environment Survey, we show that women are subjected to this kind of harassment to a greater extent than men, but that both men and women are more vulnerable than the opposite sex when they are in the minority in their workplace. As wages are generally higher in male-dominated workplaces, this means that women are more vulnerable to harassment in workplaces with high wages, and men in workplaces with low wages. The study finds evidence that these patterns increase economic inequality in two ways. First, one survey experiment shows that harassment discourages women and men from seeking employment where their gender is in the minority. Secondly, an analysis of how people switch workplaces over time shows that harassment leads to women leaving relatively well-paid workplaces with a large proportion of men, in favour of lower-paid workplaces with fewer male colleagues.

## Introduction

Sexual harassment in work organisations is a serious problem (Fitzgerald & Cortina, 2018). In a recently published research article, we analyse how harassment by employees and managers leads to increased inequality in the labour market (Folke & Rickne, 2022). Harassment more often affects women and men who are in a gender minority in their workplace, which means that women are at greater risk of vulnerability in workplaces with high wages and men in workplaces with low wages. This pattern leads to greater economic inequality in two ways. First, the risk of harassment reduces the inclination of both women and men to work in workplaces where they would be in the minority. This means that women are put off taking jobs with relatively high wages, and men are put off taking jobs with relatively low wages. In addition, sexual harassment leads to a decrease in the willingness to remain in the workplace for those who are already in the minority, making women (but not men) more likely to change employers. These changes increase economic inequality, as women who have been harassed often choose to move away to employers who pay lower wages and have a higher proportion of women employees.

## Individuals in a gender minority are more vulnerable to sexual harassment

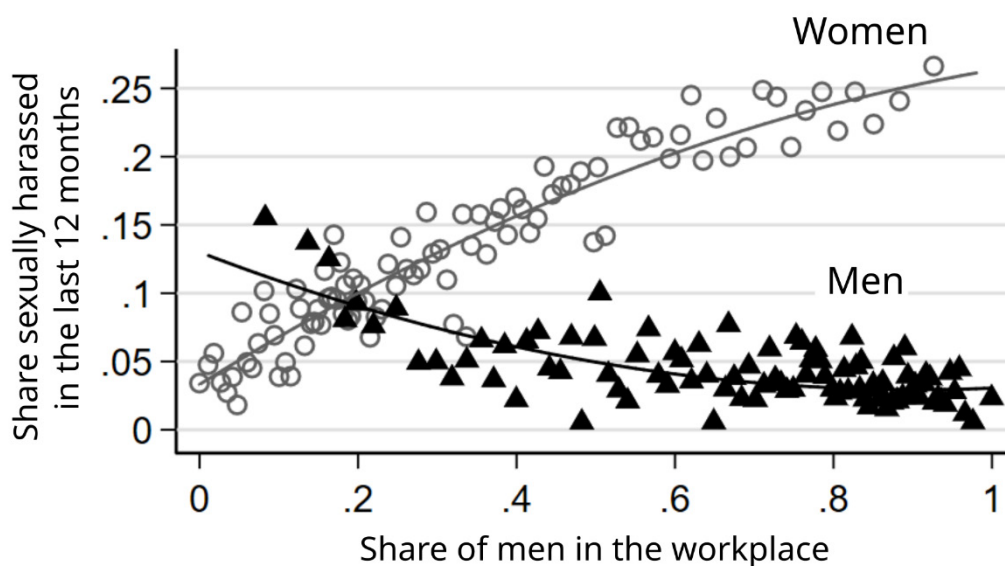
We have used detailed data to compare the extent of sexual harassment of women and of men working in workplaces of differing gender composition. The purpose of this preliminary analysis is to study whether the degree is greater when one of the genders is a minority in the workplace.

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In the Work Environment Survey, conducted by Statistics Sweden on behalf of the Swedish Work Environment Authority, sexual harassment by managers or employees is assessed by means of two questions. The survey is conducted every two years, and during the period 1999–2007, questions were asked about the incidence of two types of harassment during the prior twelve months. The first concerned unwelcome advances or offensive allusions to things generally associated with sex. The second concerned acts based on a person's gender that violate his or her integrity or are degrading.<sup>2</sup>

The composition of respondents in the Work Environment Survey reflects the Swedish workforce in terms of occupation, education, age and other attributes of individuals and workplaces, such as company size and region of birth. Our analysis involves linking the survey responses with registry data from Statistics Sweden. This enables us to find the colleagues of everyone who answered the survey and to calculate how many of these colleagues are men. We then categorise the approximately 40,000 survey responses based on gender. Next, we divide men and women into groups of about 200 people with similar proportions of men in their workplace. For each small group, we calculate the proportion of employees who have been sexually harassed over the prior 12 months. These averages are shown in Figure 1.



**Figure 1.** Share of sexually harassed women (circles) and men (triangles) in relation to the proportion of men in their workplace.

*Note:* The figure shows the prevalence of sexual harassment in groups of 200 men or women based on the proportion of men in their workplace. Sexual harassment data is sourced from five editions of the Work Environment Survey from 1999–2007. The number of observations is 19,975 women and 17,482 men. The proportion of men in the workplace was calculated using registry data from Statistics Sweden.

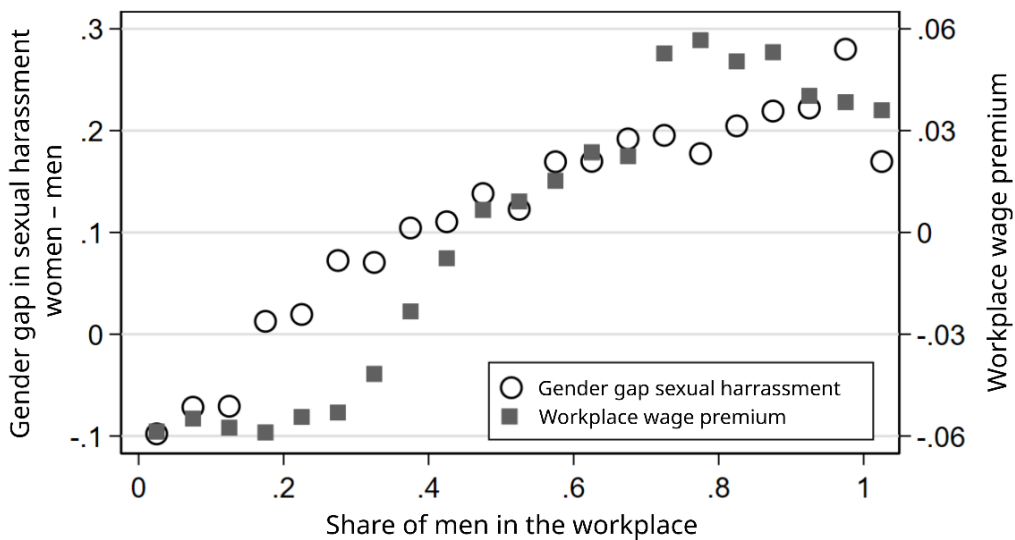
The results in Figure 1 show two significant patterns. The first is the difference between the vulnerability of women and men: women are three times more likely than men to be subjected to harassment from managers and employees. The second pattern concerns the gender composition of workplaces: both women and men are at greater risk of being harassed when their gender is a minority in the workplace. When the proportion of men in a workplace is 10 per cent, women's risk of vulnerability is 5 per cent, whereas at 90 per cent of men in a workplace, it is five times as high: 25 per cent. Conversely, the vulnerability of men is significantly greater in the most female-dominated workplaces. In male-dominated workplaces, around

3 per cent of men had been subjected to harassment during the prior 12 months, while in workplaces where the proportion of men was 10 per cent or less, the corresponding figure was between 10 and 15 per cent.

### Women are subjected to harassment in high-wage workplaces and men in low-wage workplaces

It is a well-established pattern in the labour market that workplaces with a higher proportion of men have higher wages (Card et al., 2016; Bruns, 2019; Sorkin, 2017). Therefore, we compare how wages and the risk of sexual harassment vary with the proportion of men. Wages are calculated using a standard method that keeps the attributes of the employees constant (see Abowd et al., 1999). We compare the wages of persons of the same gender, occupation, education, years in the workforce and years of active professional work. In the calculation, workplaces are compared with each other, which results in a measure that indicates the wages in a certain workplace as percentage points relative to the average wages of all workplaces in the labour market. For example, the figure 0.03 means that wages are 3 percentage points higher than the overall average, while -0.03 means wages are 3 percentage points lower.

We calculate wages for all workplaces and then select those where a respondent who participated in the Work Environment Survey works. We then divide the workplaces into smaller groups based on the proportion of men who work there – one group per 5 percentage points of men. Figure 2 shows the average wages in each group as grey squares. The circles, on the other hand, indicate the average difference in the proportion of women and men who have been sexually harassed over the prior 12 months.



**Figure 2.** Sexual harassment risks and workplace-specific wage premiums.

*Note:* The Figure shows the relationship between the gender gap in sexual harassment within the last 12 months (left Y-axis) and workplace wages (right Y-axis). Both variables are reported as an average in groups based on the proportion of men in the workplace. Sexual harassment data is sourced from the Work Environment Survey. Wages and employee attributes data is sourced from the registry of Statistics Sweden. Wages are calculated relative to all workplaces in the Swedish labour market (see Abowd et al., 1999). Number of observations is 37,457.

It is clear from Figure 2 that the gender gap in sexual harassment correlates strongly with workplace wages. Women are more vulnerable to harassment than men when wages are high, and men are more vulnerable than women when wages are low. In male-dominated workplaces, wages are between 3 and 6 percentage points above the average. There, the probability of having been harassed is about 20 percentage points greater for women than for men. In workplaces with the lowest wages, the situation is the reverse. Wages in these female-dominated workplaces are six percentage points below average, and men are at about 10 percentage points greater risk than women of being subjected to sexual harassment.

### **Harassment discourages seeking employment**

When a person is sexually harassed, they sometimes tell friends or co-workers about it. In this way, information about the harassment spreads beyond the walls of the workplace. Such rumours and stories can deter potential candidates from seeking employment. We have assessed the impact of this deterrent effect, and whether this impact varies depending on who was the victim of the harassment.

In collaboration with the Swedish Citizen Panel at the University of Hinderburg, we asked Swedish workers to take a stance on various fictitious job offers.<sup>3</sup> Five thousand people were asked to participate in the survey. The module was described as a “study of jobs” and 3,987 people responded, a response rate of 70 per cent.<sup>4</sup> All were active professionals at the time of the survey.

The respondents were shown three tables, each with two fictitious job offers, and were asked to decide which job offer they liked best in each table. Each respondent made three choices.

The fictitious jobs were described based on four attributes: salary, scope for development of tasks, influence over working hours, and the work environment. The values of these factors were randomly selected across jobs. In the information about the work environment, some respondents were randomly assigned to see short descriptions of sexual harassment that had occurred. While some workplaces were described positively, such as “employees are satisfied with the work environment”, others were described with two different types of negative information: either that there was conflict between managers and employees, or that there was sexual harassment. However, to avoid confusion about the meaning of the term “sexual harassment”, we did not use this expression but instead briefly described an incident that took place.

At the beginning of the survey, we asked the respondents about the gender composition at their current workplace. Then we used these answers as the basis for the description of sexual harassment in the information about the work environment in the fictitious jobs. Respondents in female-dominated workplaces read about a male victim and a female perpetrator, while respondents in gender-mixed or male-dominated workplaces saw reversed roles. The statistical analysis calculated how the probability of choosing a job was affected by the incidence of some form of sexual harassment, as well as by all other randomly selected attributes. The reactions to sexual harassment were then compared with the reactions to the wages.

Our calculations show that descriptions of sexual harassment having occurred at a workplace made it clearly less attractive for the respondents to apply. The average reluctance to take a job where harassment occurred was as great as the reluctance to take a job with a 10 per cent lower salary. There was no difference for men and women, or for our three types of incidents. Hearing about groping was as negative as hearing that someone persistently discussed their sex life or that some in the workplace thought a certain gender was less suitable for the job.

However, the reactions to the information about sexual harassment differed greatly depending on the gender of the victim. It was not the case that all respondents categorically chose not to take the job where there was harassment. Far from it: there was a large group of respondents where reluctance about such a workplace was relatively mild, i.e., those reading about a victim of the opposite sex. The reluctance to take a job in a workplace where harassment had occurred was only one-third as strong in this group compared to reluctance among respondents who were told about a victim of their own gender. When the victim was of the opposite sex, the increase in reluctance corresponded to reluctance regarding 6 per cent lower wages, but when the victim was of the same gender as the respondent, the increased reluctance corresponded to

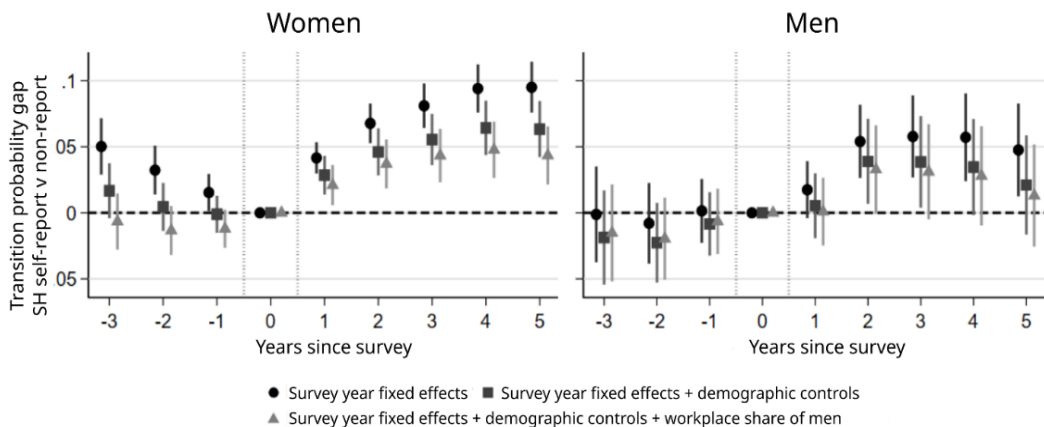
reluctance regarding 17 per cent lower wages.

Stronger reactions to harassment affecting a person's gender is an important piece of the puzzle for understanding the consequences of harassment. Women are more reluctant to take jobs in workplaces where women have been harassed – usually male-dominated workplaces with high wages – while men are put off jobs in workplaces where men have been harassed – usually female-dominated workplaces with lower wages. This way, sexual harassment reinforces gender segregation and the wage gap in the labour market.

In a broader sense, the results of the experiment show that sexual harassment can have a major impact on the ability of organisations to hire new employees. The results show that the ability to hire new employees decreases when potential applicants receive information about harassment having occurred. Further support for this interpretation comes from another survey question, where we asked if respondents were aware of any case of sexual harassment at companies in their industry. More than two-thirds said they knew of at least one such case. This shows that working people in the Swedish labour market have knowledge of harassment and can thus act on this information when job seeking.

### Changing jobs will add to inequality

When a person is sexually harassed, it increases the probability that they will change jobs. However, such changes of job proceed in a way that also adds to economic inequality. First, segregation of women and men in the labour market increases and secondly the gender pay gap increases.



**Figure 3.** Change of workplace after sexual harassment (SH).

*Note:* The plot shows estimated differences in the proportion of people who change workplaces each year before and after they participated in the Work Environment Survey. This is year 0 on the X-axis. The outcome of the analysis is a binary variable not to work at the same workplace that the survey pertained to. The difference in this probability between people who reported sexual harassment in the last 12 months and those who did not report any harassment is measured using regression analysis. The data source is the Work Environment Survey. The vertical lines show a 95 per cent confidence interval. The different-coloured dots show three different regressions that differ in terms of which control variables are included. The demographic control variables are four binary variables for the categories of marital status and parenthood, four for age categories, two for whether the person has a diploma for completing upper secondary school or a university degree, and two for whether the person was born in Europe (except Sweden) or outside Europe.

We have linked each respondent in the Work Environment Survey to their annual data from the Swedish Tax Agency in the LISA database register. This makes it possible to compare the proportion of people who change jobs from year to year. Figure 3 shows the proportion of such job changes for those who have been sexually harassed compared to those who have not been subjected to any harassment. The results show that those who have been harassed are significantly more likely to change workplaces. Within three years of the survey response, the probability that those who had been subjected to sexual harassment had changed workplaces – compared to those who had not been subjected to sexual harassment – was about five percentage points higher. Compared to the average probability of changing workplaces within three years, these results mean that sexual harassment leads to a 20 per cent higher probability of changing workplaces for women, and a 15 per cent higher probability for men. These differences persist to a large extent when we look only at people of the same age, in the same occupation and with the same proportion of men in their workplace at the time of the survey, as shown by the different markers in the illustration.

In addition to studying the prevalence of changing jobs, we also investigated what differences these job changes made in terms of workplace wages and gender composition. The results show that people who change workplaces after being sexually harassed make different changes compared to other people who change jobs. Among women who have been harassed, it is more common to switch to a workplace with lower wages and a higher proportion of female colleagues. This is in line with the results of the survey experiment, where women were willing to work for a lower salary to avoid a workplace where harassment occurred. Among men, no such systematics can be seen in any change in wages. One explanation may be that harassment of men often takes place in low-wage workplaces and that it is more difficult to “trade up” than to “trade down” in terms of wages.

## **Conclusions and ways forward**

Our research shows that people whose gender is in the minority in the workplace are at greater risk of sexual harassment from managers and employees. This applies to both men and women, although women are at greater risk than men in the labour market as a whole. There is also a strong correlation between harassment and workplace wages. Male-dominated workplaces have higher wages than female-dominated workplaces, even when restricting comparisons to people in the same occupation. Women, who are more often subjected to harassment in male-dominated workplaces, are thus at greater risk of being affected in high-wage workplaces. Similarly, men, who are more often harassed in female-dominated workplaces, are at greater risk of being affected in low-wage workplaces.

We have presented two ways in which sexual harassment by managers and employees leads to increased economic inequality. The first is that information on the incidence of harassment discourages potential workers from seeking jobs where their gender is in the minority. Our survey shows that information about the incidence of harassment in a workplace is often shared with potential workers. It also shows that such information has a deterrent effect on persons of the same gender as the victims of harassment. Harassment thus discourages women from entering male-dominated workplaces, which are usually higher paid. Men, on the other hand, are discouraged from entering female-dominated workplaces, where wages are relatively low.

The second way in which harassment leads to greater economic inequality is the nature of job changes. People who are harassed are more likely than others to change jobs. As women who have been harassed tend more than other people to switch to a workplace with lower wages and a lower proportion of male colleagues, these job changes also lead to increased gender segregation and economic inequality.

Preventing sexual harassment is profitable for society. Our study shows that a safer work environment lowers the thresholds for men and women to seek a work environment dominated by the opposite sex. This also increases opportunities for society to take advantage of the interests and skills of all workers. In this way, better prevention of sexual harassment could lead to a more resource-efficient economy, as in previ-

ous research on how inequality prevents economic growth (Hsieh et al., 2019).

Preventive work can be perceived as expensive and difficult. Harassment that comes to the employer's attention is often perceived as a one-off. However, our survey experiment shows that even one-off incidents can greatly impact a company's ability to recruit. Obtaining information, even of a one-off case of harassment, has a strong deterrent effect on the willingness of potential candidates to start working in a workplace. Therefore, combating sexual harassment is also a way for companies to increase their attractiveness to job seekers.

Finally, our research highlights the existence of an obstacle to preventing harassment in environments where one gender is in the minority. Whereas harassment is perceived as a major problem by the minority, it is also perceived as less problematic by their colleagues of the opposite sex. Changing these attitudes could provide greater support for employers' preventive actions.

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## Author biographies

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## Endnotes

1 This text is a translation of an article published originally in Swedish as “Sexuella trakasserier leder till ekonomisk ojämlikhet” (SNS Analys 94, mars 2023). The original Swedish article is available at: <https://www.sns.se/artiklar/sns-analys-94-sexuella-trakasserier-pa-jobbet-okar-den-ekonomiska-ostalldheten/>

2 While the first survey question is based on the definition in Swedish legislation of sexual harassment, the behaviours assessed in question two are classified as gender-based harassment. Since gender-based harassment is often regarded as sexual harassment in the research literature, we study both of them under this common label. The results are the same when we analyse the responses from each survey question individually.

3 The Swedish Citizen Panel, run by the SOM Institute at the University of Gothenburg, is an online panel consisting of people who voluntarily answer various questions by email a couple of times a year. For further information, see <https://www.gu.se/som-institutet/medborgarpanelen>.

4 The wording “study of jobs” made it unlikely that people who were subjected to harassment, or who were more afraid of being subjected, would be put off responding to the module.