



Loss of Income, Career Sacrifice and Overtime for an LGBTQI*-Friendly Work Environment?

A Choice Experiment to Investigate
Employment Preferences of LGBTQI* People



Lisa de Vries (Bielefeld University)
Zaza Zindel (Bielefeld University)

AAPOR's 77th Annual Conference, Chicago, IL
May 13th, 2022

Content

1. Background
2. Data
3. Experimental design
4. Results
5. Discussion

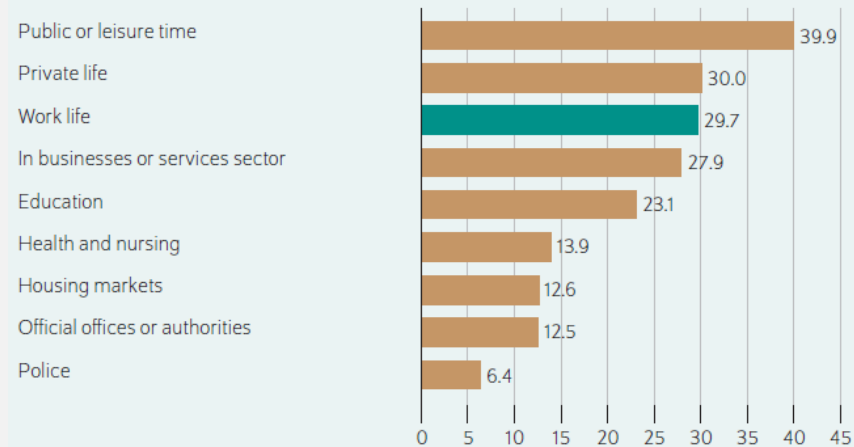
Background

- LGBTQI* people experiencing discrimination in their work lives and workplaces (OECD 2019; de Vries et al. 2020)
- Significant differences in labor market outcomes (e.g., earnings) and empirical evidence for hiring discrimination (Drydakis 2021; Badgett et al. 2021; Neumark 2018)
- Different strategies to cope with discrimination (Chung 2001):
 - self-employment
 - job-tracking
 - risk-taking
- Searching for a safe and secure work environment that protects from discrimination (Ragins 2004)
- Lesbian women and gay men avoid prejudiced occupations (Plug et al. 2014)

Background

Discrimination due to sexual orientation or gender (-identity) in particular areas of life

Share of LGBTQI* people who have experienced discrimination in different areas, in percent



Note: Discrimination due to sexual orientation or gender (-identity) within the last two years in Germany was surveyed; the shares refer to people who indicated to have experienced discrimination rarely, sometimes, or often; the total number of cases for the individual areas varies between 2,797 and 3,842 people.

Source: Socio-Economic Panel v36.beta, LGBielefeld; authors' own calculations.

© DIW Berlin 2020

Background

- ➔ *To what extent are LGBTQI* people willing to sacrifice income, promotion prospects, and time for an LGBTQI* friendly work environment and/or a diversity management (e.g., workshops/trainings on LGBTQI* inclusion or LGBTQI* networks)?*
- ➔ *Differ specific groups of the LGBTQI* community in their employment preferences?*

Data



LGB*Bielefeld 2021

- Online survey with LGBTQI* people living in Germany
- Field phase: September 3rd – October 1st, 2021
- Recruitment via ads on Facebook
- 7,607 complete interviews

Sample

- LGBTQI* population
- Age range: 25-54 years
- Exclusion of self-employed and respondents without information about work position
- Information of up to **4,338** respondents could be used

Data

	Gender Identity			
	Cis-male	Cis-female	Trans/non-binary/other	Total
Sexual Orientation				
Homosexual	1,490	1,476	101	3,067
Bi/pan/*	110	558	233	901
Hetero/other	6	58	104	168
Total	1,606	2,092	438	4,136

Note: n=202 missing information for gender identity or sexual orientation not included in cross table.



Experimental Design

- Discrete choice experiment using fictitious job descriptions
- Contrast of general job attributes with an LGBTQI* friendly work environment and a diversity management
- **Goal:** reveal hierarchy and trade-off relationships between different job attributes

Experimental Design

	Job A	Job B
Income	4,500 Euro gross per month	3,500 Euro gross per month
Promotion prospects	Promotion after 4 years	Promotion after 3 years
Overtime	0 hours	6 hours
Diversity management	yes	no
LGBTQI* friendly work environment	no	yes

Please indicate which of the two jobs you find more attractive:

- Job A
- Job B
- Neither

Experimental Design

Relevant attributes and their levels:

- **Gross income (per month):** 3,000 €, 3,500 €, 4,000 €, 4,500 €, 5,000 €
 - **Promotion prospects:** after 3 years, after 4 years, after 5 years
 - **Overtime (per month):** 0 hours, 2 hours, 6 hours
 - **Diversity management:** yes, no
 - **LGBTQI* friendly work environment:** yes, no
-
- Marginal willingness to pay by examining the ratio of preferences to cost
 - Group differences in preferences for attributes by using mixed logit models (multinomial logit models as robustness)

Results

	Marginal willingness to pay	(95% CI)
Income (in €)		
Diversity	-640.429	(-688.878; -591.981)
Work environment	-2216.289	(-2312.576; -2120.001)
Overtime (in hours per month)		
Diversity	2.643	(2.421; 2.864)
Work environment	9.146	(8.635; 9.656)
Promotion prospects (in years to promotion)		
Diversity	3.391	(2.780; 4.003)
Work environment	11.736	(9.704; 13.768)

Note: MWTP calculated using the delta method.

Results

	Full model		Cis-male		Cis-female		Trans*/non-binary/other	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Mean								
Income	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Overtime	-0.309***	(0.009)	-0.279***	(0.014)	-0.324***	(0.014)	-0.354***	(0.030)
Promotion	-0.241***	(0.021)	-0.304***	(0.034)	-0.216***	(0.031)	-0.219***	(0.066)
Diversity	0.817***	(0.029)	0.722***	(0.045)	0.899***	(0.044)	0.780***	(0.096)
Work environment	2.829***	(0.059)	2.544***	(0.089)	3.003***	(0.089)	2.977***	(0.191)
Log-likelihood	-16214.421		-5993.806		-7712.190		-1669.214	
Prob > chi2	0.000		0.000		0.000		0.000	
N (Respondents)	4338		1606		2092		458	
N (Job descriptions)	77859		28830		37548		8208	

* p<0.05, *** p<0.01, *** p<0.001. In the MXL models, all attributes except income, overtime and promotion prospect are random.

Results

	Full model		Homosexual		Bi/Pan/*	
	Coef.	SE	Coef.	SE	Coef.	SE
Mean						
Income	0.001***	(0.000)	0.001***	(0.000)	0.001***	(0.000)
Overtime	-0.309***	(0.009)	-0.300***	(0.011)	-0.311***	(0.019)
Promotion	-0.241***	(0.021)	-0.265***	(0.024)	-0.179***	(0.044)
Diversity	0.817***	(0.029)	0.818***	(0.034)	0.829***	(0.063)
Work environment	2.829***	(0.059)	2.792***	(0.070)	2.839***	(0.119)
Log-likelihood	-16214.421		-11649.786		-3782.720	
Prob > chi2	0.000		0.000		0.000	
N (Respondents)	4338		3127		1006	
N (Job descriptions)	77859		56121		18063	

* p<0.05, *** p<0.01, *** p<0.001. In the MXL models, all attributes except income, overtime and promotion prospect are random.

Discussion

- LGBTQI* people are willing to pay a high amount of income, promotion prospects and time for an LGBTQI* friendly work environment or a diversity management
- Differences between attributes and groups
 - LGBTQI* friendly work environment > diversity management
 - Cis-female and gender minority respondents > cis-male respondents
 - Small differences by sexual orientation
- **Next steps:** have a view on differences by further variables (age, industry sector, ...) & working on weighting strategies to reduce data bias

Thank you for the attention!

Lisa de Vries

lisa.de_vries@uni-bielefeld.de

@Lisa_de_Vries

Zaza Zindel

zaza.zindel@uni-bielefeld.de

@ZazaZindel

Citation:

de Vries, Lisa; Zindel, Zaza (2022). Loss of Income, Career Sacrifice and Overtime for an LGBTQI*-Friendly Work Environment? A Choice Experiment to Investigate Employment Preferences of LGBTQI* People. AAPOR's 77th Annual Conference (May 11-13, 2022, Chicago, IL).

References

- Behr, D., Meitinger, K., Braun, M., Kaczmirek, L. (2017). Web probing – implementing probing techniques from cognitive interviewing in web surveys with the goal to assess the validity of survey questions. Mannheim GESIS – Leibniz-Institute for the Social Sciences (GESIS – Survey Guidelines). https://doi.org/10.15465/gesis-sg_en_023
- Chung, Y. B. (2001). Work Discrimination and Coping Strategies: Conceptual Frameworks for Counseling Lesbian, Gay, and Bisexual Clients. *The Career Development Quarterly*, 50(1), 33–44. <https://doi.org/10.1002/j.2161-0045.2001.tb00887.x>
- Hole, Arne Risa (2015). DCREATE: Stata Module to Create Efficient Designs for Discrete Choice Experiments, Retrieved from <http://econpapers.repec.org/RePEc:boc:bocode:s458059>
- Kühne, S., & Zindel, Z. (2020). Using Facebook & Instagram to Recruit Web Survey Participants: A Step-by-Step Guide and Application. *Survey Methods: Insights from the Field, Special issue :Advancements in Online and Mobile Survey Methods*. <https://doi.org/10.13094/SMIF-2020-00017>
- Neumark, David (2018): Experimental Research on Labor Market Discrimination. *Journal of Economic Literature*, 56(3), 799-866. In: *Journal of Economic Literature* 56 (3), S. 799–866. <https://doi.org/10.1257/JEL.20161309>.
- Ng, E. S., Schweitzer, L., & Lyons, S. T. (2012). Anticipated Discrimination and a Career Choice in Nonprofit. *Review of Public Personnel Administration*, 32(4), 332–352. <https://doi.org/10.1177/0734371X12453055>
- OECD (2019). Society at a Glance 2019. OECD Social Indicators. A Spotlight on LGBT People. Paris: Organisation for Economic Co-operation and Development.
- Plug, E., Webbink, D., & Martin, N. (2014). Sexual Orientation, Prejudice, and Segregation. *Journal of Labor Economics*, 32(1), 123–159. <https://doi.org/10.1086/673315>
- Vries, L. de, Fischer, M., Kasprowski, D., Kroh, M., Kühne, S., Richter, D., & Zindel, Z. (2020). LGBTQI* People on the Labor Market: Highly Educated, Frequently Discriminated Against. Retrieved from https://www.diw.de/documents/publikationen/73/diw_01.c.798215.de/dwr-20-36-1.pdf

Backup: LGBielefeld 2021 and SOEP-Q

	LGBielefeld Analytical Sample		SOEP-Q	
	No.	%	No.	%
Gender identity				
Cis-male	1,606	38.6	100	52.9
Cis-female	2,092	50.3	67	35.3
Trans + non-binary + Other	458	11.0	22	11.8
Total	4,156	100.0	189	100.0
Sexual orientation				
Homo	3,127	72.4	100	53.0
Bi/Pan/*	1,006	23.3	78	41.2
Hetero + Other	185	4.3	11	5.8
Total	4,318	100.0	189	100.0

Source: LGBielefeld 2021, unweighted; SOEP v 36.1, weighted, own calculations.

	LGBielefeld Analytical Sample		SOEP-Q	
	No.	%	No.	%
Age				
25-34 years	2,222	51.2	68	36.1
35-44 years	1,447	33.4	62	33.0
45-54 years	669	15.4	59	31.0
Total	4,338	100.0	189	100.0
Academic degree				
No	2,308	53.2	104	54.9
Yes	2,030	46.8	85	45.1
Total	4,338	100.0	189	100.0
Discrimination based on sexual orientation/ gender (identity)				
No	743	17.1	89	47.1
Yes	3,592	82.9	100	52.9
Total	4,335	100.0	189	100.0

Note: Periods of discriminatory experiences differ between LGBielefeld (5 years) and SOEP Q (2 years). Source: LGBielefeld 2021, unweighted; SOEP v 36.1, weighted, own calculations.

Backup: Campaign Results – Clicks, Respondents & Costs

- Cost for ads: 8,352.91 €
- 1,362,537 impressions and 535,174 individuals reached
- 29,216 unique link-clicks (35,277 overall link-clicks)
- 20,904 started the questionnaire
- 7,607 complete interviews
- Only 1.06% reporting a cis-hetero status
- Average net cost for a complete interview: 1.10 €
- 86.91% used a smartphone, 9.80% a desktop, 3.67% a tablet

Backup: Performance of Experimental Design

- Respondents could skip the task
 - 2 of 5,054 (0.04%) eligible respondents decided to make no decisions
 - 98.83% of the eligible respondents took all 6 choice questions
 - 1.13% of the eligible respondents took at least some choice questions
- 102 (2.02%) of eligible respondents always chose the opt-out-option

Job A	Job B
Income	
<u>4.000 euros</u> gross per month	<u>3.500 euros</u> gross per month
Promotion opportunities	
A promotion after <u>4 years</u> is in prospect	A promotion after <u>3 years</u> is in prospect
Overtime	
On average, employees are required to work <u>6 hours</u> of unpaid overtime	On average, employees are required to work <u>2 hours</u> of unpaid overtime
Diversity measures (e.g., workshops and training on diversity, promotion of LGBTQI* networks in the company, counseling and support for experiences of discrimination)	
The company <u>does not offer diversity measures</u>	The company <u>offers diversity measures</u>
Working atmosphere	
The company <u>does not have an open working atmosphere</u> towards LGBTQI* people	The company <u>has an open working atmosphere</u> towards LGBTQI* people
Which of the two job descriptions do you find more attractive?	
<input type="radio"/> Job A	
<input type="radio"/> Job B	
<input type="radio"/> Neither	

Backup: Models

	(1) Full Model		(2) Cis-male		(3) Cis-female		(4) Trans + Non-binary + Other	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Mean								
Income	0.001 ***	(0.000)	0.001 ***	(0.000)	0.001 ***	(0.000)	0.001 ***	(0.000)
Overtime	-0.309 ***	(0.009)	-0.279 ***	(0.014)	-0.324 ***	(0.014)	-0.354 ***	(0.030)
Promotion	-0.241 ***	(0.021)	-0.304 ***	(0.034)	-0.216 ***	(0.031)	-0.219 ***	(0.066)
Diversity	0.817 ***	(0.029)	0.722 ***	(0.045)	0.899 ***	(0.044)	0.780 ***	(0.096)
Climate	2.829 ***	(0.059)	2.544 ***	(0.089)	3.003 ***	(0.089)	2.977 ***	(0.191)
ASC*block2	0.341	(0.241)	0.230	(0.304)	0.329	(0.328)	-0.073	(0.742)
ASC*block3	0.267	(0.201)	0.741	(0.416)	0.177	(0.304)	0.061	(0.584)
ASC*block4	0.942 ***	(0.248)	1.951 ***	(0.471)	0.639	(0.369)	-0.149	(0.655)
ASC*block5	-0.054	(0.181)	0.273	(0.314)	0.006	(0.261)	-1.256 *	(0.578)
ASC*block6	-0.369 *	(0.172)	-0.288	(0.310)	-0.534 *	(0.237)	-0.138	(0.611)
ASC	-3.661 ***	(0.222)	-3.827 ***	(0.366)	-3.709 ***	(0.324)	-2.161 **	(0.709)
SD								
Diversity	0.541 ***	(0.064)	0.475 ***	(0.110)	0.503 ***	(0.102)	0.601 **	(0.209)
Climate	1.708 ***	(0.046)	1.725 ***	(0.073)	1.670 ***	(0.067)	1.790 ***	(0.179)
ASC*block2	1.783 ***	(0.280)	0.833 **	(0.298)	1.938 ***	(0.444)	2.132 ***	(0.578)
ASC*block3	1.409 ***	(0.239)	2.172 **	(0.374)	1.077 *	(0.515)	0.690 **	(0.229)
ASC*block4	2.612 ***	(0.213)	2.802 ***	(0.511)	2.739 ***	(0.325)	1.703 ***	(0.426)
ASC*block5	0.031	(0.220)	0.664 **	(0.223)	0.439	(0.343)	0.321	(0.280)
ASC*block6	0.021	(0.266)	0.262	(0.661)	0.131	(0.172)	0.381	(0.399)
ASC	2.396 ***	(0.086)	2.720 ***	(0.145)	2.217 ***	(0.131)	2.245 ***	(0.223)
Log-likelihood (full model)		-16214.421		-5993.806		-7712.190		-1669.214
Prob > chi2		0.000		0.000		0.000		0.000
Respondents		4338		1606		2092		458
Jobs		77859		28830		37548		8208
descriptions								

* p<0.05, *** p<0.01, *** p<0.001. In the MXL models, all attributes except income, overtime and promotion prospect are random.

Backup: Models

	(1) Full Model		(2) Homo		(3) Bi/Pan/*	
	Coef.	SE	Coef.	SE	Coef.	SE
Mean						
Income	0.001 ***	(0.000)	0.001 ***	(0.000)	0.001 ***	(0.000)
Overtime	-0.309 ***	(0.009)	-0.300 ***	(0.011)	-0.311 ***	(0.019)
Promotion	-0.241 ***	(0.021)	-0.265 ***	(0.024)	-0.179 ***	(0.044)
Diversity	0.817 ***	(0.029)	0.818 ***	(0.034)	0.829 ***	(0.063)
Climate	2.829 ***	(0.059)	2.792 ***	(0.070)	2.839 ***	(0.119)
ASC*block2	0.341	(0.241)	0.419	(0.267)	0.509	(0.488)
ASC*block3	0.267	(0.201)	0.563 *	(0.275)	-0.590	(0.360)
ASC*block4	0.942 ***	(0.248)	1.263 ***	(0.338)	0.199	(0.450)
ASC*block5	-0.054	(0.181)	0.230	(0.212)	-0.643	(0.499)
ASC*block6	-0.369 *	(0.172)	-0.248	(0.217)	-0.481	(0.372)
ASC	-3.661 ***	(0.222)	-3.828 ***	(0.269)	-3.278 ***	(0.447)
SD						
Diversity	0.541 ***	(0.064)	0.419 ***	(0.097)	0.669 ***	(0.122)
Climate	1.708 ***	(0.046)	1.711 ***	(0.055)	1.692 ***	(0.102)
ASC*block2	1.783 ***	(0.280)	1.862 ***	(0.296)	2.339 ***	(0.347)
ASC*block3	1.409 ***	(0.239)	1.698 ***	(0.311)	0.385	(0.399)
ASC*block4	2.612 ***	(0.213)	2.755 ***	(0.492)	2.235 ***	(0.485)
ASC*block5	0.031	(0.220)	0.008	(0.290)	0.905	(0.904)
ASC*block6	0.021	(0.266)	0.717	(0.630)	0.660 *	(0.265)
ASC	2.396 ***	(0.086)	2.404 ***	(0.136)	2.168 ***	(0.144)
Log-likelihood (full model)		-16214.421		-11649.786		-3782.720
Prob > chi2		0.000		0.000		0.000
Respondents		4338		3127		1006
Job descriptions		77859		56121		18063

* p<0.05, *** p<0.01, *** p<0.001. In the MXL models, all attributes except income, overtime and promotion prospect are random.

Backup: Data analytical approach

The discrete choice experiment idea is theoretically grounded in **Random Utility Theory** (McFadden 1966).

Main idea:

Under the assumption of absolute rationality, people choose the alternative that maximizes their utility.

Utility of a choice in a DCE-framework:

$$U_i = V_i + \varepsilon_i$$

Probability P that any respondent n chooses a job description i:

$$P_{ni} = \frac{\exp(V_{ni})}{\sum_{j=1}^N \exp(V_{nj})}$$

Backup: Data analytical approach

Multinomial Logit Models (MNL)

... because they are appropriate for unlabeled and randomly ordered choices, as in our case.

Mixed Logit Models (MXL)

... because MNL models assume that preferences are the same or homogeneous among all participants. This is unlikely, so heterogeneity of preferences must be accounted for with a more flexible model.

Backup: Data analytical approach

By examining the ratio of preferences to cost, respondents' marginal **willingness to pay** for a specific level of each attribute is calculated using:

$$mWTP_{X^k} = -\frac{MU_{X^k}}{MU_C}$$

where MU_{X^k} and MU_C are the marginal utilities of attribute X^k and cost, respectively.