

# Pre-Analysis Plan: Sexual Harassment at the Workplace

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January 27, 2025

## Abstract

We describe a survey on sexual harassment at German workplaces which also includes a discrete choice experiment. In the discrete choice experiment we ask respondents to choose between fictitious jobs varying randomly in their attributes, which is a similar setup to [Folke and Rickne \(2022\)](#), [Maestas \*et al.\* \(2023\)](#) or [Nagler \*et al.\* \(2023\)](#). The experiment allows us to estimate the willingness to pay for several job characteristics including some which are linked to sexual harassment at the workplace. In the survey we also elicit whether respondents have experienced sexual harassment in their work environment, how they believe their firms would deal with cases of sexual harassment and which actions they perceive to be sexual harassment.

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# 1 Description of the study

We conduct a discrete choice experiment where respondents make several choices between two fictitious job vacancies varying randomly in their attributes. This follows a similar setup as [Folke and Rickne \(2022\)](#), [Maestas \*et al.\* \(2023\)](#) or [Nagler \*et al.\* \(2023\)](#).

Specifically we study:

1. Whether workers have a preference to avoid workplaces where cases of SH have occurred in the past.
2. Which role management characteristics (gender and age) and preventive measures against SH play.
3. Which individual and establishment-level characteristics drive these preferences. At the individual-level, this includes their demographics, employment history and their responses to this survey where we elicit whether they have experienced SH in their work environment in the past and which actions they believe would be taken against SH at their firm. At the establishment-level this includes size, industry, and workforce composition such as share of female employees and share of highly educated employees.

Sexual harassment is an important job attribute for workers' satisfaction and safety at a workplace. In contrast to other amenities such as vacation days, pay or flexibility in the job, this is an attribute that is not mentioned in job ads. Due to this, information about SH having occurred at the workplace is formulated as "word-of-mouth" information that one could have heard about a job ([Folke and Rickne, 2022](#)).

## Dependent and independent variables

1. Individual preferences over characteristics of job vacancies. This will be measured through the discrete choice experiment. The reference category in our analysis is highlighted in *italics*. The vacancy characteristics are:
  - (a) Monthly earnings
    - i. *Same as current earnings*
    - ii. 5% more than current earnings
    - iii. 10% more than current earnings
  - (b) Vacation days per year
    - i. *25 days*

- ii. 30 days

(c) Work environment

- i. You have heard about incidents at work in which unsolicited images with sexual content were distributed.
- ii. You have heard about incidents at work in which employees were unwantedly involved in conversations about their sex life.
- iii. You have heard about incidents in the company where employees have been asked to engage in unwanted sexual acts.
- iv. You have heard that in the past there have been increased conflicts about work processes between employees and their superiors.
- v. *You have no further information about the working environment.*

(d) Management

- i. *Man, 37 years old*
- ii. Man, 62 years old
- iii. Woman, 37 years old
- iv. Woman, 62 years old

(e) Additional offers at the workplace

- i. Regular training opportunities
- ii. *No further information*
- iii. Impartial contact person and person of trust for cases of discrimination and sexual harassment
- iv. Regular training courses on the topic of sexual harassment

2. Past cases of SH in respondents' career. We ask the following question with a binary "Yes/No" response:

Have there been incidents of sexual harassment in your immediate working environment in your career to date?

3. How would cases of SH be handled? We ask the following question with four potential responses, where respondents can indicate "Yes", "No", "I don't know".

Imagine there was a case of sexual harassment in your current workplace. How do you think it would be handled?

- (a) The supervisor or another manager would take care of clarifying the situation and taking the necessary measures.
  - (b) An impartial contact person and confidant for such cases would advise the affected person.
  - (c) Management would take appropriate measures against the harassing person, such as a warning, reprimand, or termination of the contract.
  - (d) There would be no support from management or the supervisor.
4. Which actions are perceived to be sexual harassment. We first ask the following question, after which respondents can again indicate “Yes”, “No”, “I don’t know” for each item.

There are different understandings of what constitutes sexual harassment in the workplace. In your opinion, does the following situation constitute sexual harassment in the workplace?

- (a) Employees are given compliments about their appearance.
- (b) Employees are shown images with sexual content without their consent.
- (c) Employees are involuntarily drawn into conversations about their sex life.
- (d) Employees are solicited for unwanted sexual acts.

**Randomization** In the discrete choice experiment each respondent will be presented with 6 pairs of randomly chosen hypothetical job vacancies. Every vacancy contains the five attributes described above in section 3. Two comparison groups are excluded because one job would be too strictly dominating the other one: 1. 10% higher earnings and 30 vacation days vs. same earnings and 25 vacation days and 2. 10% higher earnings and 30 vacation days vs. 5% higher earnings and 25 vacation days.

The variation in earnings lets us estimate the willingness to pay (WTP) for the different job attributes such that we can express their valuation in standard economic terms.

The other items in the survey are all shown to respondents in the same way without any randomization.

**Sample** The survey is part of an ad-hoc survey of the Online Panel for Labour Market Research (OPAL), which is run by the Institute for Employment Research (IAB). In total, OPAL has a pool of around 10,000 participants (Coban *et al.*, 2024). The ad-hoc module where our survey is included, is sent to a pool of all employed people in the OPAL pool

(around 5,000). Due to the explicit and potentially traumatizing topic of our module, participants need to additionally opt-in to take our questionnaire about SH. While the exact number is hard to assess ex-ante, we expect 2,000-4,000 responses.

## 2 The analysis

As in [Maestas \*et al.\* \(2023\)](#) and [Nagler \*et al.\* \(2023\)](#), we assume that the choice process for a specific job is well approximated by a linear indirect utility function, where individuals derive utility from wage and non-wage job characteristics. Assuming that the error term follows an Extreme Value Type I distribution, we can estimate a conditional logit model to analyze respondents' preferences over sexual harassment, manager demographics and other vacancy characteristics:

$$Y_{ipv} = \frac{\exp(\beta_j X_{ipv} + \gamma W_{ipv})}{\exp(\beta_j X_{ipv} + \gamma W_{ipv}) + \exp(\beta_j X'_{ipv} + \gamma W'_{ipv})} \quad (1)$$

$Y_{ipv}$  is a binary indicator for individual  $i$  choosing vacancy  $v$  in a pairwise comparison  $p$ . Non-wage vacancy characteristics are  $X_{ipv}$  and  $W_{ipv}$  are earnings in the job, where the apostrophe denotes characteristics of the job not chosen. The WTP for avoiding work environments with SH is calculated from the ratio of  $\beta_j$  and  $\gamma$ , i.e. the relative preference for SH and for wages. To establish whether participants have a different WTP to avoid SH depending on manager characteristics and other offers at the workplace related to preventive measures against SH, we also construct joint variables of SH and manager characteristics / preventive measures (e.g. an indicator variable equal to one if there were cases of SH and the manager is female).

As a robustness check, we will run the same analysis as a linear probability model as in [Folke and Rickne \(2022\)](#). The dependent dummy variable indicates whether person  $i$  chose job  $j$  in comparison  $p$ . The estimation equation reads:

$$Y_{ijp} = \alpha_1 + \alpha_2 WE_{ijp} + \alpha_3 W_{ijp} + \alpha_4 X_{ijp} + e_{ij} \quad (2)$$

$WE_{ijp}$ ,  $W_{ijp}$  and  $X_{ijp}$  are vectors of the work environment, wages and other job characteristics. The omitted categories are listed above. WTP is then estimated by dividing the coefficients for SH (part of work environment) over the wage coefficients. For the interaction with manager characteristics and other offerings at the workplace, we would estimate equations where we interact sexual harassment with these variables.

For both the conditional logit and linear probability model, we will present estimates where we pool all types of sexual harassment, but will also report individual coefficients.

We are planning to conduct heterogeneity tests along several dimensions:

- Gender of the respondent
- Age of the respondent
- Whether cases of SH have occurred in their work environment in the past
- Trust in their current firm to deal effectively with cases of SH
- Share of female workers at their current firm and in their occupation
- Rank in the earnings distribution in their current firm
- Educational attainment

In the heterogeneity analysis, we regress the individual-specific estimate of WTP to avoid sexual harassment against dimensions listed above.

$$WTP_i = \alpha + \delta X_i + \epsilon_i \quad (3)$$

## References

- COBAN, M., BAISCH, B., DISTLER, C., SCHWARZ, S., TRAPPMANN, M., WEIK, J. A., WENZIG, C., WILDEN, H. and ZINS, S. (2024). Iab-opal: Mit dem neuen online-panel schneller zu belastbaren befunden kommen. *IAB Forum*.
- FOLKE, O. and RICKNE, J. (2022). Sexual harassment and gender inequality in the labor market. *The Quarterly Journal of Economics*, **137** (4), 2163–2212.
- MAESTAS, N., MULLEN, K. J., POWELL, D., VON WACHTER, T. and WENGER, J. B. (2023). The value of working conditions in the United States and implications for the structure of wages. *American Economic Review*, **113** (7), 2007–2047.
- NAGLER, M., RINCKE, J. and WINKLER, E. (2023). High-pressure, high-paying jobs? *Review of Economics and Statistics*, pp. 1–45.