Project acronym: **UniSAFE**
Project title: **"Gender-based violence and institutional responses: Building a knowledge base and operational tools to make universities and research organisations safe"**
Grant agreement number: **101006261**
Start date of project: 1 February 2021, Duration: 36 months

UniSAFE
ENDING GENDER-BASED VIOLENCE

Deliverable No. 6.1

Report on the multi-level analysis and integrated dataset

Due date of deliverable	30/11/2022
Submission date	21/12/2022
File Name	D6.1 UniSAFE_Report on the multi-level analysis and integrated dataset
Organisation Responsible of Deliverable	ORU
Author name(s)	Anne Laure Humbert, Nicole Ovesen, Angelica Simonsson, Sofia Strid, Jeff Hearn, Averil Huck, Zuzana Andreska, Marcela Linková, Vilana Pilinkaitė Sotirovič, Giedrė Blažytė, Bruna Pereira
Revision number	01
Status	Final
Dissemination Level	PU

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Revision history

Version	Date	Modified by	Comments
0.1	01/08/2022	Anne Laure Humbert	Conceptualisation; quantitative analysis, original draft preparation, review and editing, and coordination of the report
0.1	01/08/2022	Sofia Strid, Jeff Hearn	Conceptualisation; revisions and editing of the report
0.2	17/10/2022	Nicole Ovesen, Angelica Simonson	Qualitative analysis (interviews), revisions and editing of the report
0.3	15/11/2022	Averil Huck, Zuzana Andreska, Marcela Linková	Qualitative analysis (national and organisational policies), revisions and editing of the report
0.4	02/12/2022	Pilinkaitė Sotirovič, Giedrė Blažytė	Qualitative analysis (interviews) and revisions of the report
0.5	09/11/2022	Bruna Pereira	Qualitative analysis (case studies)
0.6	22/11/2022	Anne Laure Humbert	First draft
0.7	05/11/2022	Consortium	Internal consortium review
0.8	30/11/2022	Hans Ekbrand	External quality review
0.9	9/12/2022	Anne Laure Humbert, Sofia Strid	Integration of quality reviewer's comments and consortium's feedback
0.9	16/12/2022	Hans Ekbrand	Approval of integration of reviewer's comments
0.10	19/12/2022	Anne Laure Humbert, Sofia Strid	Final editing of report
1.0	21/12/2022	ESF	Final approval prior to submission

Disclaimer

Partners

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

SUMMARY

This report provides a synthetic analysis of the different strands of evidence collected within the UniSAFE project. It relies on a multi-level study of the knowledge created within the project on the prevalence, determinants and consequences of gender-based violence in research performing organisations (RPOs), particularly within the remit of the 7P model.

The report starts by a summary of the theoretical considerations underpinning the analysis, and notably making the case that it is necessary to understand the prevalence and consequences of gender-based violence both intersectionally and in context, in order to combat, and ultimately seek to eradicate gender-based violence. This is followed by a detailed account of the methodological approach taken, and how the different strands of knowledge from the project were integrated and analysed.

The results section consists of three parts: Part I, a descriptive analysis of the sample, including prevalence and consequences of gender-based violence; Part II, an intersectional quantitative analysis of the prevalence and consequences of gender-based violence; and Part III, a quantitative analysis of the effects of national and organisational characteristics. In all three parts, the results of the quantitative analysis are supplemented by insights gained through the qualitative work undertaken through in-depth interviews and case studies of institutional measures. The report concludes with a short summary and discussion of the overall results of the synthesis multi-level analysis.

PART I

The results first provide a descriptive analysis of the demographic and functional characteristics of the survey respondents, followed by the prevalence and consequences of gender-based violence within these groups, and how much this varies in the context of the different RPOs and countries in which the fieldwork was conducted. Findings from Part I suggests that the prevalence of gender-based violence is relatively uniform across countries. Similarly, variance is low between RPOs which suggests that the prevalence of gender-based violence is largely unrelated to the RPOs in which respondents work or study, and/or to the country in which they reside.

Further, the findings suggest that prevalence is relatively uniform across most intersectional groups, though a few disclose more experiences of gender-based violence. Adverse outcomes are consistently higher among people that have experienced any form of gender-based violence, and can therefore be regarded as consequences of gender-based violence. This is most marked for social exclusion, which 70% of those having experienced gender-based violence report. Further, these adverse outcomes are relatively uniform across countries and RPOs in both form and magnitude.

PART II

The results, in a second part, provide a multi-level intersectional analysis of the prevalence and consequences of gender-based violence. The report analyses the prevalence and consequences of gender-based violence among different groups since gender-based

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

violence is shaped by social structures of oppressions – shaped by gender but also intersecting factors such as terms of employment, ethnicity, sexual orientation etc. The analysis is based on multi-level intersectional modelling, that controls for a range of factors, including the time spent the institution where respondents study or work.

The findings show, for instance, that when controlling for these other variables, students are less affected by gender-based violence overall, but more at risk of physical and sexual violence (but not sexual harassment) than staff members. Finally, staff and students are about equally affected by online violence. Experiences of gender-based violence are not only related to student and staff status but also to the terms of one's employment/position. Some doctoral candidates, early-career researchers and researchers and teaching staff who sought promotion to a higher position were, for instance, identified as particularly vulnerable to gender-based violence in the qualitative interviews.

Findings on gender identity show that respondents identifying as women are most at risk of sexual violence and sexual harassment; respondents identifying as men most at risk of physical violence; and respondents identifying as non-binary people most at risk of sexual harassment, psychological violence and economic violence, controlling for other factors. Findings also show that trans people are more subjected to psychological violence and sexual harassment, controlling for other factors. Groups of respondents who belong to a minoritised sexual orientation group (apart from asexual respondents) had a higher prevalence of overall gender-based violence – compared to heterosexual respondents, controlling for other factors.

When controlling for these other factors, all forms of gender-based violence are more prevalent across people with a disability or chronic illness. People from a minority ethnic group also have higher prevalence of all forms of gender-based violence. While staff and students that were international (i.e. people who have moved from the country where they have obtained their highest level of qualification to study or work in another country), rather than domestic, were overall as likely to experience gender-based violence. The only exceptions are economic violence and sexual violence. Thus, being an international staff/student is associated with higher risk of economic violence and sexual violence. Increasing age is associated with lower prevalence of most forms of gender-based violence. Each additional year of age decreased the overall prevalence of gender-based violence. Exceptions were economic violence, which increased with age and online violence which is unrelated to age.

Most forms of gender-based violence are associated with worse outcomes when it comes to potential consequences of gender-based violence, when controlling for other factors. Disclosing any form of gender-based violence in the survey is systematically associated with feeling less safe, feeling unwell and lower work productivity or study performance. All forms of gender-based violence measured, except for sexual violence, are associated with higher feelings of social exclusion and detrimental consequences for work. Finally, all forms of gender-based violence measured, except physical violence, are associated with detrimental consequences for studies.

Students are less at risk of social exclusion, but more at risk of feeling unsafe and feeling unwell, while controlling for other factors, and this is exacerbated by experiences of gender-

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

based violence. Women and non-binary people were also more likely to feel social excluded and unsafe. In the qualitative interviews, more than one third of the interviewees described that social exclusion of victims would manifest in a form of treating victims as difficult, crazy, mad or paranoid, and with whom it is difficult to work.

Trans people were more likely to feel unsafe and to feel unwell, but suffered fewer consequences for work. Bisexual, homosexual and queer people are more likely to feel unsafe, to feel unwell and to experience detrimental consequences for studies. All minoritised sexual orientation measured, with the exception of people who are asexual, report higher consequences, including feeling unsafe and feeling unwell. They also were more likely to experience detrimental consequences for studies, though this is not the case for work except for homosexual respondents. Feeling socially excluded appears unrelated to sexual orientation.

Having a disability or chronic illness increased reports of feeling socially excluded, unsafe and unwell, as well as experiences detrimental for work or studies, when controlling for other factors. Being from a minority ethnic background was linked to higher feelings of being unsafe and consequences for studies. Respondents from a minority ethnic background did not feel more socially excluded nor unwell, though they were more likely to feel unsafe. They were not more likely to experience work-related consequences, though they were more likely to report study-related consequences. Being an international staff/student was unrelated to most consequences, and they were not more likely than domestic staff/students to report any consequences.

Finally, when controlling for other factors, the consequences of gender-based violence are lower for non-academic staff than academic staff across all forms, including feeling socially excluded. Permanent staff were more likely to feel unsafe than those of fixed-term contracts and staff working full-time hours were more likely to feel unwell. Postgraduate students were less likely than undergraduate students to report consequences for studies but more likely to feel socially excluded.

PART III

The results in the third part provide an analysis of the relationship between the prevalence and consequences of gender-based violence, overall and in relation to specific forms (physical violence, psychological violence, economic violence, sexual violence, sexual harassment and online violence), in relation to selected national and organisational characteristics.

The analysis suggests that many of the national/organisational characteristics related to higher prevalence tend to be related to mechanisms that make gender-based violence more visible (e.g. via policies that put into place measurement, monitoring and evaluation), less acceptable (e.g. via policies that make perpetrator accountable through prosecution mechanisms). On the contrary, characteristics related to lower prevalence tend to focus on prevention and provision of services. It is important to remember that it is not possible to establish a causal effect, for example to conclude that the introduction of a national or organisational policy *decreases* the prevalence of gender-based violence. The question of directionality also matters. This analysis cannot differentiate between scenarios where the

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

introduction of a policy has successfully decreased prevalence (negative association), or where a policy has been introduced in response to a high prevalence (positive association). Equally, it is not possible to identify when a policy has successfully increased capacity for victims to disclose and report experiences of gender-based violence. Interpretation is fundamental when it comes to analysing the prevalence of gender-based violence. Lower prevalence is not necessarily a desirable outcome, nor does it necessarily reflect reality. For this reason, looking at the prevalence of gender-based violence alone is insufficient. Instead, we look at prevalence together with the potential consequences that gender-based violence can have and how it can be associated with feeling excluded, feeling unsafe and feeling unwell, as well as to consequences experienced in relation to work or studies.

Prevalence measures disclosed incidents of gender-based violence, however, the actual prevalence rate remains unknown. On the one hand, self-selection bias might artificially inflate prevalence: this is the case for example if people that have experienced gender-based violence are more prone to respond to the survey. However, studies of sexual violence on campus have shown near identical levels of reporting using self-selection and human subject pool sampling (Rosenthal & Freyd, 2018) and in studies of violence against women and men, the only evidence of non-response bias found was for differences between the sample and the background population concerning the sociodemographic characteristics (Simmons & Swahnberg, 2019). On the other hand, respondents may not disclose experiences of gender-based violence. In practice, there are many reasons why disclosure does not happen. This includes low awareness that experiences of violence were in fact violence, and is related to the normalisation of violence, and social desirability response bias, which is related to underreporting in surveys (van de Mortel, 2008). The UniSAFE survey asks about specific incidents rather than relying on labels (e.g. not using the word ‘rape’ but incidents that may constitute rape such as ‘whether someone was forced into sexual intercourse by being held down or hurt in some way’). Nonetheless, not understanding nor framing an incident as violence may limit recollection and, thereafter, disclosure. Finally, many experiences of gender-based violence remain undisclosed because of the stigma attached to them, fear of victimisation and indeed re-victimisation, and low confidence that people and institutions can provide a resolution. Where that is the case, prevalence might be low despite a high number of incidents. In these cases, higher (disclosed) prevalence can thus be regarded as a positive outcome.

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 101006261

TABLE OF CONTENTS

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

INTRODUCTION

> *"No dataset or analysis or visualization or model or algorithm is the result of one person working alone. Data feminism can help to remind us that before there are data, there are people—people who offer up their experience to be counted and analyzed, people who perform that counting and analysis, people who visualize the data and promote the findings of any particular project, and people who use the product in the end. There are also, always, people who go uncounted—for better or for worse. And there are problems that cannot be represented—or addressed—by data alone. And so data feminism, like justice, must remain both a goal and a process, one that guides our thoughts and our actions as we move forward toward our goal of remaking the world."*
> Catherine D'Ignazio and Lauren Klein (2020),
> https://data-feminism.mitpress.mit.edu/pub/frfa9szd/release/6?from=25883&to=26634

This report is a collective effort, drawing on the expertise, insights and support of all members of the UniSAFE consortium. Thanks in particular to the participants of the workshop organised at Oxford Brookes University in September 2022, where the analytical approach of this report was first discussed. The UniSAFE project, the data collected within it, the analyses performed, and the tools developed are greater than the sum of their parts. We are grateful to our colleagues, and to our participants and to the RPOs community supporting not only the project and but also our feminist goal to 'remake the world' and eradicate gender-based violence in universities and research organisations.

THE UNISAFE PROJECT

UniSAFE is a Horizon 2020 project (grant agreement number 101006261) funded under the call topic *SwafS-25-2020: Gender-based violence including sexual harassment in research organisations and universities*. UniSAFE aims to produce in-depth knowledge on gender-based violence including sexual harassment in RPOs, and to translate this research into operational tools for higher education and research organisations to eradicate it. It pursues four specific objectives that can be regrouped under two distinct headings, one focusing on developing new knowledge and the other on designing operational tools.

Develop new knowledge on gender-based violence

By understanding contexts

UniSAFE will start by generating a solid understanding of the key issues in gender-based violence studies and will identify the gaps by collecting evidence from previous studies and existing data and by mapping national policies and legal frameworks around the EU.

By collecting evidence

UniSAFE will then gather and analyse quantitative and qualitative empirical evidence on gender-based violence in universities and research organisations. The project will collect empirical evidence of the prevalence of gender-based violence, and research how this relates to its determinants and consequences, but also how it responds to the roles of universities and research organisations in preventing, protecting, prosecuting, providing services, supported by policies and partnerships (7P model).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Design operational tools for combatting gender-based violence

By developing recommendations and a toolkit

The project's findings will be translated into concrete policy recommendations, tailored tools and capacity-building activities and trainings to support stakeholders involved in tackling gender-based violence in higher education and research organisations.

By ensuring impacts

UniSAFE will ensure that these stakeholders are empowered to implement effective policies through capacity-building programmes, a co-creation approach of the tools, and advocacy actions. Another project legacy will be a lasting community of universities and research organisations committed to developing effective, well-resourced policies to eradicate gender-based violence in their institution.

UniSAFE examines the mechanisms of gender-based violence in RPOs, its determinants, and consequences, by using a multi-level research design to collect, analyse, and synthesise qualitative and quantitative data:

1. Legal and policy frameworks specific to gender-based violence in RPOs are analysed via an extensive mapping carried out by national experts in 31 EU Member States, Associated Countries and Third Countries.
2. Prevalence and impacts of gender-based violence are analysed via a survey implemented in 46 RPOs in 15 EU Member States and Associated Countries, and via a Europe-wide survey of researchers at higher risk of gender-based violence, for example due to their temporary employment contracts, lack of social networks, early-career status, and migration status.
3. Organisational responses and instruments are analysed via 16 in-depth case studies, interviews with vulnerable/precarious groups (n = 54), and an inventory of institutional measures in the 48 RPOs in 15 EU Member States and Associated Countries.

An ambitious and holistic analytical **7P model** (covering prevalence, prevention, protection, prosecution, provision of services, partnerships and policies) is used to collect and analyse data at each level (Mergaert et al., 2016). The model is better suited to structure the collection of data, analyse their relations, and translate findings into operational tools than the conventional UN and EU 3P model (prevention, protection, prosecution) or the Istanbul Convention 4P model (prevention, protection, prosecution, policies) (Council of Europe, 2011). The same 7P model is used to co-design a comprehensive set of measures and tools to be applied inside RPOs and by other stakeholders, including policymakers and research funding organisations.

UniSAFE relies on a strong multi-disciplinary consortium of nine European partners. Its strength is in the partners' in-depth knowledge and extensive track record in researching gender-based violence, translating academic insights into operational tools, disseminating knowledge (including a direct link to the Horizon 2020 project Gender Equality Academy), developing policy recommendations at the EU level, and empowering stakeholders to exploit project results, with a carefully designed impact plan.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

ROADMAP

This report provides a synthetic analysis of the different strands of qualitative and quantitative evidence collected within the UniSAFE project. It relies on a multi-level study of the knowledge created within the project on the prevalence, determinants and consequences of gender-based violence in RPOs, particularly within the remit of the 7P model.

The report starts by a summary of the theoretical considerations underpinning the analysis, and notably making the case that it is necessary to understand the prevalence and consequences of gender-based violence both intersectionally and in context in order to combat, and ultimately seek to eradicate gender-based violence. This is followed by a detailed account of the methodological approach taken, and how the different strands of knowledge from the project were integrated and analysed.

The results section consists of three distinct sections. The results first provide a descriptive analysis of the demographic and functional characteristics of the survey respondents, followed by the prevalence and consequences of gender-based violence within these groups, and how much this varies in the context of the different RPOs and countries in which the fieldwork was conducted. The results, in a second part, then provide a multi-level intersectional analysis of the prevalence and consequences of gender-based violence, supplemented by illustrations of key insights arising from in-depth interviews with victims or bystanders. Finally, the results provide an analysis of the relationship between the prevalence and consequences of gender-based violence in relation to selected national and organisational characteristics.

The report concludes with a short summary and discussion of the overall results of the synthesis multi-level analysis.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

THEORETICAL CONSIDERATIONS

UniSAFE conceptualises gender-based violence as part of a wider system of dominance and power inequalities which goes beyond a binary understanding of gender, and reaches beyond narrow legalistic definitions of gender-based violence (Hearn et al., 2022; O'Connor et al., 2021; Strid et al., 2021). Following this framing gender-based violence is related to power, but is not reducible to power. Nor is gender-based violence limited to violence against women, and it may affect all people, though women and minoritised groups are disproportionately affected. To be able to design and implement properly inclusive and structural interventions against gender-based violence, it is essential to conduct an intersectional and contextual multi-level analysis.

INTERSECTIONALITY AND GENDER-BASED VIOLENCE

Intersectionality as a term originates from the work of Crenshaw (1989, 1991), even though the concept and research approach are much older (Hearn et al., 2016). It can be understood as multiple inequalities shaped by different axes of power among different sets of social relations (Walby et al., 2012). Despite growing recognition of the relevance of intersectionality in research as well as at policy levels, there is still limited research on gender-based violence that addresses intersectionality (Musso et al., 2020). Taking an intersectional analytical approach allows us to consider the experiences of gender-based violence beyond those of women alone, and makes it possible to break down experiences of gender-based violence by different groups, according to factors that might create disadvantage and/or vulnerabilities, and increase consequences. However, the creation of these discrete 'groups' or 'categorisations' are in themselves problematic in that there is a risk that they become over-stabilised, and thus unhelpful if this ends up essentialising and reifying differences or ideas of sameness and uniformity within groups (Crenshaw, 1991; McCall, 2005; Walby et al., 2012). One approach to move past the discussion on whether to regard categories as fluid or stable, is regard them as 'heuristic devices' (Cho et al., 2013, p. 786). Such approach can help to move focus from 'categories of identity' towards 'structure of inequalities' (Cho et al., 2013, p. 797). Given that certain social groups are systematically disadvantaged though the dominance structure that defines inequalities this also creates variation in different contexts and calls for an integration not only of intersectionality but also of context in the analysis of gender-based violence.

THE ORGANISATIONAL CONTEXT AND GENDER-BASED VIOLENCE

Gender-based violence is a highly complex problem, which cannot be explained nor addressed without considering how individual experiences relate to a wider context (Heise, 1998; Wemrell et al., 2019). Organisational features, which worsen the problem of gender-based violence within universities and other research organisations, include gendered and hierarchical structures, cultures that are not gender egalitarian and neoliberal cultures with unhealthy competitions for publications and funding, and where there is a high reliance on precarious forms of employment. Furthermore, gender/intersectional incompetent leadership is another example of an organisational feature which can stand in the way of an active stance against gender-based violence, and which often means that little effort is made towards gender structural change (Bondestam & Lundqvist, 2020; Naezer et al.,

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

2019; O'Connor et al., 2021). To understand gender-based violence in the context of universities and other research organisations it is necessary to understand the relational nature between incidents and the context-based/located perpetrators, as well as how incidents relate to the exercising of power relations from some over others, with the aim to produce and reproduce a system of dominance (O'Connor et al., 2021). The ecological framework approach or model, originally attributed to Heise (1998) and later adopted in the work of Krug et al. (2002), can be used as a way to expand intersectional analyses by providing depth through context, both at meso- and macro-level. Such extended multilevel approaches allow the research to move away from single factor explanations, and help us to further explore the interplay of personal, situational and sociocultural factors in order to understand the way in which experiences of gender-based violence are nested within interconnected layers.

MULTILEVEL ANALYSIS

A first step in tackling inequalities is to document and analyse the problem of gender-based violence, both within and between different groups (McCall, 2005). Yet this is in itself a challenging project. One of the main challenges concerns reconciling the needs for an intersectional approach with that of the requirements of a quantitative approach. UniSAFE aims to contribute to the growing body of literature which explore how to transpose the intersectional framework approach into more advanced quantitative methodology (Bauer et al., 2021; Merlo, 2018). These works also recognise that social relations are created to correspond, more or less well, to individual identities and their intersections, and that social relations are shaped by complex systems, imbued by power relations that reflect wider structural inequalities (Hancock, 2007). Multi-level modelling is key here as it allows for a combination of variables located at the individual level with organisational or national level variables, due to its potential to analyse identities in relation to wider structures of inequalities (Bauer et al., 2021; Spierings, 2012). Thus, a multi-level intersectional analysis which includes micro, meso and macro levels, can guide to a more nuanced knowledge production on experiences of gender-based violence, and thereafter better inform the development of measures to eradicate the problem in an inclusive and more holistic way. Intersectional and contextual approaches are very useful in the multi-level models as they allow for interactions between national/institutional variables and individual ones which can help to explain how institutions and actors relate to each other but also how identities might not operate in an identical manner across cities, regions or countries (Hancock, 2007). Adopting such a multi-level approach in the analysis of gender-based violence helps to tackle the problems associated with the limited geographical scope of studies as well as it integrates a broader range of factors which previously have tended to be skewed towards the individual level as opposed to the community or societal level (Heise & Garcia-Moreno, 2002). Finally, UniSAFE's conceptual and theoretical approaches aim to improve analyses of gender-based violence, using the context of universities and research organisations, but with relevance to gender-based violence in other organisational contexts.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

METHODOLOGY

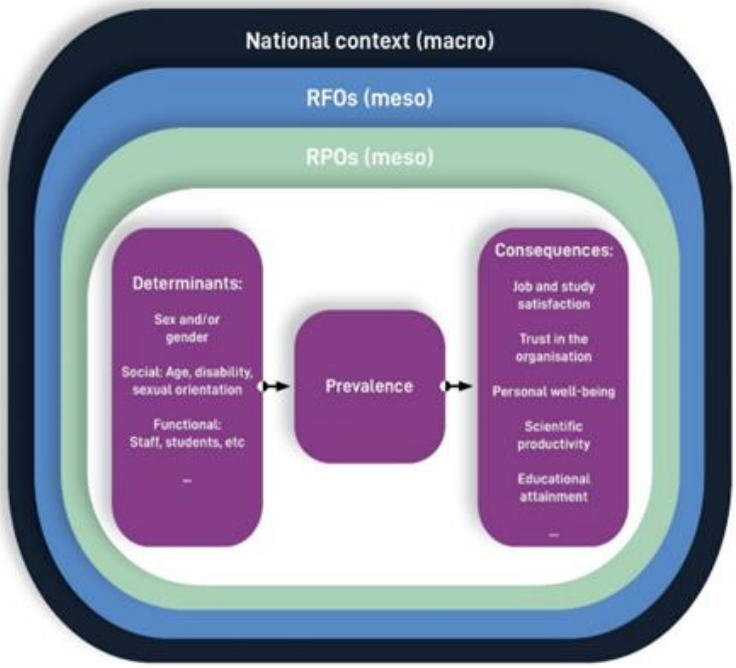
The analysis conducted in this report relies on combination of quantitative and qualitative data. In this section, we outline the analytical report used for the quantitative data, including the creating of an integrated dataset from the survey and the national and organisational mappings, the analytical process and software, and the variables used. We then discuss in brief the analytical approach taken for the qualitative data, and how the interviews and case studies are used to both illustrate and enrich the overall analysis.

ANALYTICAL APPROACH FOR THE QUANTITATIVE DATA

Creation of the integrated quantitative dataset

The purpose of the integrated dataset is to merge different levels of information. This recognises that experiences of gender-based violence are also shaped by the context of institutions and countries. The integrated dataset was created to empirically test selected aspects of the conceptual framework in response to the UniSAFE project's objectives, and in particular the nested nature of the data which necessitates analyses that combine the micro, meso and macro levels (Figure 1).

Figure 1 UniSAFE's conceptual framework



The overall empirical part of the UniSAFE project relies on a nested sampling strategy, at multiple levels. Countries were first selected (macro), from which several RPOs (meso) were then selected from those who had volunteered to take part in the project. Two in-depth mappings were carried out, one at national level (Fajmonová et al., 2021) and one at organisational level (Huck et al., 2022). At meso-level, this was complemented by 16 in-depth case studies on institutional responses (Ranea et al., 2022). Finally, in each RPO, an online survey (Lipinsky et al., 2021) was administered among all staff and students (micro),

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

combined with interviews (Pilinkaitė Sotirovic & Blazytė, 2022) to obtain some qualitative accounts of experiences of violence, particularly among groups that may be in more vulnerable situations.

For the multi-level modelling, only cases where quantitative data, including quantified data from the mappings, are available on all three levels can be included. The analysis relies on the creation of an integrated dataset that can only include individual cases for which there are meso and macro level data available, either from the in-depth mappings or from other sources (summarised in Table 1). The national mapping (Fajmonová et al., 2021) was undertaken for 33 countries, but there are only 15 for which there are survey data (Belgium, Czech Republic, Finland, France, Germany, Iceland, Ireland, Italy, Lithuania, Poland, Serbia, Spain, Sweden, Turkey, UK). The organisational mapping (Huck et al., 2022) was conducted across 50 RPOs, though only 43 had also completed the survey (i.e. of the 46 RPOs that participated in the survey, three do not have corresponding data from the mappings). Altogether, this means that there are 39,631 individuals (from the original 42,186) for whom information is available at all three levels.

Table 1 Sample size overall and across all levels (micro, meso, macro)

	Total n	Total n available across all three levels
Macro	33	15
Meso	50	43
Micro	42,186	39,631

Table 2 illustrates the structure of an integrated dataset in a schematic format. The first three columns are identifiers, respectively for countries A and B; for institutions c, d, e and f; and for individuals 1 to 8. The last three columns provide an illustration of what corresponding data for these might look like, and show, for example, that macro-level data are repeated for each individual within the two different countries while meso-level data are repeated for each individual within the four institutions.

Table 2 Schematic illustration of an integrated dataset

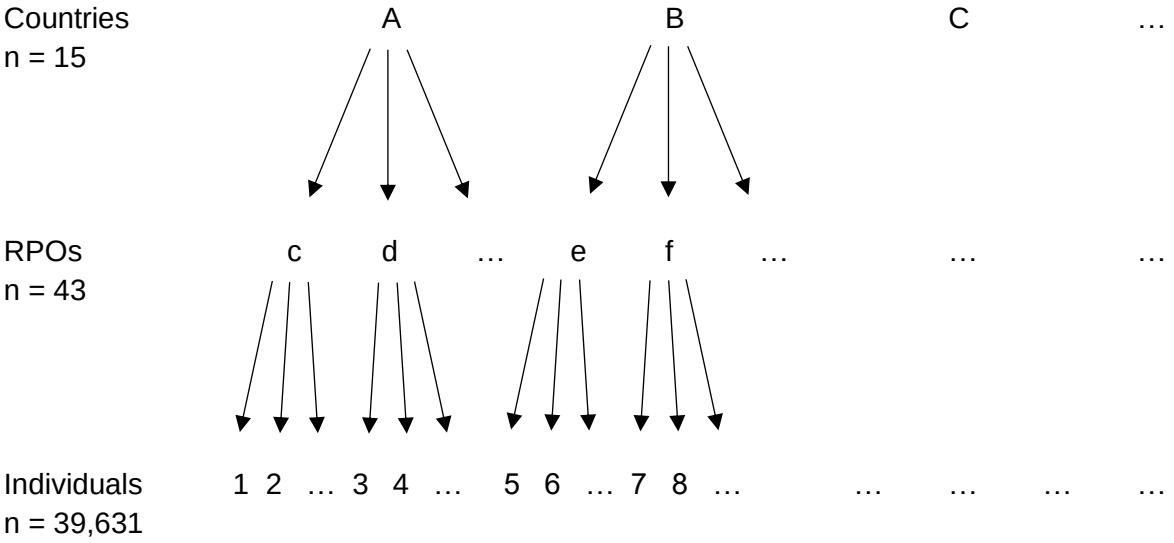
Country	Institution	Individuals	National: how good are policies	Organisational: how good are policies	Experienced gender-based violence
A	c	1	0.5	0	0
A	c	2	0.5	0	1
A	d	3	0.5	1	0
A	d	4	0.5	1	1
B	e	5	1	0.5	0
B	e	6	1	0.5	1
B	f	7	1	1	0
B	f	8	1	1	1

Multi-level structure and classification

Analytically, a nested design such as the one described above should be approached through multilevel modelling. A nested structure is a complex structure characterised by ‘atomic units’ (here individual staff and students), grouped into higher level structures (for the UniSAFE project that is RPOs, followed by countries). This can be represented graphically into a unit diagram (Figure 2).

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 2 Unit diagram of the UniSAFE three-level structure



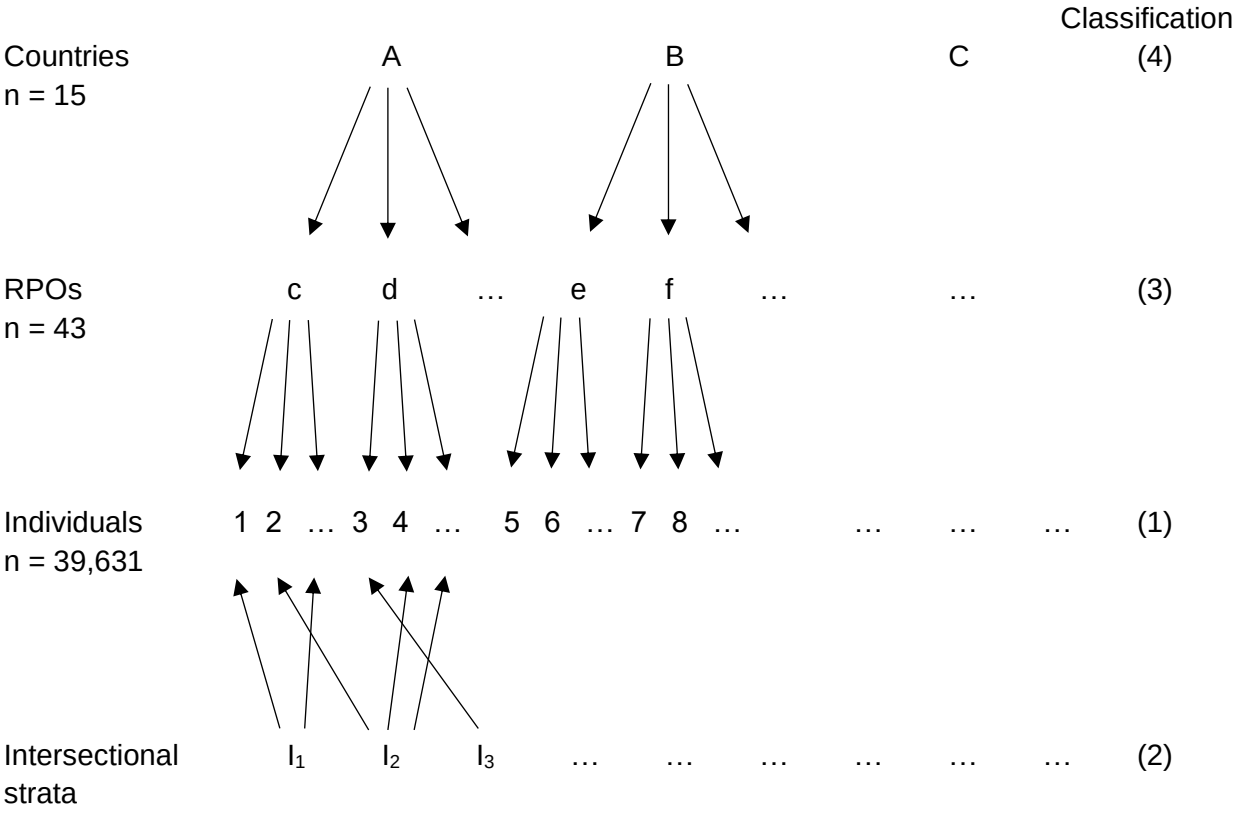
This structure is important to consider in the analysis because of the non-independence of the individual level data, in that experiences of gender-based violence and their consequences might be related to the RPO and/or country in which individuals are located. It is therefore expected that there is dependence between the three levels, and a need to explicitly model these correlations using a multi-level modelling approach (Rasbash, 2008).

Nested structures are not always sufficient to represent a complex reality (Leckie, 2013a). Recent methodological developments in intersectional quantitative research recommend incorporating the interactions of social determinants (e.g. age, gender identity, disability, etc…) into modelling through random effects in a multilevel model, as opposed to the more common approach of adding them as fixed effects as in the case of single-level regression modelling (Evans et al., 2018; Merlo, 2018). Doing so means creating a two-level model, where intersectional strata[1] that combine all non-empty intersections of socio-demographic and functional diversity variables are placed at level 2. In our case, since there are already two existing higher levels (RPOs at level 2, and countries at level 3), and we therefore need to rely on cross-classified multilevel models to incorporate this additional level for intersectional strata. We therefore expend the unit diagram initially presented in Figure 2, and add the intersectional strata level as illustrated in Figure 3.

[1] Intersectional strata provide an individual level membership group corresponding to the different combination of eight possible dimensions: (1) staff, students; (2) women, men, non-binary; (3) sex at birth same as gender identity, sex at birth different from gender identity; (4) <20, 21-25, 26-30, 31-35, 36-40, 41-45, 46-50, 51-55, 56-60, 60 years+; (5) no disability nor chronic illness, disability or chronic illness; (6) non minority ethnic group, minority ethnic group; (7) asexual, bisexual, heterosexual, homosexual, queer, another sexual orientation; (8) domestic, international.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 3 Unit diagram of the UniSAFE cross-classified structure



Cross-classified structures can be used to answer different types of research questions, such as for example:

1. Does the prevalence of gender-based violence and their consequences vary between individual level characteristics and across their intersections, considering that prevalence and consequences may not be independent of the RPOs and countries in which they are located?
2. Does the prevalence rate of gender-based violence and their consequences vary across RPOs and/or countries, according to different socio-demographic or functional diversity characteristics, and/or different organisational/ national characteristics?

These two types of research questions can both be answered through a multilevel modelling approach. It allows for an analysis of a mean response (e.g. prevalence, consequences) as function of explanatory variables (e.g. gender identity), as well as of the variability (in prevalence or consequences across RPOs and/or countries) as a function of explanatory variables (e.g. existence of a policy on gender-based violence).

The ability to respond to different research questions is also related to sample size considerations. For this, it is important to consider what is the 'target of inference', defined as the unit of interest, and which represent a larger population about which conclusions want to be reached (Rasbash, 2008). Because of the large sample size at the level of individuals as the analytical unit – with close to 40,000 responses – it is appropriate to draw inferences about explanatory variables at the individual level, for example, the comparative

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

level of gender-based violence reported by those in different social groupings, and the relation of different forms of gender-based violence and their probable consequences.

In some cases, RPO level findings can also be meaningfully reported where sample sizes are sufficiently large, though because of confidentiality issues, these results are not reported in this report. However according to these guidelines, with typically about three RPOs within each country, it would be inappropriate to provide any results at the national level since these would not be representative.

Analytical process and outline of the generalised linear model

Below we provide an outline of the analytical process followed in this report, drawing on materials produced by researchers associated with the Centre for Multilevel Modelling at the University of Bristol, UK, from which further detailed explanations can be obtained (see in particular LEMMA - Learning Environment for Multilevel Methods and Applications - including but not limited to Leckie, 2013a, 2013b; Rasbash, 2008; Steele, 2008). On the basis of this material, we first provide an outline of multilevel models in general terms, i.e. for a response variable that is continuous, so that the effects of RPOs and countries can be examined. We then set out how to apply a multilevel modelling approach to the case of binary response variable, needed for example in the case of measuring the prevalence of gender-based violence or its consequences, both of which are measured as dichotomous variables. Finally, we extend this to the case of cross-classified models to allow for the incorporation of intersectional strata.

Three-level model for a continuous response

An initial null three-level model (Leckie, 2013b), that is one that only considers an intercept and RPO/country effects, but not explanatory variables. This is the three-level variance-component model, which is expressed as:

$$y_{ijk} = \beta_0 + v_k + u_{jk} + e_{ijk}$$

$$\text{with } v_k \sim N(0, \sigma_v^2),\ u_{jk} \sim N(0, \sigma_u^2) \text{ and } e_{ijk} \sim N(0, \sigma_e^2)$$

where:

- β_0 is the overall intercept;
- v_k and u_{jk} are group random effects and e_{ijk} the individual residuals;
    - v_k is the effect of country k, with the intercept for a given country given by $\beta_0 + v_k$ and the variance of these intercepts across countries defined as $var(v_k) = \sigma_k^2$;
    - u_{jk} is the effect of RPO j within country k, and the variance of these intercepts across RPOs defined as $var(u_{jk}) = \sigma_u^2$. The linear combination $v_k + u_{jk}$ is the difference between RPO j and the overall intercept. The intercept for a given RPO is therefore given by $\beta_0 + v_k + u_{jk}$;
    - e_{ijk} is the variance between individuals within RPOs and countries;
- σ_v^2 measures variation between countries, σ_u^2 measures variation between RPOs within countries, and σ_e^2 measures variation between individuals within RPOs and within countries;

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

- The i, j, k indices are defined as $i = 1, \dots, N$ where N is the total number of respondents in the sample; $j = 1, \dots, J$, where J is the total number of RPOs in the sample; $k = 1, \dots, K$, where K is the total number of countries in the sample.

The null model is used to decompose the variation within the data, and understand at which levels variation is distributed. This can be quantified through the Variance Partition Coefficients (VPCs), which provide information on the relative proportion of variance at each level. The total variance for individual i is:

$$var(y_{ijk}) = var(\beta_0 + v_k + u_{jk} + e_{ijk}) = var(v_k) + var(u_{jk}) + var(e_{ijk}) = \sigma_v^2 + \sigma_u^2 + \sigma_e^2$$

Accordingly, the country-, RPO-, and individual-level VPCs are given respectively by:

$$VPC_v = \frac{\sigma_v^2}{\sigma_v^2 + \sigma_u^2 + \sigma_e^2}$$

$$VPC_u = \frac{\sigma_u^2}{\sigma_v^2 + \sigma_u^2 + \sigma_e^2}$$

$$VPC_e = \frac{\sigma_e^2}{\sigma_v^2 + \sigma_u^2 + \sigma_e^2}$$

The VPCs can be complemented by the Interclass Correlation Coefficients (ICCs), which provide a measure of similarity within clusters (e.g. RPOs, countries). They are obtained, for the country- and RPO-level respectively, through:

$$ICC_v = \frac{\sigma_v^2}{\sigma_v^2 + \sigma_u^2 + \sigma_e^2}$$

$$ICC_u = \frac{\sigma_v^2 + \sigma_u^2}{\sigma_v^2 + \sigma_u^2 + \sigma_e^2}$$

Subsequently, further predictor variables can be added to the model with fit assessed at respective stages. For example, the appropriateness of the model specification can be checked using a traditional Likelihood Ratio (LR) test approach. This is obtained by calculating:

$$LR = (-2 \log L_0) - (-2 \log L_1)$$

where L_0 and L_1 are the respective likelihood values for the two models to be compared. The LR test statistic is assessed against the value obtained from a chi-squared distribution with degrees of freedom equal to the difference in the number of parameters in the two models. For example, in this analysis, the LR test between a single-level null model and the three-level null model tests the hypothesis that there is no country and no RPO variations, vs the alternative that there is some country and/or RPO variation.

The random intercept model only considers the effects of individual predictor variables on the overall intercept and the intercepts for different groups, i.e. it assumes that the slope remains constant across different groups. It is expressed as:

$$y_{ijk} = \beta_0 + \beta_1 x_{1ijk} + \beta_2 x_{2jk} + \beta_3 x_{3k} + \cdots + v_k + u_{jk} + e_{ijk}$$

with $v_k \sim N(0, \sigma_v^2)$, $u_{jk} \sim N(0, \sigma_u^2)$ and $e_{ijk} \sim N(0, \sigma_e^2)$

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

The fixed part $\beta_0 + \beta_1 x_{1ijk} + \beta_2 x_{2jk} + \beta_3 x_{3k} + \cdots$ represents the relationship between predictors and the response on average. The random part $v_k + u_{jk} + e_{ijk}$ describes how countries and RPOs differ from this relationship. Predictors can be located at different levels: x_{1ijk} is an individual-level predictor with slope β_1; x_{2jk} is an RPO-level predictor with slope β_2; and x_{3k} is a country-level predictor with slope β_3.

Three-level model for a binary response

Thus far, the multilevel modelling approach has only considered cases where the response variable is continuous. However, it can be adapted to cases where the response variable is a binary, dichotomous variable, as for the example if the case for the prevalence of gender-based violence or its consequences. Prevalence, for example, is coded as 1 where someone has experienced an incident (for single items describing an incident), one or more incidents with a form of gender-based violence (prevalence of one of the forms of gender-based violence), or any form of gender-based violence (overall prevalence of gender-based violence). Consequences are also coded as 1 where someone reports one of the listed consequences, and 0 otherwise.

The aim with a binary response variable becomes to estimate a generalised linear random intercept model for the dependency of the response probability π_{ijk} (the mean or expected value of y_{ijk} for an individual in RPO j and country k, with value x_{ijk}) on a predictor variable x_{ijk} (Steele, 2009). We have:

$$E(y_{ijk} \mid x_{ijk}, v_k, u_{jk}) = \pi_{ijk} = P(\pi_{ijk} = 1) = \beta_0 + \beta_1 x_{1ijk} + v_k + u_{jk}$$

For a binary response, we use:

$$F^{-1}(\pi_{ijk}) = \beta_0 + \beta_1 x_{1ijk} + v_k + u_{jk}$$

where F^{-1} is the link function, with a logit link selected in this analysis. The linear terms of this equation, on the right-hand side, can be extended to include further predictor variables at different levels as described above in the general case, including random intercepts and slopes.

The null multilevel logistic model is thus expressed as:

$$log\left(\frac{\pi_{ijk}}{1 - \pi_{ijk}}\right) = \beta_0 + v_k + u_{jk}$$

with $v_k \sim N(0, \sigma_v^2)$ and $u_{jk} \sim N(0, \sigma_u^2)$

where:

- β_0 are the log odds that $y_{ijk} = 1$, when v_k and u_{jk} are equal to 0, i.e. the overall intercept. Calculating e^{β_0} therefore gives the odds that $y_{ijk} = 1$, all other variables equal to 0.
- v_k is the effect of country k, with the intercept for a given country given by $\beta_0 + v_k$ and the variance of these intercepts across countries defined as $var(v_k) = \sigma_k^2$. The random country effect v_k can be interpreted as the difference in the odds that $y_{ijk} = 1$ for a country k with overall odds.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

- u_{jk} is the effect of RPO j within country k, and the variance of these intercepts across RPOs defined as $var(u_{jk}) = \sigma_u^2$. The random RPO effect u_{jk} can be interpreted as the difference in the odds that $y_{ijk} = 1$ between RPO j and country k, i.e. the within country difference. The linear combination $v_k + u_{jk}$ is the difference in the odds that $y_{ijk} = 1$ between RPO j and overall odds. The intercept for a given RPO is therefore given by $\beta_0 + v_k + u_{jk}$.
- σ_v^2 measures variation in the odds that $y_{ijk} = 1$ between countries, σ_u^2 measures this variation between RPOs within countries. Unlike the general case, there is no direct estimation of σ_e^2, though it can be substituted by $\pi^2/3 \approx 3.29$ which corresponds to the variance of the logistic distribution.
- The i, j, k indices are defined as $i = 1, \dots, N$ where N is the total number of respondents in the sample; $j = 1, \dots, J$, where J is the total number of RPOs in the sample; $k = 1, \dots, K$, where K is the total number of countries in the sample.

Coefficients are best interpretated in relation to odds[2], rather than log odds. This is obtained for example by calculating e^{β_0}. Odds above the threshold value of 1 represent an increased likelihood, and conversely. Usefully, odds can also be interpreted as a probability. This is because the two expressions below are algebraically equivalent to each other:

$$log\left(\frac{\pi_{ijk}}{1 - \pi_{ijk}}\right) = \beta_0 + v_k + u_{jk}$$

$$\pi_{ijk} = \frac{e^{\beta_0 + v_k + u_{jk}}}{1 + e^{\beta_0 + v_k + u_{jk}}}$$

The intercept β_0 can be interpreted, for example, if used to examine prevalence, as measuring the log-odds of prevalence across all respondents, all RPOs and all countries. The log odds for prevalence in country k is $\beta_0 + v_k$. Countries with higher values of v_k tend to have higher prevalence, and conversely. The log odds for prevalence for RPO j is $\beta_0 + v_k + u_{jk}$. RPOs with higher values of u_{jk} tend to have higher prevalence of gender-based violence, relative to RPOs within the same country.

Four-level cross-classified model

Cross-classified models, either for a continuous or binary response variable, rely on a slightly different notation since it is no longer simply a nested structure. Superscripts are used to denote levels, though these are no longer levels in the sense used for nested structures, but instead levels of classification that are assigned arbitrarily (see visual representation in Figure 3).

We outline how cross-classified models are expressed, and how their parameters can be interpreted below for the continuous response case, though they can be adapted for a

[2] To illustrate how odds are calculated and how to interpret them, consider the following example. If a person applies for a promotion, there is 53% chance they will be successful. Therefore, s = 0.53 and f = 0.47 (where s and f stand for success and failure respectively). This gives us odds of 0.53 / 0.47 = 1.11. Therefore, if this person is representative of a population of interest, we can consider that were we to select a person at random who had applied for promotion, they would be 11% more likely to be promoted than not to be promoted all else being equal (1.11 – 1 = 0.11 = 11%).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

binary response as discussed above. The null cross-classified model for a continuous response variable can be expressed in classification notation[3] as:

$$y_i = \beta_0 + u^{(4)}_{country(i)} + u^{(3)}_{RPO(i)} + u^{(2)}_{is(i)} + e_i$$

with $u^{(4)}_{country(i)} \sim N(0, \sigma^2_{u(4)})$, $u^{(3)}_{RPO(i)} \sim N(0, \sigma^2_{u(3)})$, $u^{(2)}_{is(i)} \sim N(0, \sigma^2_{u(2)})$ and $e_i \sim N(0, \sigma^2_e)$

where:

- y_i is the response for individual i
- β_0 is the overall mean, across all individuals, all intersectional strata, all RPOs, all countries
- $u^{(4)}_{country(i)}$ is the effect of individual i's country, i.e. the difference between a given country and the overall response.
- $u^{(3)}_{RPO(i)}$ is the effect of individual i's RPO, i.e. the difference between a given RPO and the overall response.
- $u^{(2)}_{is(i)}$ is the effect of individual i's intersectional strata, i.e. the difference between a given strata and the overall response.
- e_i is the residual error term[4]
- $\sigma^2_{u(4)}$, $\sigma^2_{u(3)}$, $\sigma^2_{u(2)}$ and σ^2_e measure the variation at the respective classifications level, after adjusting for differences across the other classifications, i.e. $\sigma^2_{u(4)}$ measures differences between countries after adjusting for differences across RPOs and intersectional strata; $\sigma^2_{u(3)}$ measures differences between RPOs after adjusting for differences across countries and intersectional strata; $\sigma^2_{u(2)}$ measures differences between intersectional strata after adjusting for differences across countries and RPOs; σ^2_e measures how individuals vary within countries, RPOs and intersectional strata[5].
- $i = 1, \dots, N$ individuals
- $is(i) \in \{1, \dots, J^{(1)}\}$, i.e. the set of all possible intersectional strata
- $RPO(i) \in \{1, \dots, J^{(2)}\}$, i.e. the set of all RPOs
- $country(i) \in \{1, \dots, J^{(3)}\}$, i.e. the set of all countries.

[3] Classification notation is used for cross-classified models to simplify the notation, and avoid multiple subscripts. The individual level is 'classification 1', and here intersectional strata (is), RPOs (RPO) and countries ($country$) are labelled 'classification 2', 'classification 3' and 'classification 4' respectively. The sub/superscripts '(2)', '(3)' and '(4)' are used for corresponding parameters, with '(1)' omitted but implied. See Leckie (2013a) for further details on classification notation.

[4] Note that where this model is extended to the case of a response variable that is binary, there is no residual error term e_i since we model $E(y_i)$.

[5] Note that where this model is extended to the case of a response variable that is binary, there is no direct estimation of σ^2_e, though it can be substituted by $\pi^2/3 \approx 3.29$ which corresponds to the variance of the logistic distribution.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

VPCs and ICCs can be used to assess how variation is distributed across the different classifications level. The VPCs are given by the following, respectively for the classification levels 4, 3 and 2:

$$VPC_{u(4)} = \frac{\sigma^2_{u(4)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$$

$$VPC_{u(3)} = \frac{\sigma^2_{u(3)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$$

$$VPC_{u(2)} = \frac{\sigma^2_{u(2)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$$

$$VPC_e = \frac{\sigma^2_e}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$$

The ICCs measure the similarity in response within a cluster, and can be obtained as given in Table 3, based on whether two individuals belong or not to the same country, and/or the same RPO, and/or the same intersectional strata.

Table 3 ICCs for the four-level cross-classified model

Country	RPO	Intersectional strata	ICC
$c(i) = c(i')$	$r(i) = r(i')$	$is(i) = is(i')$	
✓	✓	✓	$\frac{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$
✓	✓	✗	$\frac{\sigma^2_{u(4)} + \sigma^2_{u(3)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$
✓	✗	✓	$\frac{\sigma^2_{u(4)} + \sigma^2_{u(2)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$
✓	✗	✗	$\frac{\sigma^2_{u(4)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$
✗	✓	✓	$\frac{\sigma^2_{u(3)} + \sigma^2_{u(2)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$
✗	✓	✗	$\frac{\sigma^2_{u(3)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$
✗	✗	✓	$\frac{\sigma^2_{u(2)}}{\sigma^2_{u(4)} + \sigma^2_{u(3)} + \sigma^2_{u(2)} + \sigma^2_e}$
✗	✗	✗	0

The random intercept model is obtained by adding predictor variables in the fixed part of the model, and is expressed as:

$$y_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x^{(2)}_{2,is(i)} + \beta_3 x^{(3)}_{3,RPO(i)} + \beta_4 x^{(4)}_{4,country(i)} + u^{(4)}_{country(i)} + u^{(3)}_{RPO(i)} + u^{(2)}_{is(i)} + e_i$$

with $u^{(4)}_{country(i)} \sim N(0, \sigma^2_{u(4)})$, $u^{(3)}_{RPO(i)} \sim N(0, \sigma^2_{u(3)})$, $u^{(2)}_{is(i)} \sim N(0, \sigma^2_{u(2)})$ and $e_i \sim N(0, \sigma^2_e)$

where $\beta_0 + \beta_1 x_{1i} + \beta_2 x^{(2)}_{2,is(i)} + \beta_3 x^{(3)}_{3,RPO(i)} + \beta_4 x^{(4)}_{4,country(i)}$ is the fixed part of the model, with x_{1i} a classification 1 variable with slope β_1, $x^{(2)}_{2,is(i)}$ a classification 2 variable with slope

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

β_2, $x^{(3)}_{3,RPO(i)}$ a classification 3 variable with slope β_3, $x^{(4)}_{4,country(i)}$ a classification 4 variable with slope β_4.

Finally, the cross-classified model can also be adapted to cases where the response variable is a binary outcome. The random intercept model for a binary response are given by:

$$log\left(\frac{\pi_{ijk}}{1-\pi_{ijk}}\right) = \beta_0 + \beta_1 x_{1i} + \beta_2 x^{(2)}_{2,is(i)} + \beta_3 x^{(3)}_{3,RPO(i)} + \beta_4 x^{(4)}_{4,country(i)} + u^{(4)}_{country(i)} + u^{(3)}_{RPO(i)} + u^{(2)}_{is(i)}$$

with $u^{(4)}_{country(i)} \sim N(0, \sigma^2_{u(4)})$, $u^{(3)}_{RPO(i)} \sim N(0, \sigma^2_{u(3)})$ and $u^{(2)}_{is(i)} \sim N(0, \sigma^2_{u(2)})$

Statistical software

The models are fitted using MLwiN (https://www.bristol.ac.uk/cmm/software/mlwin/), a software developed by the Centre for Multilevel Modelling at the University of Bristol (UK) and which specialises in estimating more advanced types of multi-level models. The analysis is carried out within Stata by running the external software package 'runmlwin' developed by Leckie and Charlton (2013).

The package performs the estimation using an IGLS (Iterative Generalised Least Squares) algorithm, since the MCMC (Markov Chain Monte Carlo) algorithm is not currently compatible with the specification of survey weights. As an IGLS algorithm can be biased, several model specifications without weights were tested using both the IGLS and MCMC algorithm, showing only marginal differences in the parameter estimates between the two approaches. Of the four methods that exist within the IGLS algorithm, the PQL2 method was applied as it is considered to be the most accurate one (Leckie & Charlton, 2013).

Variables

Socio-demographic and functional determinants

A summary of the measures used for socio-demographic and functional determinants in the UniSAFE survey (Lipinsky et al., 2021) is provided in Table 4.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 4 Variables used to measure socio-demographic and functional determinants

Group	• Staff • Students
Type of staff	• Academic staff • Non-academic staff, e.g. professional and administrative staff
Type of contract	• Fixed-term • Permanent
Paid working hours	• Part-time (<35 hours a week) • Full-time (35 hours a week or more)
Academic grade	• Grade A (Single highest grade or position at which research is normally conducted within an institution, e.g. full professor, research director) • Grade B (Positions which are not as senior as the top position but definitely more senior than newly qualified PhD holders, e.g. associate professor, senior lecturer or senior researcher, habilitated PhD) • Grade C (The first grade or position into which a newly qualified PhD graduate would normally be recruited within an institution, e.g. assistant professor, lecturer, postdoc) • Grade D (Postgraduates not yet holding a PhD degree who are engaged as staff (on the payroll), staff working in posts that do not normally require a PhD, or other teaching staff, junior researchers)
Level of studies	• Doctoral or equivalent • Master's or equivalent • Bachelor's or equivalent
Living in a university residence or on campus	• No • Yes
Gender identity	• Women • Men • Non-binary or another gender identity not listed
Sex at birth the same as current gender identity	• Yes • No
Disability or chronic illness	• No • Yes
Ethnic minority	• No • Yes
Sexual orientation	• Asexual • Bisexual • Heterosexual • Homosexual • Queer • Another sexual orientation
Mobility	• Domestic (people who work or study in the country in which they have been habitually residing and/or a citizen of prior to joining their institution) • International (people who have moved from the country where they have obtained their highest level of qualification to study or work in another country)
Age in years (mean-centred)	Age is years is centred around the weighted average, overall as well as for staff and students where relevant. For the calculation of intersectional strata, age is binned in the following categories: <20; 21-25; 26-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60; 60 years+.
Time spent at the institution (mean-centred)	Time spent at the institution is centred around the weighted average, overall as well as for staff and students where relevant. Improbable values are set as missing on the basis of two criteria: (1) staff/students whose time at the institution was above 50/20 years respectively, noting that a disproportionate number had selected '1950', i.e. the first response category, as the year they started at the institution; (2) observations for which the difference between the time at the institution and age is less than 18 years.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Gender-based violence

A summary of the measures used for the prevalence of gender-based violence in the UniSAFE survey (Lipinsky et al., 2021) is provided in Table 5.

Table 5 Items used to measure different forms of gender-based violence in the UniSAFE survey

Forms of gender-based violence	Items
Physical violence	• Threatened to hurt you physically (q20_1) • Pushed or shoved you, slapped you, grabbed or pulled your hair (q20_2) • Threw a hard object at you, beat you with a fist or a hard object, or kicked you (q20_3) • Tried to suffocate or strangle you, cut or stabbed you, or shot at you (q20_4)
Psychological violence	• Directed abusive comments towards you (e.g. demeaning, humiliating, offensive or ridiculing comments) (q29_1) • Made threatening comments towards you (q29_2) • Gave you hostile looks, stares, or sneers (q29_3) • Interrupted you, spoke over you or addressed you in disrespectful terms in front of others (q29_4) • Unfairly rated you lower than you deserve in an evaluation or assessment (q29_5) • Ignored you or did not speak to you (q29_6) • Subjected you to an outburst of anger (q29_7)
Economic violence	• Harmed your work or studies through unfairly restricting access to financial resources (e.g. by withholding a grant, a travel allowance, a contract, a promotion, etc.) (q38_1) • Harmed your work or studies through intentionally damaging items (e.g. damaging lab equipment, a laptop computer, etc.) (q38_2) • Harmed your work or studies through intentionally deleting or removing access to files or information etc. (q38_3)
Sexual violence	• Attempted to extort sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade (q47_1) • Extorted sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade (q47_2) • Attempted to force you into sexual intercourse by holding you down or hurting you in some way (q47_3) • Forced you into sexual intercourse by holding you down or hurting you in some way (q47_4) • Made you take part in any form of sexual activity when you did not want to or you were unable to refuse or you were afraid of what might happen if you refused (q47_5) • Made you take part in any form of sexual activity when you could not consent because you were asleep, drunk or drugged (q47_6)
Sexual harassment	• Asked intrusive questions about your private life (q56_1) • Stared or leered inappropriately at you (q56_2) • Made sexually suggestive comments or jokes (q56_3) • Made intrusive comments about your physical appearance (q56_4) • Made inappropriate invitations to go out on dates (q56_5) • Indecently exposed themselves to you (q56_6) • Made you watch or look at pornographic material against your wishes (q56_7) • Touched, hugged or kissed you in an unwelcome manner (q56_8)
Online violence	• Unlawfully photographed or recorded you (q65_1) • Distributed sexual images or texts of you without your consent (q65_2) • Bullied, threatened or attacked you online, e.g. via social media (q65_3) • Made offensive or threatening comments on learning or collaborative work platforms (q65_4)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Prevalence[6] was calculated as the weighted number of people reporting one or more incidents of violence divided by the total number of people having responded, multiplied by 100, i.e. all cases coded as 'Prefer not to say' or 'No answer: break-off' were excluded from the calculation. For any form of violence, cases were excluded from the calculation if there was no valid data for any of the specific forms of violence.

The validity and reliability of the measurement model for gender-based violence was first assessed through looking at Cronbach α values (Table 6). These were near or well above the threshold of 0.7 for any form of gender-based violence, as well as the forms of gender-based violence for which already validated scales were adapted in the UniSAFE questionnaire (physical violence, psychological violence, sexual violence and sexual harassment). However, the reliability scale was much lower for economic violence and online violence, both of which were measured through newly established scales.

Table 6 Cronbach α values for measures of the prevalence of gender-based violence

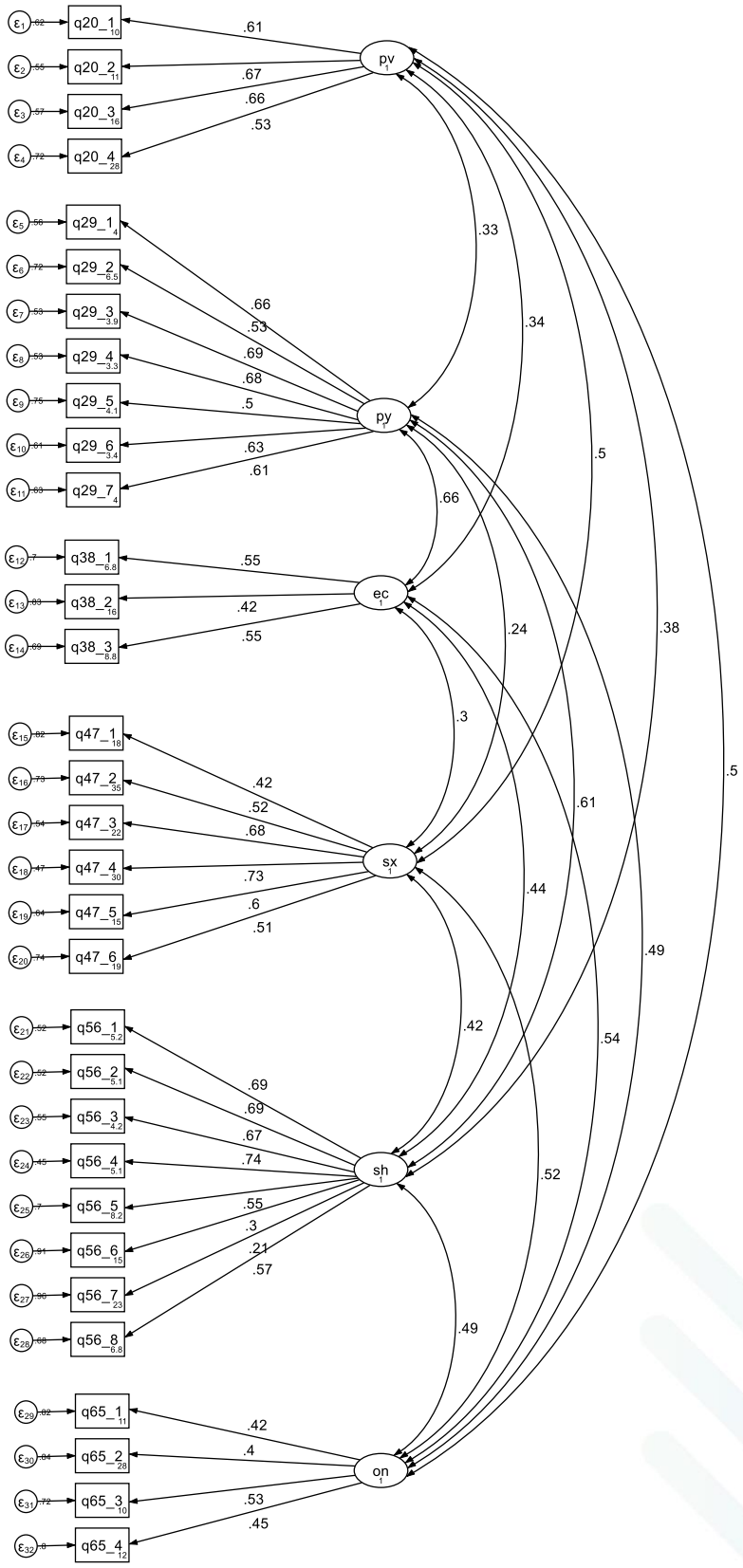
	Cronbach α
Any form of gender-based violence	0.8535
Physical violence	0.6759
Psychological violence	0.8035
Economic violence	0.4664
Sexual violence	0.7058
Sexual harassment	0.7847
Online violence	0.4594

The validity of the measurement model was further assessed using Confirmatory Factor Analysis (CFA) because of the need to aggregate all forms of gender-based violence into one overall measure of prevalence. This was implemented through a Structural Equation Modelling (SEM) procedure in Stata. The full model includes all items asked about in the survey (Figure 4), and shows that some of the standardised coefficients fall below the usual thresholds used by CFA. The rule of thumb is typically no less than 0.5 for new items, and 0.6 for established ones. Due to the nature of this survey, it is deemed important to retain as much information as possible about the forms of gender-based violence shared by participants, and thus to include as many items as possible without compromising the statistical integrity of the measurement framework, this threshold is set at 0.4 for new items and 0.5 for established ones as a guide. Accordingly, three items were candidates for deletion: q56_6 ('Indecently exposed themselves to you') and q56_7 ('Made you watch or look at pornographic material against your wishes') have standardised loadings of 0.3 and 0.21 respectively for sexual harassment, as well as q47_1 ('Attempted to extort sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade') with a standardised loading of 0.43 for sexual violence. The goodness of fit statistics for the model were also examined. While the RMSEA (Root Mean Square Error of Approximation) value of 0.041 is below the threshold of 0.05, the CFI (Comparative Fit Index) value of 0.884 is considered low.

[6] The conceptualisation of violence as 'incidents' can, with some violence, be flawed, as some forms of violence comprise processes of violence over time, such that they can be seen as either one long 'incident' or multiple incidents or several clusters of incidents. This processual approach is especially important in workplace and educational relationships that continue long-term, including between students, and how violence may figure in organisations and organisational processes more generally.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 4 Standardised estimates for the full measurement framework for gender-based violence (all items)



Note: pv (physical violence); py (psychological violence); ec (economic violence); sx (sexual violence); sh (sexual harassment); on (online violence)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Further, this full measurement framework was examined through Principal Components Analysis (PCA) to better understand its underlying structure (Table 7). Principal components results are based on SPSS, where the sum of squared loadings sums to the eigenvalue of respective components. The Kaiser criterion was applied, and generated a solution consisting of six components, which accounted for 46% of the explained variance. The varimax rotated factors loading are presented in Table 7. Most component loading are above 0.5, and largely align with the expected corresponding form of gender-based violence. However, the three items discussed above are also problematic in this assessment of the statistical structure of the full measurement framework. The variables q56_6 ('Indecently exposed themselves to you') and q56_7 ('Made you watch or look at pornographic material against your wishes') do not load on any of the factors. In addition, variable q47_1 ('Attempted to extort sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade') loads onto economic violence, rather than the theorised sexual violence. It is also worth noting that variable q47_2 ('Extorted sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade') presents a cross-loading over both economic and sexual violence.

These three items (q47_1, q56_6 and q56_7, respectively 'Attempted to extort sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade'; 'Indecently exposed themselves to you'; and 'Made you watch or look at pornographic material against your wishes') are therefore removed from the measurement framework. An assessment of the underlying structure of this new reduced measurement framework shows improvement in terms of fit (Figure 5). For new sets of items, all loadings are now above 0.4, with some also above the stricter threshold of 0.5. For existing sets of items, all loadings are now above 0.5, with the majority also above the stricter threshold of 0.6. The goodness of fit statistics are satisfactory with an RMSEA value of 0.037 and a CFI of 0.917.

The updated PCA also shows an improvementTable 8). All items now load onto the form of gender-based violence they were included to measure. The vast majority of loadings are well-above the threshold of 0.5, suggesting that they strongly contribute to measure their associated form of gender-based violence. The only exception is variable q65_2 ('Distributed sexual images or texts of you without your consent'), with a loading of only .441 (due a very slight cross-loading with sexual violence) but which is nevertheless kept to retain as many experiences of gender-based violence as possible.

New variables for the overall prevalence of violence (labelled anyvio2), as well as for sexual violence and sexual harassment (labelled sx2 and sh2 respectively), are therefore recomputed on the basis of not including the three items outlined above, and used further in the remaining of the analysis.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 7 Rotated component matrix for the full measurement framework for gender-based violence (all items)

		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6
Physical violence	Threatened to hurt you physically (q20_1)				.668		
	Pushed or shoved you, slapped you, grabbed or pulled your hair (q20_2)				.729		
	Threw a hard object at you, beat you with a fist or a hard object, or kicked you (q20_3)				.701		
	Tried to suffocate or strangle you, cut or stabbed you, or shot at you (q20_4)				.571		
Psychological violence	Directed abusive comments towards you (e.g. demeaning, humiliating, offensive or ridiculing comments) (q29_1)	.672					
	Made threatening comments towards you (q29_2)	.511					
	Gave you hostile looks, stares, or sneers (q29_3)	.701					
	Interrupted you, spoke over you or addressed you in disrespectful terms in front of others (q29_4)	.722					
	Unfairly rated you lower than you deserve in an evaluation or assessment (q29_5)	.549					
	Ignored you or did not speak to you (q29_6)	.679					
	Subjected you to an outburst of anger (q29_7)	.674					
Economic violence	Harmed your work or studies through unfairly restricting access to financial resources (e.g. by withholding a grant, a travel allowance, a contract, a promotion, etc.) (q38_1)	.394				.490	
	Harmed your work or studies through intentionally damaging items (e.g. damaging lab equipment, a laptop computer, etc.) (q38_2)					.533	
	Harmed your work or studies through intentionally deleting or removing access to files or information etc. (q38_3)					.539	

(table continued below)

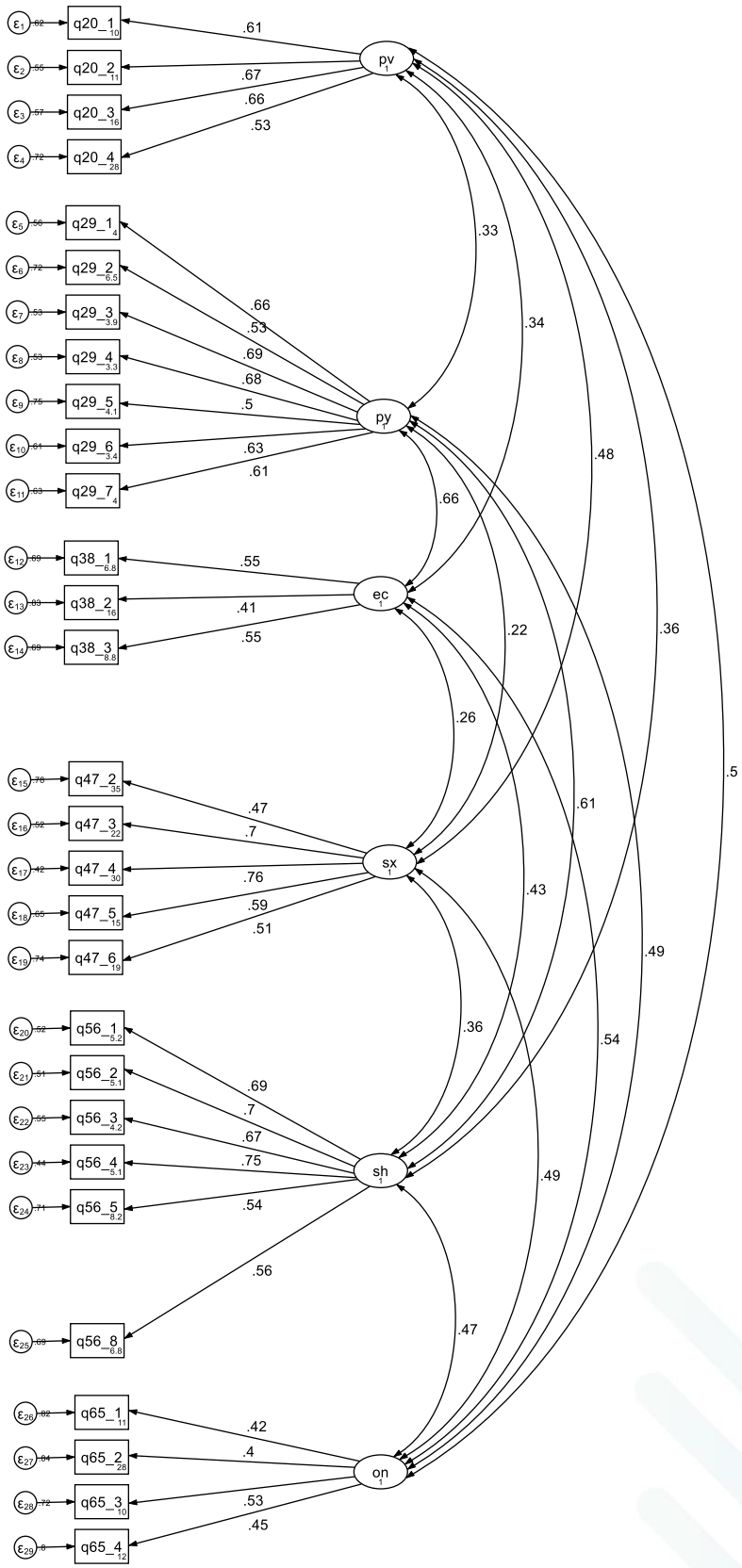
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6
Sexual violence	Attempted to extort sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade (q47_1)					.590	
	Extorted sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade (q47_2)			.466		.523	
	Attempted to force you into sexual intercourse by holding you down or hurting you in some way (q47_3)			.690			
	Forced you into sexual intercourse by holding you down or hurting you in some way (q47_4)			.745			
	Made you take part in any form of sexual activity when you did not want to or you were unable to refuse or you were afraid of what might happen if you refused (q47_5)			.679			
	Made you take part in any form of sexual activity when you could not consent because you were asleep, drunk or drugged (q47_6)			.652			
Sexual harassment	Asked intrusive questions about your private life (q56_1)		.689				
	Stared or leered inappropriately at you (q56_2)		.719				
	Made sexually suggestive comments or jokes (q56_3)		.664				
	Made intrusive comments about your physical appearance (q56_4)		.724				
	Made inappropriate invitations to go out on dates (q56_5)		.611				
	Indecently exposed themselves to you (q56_6)			.306			
	Made you watch or look at pornographic material against your wishes (q56_7)						
	Touched, hugged or kissed you in an unwelcome manner (q56_8)		.612				
Online violence	Unlawfully photographed or recorded you (q65_1)						.561
	Distributed sexual images or texts of you without your consent (q65_2)			.300			.452
	Bullied, threatened or attacked you online, e.g. via social media (q65_3)						.644
	Made offensive or threatening comments on learning or collaborative work platforms (q65_4)						.662

Note: loadings < |0.3| are blanked

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 5 Standardised estimates for the reduced measurement framework for gender-based violence



Note: pv (physical violence); py (psychological violence); ec (economic violence); sx (sexual violence); sh (sexual harassment); on (online violence)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 8 Rotated component matrix for the reduced measurement framework for gender-based violence

		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6
Physical violence	Threatened to hurt you physically (q20_1)				.670		
	Pushed or shoved you, slapped you, grabbed or pulled your hair (q20_2)				.732		
	Threw a hard object at you, beat you with a fist or a hard object, or kicked you (q20_3)				.704		
	Tried to suffocate or strangle you, cut or stabbed you, or shot at you (q20_4)				.572		
Psychological violence	Directed abusive comments towards you (e.g. demeaning, humiliating, offensive or ridiculing comments) (q29_1)	.676					
	Made threatening comments towards you (q29_2)	.493					
	Gave you hostile looks, stares, or sneers (q29_3)	.705					
	Interrupted you, spoke over you or addressed you in disrespectful terms in front of others (q29_4)	.734					
	Unfairly rated you lower than you deserve in an evaluation or assessment (q29_5)	.535					
	Ignored you or did not speak to you (q29_6)	.685					
	Subjected you to an outburst of anger (q29_7)	.675					
Economic violence	Harmed your work or studies through unfairly restricting access to financial resources (e.g. by withholding a grant, a travel allowance, a contract, a promotion, etc.) (q38_1)	.336					.577
	Harmed your work or studies through intentionally damaging items (e.g. damaging lab equipment, a laptop computer, etc.) (q38_2)						.669
	Harmed your work or studies through intentionally deleting or removing access to files or information etc. (q38_3)						.657

(table continued below)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

		Component 1	Component 2	Component 3	Component 4	Component 5	Component 6
Sexual violence	Extorted sexual favours from you in exchange for something within their power to grant or withhold, e.g. a grant, a contract, a promotion, a grade (q47_2)			.513			
	Attempted to force you into sexual intercourse by holding you down or hurting you in some way (q47_3)			.708			
	Forced you into sexual intercourse by holding you down or hurting you in some way (q47_4)			.766			
	Made you take part in any form of sexual activity when you did not want to or you were unable to refuse or you were afraid of what might happen if you refused (q47_5)			.677			
	Made you take part in any form of sexual activity when you could not consent because you were asleep, drunk or drugged (q47_6)			.636			
Sexual harassment	Asked intrusive questions about your private life (q56_1)		.698				
	Stared or leered inappropriately at you (q56_2)		.728				
	Made sexually suggestive comments or jokes (q56_3)		.671				
	Made intrusive comments about your physical appearance (q56_4)		.734				
	Made inappropriate invitations to go out on dates (q56_5)		.610				
	Touched, hugged or kissed you in an unwelcome manner (q56_8)		.620				
Online violence	Unlawfully photographed or recorded you (q65_1)					.554	
	Distributed sexual images or texts of you without your consent (q65_2)			.305		.441	
	Bullied, threatened or attacked you online, e.g. via social media (q65_3)					.673	
	Made offensive or threatening comments on learning or collaborative work platforms (q65_4)					.681	

Note: loadings < |0.3| are blanked

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Consequences

A summary of the measures used for the consequences of gender-based violence in the UniSAFE survey (Lipinsky et al., 2021) is provided in Table 9.

Table 9 Items used to measure different consequences of gender-based violence

Consequences of gender-based violence	Items
Feeling socially excluded	Since you started at your institution, have you ever been in a situation where someone: • put you down or was condescending to you in some way? (q75_1) • paid little attention to a statement you made or showed little interest in your opinion? (q75_2) • ignored or excluded you from the group or team? (q75_3) • ignored you or failed to speak to you? (q75_4)
Feeling unsafe	Since you started at your institution, have you felt unsafe in any of the following spaces...? • Break room, canteen or cafeteria (q76_1) • Classroom, lecture theatre, seminar or meeting room (q76_2) • Library (q76_3) • In the lab or a staff office (q76_4) • While out conducting fieldwork (q76_5) • Residential accommodation (q76_6) • Toilets (q76_7) • Lift, stairs or corridor (q76_8) • Multi-storey car park (q76_9) • Outdoor spaces in the institution's premises (q76_10) • At a conference (q76_11) • In connection with a study or work-related activity in the evening (q76_12) • In connection with an activity not related to study or work in the evening but connected to your institution (q76_13) • Online, e.g. threats via social media, email, messages, or virtual learning platforms (q76_14) • A gym or sports facility that is part of your institution (q76_15) • At another place or in a situation other than those listed above (q76_16)
Feeling unwell	These questions are about how you have been in the past three months. How often have you: • had stomach ache, headache or tension in various muscles? (q77_1) • been physically exhausted? (q77_2) • slept badly or restlessly or found it hard to go to sleep? (q77_3) • been emotionally exhausted or felt worn out? (q77_4) • been irritable or tense? (q77_5) • had problems to concentrate? (q77_6) • felt sad or guilty? (q77_7) The original question is asked on a 4-point scale (Never; Once; 2-5 times; 6 times or more), recoded in this analysis into a dichotomous variable (Never up to 5 times; 6 times or more)

(table continued below)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Consequences of gender-based violence	Items
Work-related consequences (staff only)	These questions are about how you have been since you started at your institution. Have you: • taken time off work or had to stay off work? (q78_1) • experienced reduced work productivity? (q78_2) • disengaged from your colleagues? (q78_3) • received reduced pay or missed out on bonuses? (q78_4) • felt afraid to physically come to work at your institution or to use the necessary online tools for collaborative work? (q78_5) • changed or tried to change team, unit, department, supervisor? (q78_6) • changed or tried to change institution? (q78_7) • considered leaving the academic sector? (q78_8) • felt dissatisfied with your job? (q78_9)
Study-related consequences (student only)	These questions are about how you have been since you started at your institution. Have you: • missed classes? (q79_1) • dropped a course? (q79_2) • changed or tried to change your supervisor or lecturer? (q79_3) • experienced reduced learning achievements? (q79_4) • disengaged from your fellow students? (q79_5) • felt afraid to come physically to study at your institution or to use the necessary online tools for collaborative work? (q79_6) • tried to change institution? (q79_7) • considered opting out of university altogether? (q79_8) • felt dissatisfied with the course of your studies? (q79_9) • decided not to pursue further studies (e.g. not considered postgraduate studies)? (q79_10)

The validity and reliability of the items used to measure consequences of gender-based violence was assessed through looking at Cronbach α values (Table 10). These were near or well above the threshold of 0.7 for all types of consequences.

Table 10 Cronbach α values for measures of the consequences of gender-based violence

	Cronbach α
Feeling socially excluded	0.8017
Feeling unsafe	0.6810
Feeling unwell	0.8579
Consequences on work	0.7368
Consequences on studies	0.7261

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

National and organisational characteristics

The mapping of national policies was conducted in the EU-27, four Associated Countries (Iceland, Serbia, Turkey, UK), and two Third Countries (Canada, USA). The mapping of organisational level policies, measures and actions adopted to address gender-based violence in cooperating universities and research organisations was conducted at 48 RPOs (with regard to their size, disciplines and whether they are universities or RPOs) in 15 countries across Europe and Associated Countries. The mapping of national and organisational level policies was conducted with the support of national researchers. The desk-based research was done using mapping tools (a survey for the national policies and grids and a report template for both national and organisational level policies). The data was cleared and coded by the ISAS team members. The period covered by the mapping was the past six years, between 2015 and May 2021, and the policies had to have been in force for at least a portion of that period (for further details see Fajmonová et al., 2021, pp. 17-23; Huck et al., 2022, pp. 14-18).

Table 11 Variables used to assess national and organisational policies

Label	Description
• Generic national policies on gender equality in RPOs more widely, that includes the issue of gender-based violence • National policies specifically dedicated to gender-based violence in RPOs	National policies have been coded in two separate categories with regards to the framing of gender-based violence in the national policy. On the one hand, there are policies specifically dedicated to combatting only gender-based violence in universities and research organisations. On the other hand, there are more general policies (such as gender equality strategies) that address gender-based violence as one of the topics in the context of a broader policy goal such as the improvement of the Higher Education system, the fight against all types of violence/discrimination, or the work on equality.
National policies that address • prevalence • protection • prosecution • prevention • provision • partnerships • organisational policies	The content of each country's policy mix has been coded with regards to the 7P model, whether they address prevalence, prevention, protection, prosecution, provision of services, partnerships and policies.

(table continued below)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Label	Description
• Generic organisational policy on gender equality that includes the issue of gender-based violence • Organisational policy specifically dedicated to gender-based violence	Organisational policies have been coded in two separate categories in terms of the focus they have in relation to gender-based violence. There are organisational policies that are dedicated specifically to combatting gender-based violence or some of its forms, with gender-based violence being their core topic. There are also more general organisational policies that address gender-based violence as one of their topics (typically GEPs, codes of conduct, HR award action plans, EDI policies, etc.). Some organisations have a mix of dedicated and general policies, and if they have at least one policy dedicated to gender-based violence or some of its forms, they have been coded as having a dedicated organisational policy.
Organisational policies that address: • prevalence • protection • prosecution • prevention • provision • partnerships • organisational policies	The content of each organisation's policy mix has been coded with regards to the 7P model, whether they address prevalence, prevention, protection, prosecution, provision of services, partnerships and policies.
• Organisational policies that do not consider intersectionality • Organisational policies that consider intersectionality	Each policy was coded in two categories. Organisational policies which incorporate an intersectional perspective (gender at the intersection with other axes of inequalities) and organisational policies which do not.
• Organisational policies that do not consider vulnerable groups • Organisational policies that consider vulnerable groups	Organisational policies were coded based on the information provided on whether they specifically mentioned any of these following groups: international students, international staff, early-career researchers, staff with disabilities, students with disabilities, staff with migrant and ethnic minority background, student with migrant and ethnic minority background, LGBTQIA+ staff, LGBTQIA+ students, staff with the temporary contracts, new and expecting mothers or other.
Organisational policies that address: • objectives • indicators • monitoring • evaluation • budget	Organisational policies were coded in two groups on the basis of: • whether they define concrete objectives to be reached (objectives); • whether they contain (implicit or explicit) measurable or verifiable indicators to assess the degree of implementation (indicators); • whether they set a mechanism for monitoring incidents of gender-based violence at the institutional level (monitoring); • whether the collected monitoring data is evaluated at the institutional level (evaluation); and • whether there is a budget allocated to implement the policy (budget).

Weights

As with any survey, the UniSAFE survey is affected by non-response patterns. For example, 69% of the respondents are women though in the corresponding population there are 55% of women. To make the survey more representative, survey weights have been calculated and applied, on the basis of sex, staff/student categories and STEMM/non-STEMM disciplines. Weights have a mean of 1 though range from 0.0077025 to 8.681155, with lower values compensating for over-representation and higher values for under-representation in the sample compared with the population. Weighting is an attempt to provide a more representative and realistic set of estimates about the characteristics of the population. All results in this analysis are weighted, unless otherwise specified.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

ANALYTICAL APPROACH FOR THE QUALITATIVE DATA

Interviews

Semi-structured interviews were conducted online with 54 researchers (of which 23% were PhD candidates, 17% were researchers on temporary contracts, 10% at an early career stage and 31% were Full Professor and senior staff with different lengths of work contracts) who had indicated that they had experienced and/or witnessed gender-based violence in the context of their institution, or in RPOs more broadly (Pilinkaitė Sotirovic & Blazytė, 2022). These interviews were conducted in the period February-May 2022 by six partners of the UniSAFE Consortium (ISAS, GESIS, JU, LCSS, UCM and YW). Interviewees were recruited all over Europe and represented 20 different nationalities (both EU and non-EU countries).

Collectively, these interviews represented the personal stories of 48 women, five men and one person who identified as non-binary. The ethnic backgrounds of the interviewees did not vary much – the majority (70%) described themselves as 'White', followed by 18% who identified as 'Black, African, Caribbean or Latino' and 'Mixed or Multiple' respectively. More than a half (55%) of the interviewees were over 40 years old, 22% were 30-39, 15% were 20-25 and 6% were 18-24 years old. The majority of research participants (81%) identified as heterosexual, while 15% indicated that they belong to the LGBTQI+ community.

To analyse the collected qualitative data, an inductive-deductive analysis approach was applied. Using a deductive analysis approach, data were organised into categories to maintain alignment with research questions. Applying the inductive analysis approach, codes and subcodes were added to capture how the contextual factors relate to the experiences of gender-based violence and reveal its prevalence, institutional response and the consequences both for individuals (victims and perpetrators) and organisations (Pilinkaitė Sotirovic & Blazytė, 2022).

Case studies

As part of the UniSAFE project, 16 case studies were developed with the aim of understanding how institutional measures against gender-based violence are implemented in RPOs, focusing on the interactions, effects and consequences of each institutional response (Ranea et al., 2022). Here, 'institutional response' means any kind of action or measure put in place by the institution to actively cover one or more of the 7Ps to address gender-based violence and/or any kind of sexual or sexist harassment, be it at the policy design level or the implementation level. The 16 case studies provided information about the adoption of an intersectional lens in organisational policies on gender-based violence.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

RESULTS

PART I: DESCRIPTIVE ANALYSIS

Demographic and functional characteristics of the respondents

The sample consists of 53% of people who identify as women, 44% as men and 3% as non-binary. The survey also asks about sex, with 54% of respondents stating they are female, 45% they are male and 2% another sex. Finally, the survey asks respondents if their current gender identity matches their sex at birth, allowing us to infer their trans status, with 2% stating that this was the case. It should be noted that trans status here is a wider category that regroups a variety of identities and experiences, but which is useful analytically to capture the extent to which it can increase exposure to gender-based violence. Though these proportions are small, because of the large sample size, this represents a non-negligeable number of people within each sub-categories that allow for further analyses. Before weighting, there are 1,053 people identifying as non-binary, as well as 611 whose gender identity differs from their sex assigned at birth, of which 72 currently identify as women, 102 as men and 437 as non-binary (Table 12). Nearly four in five respondents (79%) declared being heterosexual, with the remaining 21% composed of people who are – in decreasing order – bisexual (11%), homosexual (4%), queer (2%), asexual (2%), or a sexual orientation not listed in the survey (1%).

Table 12 Gender identity by sex assigned at birth

	Woman		Man		Non-binary		Total
Gender identity is the same as sex assigned at birth	53.4%	26,301	43.9%	11,884	0.7%	259	38,444
Gender identity differs from sex assigned at birth	0.2%	72	0.4%	102	1.5%	437	611
		26,373		11,986		696	39,055

Note: weighted percentages, unweighted number of observations.
Source of the data: UniSAFE survey dataset, 2022

Though the average age was just above 30 years, this was understandably much lower among students (25 years) than staff (45 years). Average age did not differ markedly by gender identity.

There were 11%, for both staff and students, who reported a disability or chronic illness. This was about the same for women (11%) as for men (10%), though it affected 32% of people who identified as non-binary.

Overall, 6% of respondent identified as belong to a minority ethnic group, with a higher proportion among students (7%) than staff (4%). Respondents identifying as non-binary were more likely to belong to a minority ethnic group (19%) compared to women (6%) or men (7%).

Respondents consist of 27% who are members of staff and 72% who are students (n = 39,631). About 7% were international staff or students. Mobility was about the same for women (6%) as for men (7%), but higher for those that identify as non-binary (11%).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

The average time at the institution was nearly six years, but this was much lower for students (3 years) compared with staff (13 years). The main fields of work or study for staff and students are given in Table 13.

Table 13 Main field of work or study

	Staff	Students
Natural Sciences	41%	17%
Engineering and Technology	18%	17%
Medical and Health Sciences	12%	12%
Agricultural Sciences	3%	1%
Social Sciences	14%	34%
Humanities	11%	19%
n	9,621	22,381

Note: weighted percentages, unweighted number of observations.
Source of the data: UniSAFE survey dataset, 2022

Among staff (n = 17,184), 54% are academics and the remaining 46% in other professional, administrative or technical roles. The majority of staff worked full-time (88%), defined here as over 35 hours of paid work per week. Men were more likely to work full-time (92%) compared with women (85%) and non-binary people (84%). Academic staff were also slightly less likely to work full-time (87%) compared with other roles (90%), though this also related to gender (Table 14).

Table 14 Paid working hours per week by category of staff and gender identity

	Women		Men		Non-binary	
	Academic	Other staff roles	Academic	Other staff roles	Academic	Other staff roles
< 20h	5%	2%	3%	1%	6%	9%
20-34h	12%	12%	6%	5%	8%	11%
35h +	83%	86%	90%	94%	87%	80%
Total	5,662	5,369	3,758	2,026	185	98

Note: weighted percentages, unweighted number of observations.
Source of the data: UniSAFE survey dataset, 2022

Occupational segregation is apparent in the sample, as women staff members are less likely to work in academic positions (47%) compared with men (60%) and non-binary people (60%).

Furthermore, while a quarter (25%) of academics are in Grade A posts (the highest grade, equivalent to full professor), this is not without strong gender differences with 30% of men in Grade A posts compared with just 18% for women and non-binary people respectively.

Amongst academics, there are a quarter (25%) on fixed-term positions, though non-binary people are more often concerned (37%) here compared with women (26%) and men (23%).

Among students (n = 22,447), 64% were studying for a Bachelors, 29% for a Masters, and 8% at PhD level. Over one in ten (11%) of students lived on campus or student residences, with few differences by gender identity.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Prevalence of gender-based violence

Prevalence of gender-based violence across different forms

The prevalence of gender-based violence is measured across six different forms:

1. Physical violence
2. Psychological violence
3. Economic violence
4. Sexual violence
5. Sexual harassment
6. Online violence

The prevalence of gender-based violence is measured overall, that is having experienced any, or more than one, any of the forms of gender-based violence asked about. These prevalence rates are summarised in Table 15.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 15 Prevalence (and 95% confidence interval) of gender-based violence overall and across different forms by groups

	Total	Staff	Students	Women	Men	Non-binary
Any form	62.1% (56.5%; 67.3%)	73.7% (68.3%; 78.5%)	57.7% (53.7%; 61.5%)	66.2% (60.6%; 71.4%)	56.2% (49.6%; 62.6%)	74.1% (70.4%; 77.4%)
Physical violence	6.4% (5.5%; 7.4%)	5.3% (4.2%; 6.6%)	6.8% (5.7%; 8.2%)	5.4% (4.4%; 6.5%)	7.2% (6.3%; 8.3%)	12.9% (10.4%; 15.8%)
Psychological violence	57.2% (51.1%; 63.1%)	70.2% (64.4%; 75.4%)	52.1% (47.9%; 56.3%)	61.2% (55.1%; 66.9%)	51.6% (44.4%; 58.7%)	67.8% (62.7%; 72.6%)
Economic violence	9.7% (6.9%; 13.5%)	19.3% (16.4%; 22.6%)	5.8% (4.6%; 7.2%)	9.8% (6.7%; 14.0%)	9.5% (6.8%; 13.1%)	11.4% (8.7%; 14.9%)
Sexual violence	2.8% (2.0%; 4.0%)	1.2% (1.0%; 1.4%)	3.5% (2.5%;4.8%)	3.5% (2.5%; 5.0%)	1.7% (1.1%; 2.6%)	6.2% (4.3%; 9.1%)
Sexual harassment	31.1% (26.3%; 36.3%)	35.3% (29.0%; 42.1%)	29.3% (25.1%; 33.9%)	37.5% (31.3%; 44.1%)	22.4% (18.0%; 27.5%)	43.9% (37.2%; 50.9%)
Online violence	7.6% (6.5%; 8.8%)	7.4% (5.7%; 9.6%)	7.7% (6.6%; 8.9%)	7.2% (6.3%; 8.2%)	7.5% (6.1%; 9.2%)	15.7% (12.3%; 19.9%)

Note: weighted percentages.
Source of the data: UniSAFE survey dataset, 2022

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Variance distribution of the prevalence of gender-based violence across levels

Variance components models for the prevalence of gender-based violence across RPO-, country- and individual level

A three-level variance components model is fitted to assess how much variation in the overall prevalence of gender-based violence – and its different forms – takes place at country-, RPO- and individual-level (Table 16). The VPCs can be interpreted as the proportion of the total variance in prevalence that is due to differences between countries (VPC_v) and between RPOs within countries (VPC_u) respectively.

For the overall prevalence of gender-based violence, the majority of the variance (96%) happens between individuals within RPOs, rather than between RPOs within countries (3%) or between countries (1%). This reflects the fact that the random effects for countries show that the 95% intervals include 0, i.e. the 'overall' mean for most countries (Figure 6), as well as RPOs (Figure 7). The ICCs can be interpreted as the similarity between responses between countries (ICC_v) or RPOs (ICC_u). Since $ICC_v = VPC_v$ by definition, the only statistic of interest is ICC_u. For the overall prevalence of gender-based violence, ICC_u suggests that only 4% of the variance happens between RPOs.

A breakdown by different forms of gender-based violence is provided, which also shows that the majority of the variance in prevalence is located between individuals within RPOs rather than between RPOs within countries or between countries (from 84% for sexual violence up to 97% for online violence). Variance between countries is very low for all forms of gender-based violence, with VPC_vs typically between 0% and 2%, except for 5% for economic violence. This suggests that the prevalence of gender-based violence is relatively uniform across countries. Similarly, variance is low between RPOs, with ICC_us typically between 4% and 9% but with higher variance for sexual violence (16%). This suggests that the prevalence of gender-based violence is approximately the same across RPOs in which respondents work or study.

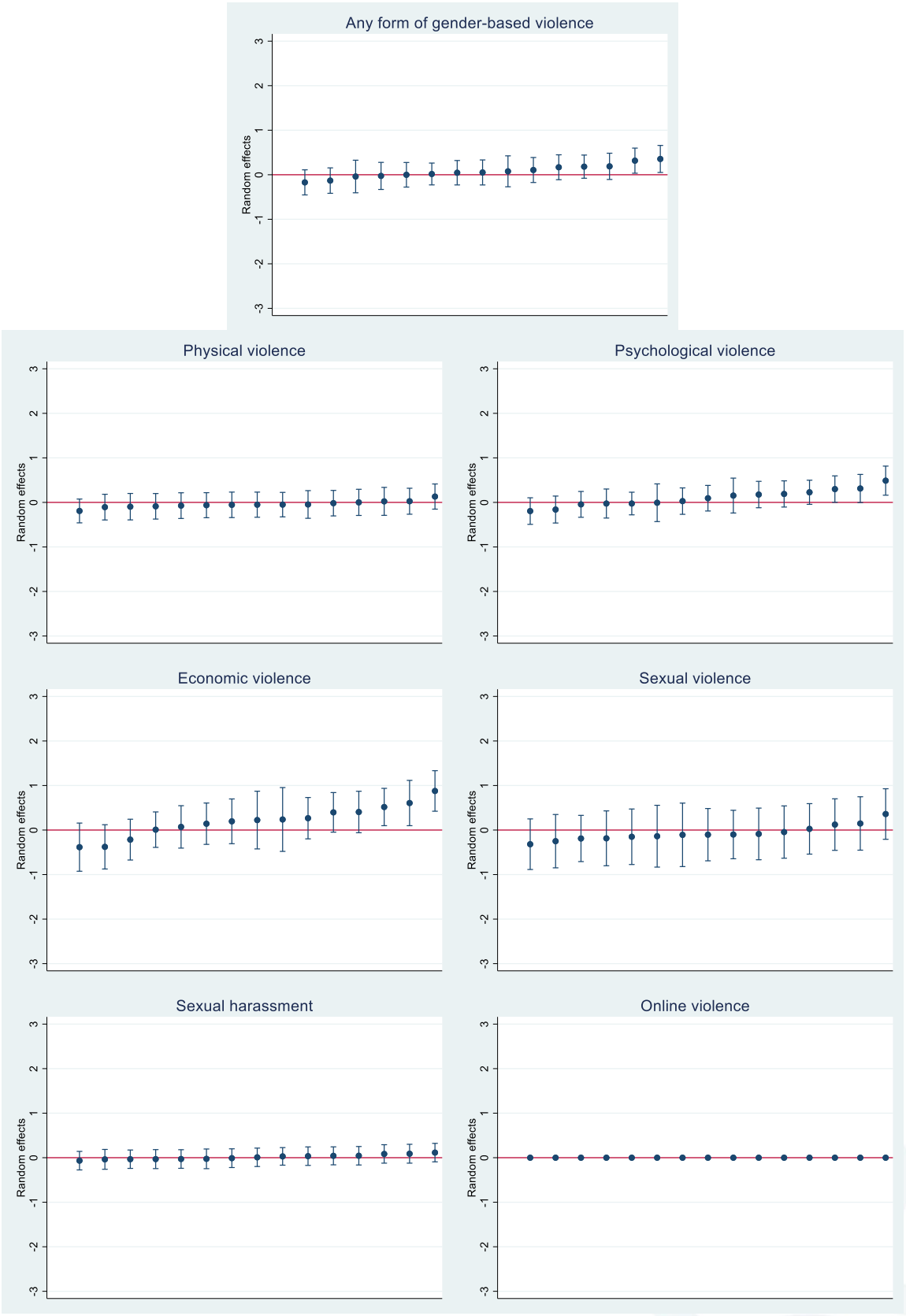
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 16 Three-level variance components models (countries and RPOs) for overall prevalence of gender-based violence and its different forms

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
e^{β_0}	1.67	0.07	1.36	0.09	0.03	0.43	0.09
v_0	0.04	0.03	0.06	0.19	0.14	0.01	0.00
u_0	0.09	0.22	0.07	0.14	0.47	0.17	0.11
VPC_v	0.01	0.01	0.02	0.05	0.04	0.00	0.00
VPC_u	0.03	0.06	0.02	0.04	0.12	0.05	0.03
VPC_e	0.96	0.93	0.96	0.91	0.84	0.95	0.97
ICC_v	0.01	0.01	0.02	0.05	0.04	0.00	0.00
ICC_u	0.04	0.07	0.04	0.09	0.16	0.05	0.03
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Individuals (n)	39,504	39,426	37,712	34,751	34,021	33,600	33,113

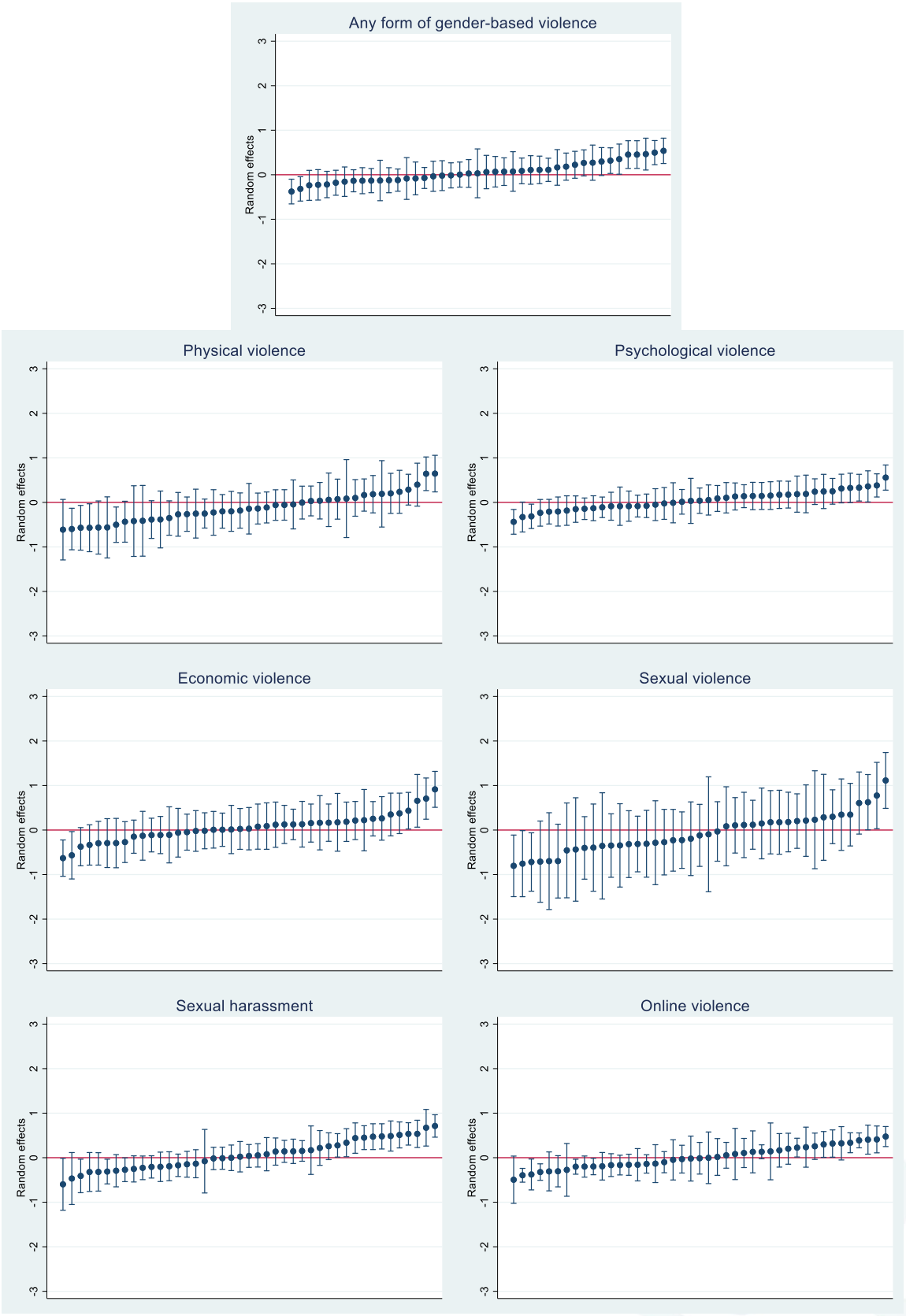
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 6 Country-level random effects and their standard errors for the prevalence of gender-based violence for the three-level null models



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 7 RPO-level random effects and their standard errors for the prevalence of gender-based violence for the three-level null model



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Variance components models for the prevalence of gender-based violence across intersectional strata

A two-level variance components model is fitted to assess how much variation in the overall prevalence of gender-based violence – and its different forms – takes place across intersectional strata and at individual-level (Table 17).

The intersectional strata consist of distinct groups from (non-null) intersections of the following categories:

- staff; students
- women; men; non-binary
- sex at birth same as gender identity; sex at birth different from gender identity
- <20; 21-25; 26-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60; 60 years+
- no disability nor chronic illness; disability or chronic illness
- non minority ethnic group; minority ethnic group
- asexual; bisexual; heterosexual; homosexual; queer; another sexual orientation
- domestic; international

The VPCs can be interpreted as the proportion of the total variance in prevalence that is due to differences between intersectional strata (VPC_{is}). For the overall prevalence of gender-based violence, 14% of the variance is related to intersectional differences between different strata, though the majority of the variation is located at the individual level. This does not apply equally across all forms of gender-based violence. Variation between intersectional strata is highest for sexual violence (36%) and economic violence (28%), and lowest for online violence (8%). Plotting random effects for intersectional strata show that many of the 95% intervals include 0, i.e. the 'overall' mean (Figure 8). This suggests that gender-based violence varies most across all individuals, with only some variation related to intersectionality.

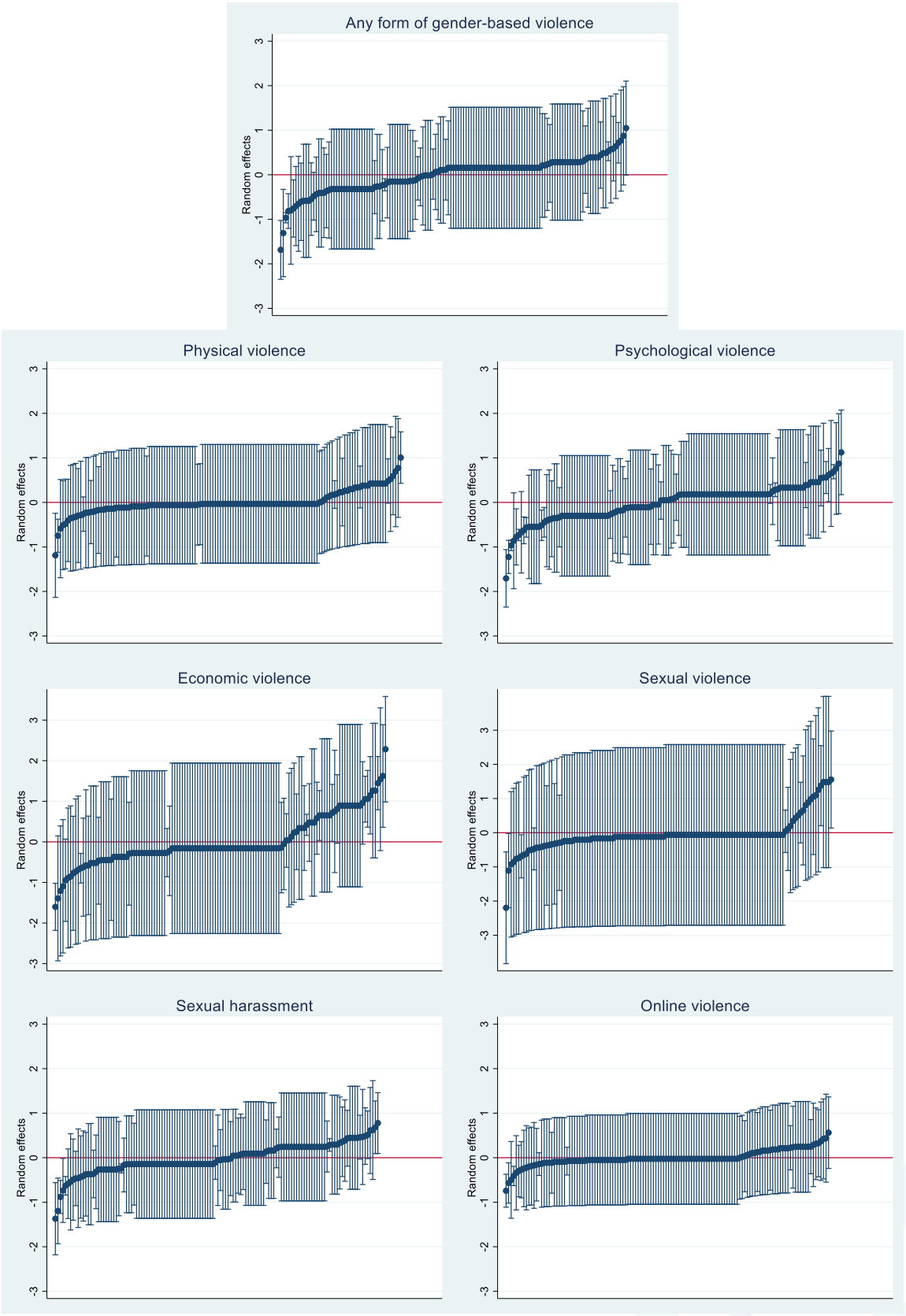
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 17 Two-level variance components models (intersectional strata) for overall prevalence of gender-based violence and its different forms

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
e^{β_0}	2.26	.06	1.77	.12	.02	.56	.09
$inter_0$	.53	.47	.54	1.26	1.88	.42	.28
VPC_{is}	.14	.13	.14	.28	.36	.11	.08
VPC_e	.86	.87	.86	.72	.64	.89	.92
ICC_{is}	.14	.13	.14	.28	.36	.11	.08
Intersectional strata (n)	1,091	1,089	1,062	1,041	1,031	1,024	1,021
Individuals (n)	36,124	36,081	34,594	31,934	31,269	30,884	30,456

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 8 Intersectional strata-level random effects and their standard errors for the prevalence of gender-based violence for the two-level null models



Note: to make visualisation more reader-friendly, only every eight intersectional strata are plotted.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Variance components models for the prevalence of gender-based violence across RPO, country, intersectional strata and individual level

A four-level cross-classified variance components model is fitted to assess how much variation in the overall prevalence of gender-based violence – and its different forms – takes place at country, RPO, intersectional strata and individual-level (Table 18). The VPCs can be interpreted as the proportion of the total variance in prevalence that is due to differences between countries (VPC_v), between RPOs within countries (VPC_u) and between intersectional strata within RPOs and countries (VPC_{is}) respectively. For the overall prevalence of gender-based violence, the majority of the variance (88%) happens between individuals within intersectional strata, RPOs and countries. This suggests that most of the heterogeneity is located between individuals, independently of other levels. Further, 9% of the variation is located between intersectional strata, within RPOs and countries, suggesting that intersectionality matters to some extent. However, practically none of the variation is located between RPOs within countries (2%) or between countries (1%). This reflects the fact that the random effects for countries show that the 95% intervals include 0, i.e. the 'overall' mean for most countries (Figure 9), for RPOs (Figure 10) and for intersectional strata (Figure 11).

A breakdown by different forms of gender-based violence is provided, which also shows that the majority of the variance in prevalence is located between individuals within intersectional strata, RPOs and countries (from 71% for economic violence up to 88% for psychological violence and sexual harassment respectively). Variance between countries is very low for all forms of gender-based violence, with VPC_vs typically between 0% and 2%, except for 20% for sexual violence. This suggests that the prevalence of different forms of gender-based violence is relatively uniform across countries. Similarly, variance is low between RPOs within countries, with VPC_us typically between 2% and 4%. This too suggests that the prevalence of different forms of gender-based violence across RPOs is relatively uniform. The effects of intersectional strata, however, are higher and range from 8% for sexual harassment to 41% for sexual violence. This suggests that the prevalence of different forms of gender-based violence is related to intersectional strata. In fact, an examination of the standard error plots (Figure 11) shows that there are some distinctive intersectional strata for which there is higher prevalence.

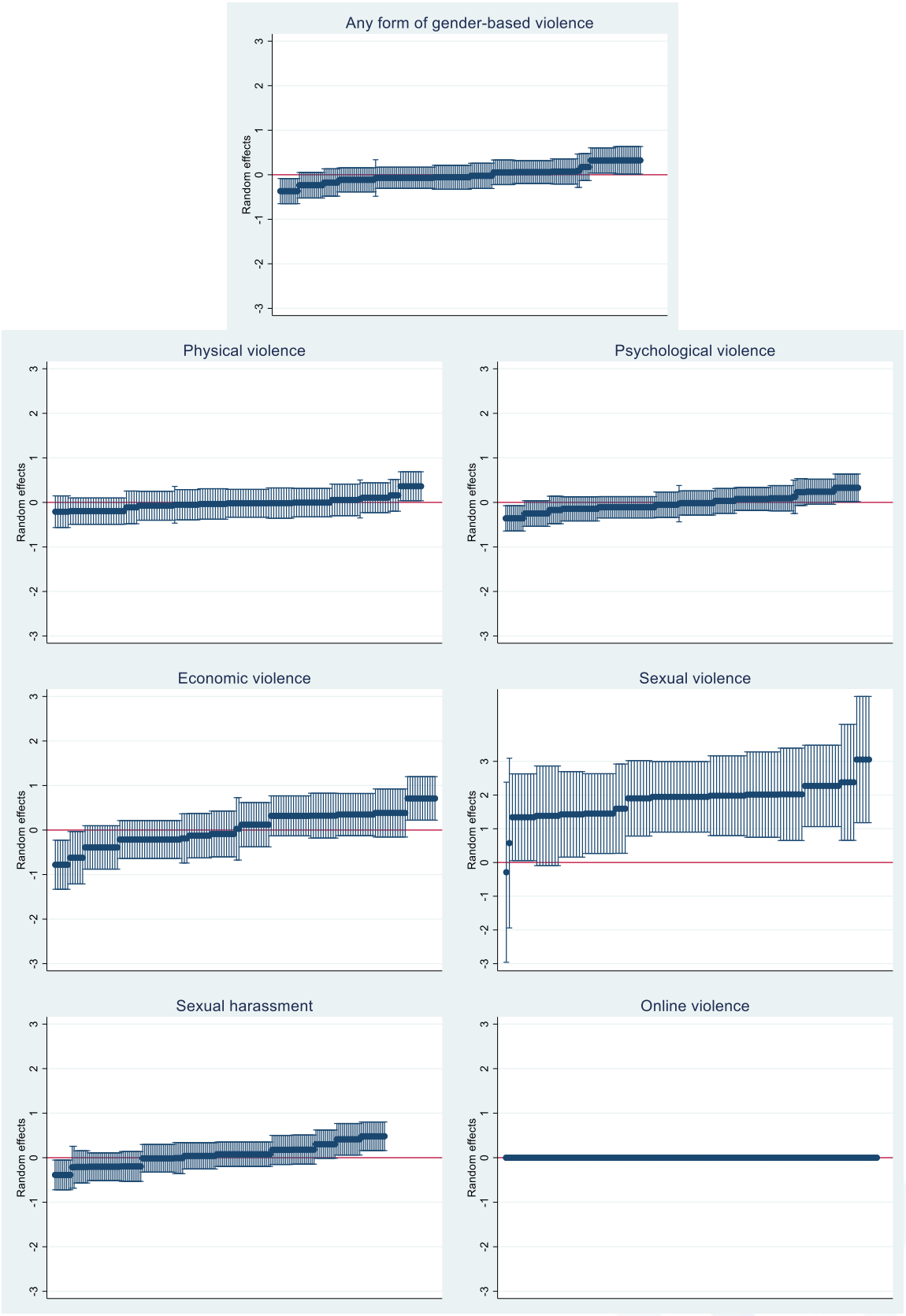
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 18 Four-level variance components models (countries and RPOs) for overall prevalence of gender-based violence and its different forms

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
e^{β_0}	2.05	.05	1.67	.09	<.01	.43	.08
v_0	.06	.05	.05	.21	1.97	.10	.00
u_0	.06	.10	.06	.14	.40	.06	.07
is_0	.32	.55	.35	1.01	3.95	.31	.45
VPC_v	.01	.01	.01	.05	.20	.03	0
VPC_u	.02	.03	.02	.03	.04	.02	.02
VPC_{is}	.09	.14	.09	.22	.41	.08	.12
VPC_e	.88	.82	.88	.71	.34	.88	.86
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,840	5,833	5,690	5,497	5,443	5,407	5,374
Individuals (n)	36,124	36,081	34,594	31,934	31,269	30,884	30,456

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

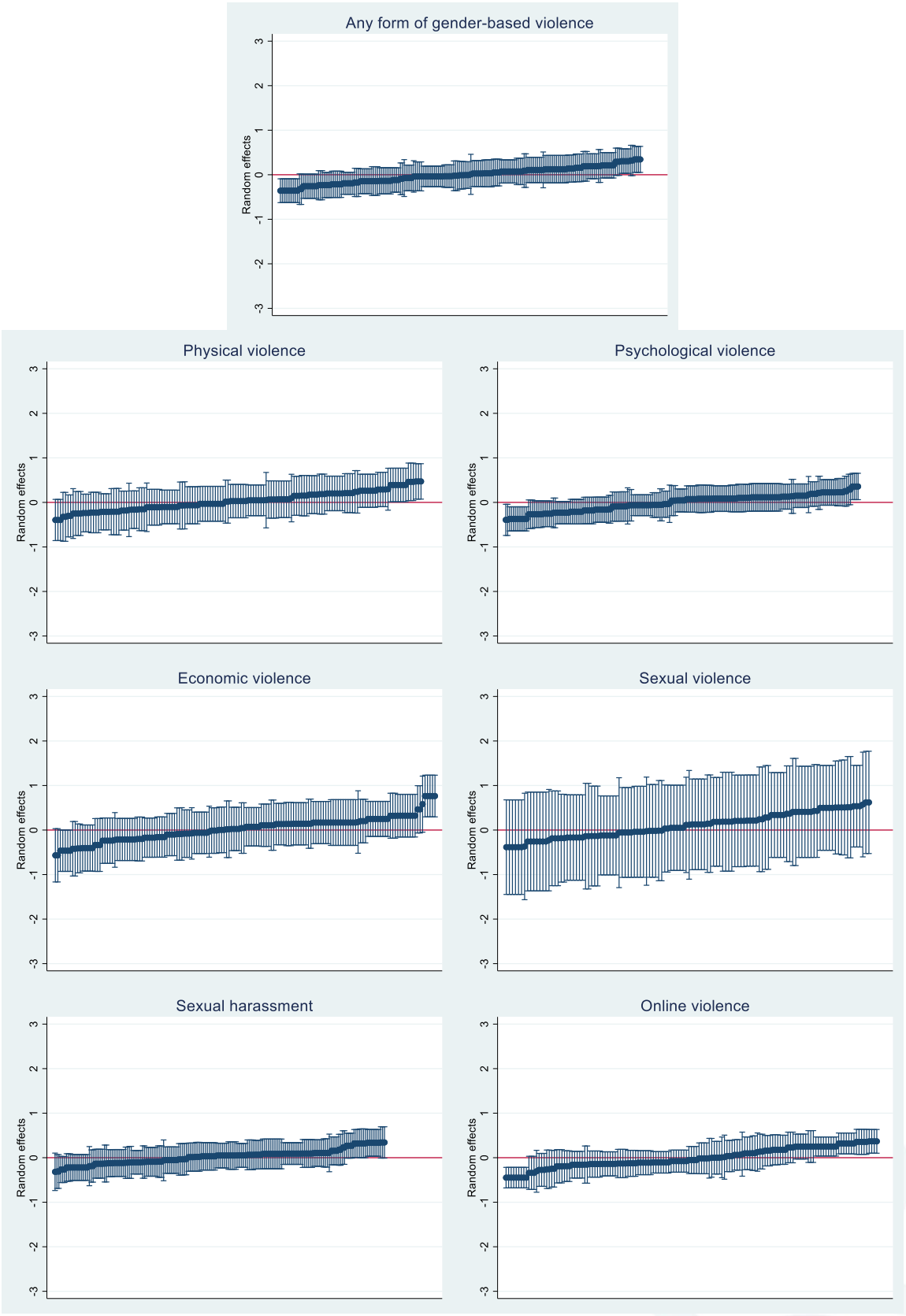
Figure 9 Country-level random effects and their standard errors for the prevalence of gender-based violence for the four-level cross-sectional null models



Note: to make visualisation more reader-friendly, only every eighth intersectional strata are plotted.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

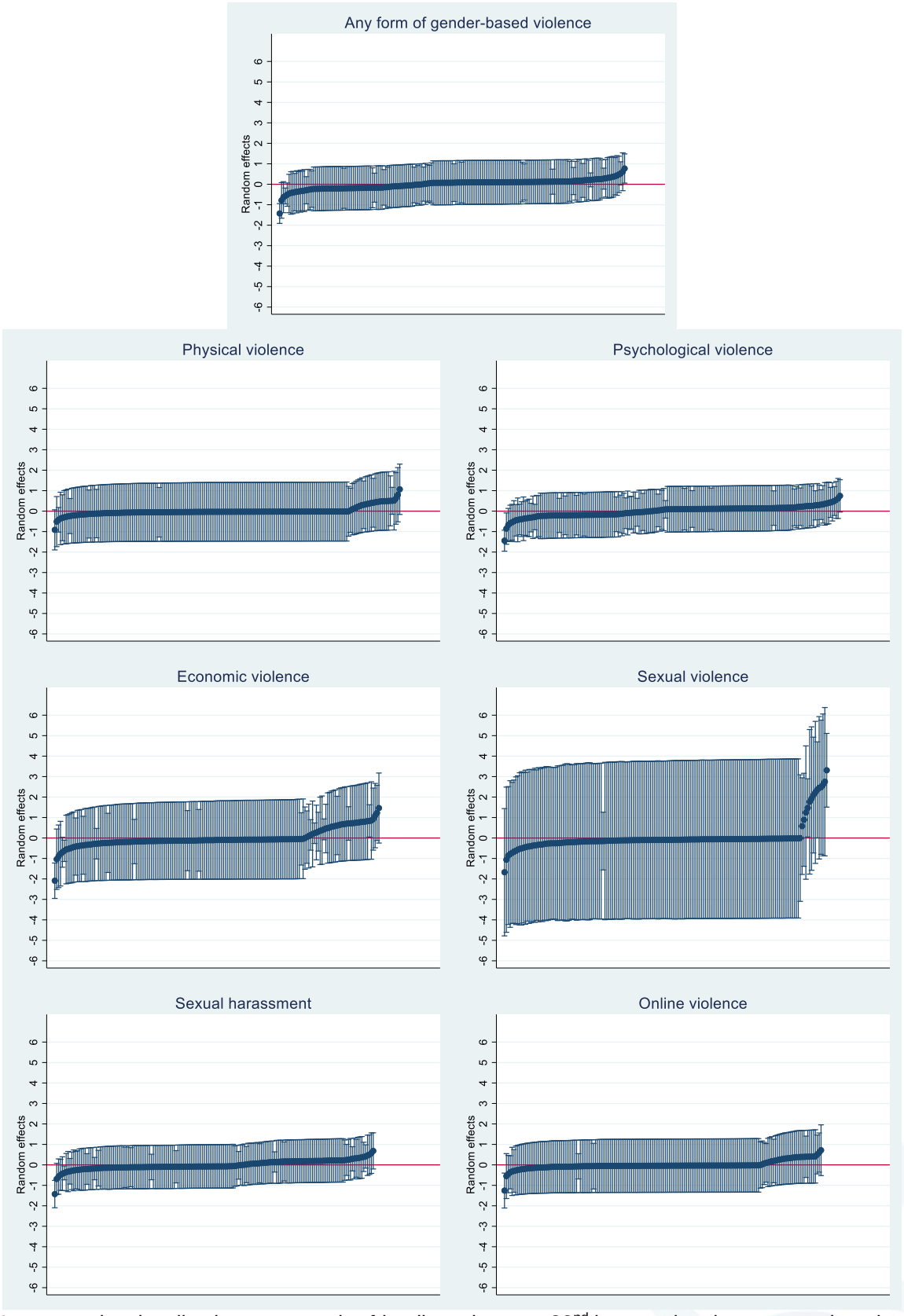
Figure 10 RPO-level random effects and their standard errors for the prevalence of gender-based violence for the four-level cross-sectional null models



Note: to make visualisation more reader-friendly, only every eighth intersectional strata are plotted.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 11 Intersectional strata-level random effects and their standard errors for the prevalence of gender-based violence for the four-level cross-sectional null models



Note: to make visualisation more reader-friendly, only every 32nd intersectional strata are plotted.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Consequences of gender-based violence

The consequences of gender-based violence are measured across four different aspects:

1. Social exclusion
2. Feeling unsafe
3. Feeling unwell
4. Consequences for work (for staff only)
5. Consequences for studies (for students only)

These consequences are summarised in Table 19 overall, as well as broken down by gender identity in Table 20 and by staff/student group in Table 21. These outcomes are consistently higher among people that have experienced any form of gender-based violence. This is most marked for social exclusion, which 70% of those having experienced gender-based violence report, compared to 19.8% of those who did not experience any gender-based violence. People who experienced gender-based violence are also more likely to feeling unsafe in selected locations (38.7% compared with 11.3%). Adverse consequences for work or studies, respectively, are also higher among those that experienced gender-based violence (86.8% compared with 61.7% among staff; 89.5% compared with 76.7% among students). Differences are less pronounced, though still present between people who experienced gender-based violence and those who did not in relation to well-being. The vast majority had felt unwell at some point, though this was reported by 95.9% of those who experienced gender-based violence compared to 90.7% of those who did not. A breakdown of these figures by gender identity shows that across the different types of consequences, men are the least affected. Women and non-binary people are more likely than men to feel excluded, to feel unwell or to feel unsafe.

Insights from the interviews:

Many examples of the potential consequences of gender-based violence were described in the interviews. More than a third described that social exclusion would manifest itself through treating victims as difficult, crazy, mad or 'paranoid', and with whom it is difficult to work. As some interview participants summarised:

> *I had engaged HR […] and then the HR people talked to him [perpetrator]. And you see how this escalates. So at one point in time, nobody was actually listening to my content anymore, right. But they were just, you know, seeing me as an antagonistic person […]. And then they usually use that to fire you.* (Associate Professor at the time of the interview, woman, age 40-49)

Another interviewee described a similar situation in which the person who abused her portrayed her as crazy and as a poor collaborator.

> *In the end, I know that now his strategy is going to be to sort of frame me as the mad woman, and to say – 'she was really a mad woman, it's impossible to work with her. She was a radical feminist, a feminazi, she saw gender where there was none.' And it's completely exaggerated. And so he's going to put me forward as being the mad woman.* (Non-academic staff at the time of the interview, woman, age 50-59)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Consequences for well-being were also evident among the interviewees. One consequence that was more common among victims was feeling unwell. One interview clearly illustrates how exposure to gender-based violence, in her case to sexual harassment, can lead to psychological ill-health such as depression, and how this can lead to self-exclusion because the feeling is that no one understands her:

> *I went through a very big depression that has made me isolate myself a lot from others. I don't have the same patience, I experience everything as a personal attack, then you have answers that sometimes are not in accordance with the real circumstances, so that also makes people distance themselves from me […]. But on a personal level it affects you because nobody understands you, […] like it seems that it's your fault [if you experienced sexual harassment], nobody understands the mental illness associated with depression or trauma, or post-traumatic shock.* (Researcher at the time of the interview, woman, age 40-49)

Consequences for work and studies are also more common among the victims. The following interview describes how independence at work seems to act as a shield. Although self-isolation and independence seem to make the interviewee feel safe at work, this still does not seem to have fully protected the interviewee from, for example, verbal abuse:

> *I cannot say that my career really suffered because I'm more or less independent in my work. Uh, I don't rely on those, fortunately, those abusers, I don't depend on them. So, maybe it, it affected me going to work, I can't say that I'm going there happy everyday. But since I have isolated myself from those couple of abusers, I've, I must say … I do feel safe at work. … there has never been any, let's say, immediate danger, like someone will lock me in the room or attack me or, or something like that. It was more or less abusive behaviour, verbal abuse.* (Associate Professor at the time of the interview, woman, age 50-59)

The ultimate consequence for work is having to quit your job. Some interviewees described how the situation eventually led them to quit their jobs. This is illustrated in the following quote, which also clearly illustrates that the situation might have been different if this person had held a permanent position instead of a temporary one. Despite major financial consequences in terms of having to sell their home and move to another location, this appeared to be the only possible option to end an unbearable situation. It is also noteworthy that this option was what they were recommended to do:

> *They recommended us to look for another job because we were not permanent and since it's very hard to attack a permanent researcher in [country]. Uh, it would be easier for us to just leave. Which at the time, uh, I was really in bad psychological condition, so I did. […] I quit my position, changed city, I had to sell my home that I bought two years before. So economically it was a bit nuts. So, I wouldn't do that. I wouldn't have done that by my free will, but I yes, I was at... I was completely depressed. I was crying in the lab all the time. It was horrible.* (Researcher at the time of the interview, woman, age 40-49)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Another similar pattern is described below, in which the trade-off between economic loss and health is made, and in which health is ultimately the most important factor. When the impact on one's well-being becomes too great, work is no longer the first priority. This interviewee also describes how she has read up to learn about similar situations, and even then has come to the conclusion that the way out is to eventually flee:

> *I have I been reading a lot about like a workplace bullying and [harassment] and they said, nothing works. If nothing works, flee, leave for your own sake. So now I'm taking that way. I'm really, really tired of this situation […]. So money is not important. If I work as a gardener, my salary will go down around 50%. And I need to go to an education first, two years, and during which I will go down to 50% work. So I will get a lot of financial damage, but I don't care. What is important is my mental health, my psychological health.* (Early-career researcher at the time of the interview, woman, age 30-39)

Another interviewee describes negative consequences for her own well-being and how her experience affected her ability to concentrate and work, which her family also noted, suggesting that she should therefore stop working:

> *I'm working on the topic so I can look at it from a professional angle and keep a professional perspective on this. But because […] you're also you're not a professional in this, you're the victim in the whole situation. So it affected me emotionally much, much worse than I had anticipated. I've had sleepless nights. Over the past two months, I have not been able to sleep longer than five o'clock in the morning. You know, I wake up, I get in a complete stress, I can't fall asleep anymore. I'm constantly worrying about it. And you know, it's like I described it yesterday, I said to my husband, it's like a fog in your mind, you cannot clearly think anymore. And that really affects, of course, also the quality of the work that you're doing it I have a very hard time to concentrate. You know, I take a longer time to get the job done. Because of course, if you can't concentrate, it takes a longer time, I'm starting, I started to feel very demotivated in my job, very depressive feelings. And in the end, it was really also my husband, and my children who started to put pressure on me to resign and to say, "you know, honestly, Mom, you can't go on like that, resign, quit this thing. You know, this is not your battle and get out of it. Because, you know, this is not healthy for you, and it's not okay".* (Non-academic staff at the time of the interview, woman, age 50-59)

A similar situation describes whether it is worth sacrificing your health to stay and fight a seemingly lengthy and hopeless battle. This example also illustrates how long administrative procedures may have a debilitating effect:

> *We wrote even a letter to the European Commission. And they were like "OK. Yes, we will see, but you know maybe you should see HR" […]. But nothing changed. If you send the letter today and then you get a reply six months later about issues that are very serious, you quit, you don't stay there just to wait someone to reply […]. We knew that this person had other similar cases […] at the University Council, but no one was doing anything to, to this person. So, it's either your psychological health or either your career, so you choose. And at the end of the day, you don't have a choice, you just quit and you go away from this kind of situation.* (Researcher on temporary contract at the time of the interview, woman, age 40-49)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

The following example also describe how unsustainable situations eventually seem to be resolved only by the victim leaving:

> *I have been reading and talking to other colleagues. We're not in the same department anymore because one of them she had to leave. She had to. She told me 'I had enough. It was affecting my health. I couldn't be there any longer'. And then I've been reading the news about the [one of the University's] departments. A teacher who had the same experience that I'm feeling now. And she had to go on sick leave.* (Lecturer at the time of the interview, woman, age 40-49)

Table 19 Consequences (and 95% confidence interval) of gender-based violence overall and across different forms

	Overall		
Experience of any form of gender-based violence	Total	No	Yes
Social exclusion	51.5%	19.8%	70.2%
	(47.4%; 55.6%)	(17.9%; 21.9%)	(67.5%; 72.7%)
Feeling unsafe	28.4%	11.3%	38.7%
	(21.2%; 36.8%)	(7.0%; 17.9%)	(29.0%; 49.3%)
Feeling unwell	93.9%	90.7%	95.9%
	(92.4%; 95.2%)	(88.2%; 92.7%)	(94.2%; 97.2%)
Consequences for work	80.3%	61.7%	86.8%
	(72.7%; 86.2%)	(51.2%; 71.2%)	(82.4%; 90.2%)
Consequences for studies	84.1%	76.7%	89.5%
	(80.8%; 86.9%)	(71.6%; 81.2%)	(87.3%; 91.4%)

Note: weighted percentage.
Source of the data: UniSAFE survey dataset, 2022

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 20 Consequences (and 95% confidence interval) of gender-based violence overall and across different forms by gender identity

	Women		Men		Non-binary	
Experience of any form of gender-based violence	No	Yes	No	Yes	No	Yes
Social exclusion	21.9%	72.5%	17.5%	66.1%	25.7%	77.4%
	(19.4%; 24.7%)	(69.2%; 75.6%)	(15.4%; 19.8%)	(63.0%; 69.0%)	(18.6%; 34.4%)	(72.2%; 81.8%)
Feeling unsafe	16.9%	44.7%	5.7%	27.7%	19.6%	61.9%
	(10.4%; 26.3%)	(34.5%; 55.5%)	(3.3%; 9.9%)	(19.7%; 37.4%)	(12.4%; 29.7%)	(50.2%; 72.4%)
Feeling unwell	94.2%	97.6%	87.3%	93.3%	94.6%	98.3%
	(92.2%; 95.7%)	(96.8%; 98.3%)	(83.9%; 90.1%)	(91.0%; 95.1%)	(89.6%; 97.3%)	(94.1%; 99.5%)
Consequences for work	60.7%	88.5%	61.9%	84.8%	81.7%	87.3%
	(51.6%; 69.2%)	(83.4%; 92.2%)	(50.6%; 72.1%)	(80.4%; 88.5%)	(64.3%; 91.7%)	(82.5%; 90.9%)
Consequences for studies	77.6%	89.8%	75.3%	88.4%	87.1%	94.2%
	(72.7%; 81.9%)	(87.2%; 92.0%)	(69.8%; 80.1%)	(86.4%; 90.2%)	(80.9%; 91.5%)	(91.6%; 96.0%)

Note: weighted percentage.
Source of the data: UniSAFE survey dataset, 2022

Table 21 Consequences (and 95% confidence interval) of gender-based violence overall and across different forms by groups

	Staff		Students	
Experience of any form of gender-based violence	No	Yes	No	Yes
Social exclusion	20.4%	75.7%	19.6%	67.1%
	(17.8%; 23.3%)	(72.5%; 78.6%)	(17.8%; 21.6%)	(64.0%; 70.2%)
Feeling unsafe	6.1%	28.6%	12.7%	44.3%
	(2.6%; 13.9%)	(20.6%; 38.2%)	(8.1%; 19.4%)	(35.1%; 53.8%)
Feeling unwell	85.5%	93.3%	92.0%	97.4%
	(82.8%; 87.8%)	(91.8%; 94.6%)	(89.3%; 94.1%)	(96.8%; 97.8%)
Consequences for work	61.7%	86.8%	-	-
	(51.2%; 71.2%)	(82.4%; 90.2%)	-	-
Consequences for studies	-	-	76.7%	89.5%
	-	-	(71.6%; 81.2%)	(87.3%; 91.4%)

Note: weighted percentage.
Source of the data: UniSAFE survey dataset, 2022

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Variance distribution of the consequences of gender-based violence across levels

Variance components models for the consequences of gender-based violence across RPO, country and individual level

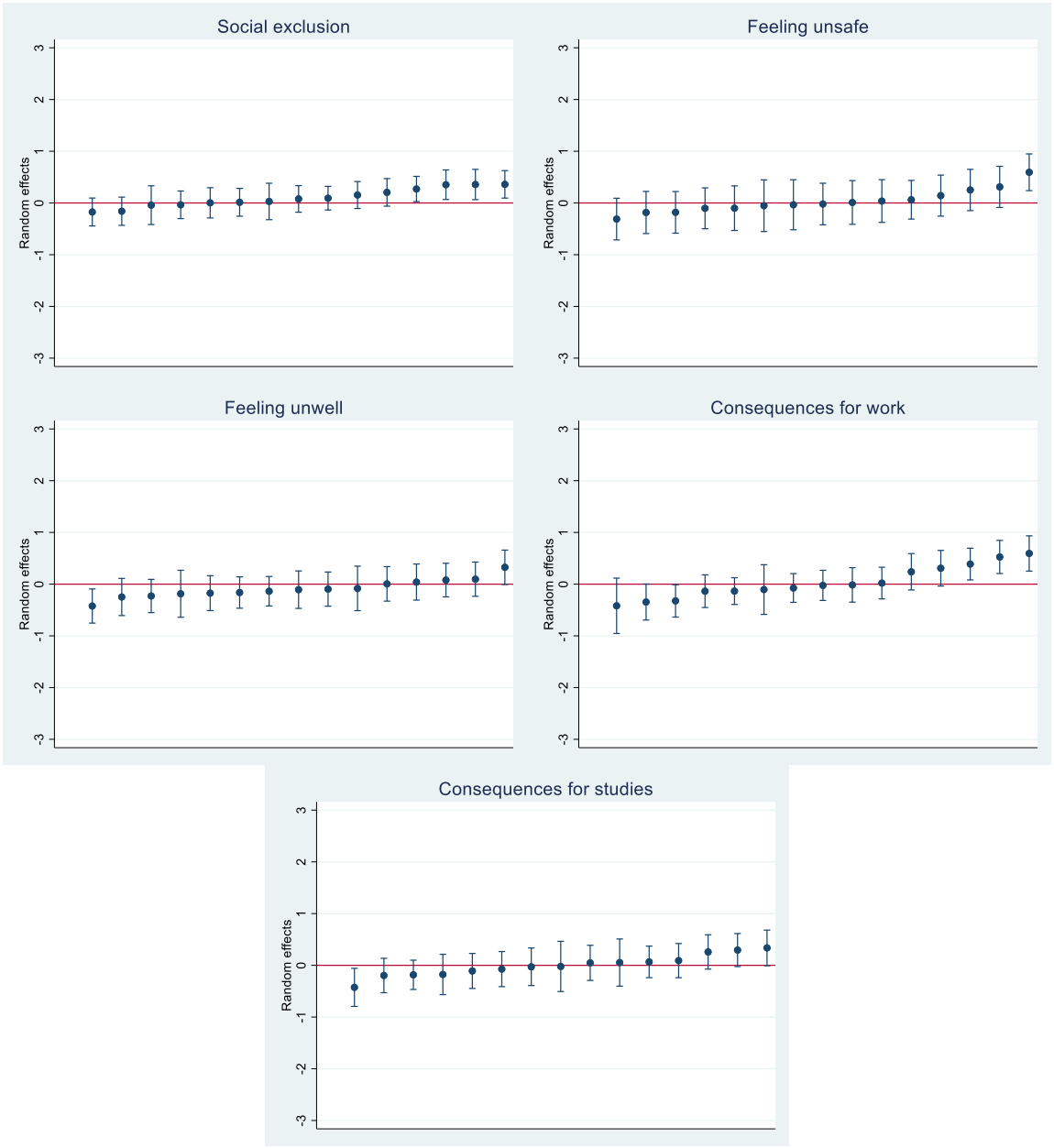
A three-level variance components model is fitted to assess how much variation in the overall consequences of gender-based violence takes place at country-, RPO- and individual-level (Table 22). The VPCs can be interpreted as the proportion of the total variance in consequences that is due to differences between countries (VPC_v) and between RPOs within countries (VPC_u) respectively. The majority of the variance in consequences takes place between individuals within RPOs (range between 92% and 97%), rather than between RPOs within countries (range 1% to 6%) or between countries (range 1% to 3%). This is visible through the random effects plots (Figure 12 and Figure 13) which show that the 95% intervals include 0, which represents the 'overall' mean for countries and RPOs respectively. The ICCs can be interpreted as the similarity between responses between countries (ICC_v) or RPOs (ICC_u). Since $ICC_v = VPC_v$ by definition, the only statistic of interest is ICC_u. For the consequences of gender-based violence, ICC_u suggests that only 3% to 8% of the variance happens between RPOs.-This suggests that the consequences of gender-based violence are relatively uniform across both countries and RPOs.

Table 22 Three-level variance components models (countries and RPOs) for the consequences of gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
e^{β_0}	1.09	0.40	2.40	3.28	5.46
v_0	0.05	0.08	0.07	0.12	0.07
u_0	0.06	0.21	0.10	0.03	0.08
VPC_v	0.01	0.02	0.02	0.03	0.02
VPC_u	0.02	0.06	0.03	0.01	0.02
VPC_e	0.97	0.92	0.95	0.96	0.96
ICC_v	0.01	0.02	0.02	0.03	0.02
ICC_u	0.03	0.08	0.05	0.04	0.04
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Individuals (n)	32,037	29,965	31,952	14,908	17,317

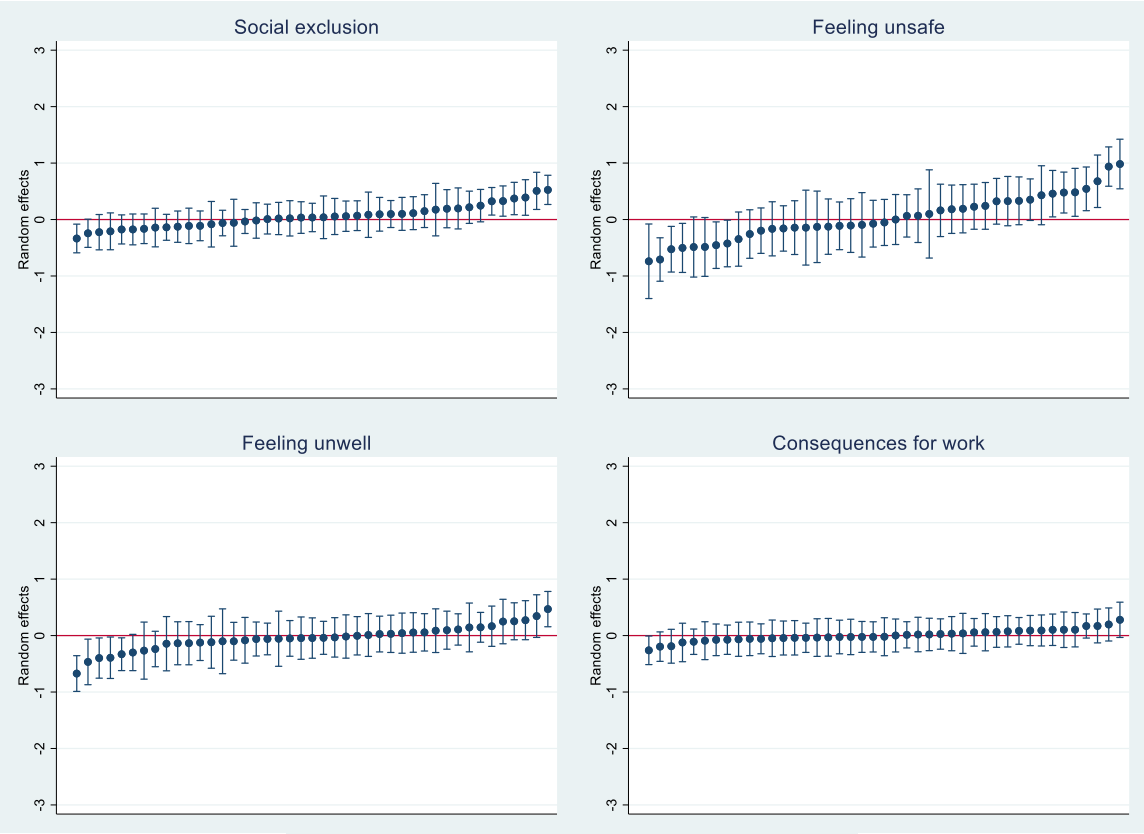
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 12 Country-level random effects and their standard errors for the consequences of gender-based violence for the three-level null models



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 13 RPO-level random effects and their standard errors for the consequences of gender-based violence for the three-level null model



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Variance components models for the consequences of gender-based violence across intersectional strata

A two-level variance components model is fitted to assess how much variation in the consequences of gender-based violence takes place across intersectional strata and at individual-level (Table 23). This uses the same intersectional strata as created previously, and consist of the (non-null) intersections of the following categories:

- staff; students
- women; men; non-binary
- sex at birth same as gender identity; sex at birth different from gender identity
- <20; 21-25; 26-30; 31-35; 36-40; 41-45; 46-50; 51-55; 56-60; 60 years+
- no disability nor chronic illness; disability or chronic illness
- non-minority ethnic group; minority ethnic group
- asexual; bisexual; heterosexual; homosexual; queer; another sexual orientation
- domestic; international

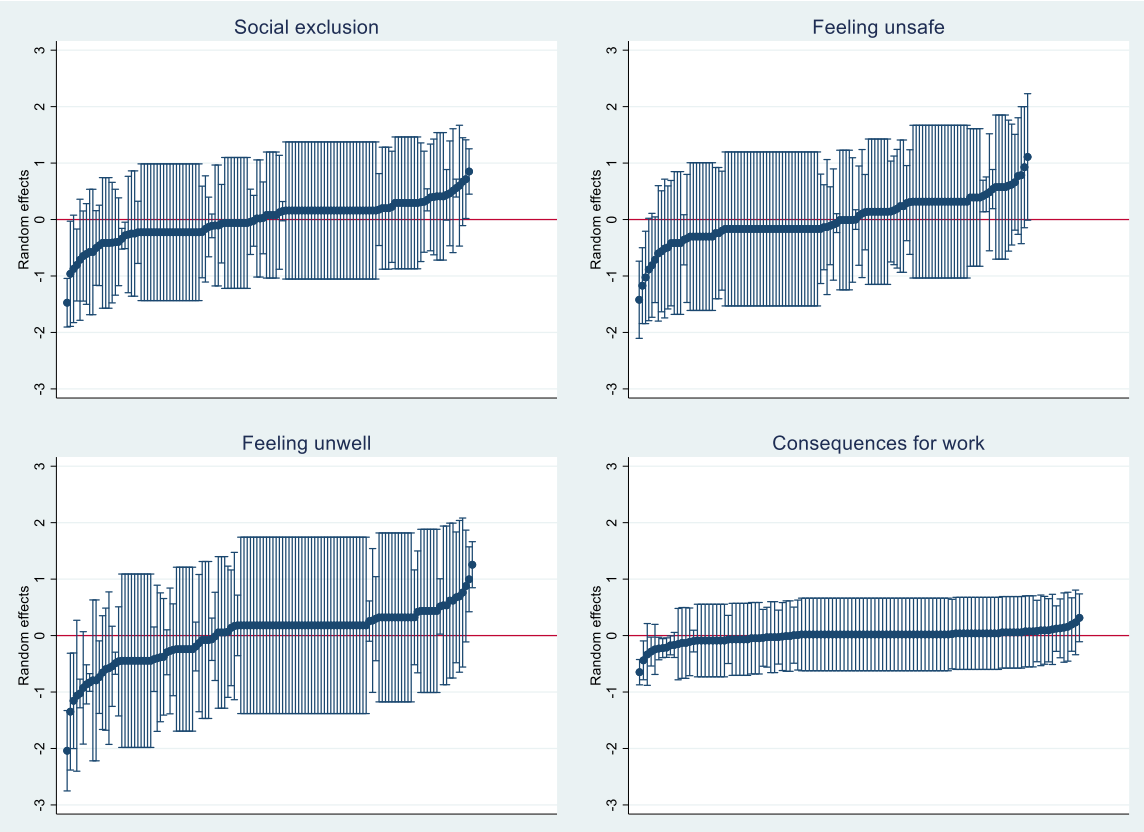
The VPCs can be interpreted as the proportion of the total variance in prevalence that is due to differences between intersectional strata (VPC_{is}). For consequences, the variation that is related to intersectional differences is lowest (3%) for consequences for work, but ranges from 11% to 18% for other measured consequences. This shows that though most of the variation is located at the individual level, there are nevertheless some differences across intersectional strata. Plotting random effects for intersectional strata show that many, though not all, of the 95% intervals include 0 (Figure 14), confirming that some of the variation in consequences is related to intersections of different sets of social relations.

Table 23 Two-level variance components models (intersectional strata) for the consequences of gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
e^{β_0}	1.46	0.48	2.87	4.64	6.93
$inter_0$	0.42	0.54	0.71	0.11	0.55
VPC_{is}	0.11	0.14	0.18	0.03	0.14
VPC_e	0.89	0.86	0.82	0.97	0.86
ICC_{is}	0.11	0.14	0.18	0.03	0.14
Intersectional strata (n)	1,005	984	1,013	459	552
Individuals (n)	29,476	27,639	29,427	13,651	16,008

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 14 Intersectional strata-level random effects and their standard errors for the consequences of gender-based violence for the two-level null models



Note: to make visualisation more reader-friendly, only every eighth strata are plotted for social exclusion, feeling unsafe and feeling unwell; and every fourth strata for consequences for work and consequences for studies.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Variance components models for the consequences of gender-based violence across RPO, country, intersectional strata and individual level

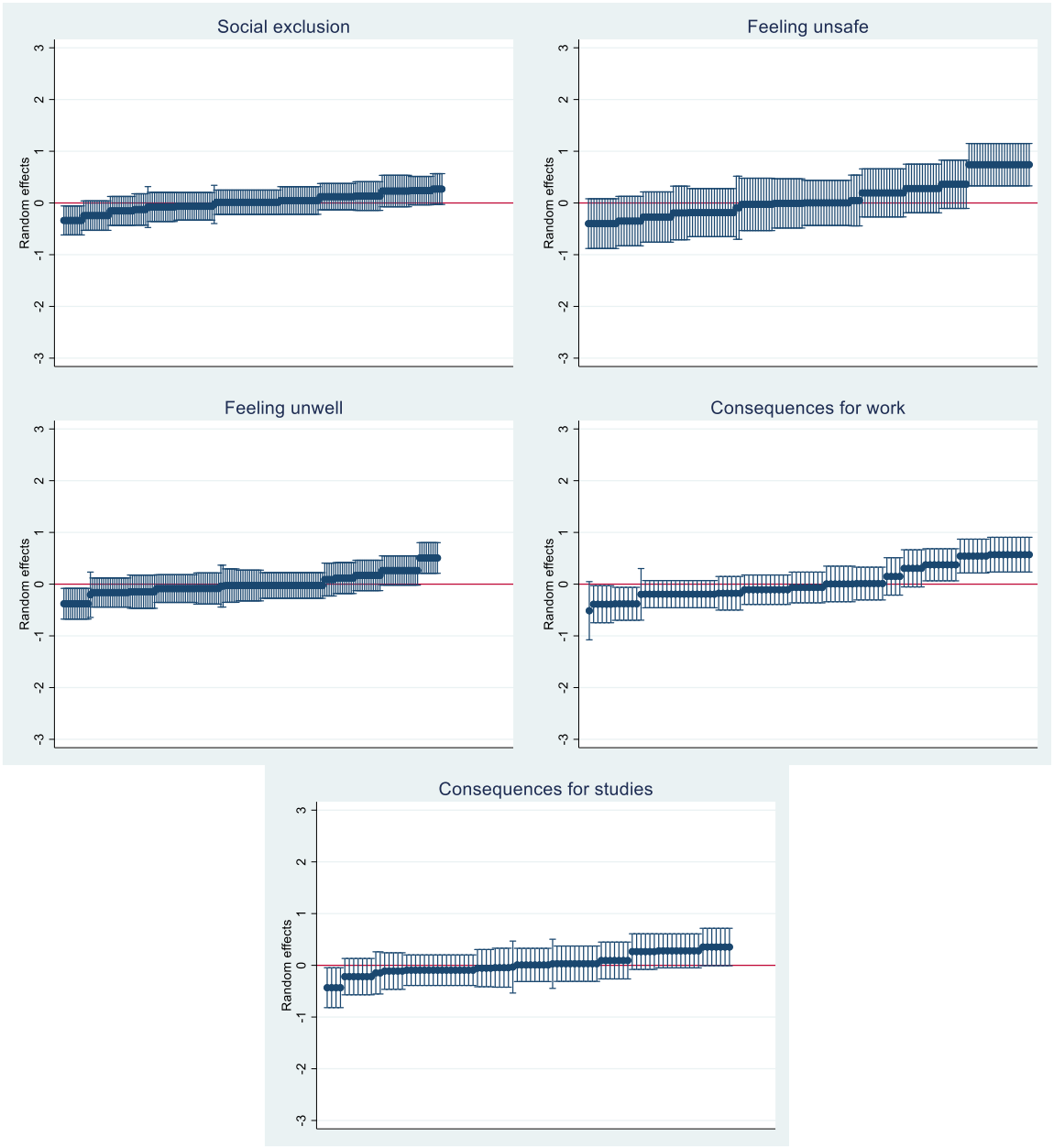
A four-level cross-classified variance components model is used to assess how much variation in the consequences of gender-based violence takes place at country, RPO, intersectional strata and individual-level (Table 24). The VPCs can be interpreted as the proportion of the total variance in consequences that is due to differences between countries (VPC_v), between RPOs within countries (VPC_u) and between intersectional strata within RPOs and countries (VPC_{is}) respectively. The majority of the variance is located between individuals within intersectional strata, RPOs and countries, ranging from 81% and 91%. This suggests that most of the heterogeneity is located between individuals, independently of other levels. Although only 4% of variation is located between intersectional strata for consequences for work, there is more variation at this level for other consequences, ranging from 8% and 11%. This suggests that there are differences in relation to international groups. However, few of the variation is located between RPOs within countries (range from 1% and 5%) or between countries (range from 1% and 4%). These results are reflected in the random effects plots for countries where most intervals include 0, i.e. the 'overall' mean for most countries (Figure 15), for RPOs (Figure 16) and for intersectional strata (Figure 17).

Table 24 Four-level variance components models (countries and RPOs) for the consequences of gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
e^{β_0}	1.35	0.39	2.19	3.49	6.00
v_0	0.05	0.14	0.07	0.13	0.07
u_0	0.06	0.21	0.06	0.02	0.07
is_0	0.30	0.40	0.41	0.15	0.39
VPC_v	0.01	0.04	0.02	0.04	0.02
VPC_u	0.02	0.05	0.01	0.01	0.02
VPC_{is}	0.08	0.10	0.11	0.04	0.10
VPC_e	0.89	0.81	0.86	0.91	0.86
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,280	5,124	5,286	2,502	2,797
Individuals (n)	29,476	27,639	29,427	13,651	16,008

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

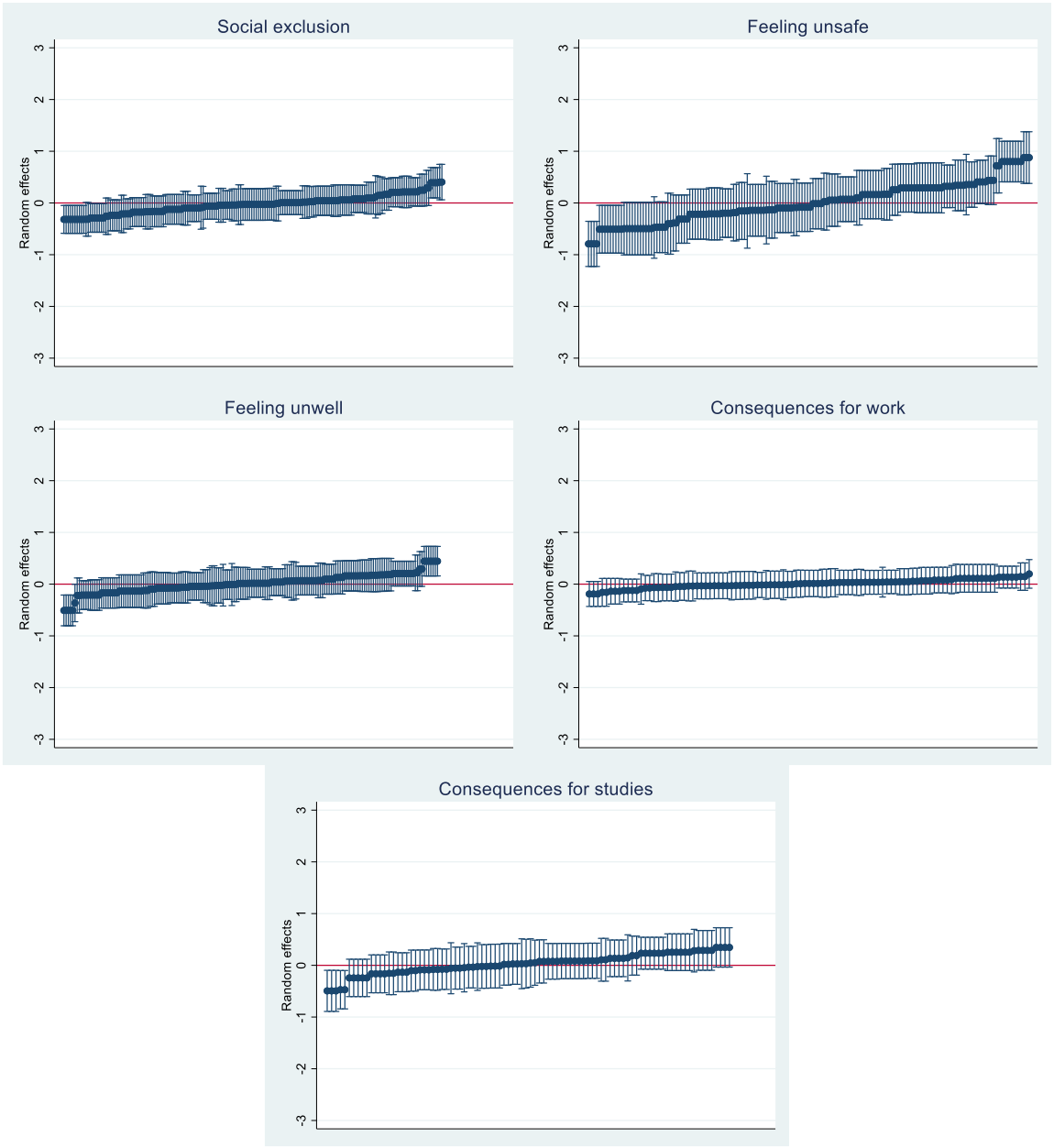
Figure 15 Country-level random effects and their standard errors for the consequences of gender-based violence for the four-level cross-sectional null models



Note: to make visualisation more reader-friendly, only every eighth intersectional strata are plotted.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

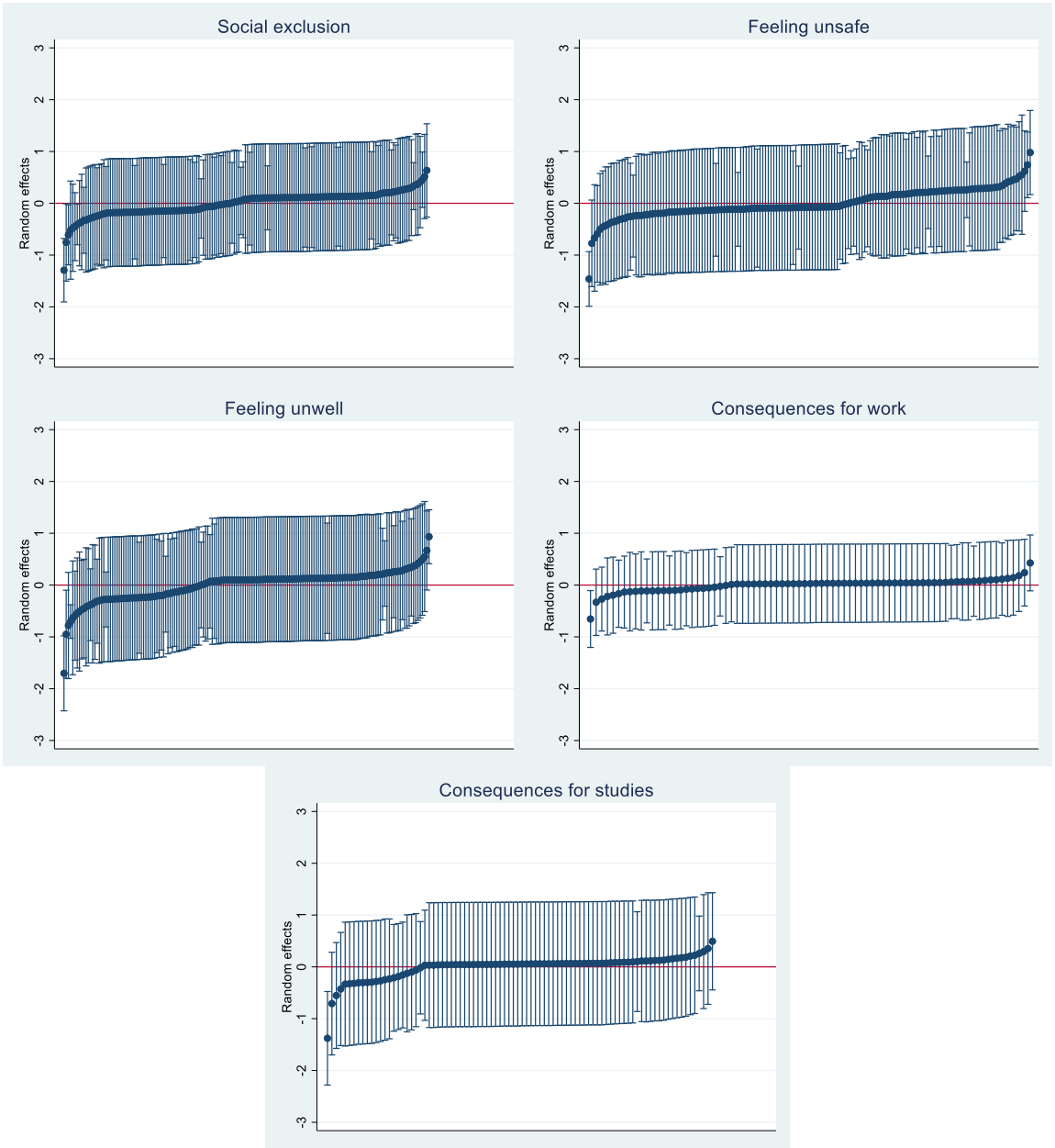
Figure 16 RPO-level random effects and their standard errors for the consequences of gender-based violence for the four-level cross-sectional null models



Note: to make visualisation more reader-friendly, only every eighth intersectional strata are plotted.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Figure 17 Intersectional strata-level random effects and their standard errors for the consequences of gender-based violence for the four-level cross-sectional null models



Note: to make visualisation more reader-friendly, only every 32nd intersectional strata are plotted.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

PART II: INTERSECTIONAL ANALYSIS

In this section, we extend the models presented in Part I and examine how different intersecting inequalities (linked to socio-demographic or functional diversity characteristics) relate to the prevalence of gender-based violence and its consequences. Experiences of gender-based violence are determined by the context of people's lives, including the individual characteristics that can act as intersectional determinants. We combine the results obtained from the survey with results obtained from qualitative interviews, to illustrate the greater understandings that can be obtained on these issues by adopting an intersectional qualitative lens that gives a 'voice' to the victims, and provide a window into how gender-based violence manifests itself in practice within the context of RPOs.

Intersectional determinants and the prevalence of gender-based violence

Descriptive accounts of prevalence do not consider the time spent at the institution. As such, since students compared to staff (3 years compared with 13 years on average) have spent much less time at the institution, it is logical that they will have fewer experiences of gender-based violence. This institutional timeframe therefore needs to be incorporated into any model through the inclusion of a control variable. Where relevant the analyses are also presented separately for staff and students, to account not only for differences in the institutional timeframe but also the different patterns that may arise between their experiences of gender-based violence in connection with the institution in which they work or study.

In this section, we examine the effects of intersectional determinants on the prevalence of gender-based violence, for the overall sample of staff and students, and subsequently separately for the two populations. The intersectional determinants used in the models include both markers of socio-demographic and functional diversity, and consist of:

- being a member of staff or a student
- gender identity
- alignment of current gender with sex at birth
- sexual orientation
- disability
- ethnicity
- international status
- age
- academic or non-academic staff (staff only)
- contract type (staff only)
- contracted working hours (staff only)
- academic grades (academic staff only)
- study level (students only)
- campus residence (students only)

Correlation matrices are provided in Annex.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

To supplement the quantitative analysis, the voices of staff and students that took part in the qualitative interviews are included, to illustrate the evidence given by the numbers. It is extremely relevant to look at the two sources of evidence together since the interviews show the impact of gender-based violence in the context of RPOs.

Insights from the interviews:

Some research participants in the qualitative research described experiences that happened 5, 10 or 20 years ago, though many revealed their most recent and sometimes on-going experiences. Regardless of when it happened, the experiences show a very similar pattern: they happened more than once and were often frequently repeated, lasting for months or years, and demonstrating an interplay of multiple forms of gender-based violence. (Pilinkaitė Sotirovic & Blazytė, 2022).

Students vs staff: students less affected by gender-based violence overall, though more at risk of physical and sexual violence. The prevalence of any form of gender-based violence is lower among students than staff overall (e^{β} = 0.691, p < 0.01) (Table 25). However, it is clear that different forms of gender-based violence play out differently between the two groups. If it is true that students are less affected by economic violence (e^{β} = 0.448, p < 0.01), psychological violence (e^{β} = 0.709, p < 0.01) or sexual harassment (e^{β} = 0.742, p < 0.01), they are however much more at risk of physical violence (e^{β} = 1.620, p < 0.01) or sexual violence (e^{β} = 2.526, p < 0.01). Finally, staff and students are about equally affected by online violence.

Insights from the interviews:

The existence of gender-based violence within the RPO community is clear. One interviewee describes the repetitive nature of these experiences, and at the same time describes the difference in power between the perpetrator and the victim. Sexism and sexual joking are notably described as ongoing:

> *My supervisor had very inappropriate behaviour with me and the other girls in the team, and uh, […] he never touched us, but he always made very heavy jokes with sexual reference and also which were either directed to us or to other women in the lab. So, it was a constant scene.* (Researcher at the time of the interview, woman, age 40-49)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Gender identity: women most at risk of sexual violence and sexual harassment; men most at risk of physical violence; non-binary people most at risk of sexual harassment, psychological violence and economic violence. The gender-based nature of violence is apparent in how women, men and non-binary individuals are affected (Table 25). Except for online violence, women are disproportionately affected by gender-based violence overall and all other forms of gender-based violence, compared with men. This is highest for sexual harassment (e^{β} = 2.344, p < 0.01) and sexual violence (e^{β} = 2.196, p < 0.01), with women more than twice as likely as men to be affected. Non-binary people are on the whole much more likely to be affected by gender-based violence compared with men. For them, the highest experiences are linked to sexual harassment (e^{β} = 1.938, p < 0.01), as well as psychological violence (e^{β} = 1.505, p < 0.01) and economic violence (e^{β} = 1.482, p < 0.01). The only form of violence for which experiences are lower for women is that of physical violence (e^{β} = 0.739, p < 0.01), showing that this is the only form of violence that men are more exposed to.

Insights from the interviews:

The interviews often revealed insights into the extent to which gender-based violence was related to being a woman, though because of low numbers it was not possible to illustrate the full extent to which non-binary people suffer from experiences of gender-based violence. Sexist behaviours, and associated psychological violence, were commonly affecting women. Interviewees describe how women and men are treated completely differently during meetings, including facing inappropriate and unfair remarks on their appearance or competence:

> *I looked at how my director was treating other members in the team. And then I could clearly see that it was a pattern. Whenever a woman would oppose him during a meeting, she would be strongly contradicted and put in her place and denigrated. Whenever a man would oppose him, he would listen to the criticism, he would always give many more compliments, and really, you know, be so positive about any work done by a man, […] the work done by women was heavily criticised.* (Non-academic staff at the time of the interview, woman, age 50-59)

Humiliating comments on women's appearance were sometimes connected to remarks questioning the competences of women researchers:

> *What is a pretty girl like you doing? […] these are difficult studies. This is hard work. You will spoil your beauty, […] why don't you go do some modelling. Find a rich husband.* (Associate Professor at the time of the interview, woman, age 50-59)

Women working in teams composed predominantly of men often felt unwelcomed and lower in rank regardless of their academic achievements.

> *They [men colleagues] are always laughing at you because you are a woman.* (Researcher on temporary contract at the time of the interview, woman, age 40-49)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Sometimes interviewees described how sexist behaviours and domination techniques were used. It could be manifested in explicit ways such as interrupting and physically excluding women, and sometimes more implicitly by ignoring or not listening to them.

> *When a woman was talking, they [team members that are men] used to talk over her as if laughing at what she was saying.* (Senior Researcher at the time of the interview, woman, age 40-49)

> *[The supervisor] underestimated us [women] and, well, in fact, he had faith in the guys.* (Lecturer on temporary contract at the time of the interview, woman, age 30-39)

> *They [top administration] just shut me down. They make me completely invisible. They do not engage in any kind of conversation with me.* (Associate Professor at the time of the interview, woman, age 40-49)

Some women participants described their experience of sexual violence, including attempts to extort sex from them or other women. Such experience might involve making chances of further funding conditional on having sex with a supervisor (man):

> *It was with my supervisor. And now I see that it was like a long-time thing, but I did not know maybe what our relations should be like. Because he was trying to be my friend […] When I passed the evaluation, he said that is okay, so what can you do, what can we do for you to extend your PhD for like, one year or two to have it five or six years? […] And he said, you know, pregnancy is like a good way to extend the PhD. […] And he said, so be ready tomorrow, and we can try. And that was for me the offer of sex not exactly directly, but in this way. Because also that day, and at that meeting, he proposed a date and wine and to come to his house.* (PhD candidate at the time of the interview, woman, age 25-29)

Experiences of unwanted touching were also common place in the testimonies of women:

> *[After I shared the good news with my supervisor, I had received a scholarship] he raised his arms as if to hug me. I'd never done it before. I usually just shook his hand. But I was happy and so, I saw nothing bad in it. So, I did it. And then when he hugged me his hands were very close to my butt, just to feel it.* (PhD candidate at the time of the interview, woman, age 30-39)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Trans: trans people are more affected by psychological violence and sexual harassment. While controlling for other socio-demographic determinants, trans people (defined as non-alignment between sex at birth and current gender identity) are not more nor less affected by overall gender-based violence compared with non-trans people (Table 25). However, being trans is associated with higher prevalence of psychological violence (e^{β} = 1.337, p < 0.01) and sexual harassment (e^{β} = 1.242, p < 0.05), though lower prevalence of economic violence (e^{β} = 0.585, p < 0.05).

Insights from the interviews:

The experiences of trans people, revealed in interviews by research participants, illustrated the type of verbal abuse directed towards the trans identity and expression of the victims. Further it shows how harassment does not only seem to come from higher up in the academic hierarchy directed downwards, but that the harassment seems to be more normalised within both the student and staff community:

> *I had a colleague who was transgender. [...] She had a lot of problems in her 1st year because she was in the process of changing their sex. And after a year in the faculty, uh, she signed out. She was ridiculed by students. She was ridiculed by teachers [...], she was not accepted at the faculty. She had a lot of problems, and she signed out. She is no longer a colleague.* (Post-doctoral researcher at the time of the interview, woman, age 30-39)

The interviewees also revealed the existence of an institutional acceptance of gender-based violence directed at trans people:

> *Vocal or emotional abuse towards trans students. That was a massive issue, and it actually became such an issue that there was like the student union elections, there was basically, one of the years there was a student union president that continued calling a trans student "a man in a dress". And that was widely acknowledged. It was all admitted and there was continued kind of abuse towards trans community, yet they were still elected.* (Early-career researcher at the time of the interview, queer man, 25-29)

Sexual orientation: increased exposure to gender-based violence among homosexual, bisexual or queer people. Most sexual orientation groups, compared with people who are heterosexual, have a higher prevalence of overall gender-based violence (Table 25). The only exception is for the category of asexual people. Experiences are highest for online violence (e^{β} ranges from 1.420 to 1.733, with p < 0.05 or less) and sexual harassment (e^{β} ranges from 1.568 to 1.854, with p < 0.01). For bisexual and queer people, there is also a higher prevalence of sexual violence ($e^{\beta} = 2.110$, p < 0.01 and $e^{\beta} = 1.504$, p < 0.05 respectively). All minority sexual orientation groups, except asexual people, are also more affected by psychological violence (e^{β} ranges from 1.252 to 1.551, with p < 0.05 or less). Finally, being bisexual, queer or another sexual orientation than those listed in the survey is also associated with higher prevalence of economic violence (e^{β} ranges from 1.410 to 1.578, with p < 0.01).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Insights from the interviews:

In the interviews, LGBQ+ students described experiencing verbal abuse, sexual harassment and physical violence. This was described as an institutionalised normalisation of verbal harassment:

> *Homophobia and sexism, in any case, are quite present. On several occasions I have witnessed comments based on the gender, or the sexual orientation of certain people from professors directly it's often […] little remarks or little comments or little jokes that are thrown in there, but it still says a lot about the way some people can think.* (Student at the time of the interview, homosexual man, age 18-24)

The language used in workplaces characterises the perceived sexism and homophobia. This could be manifested through verbal harassment by students or colleagues at about the same level in the academic hierarchy. Thus, it appears that harassment is not only coming from higher up in the hierarchy and filtering downwards, but that problematic language might be used more widely. This serves to further legitimise and normalise this form of gender-based violence:

> *The assistant […] said a homophobic swear word [faggot] about [another] assistant, but quite normally, […] as if it was part of his daily vocabulary, as if he didn't see any harm, as if it was totally normal to say that kind of thing, and the other assistant didn't react, and they continued the conversation as if nothing had happened. […] It's a kind of behaviour that is very normalised […], people often […] don't realise the impact of what they say, even if it's the kind of vocabulary that's common to them.* (Student at the time of the interview, homosexual man, age 18-24)

Physical threats and physical violence against gay men, as one interviewee mentioned, were regular on campus, usually exercised by other students that were men. This was described as following on from a long string of incidents of verbal abuse, and part of such numerous series of incidents that only one was actually reported:

> *I would have reported for myself, the first [incident] maybe. The first. I would have ignored a lot of the verbal stuff because I, you know, you'd be there all day, but the first time that I reported something when I was physically hit like. And when I was punched in the bathroom, I would have reported that, and again it was well… It was just you and then how do you know? And after that I kind of went 'but what's the point in reporting anything?'* (Early-career researcher at the time of the interview, queer man, 25-29)

Disability: all forms of gender-based violence more prevalent across people with a disability or chronic illness. The prevalence of gender-based violence ($e^{\beta} = 1.591$, $p < 0.01$), and across its different forms (e^{β} ranges from 1.479 to 1.702, with $p < 0.01$) is higher for people that report a disability or chronic illness (Table 25).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Minority ethnic status: higher prevalence of all forms of gender-based violence among people from a minority ethnic group. Being from a minority ethnic group is associated with higher prevalence of gender-based violence overall ($e^{\beta} = 1.358$, p < 0.01), as well as in all the forms asked about in the survey (e^{β} ranges from 1.263 to 2.184, with p < 0.01) (Table 25).

Insights from the interviews:

The voices included in the qualitative interviews suggests similar issues. Ethnicity and migrant status were indicated as factors which increased the risk of experiencing gender-based violence:

> *Academia is not the most notoriously open, as you can probably imagine. You're a person of colour in academia, and as a female, I can't even imagine the nonsense that you deal with.* (PhD candidate at the time of the interview, woman, age 30-39)

Race and ethnicity often affected working conditions, because of racial prejudices and stereotypes which sees people having to adapt their behaviour:

> *I used to feel safe, because I put a lot of boundaries, you know, like, I tried not to be too smiley not to be too.... You know, because I have the feeling of a thing [that my faculty staff thought] because I'm Latina, Black, I'm looking for a European passport. […] Therefore, I don't usually go out with my colleagues to have beers or anything I do it like, but occasionally, and I don't drink with them, you know, I cannot be completely myself or free or feel confident, because I don't want to be mistaken.* (PhD candidate at the time of the interview, woman, age 30-39)

Sexist and racial prejudiced often mixed in a normalised and legitimised discourse in the institutions. The intersection of gender and race also tended to manifest itself through a sexualisation of women students from minority ethnic backgrounds:

> *On my side there were no white, Christian, blonde, blue-eyed PhD students, no, we were all a little bit brown-skin women from less economically developed countries. So, from the very first moment, the atmosphere seemed very misogynistic among us because I heard my classmates say that all women were either whores or donkeys, and I was like, "What category are you in, pretty girl? You are doing a thesis, so you must be a whore" […] So, you find yourself in that environment, with your Marie Curie grant, and you say, what do I do? After three months I wanted to leave".* (Researcher at the time of the interview, woman, age 40-49)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

International status: being an international staff/student associated with higher risk of economic violence and sexual violence. Staff and students that were international, rather than domestic, were overall as likely to experience gender-based violence (Table 25). The only exceptions are economic violence ($e^{\beta} = 1.298$, p < 0.05) and sexual violence ($e^{\beta} = 1.344$, p < 0.05).

Insights from the interviews:

International status can mean not speaking the local language as well as native speakers, which can work in subtle ways beyond merely gender and race to stratify different groups of people:

> *The difference is not your skin colour, […], but the thing is that this differentiation of the way that you are treated is if you speak the 'national language' or not? I think they 'will not take you seriously if you don't. Or we are not involved in 'the conversation; that happens a lot with other colleagues who don't 'speak the 'native language'. they will start speaking the 'native language'. And that's a way to, you know, to push you back, because then you will not be integrated into the conversation because they don't want to talk to you.* (PhD candidate at the time of the interview, woman, age 30-39)

Not speaking the native language was described in several interviews as having an impact on working conditions and the risk of being excluded:

> *My case it is intersection, very much. Gender, yes, but at the same time my race. […] We have two male professors, who teach very, very little, because they do research and they sit on a lot of a committee and then under which we have female lecturers, senior lecturers, like me, we do... sometimes we say that we are cleaners. [Laughs] Yeah, so, we teach a lot, and I am ambitious, I want to do research also. I'm the only one who doesn't speak [national language] fluently in my institution where are more than 100 people. And, and I'm the only one who is Asian, only Asian. So I've got a lot of things that are very subtle, but there are that I can clearly feel that I am not equally treated, and I do not have the same resources.* (Early-career researcher at the time of the interview, woman, age 30-39)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Age: increasing age associated with lower prevalence of most forms of gender-based violence. Each additional year of age decreased the overall prevalence of gender-based violence ($e^{\beta} = 0.982$, p < 0.01) (Table 25). Exceptions were economic violence, which increased with age ($e^{\beta} = 1.012$, p < 0.01) and online violence which is unrelated to age.

Insights from the interviews:

The interviews illustrate how age and gender can influence who is exposed to gender-based violence. Often, victims did not identify the violence they experienced as gender-based violence when it happened. Instead, it is only after time has elapsed – often combined with repeated incidents – that they could understand their experience as gender-based violence:

> *This has been happening when I joined this university five years ago. I have only realised now. It is not just to me, it's also to other colleagues. And they are younger, and they are female. The strategies (of line managers) are to undervalue you, insulting […], blocking promotion, creating obstacle to move forward and provoke resignation.* […] *I wasn't able to understand what was happening to me.* (Researcher at the time of the interview, woman, age 40-49)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 25 Multi-level intersectional random intercept models for the prevalence of gender-based violence – all staff and students

	Any form	Physical violence	Psychological violence	Economic violence
Student (Ref: Staff)	0.691***	1.620***	0.709***	0.448***
	(0.0371)	(0.244)	(0.0432)	(0.0669)
Women (Ref: Men)	1.753***	0.739***	1.691***	1.244***
	(0.0706)	(0.0486)	(0.0729)	(0.0674)
Non-binary people (Ref: Men)	1.975***	0.820	1.505***	1.482**
	(0.267)	(0.116)	(0.162)	(0.232)
Sex at birth not aligned to current gender identity	1.120	1.463*	1.337***	0.585**
	(0.141)	(0.314)	(0.123)	(0.126)
Disability or chronic illness	1.591***	1.702***	1.547***	1.651***
	(0.0843)	(0.112)	(0.0737)	(0.119)
Ethnic minority background	1.358***	1.701***	1.420***	2.184***
	(0.0726)	(0.143)	(0.0610)	(0.144)
Asexual (Ref: Heterosexual)	0.888*	0.840	0.871	1.043
	(0.0587)	(0.181)	(0.0836)	(0.180)
Bisexual (Ref: Heterosexual)	1.507***	1.378***	1.434***	1.410***
	(0.0584)	(0.114)	(0.0553)	(0.0997)
Homosexual (Ref: Heterosexual)	1.369***	1.118	1.252***	1.119
	(0.101)	(0.186)	(0.0760)	(0.116)
Queer (Ref: Heterosexual)	1.671***	1.049	1.551***	1.517***
	(0.219)	(0.242)	(0.179)	(0.194)
Another sexual orientation (Ref: Heterosexual)	1.265**	2.019***	1.350**	1.578***
	(0.135)	(0.329)	(0.161)	(0.246)
International	0.941	0.859	0.986	1.298**
	(0.0615)	(0.112)	(0.0775)	(0.138)
Age (mean-centred)	0.982***	0.976***	0.987**	1.012***
	(0.00399)	(0.00645)	(0.00494)	(0.00487)
Time spent at the institution (mean-centred)	1.083***	1.058***	1.076***	1.039***
	(0.00433)	(0.00538)	(0.00334)	(0.00272)
Constant	1.978***	0.0193***	1.231	0.246***
	(0.415)	(0.00589)	(0.268)	(0.0844)
v_0	0.039	0.057	0.037	0.193
u_0	0.027	0.062	0.028	0.017
is_0	0.099	0.168	0.119	0.186
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451
Individuals (n)	35,850	35,807	34,343	31,713

(table continued below)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	Any form	Sexual violence	Sexual harassment	Online violence
Student (Ref: Staff)	0.691***	2.526***	0.742***	0.990
	(0.0371)	(0.603)	(0.0489)	(0.0881)
Women (Ref: Men)	1.753***	2.196***	2.344***	0.972
	(0.0706)	(0.386)	(0.110)	(0.0833)
Non-binary people (Ref: Men)	1.975***	1.116	1.938***	1.020
	(0.267)	(0.500)	(0.293)	(0.208)
Sex at birth not aligned to current gender identity	1.120	1.994	1.242**	1.168
	(0.141)	(0.864)	(0.126)	(0.230)
Disability or chronic illness	1.591***	1.679***	1.479***	1.653***
	(0.0843)	(0.149)	(0.0749)	(0.113)
Ethnic minority background	1.358***	1.337*	1.263***	1.558***
	(0.0726)	(0.235)	(0.108)	(0.116)
Asexual (Ref: Heterosexual)	0.888*	0.611**	1.111	1.008
	(0.0587)	(0.141)	(0.118)	(0.164)
Bisexual (Ref: Heterosexual)	1.507***	2.110***	1.656***	1.534***
	(0.0584)	(0.221)	(0.0470)	(0.121)
Homosexual (Ref: Heterosexual)	1.369***	1.356*	1.568***	1.420***
	(0.101)	(0.219)	(0.0843)	(0.188)
Queer (Ref: Heterosexual)	1.671***	1.504**	1.653***	1.733***
	(0.219)	(0.302)	(0.0854)	(0.213)
Another sexual orientation (Ref: Heterosexual)	1.265**	1.746	1.854***	1.637**
	(0.135)	(0.711)	(0.164)	(0.319)
International	0.941	1.344**	0.923	0.926
	(0.0615)	(0.176)	(0.0576)	(0.0978)
Age (mean-centred)	0.982***	0.948***	0.964***	1.000
	(0.00399)	(0.0140)	(0.00433)	(0.00477)
Time spent at the institution (mean-centred)	1.083***	1.100***	1.067***	1.029***
	(0.00433)	(0.0175)	(0.00533)	(0.00428)
Constant	1.978***	0.000553***	0.293***	0.0578***
	(0.415)	(0.000279)	(0.0443)	(0.0159)
v_0	0.039	0.180	0.062	0.000
u_0	0.027	0.140	0.041	0.071
is_0	0.099	0.324	0.103	0.219
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	5,790	5,401	5,368	5,335
Individuals (n)	35,850	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

The prevalence of gender-based violence is examined specifically among staff, both academic and non-academic staff, to examine the effects of being academic or non-academic, of contract type and of working hours (Table 26).

Academic vs non-academic staff: the prevalence of gender-based violence is lower among most forms of gender-based violence for non-academic staff. The overall prevalence of gender-based violence is lower among non-academic staff (e^{β} = 0.748, p < 0.01), as well as across all forms of gender-based violence with the exception of physical violence (Table 26).

Contract type: staff on a permanent contract disclose higher levels of gender-based violence. The prevalence of gender-based violence is higher among staff with permanent contracts (e^{β} = 1.722, p < 0.01) for overall gender-based violence compared with staff on fixed-term contracts (Table 26). This applies to all forms of gender-based violence, apart from sexual violence.

Insights from the interviews:

Some experiences from the qualitative interviews suggest that age or secured tenure position does not guarantee safety at work:

> *I never felt safe in my job, I always felt they could just take it from me, they will find a way to fire you, if they want to. So the precariousness, I can see how this adds a lot of tension and a lot of anxiety. But I think that being tenure doesn't really take away so much of the precariousness just on paper you're not you don't need to be anxious. But in reality, you have to watch your back all the time.* (Associate Professor at the time of the interview, woman, age 40-49)

> *There's certainly a power imbalance between professors who are tenured, or who are who have access to funding. There's absolutely a power imbalance, it doesn't matter that I have a career before that. I am at the bottom of the ladder and I understand that, a new career, and I know that I have to pull my way in.* (Early-career researcher at the time of the interview, woman, age 30-39)

Working hours: full-time contracted hours of work are associated with higher prevalence of gender-based violence overall. Staff working on a full-time contract (35 hours a week or more) disclose more gender-based violence overall (e^{β} = 1.309, p < 0.01), compared with staff working on a part-time basis (Table 26). This is also the case for economic violence, psychological violence and sexual harassment.

Thereafter, the prevalence of gender-based violence is examined among academic staff, to examine the effects of grades (Table 27).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Academic grades: higher prevalence of gender-based violence overall among higher grades, as well as of psychological violence and sexual harassment. Academic staff in Grade A, Grade B, or Grade C are more likely to disclose gender-based violence overall, compared to academic staff in Grade D, with higher e^{β} progressing with seniority (e^{β}s are 1.668, 1.608 and 1.283 respectively, p < 0.01) (Table 27). All grades are associated with higher prevalence of psychological violence and sexual harassment. Economic violence, however, only affects Grades B and C.

Insights from the interviews:

The interviews show how experiences of gender-based violence are a recurrent pattern, and particularly acute among PhD candidates or early-career researchers, as well as among researchers or teaching staff that seek a promotion to a higher position:

> *He [the head of the department] told me that I could not try for Associate Professorship. I still need to work. […] And at that moment, I realised that he wanted […] me to wait another five years before being an Associate Professor so that his new PhD male student would have finished his PhD, and then take my place.* (Assistant Professor at the time of the interview, woman, 30-39)

> *I asked for the promotion. And then my supervisor told me 'No, you can't have the promotion, because you're not publishing enough.' And then I said, 'but look, you have it on paper, I published more than my colleague [who was recently promoted]'. And then he said 'Yeah, but you don't publish enough in this and that...'. He came up with three different things. And I defended myself against all of them until he came with 'Yeah, but you, you have to have two publications in like top journals". It's one of their stupid indexes they use, right, to show quality, right? So this I didn't have, but it was also the first time I heard of that, it's not written down anywhere. It's not if you take a tenure track document, it's not written down anywhere.* (Associate Professor at the time of the interview, woman, 40-49)

The hierarchical grades within the academia seem to influence the culture of RPOs, particularly when it comes to enabling certain forms of gender-based violence. Some interviews talked about the sexist culture that prevailed among more senior staff, and how this was systematic and often directed at more junior colleagues or students:

> *I have therefore been able to have closer contact with the professors and at this level, the sexist and misogynistic remarks are quite common.* (Student at the time of the interview, man, age 18-24)

> *He [the head of the faculty] demanded me [Assistant Professor] and my other female colleague to leave the room when the full professors entered this room.* (Assistant Professor at the time of the interview, woman, 30-39)

> *I was wearing a tied coat, a leather coat tied [to her waist], not buttoned, but tied, then he unbuckled my belt, opened my coat, and hugged me inside. He has never touched my private parts, okay? But from then on, the hugs, there was an obsession with me hugging, that began to be systematic. That is, each thesis correction had to necessarily end with a hug.* (Lecturer at the time of the interview, woman, age 40-49)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Finally, the prevalence of gender-based violence is examined among students, to examine the effects of level of studies and whether residing on campus or not (Table 28).

Study level: Doctoral candidates most at risk of gender-based violence overall, and particularly economic violence. Postgraduate students were more likely than undergraduate students to disclose incidents of any forms of gender-based violence, with the prevalence highest among doctoral candidates (e^{β} = 1.391, p < 0.01) (Table 28). Doctoral candidates were most likely to report incidents of economic violence (e^{β} = 1.924, p < 0.01) and sexual harassment (e^{β} = 1.444, p < 0.01) compared to undergraduate students.

Campus residence: living on campus is associated with greater prevalence of gender-based violence overall, most particularly sexual violence, sexual harassment and physical violence. The prevalence of gender-based violence is higher among students living in university residences (e^{β} = 1.186, p < 0.01) (Table 28). Among the different forms of gender-based violence, it appears that this is particularly the case for sexual violence (e^{β} = 1.482, p < 0.01), sexual harassment (e^{β} = 1.295, p < 0.01) and physical violence (e^{β} = 1.239, p < 0.01).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 26 Multi-level intersectional random intercept models for the prevalence of gender-based violence – academic and non-academic staff

	Any form	Physical violence	Psychological violence	Economic violence
Women (Ref: Men)	2.137***	0.785**	2.001***	1.482***
	(0.147)	(0.0895)	(0.125)	(0.0675)
Non-binary people (Ref: Men)	2.258*	0.759	1.624*	1.986***
	(0.939)	(0.146)	(0.438)	(0.289)
Sex at birth not aligned to current gender identity	1.523	3.144***	1.693**	1.016
	(0.515)	(1.387)	(0.398)	(0.176)
Disability or chronic illness	1.621***	1.642***	1.587***	1.640***
	(0.0828)	(0.157)	(0.0764)	(0.127)
Ethnic minority background	1.206**	1.647***	1.222***	2.089***
	(0.105)	(0.184)	(0.0793)	(0.219)
Asexual (Ref: Heterosexual)	1.130	1.059	0.917	1.280
	(0.156)	(0.386)	(0.205)	(0.339)
Bisexual (Ref: Heterosexual)	1.451***	1.306	1.370***	1.548***
	(0.150)	(0.262)	(0.132)	(0.161)
Homosexual (Ref: Heterosexual)	1.430**	1.452	1.318**	1.132
	(0.227)	(0.382)	(0.152)	(0.175)
Queer (Ref: Heterosexual)	1.778**	1.260	1.804*	1.607**
	(0.449)	(0.756)	(0.581)	(0.329)
Another sexual orientation (Ref: Heterosexual)	1.098	1.633	0.889	0.908
	(0.209)	(0.915)	(0.194)	(0.217)
International	0.759***	0.949	0.822**	1.099
	(0.0522)	(0.294)	(0.0645)	(0.136)
Non-academic staff	0.748***	1.087	0.789***	0.625***
	(0.0390)	(0.122)	(0.0462)	(0.0426)
Permanent staff	1.722***	1.657***	1.718***	1.390***
	(0.144)	(0.236)	(0.168)	(0.146)
Full-time contract (35+ hours)	1.309***	0.977	1.363***	1.230***
	(0.0425)	(0.121)	(0.0487)	(0.0681)
Age (mean-centred)	0.982***	0.981**	0.987***	1.003
	(0.00221)	(0.00929)	(0.00358)	(0.00380)
Time spent at the institution (mean-centred)	1.059***	1.048***	1.055***	1.034***
	(0.00483)	(0.00400)	(0.00366)	(0.00282)
Constant	0.712	0.00453***	0.453**	0.102***
	(0.324)	(0.00198)	(0.169)	(0.0405)
v_0	0.030	0.000	0.023	0.216
u_0	0.028	0.123	0.029	0.031
is_0	0.110	0.172	0.117	0.051
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	2,669	2,665	2,623	2,559
Individuals (n)	15,470	15,443	15,120	14,298

(table continued below)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	Any form	Sexual violence	Sexual harassment	Online violence
Women (Ref: Men)	2.137***	3.237***	2.925***	1.154
	(0.147)	(0.942)	(0.185)	(0.142)
Non-binary people (Ref: Men)	2.258*	1.597	2.928***	1.290
	(0.939)	(1.496)	(1.149)	(0.457)
Sex at birth not aligned to current gender identity	1.523	6.739**	1.030	0.916
	(0.515)	(5.514)	(0.316)	(0.370)
Disability or chronic illness	1.621***	1.632***	1.437***	1.514***
	(0.0828)	(0.283)	(0.0860)	(0.155)
Ethnic minority background	1.206**	0.835	1.240**	1.766***
	(0.105)	(0.332)	(0.111)	(0.335)
Asexual (Ref: Heterosexual)	1.130	1.005	1.520***	1.197
	(0.156)	(0.489)	(0.186)	(0.487)
Bisexual (Ref: Heterosexual)	1.451***	1.377	1.501***	1.353**
	(0.150)	(0.520)	(0.112)	(0.183)
Homosexual (Ref: Heterosexual)	1.430**	0.953	1.655***	1.411
	(0.227)	(0.468)	(0.215)	(0.299)
Queer (Ref: Heterosexual)	1.778**	0.956	1.852***	2.269***
	(0.449)	(0.765)	(0.271)	(0.391)
Another sexual orientation (Ref: Heterosexual)	1.098	0***	1.383*	1.788**
	(0.209)	(0)	(0.234)	(0.409)
International	0.759***	0.563**	0.774***	0.703**
	(0.0522)	(0.162)	(0.0387)	(0.110)
Non-academic staff	0.748***	0.563***	0.759***	0.491***
	(0.0390)	(0.0492)	(0.0336)	(0.0552)
Permanent staff	1.722***	1.466*	1.464***	1.694***
	(0.144)	(0.290)	(0.126)	(0.124)
Full-time contract (35+ hours)	1.309***	1.220	1.220***	1.057
	(0.0425)	(0.257)	(0.0758)	(0.141)
Age (mean-centred)	0.982***	0.961	0.959***	0.998
	(0.00221)	(0.0239)	(0.00351)	(0.00307)
Time spent at the institution (mean-centred)	1.059***	1.069***	1.056***	1.015***
	(0.00483)	(0.0169)	(0.00490)	(0.00268)
Constant	0.712	0.000707***	0.166***	0.113***
	(0.324)	(0.000673)	(0.0716)	(0.0605)
v_0	0.030	0.590	0.032	0.016
u_0	0.028	0.128	0.066	0.109
is_0	0.110	0.000	0.060	0.205
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	2,669	2,548	2,537	2,526
Individuals (n)	15,470	14,127	14,019	13,899

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 27 Multi-level intersectional random intercept models for the prevalence of gender-based violence – academic staff

	Any form	Physical violence	Psychological violence	Economic violence
Women (Ref: Men)	2.352***	0.948	2.190***	1.709***
	(0.220)	(0.108)	(0.172)	(0.125)
Non-binary people (Ref: Men)	2.998***	0.503	1.971***	1.851***
	(1.131)	(0.246)	(0.487)	(0.344)
Sex at birth not aligned to current gender identity	1.106	4.446**	1.335	1.101
	(0.247)	(2.607)	(0.327)	(0.321)
Disability or chronic illness	1.655***	1.810***	1.649***	1.427***
	(0.144)	(0.198)	(0.127)	(0.135)
Ethnic minority background	1.420***	1.407*	1.383***	2.490***
	(0.170)	(0.258)	(0.117)	(0.208)
Asexual (Ref: Heterosexual)	1.114	0.334	0.879	1.297
	(0.235)	(0.304)	(0.236)	(0.365)
Bisexual (Ref: Heterosexual)	1.358***	1.341	1.191**	1.277***
	(0.142)	(0.364)	(0.102)	(0.117)
Homosexual (Ref: Heterosexual)	1.607**	1.464	1.437**	1.142
	(0.336)	(0.511)	(0.238)	(0.163)
Queer (Ref: Heterosexual)	1.975*	1.238	1.692	1.403
	(0.724)	(0.965)	(0.695)	(0.341)
Another sexual orientation (Ref: Heterosexual)	0.989	1.698	0.729	0.967
	(0.280)	(0.852)	(0.246)	(0.303)
International	0.743***	1.026	0.790***	0.996
	(0.0532)	(0.254)	(0.0643)	(0.130)
Permanent staff	1.320***	1.623**	1.319***	1.034
	(0.125)	(0.344)	(0.136)	(0.111)
Full-time contract (35+ hours)	1.329***	0.925	1.411***	1.283***
	(0.0723)	(0.155)	(0.0488)	(0.0654)
Grade A (Ref: Grade D)	1.668***	1.710	1.485***	1.266
	(0.252)	(0.608)	(0.228)	(0.213)
Grade B (Ref: Grade D)	1.608***	1.339	1.416***	1.484***
	(0.113)	(0.447)	(0.0762)	(0.214)
Grade C (Ref: Grade D)	1.283***	1.565	1.204**	1.294***
	(0.103)	(0.448)	(0.0876)	(0.129)
Age (mean-centred)	0.973***	0.975*	0.982***	1.004
	(0.00507)	(0.0149)	(0.00587)	(0.00684)
Time spent at the institution (mean-centred)	1.059***	1.051***	1.054***	1.036***
	(0.00702)	(0.00999)	(0.00540)	(0.00440)
Constant	0.747	0.00245***	0.502*	0.0768***
	(0.245)	(0.00191)	(0.188)	(0.0303)
v_0	0.011	0.052	0.000	0.146
u_0	0.045	0.041	0.076	0.071
is_0	0.159	0.000	0.166	0.058
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	1,977	1,973	1,944	1,898
Individuals (n)	8,682	8,668	8,504	8,052

(table continued below)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	Any form	Sexual violence	Sexual harassment	Online violence
Women (Ref: Men)	2.352***	2.679*	3.222***	1.215
	(0.220)	(1.485)	(0.272)	(0.176)
Non-binary people (Ref: Men)	2.998***	3.300	4.084***	1.505
	(1.131)	(5.073)	(1.324)	(0.649)
Sex at birth not aligned to current gender identity	1.106	5.475*	0.651*	0.715
	(0.247)	(5.633)	(0.154)	(0.408)
Disability or chronic illness	1.655***	1.507	1.349***	1.505***
	(0.144)	(0.597)	(0.115)	(0.229)
Ethnic minority background	1.420***	1.084	1.264***	1.671**
	(0.170)	(0.741)	(0.0950)	(0.352)
Asexual (Ref: Heterosexual)	1.114	2.376	1.352	1.291
	(0.235)	(1.554)	(0.334)	(0.599)
Bisexual (Ref: Heterosexual)	1.358***	1.098	1.385**	1.246
	(0.142)	(0.814)	(0.181)	(0.209)
Homosexual (Ref: Heterosexual)	1.607**	0.346	1.555***	1.567***
	(0.336)	(0.626)	(0.251)	(0.258)
Queer (Ref: Heterosexual)	1.975*	0***	1.772***	1.950***
	(0.724)	(0)	(0.386)	(0.437)
Another sexual orientation (Ref: Heterosexual)	0.989	0***	1.005	2.372***
	(0.280)	(0)	(0.274)	(0.676)
International	0.743***	0.674	0.737***	0.659***
	(0.0532)	(0.355)	(0.0291)	(0.104)
Permanent staff	1.320***	1.041	1.153*	1.387***
	(0.125)	(0.483)	(0.0942)	(0.163)
Full-time contract (35+ hours)	1.329***	1.153	1.179***	1.079
	(0.0723)	(0.535)	(0.0733)	(0.172)
Grade A (Ref: Grade D)	1.668***	1.645	1.396**	1.665**
	(0.252)	(1.052)	(0.229)	(0.335)
Grade B (Ref: Grade D)	1.608***	1.229	1.505***	1.402*
	(0.113)	(0.720)	(0.170)	(0.277)
Grade C (Ref: Grade D)	1.283***	1.307	1.167**	1.125
	(0.103)	(0.762)	(0.0817)	(0.204)
Age (mean-centred)	0.973***	0.972	0.954***	0.997
	(0.00507)	(0.0287)	(0.00522)	(0.00622)
Time spent at the institution (mean-centred)	1.059***	1.057*	1.053***	1.013***
	(0.00702)	(0.0322)	(0.00538)	(0.00483)
Constant	0.747	0.00120***	0.249***	0.0802***
	(0.245)	(0.00180)	(0.0728)	(0.0481)
v_0	0.011	0.023	0.001	0.031
u_0	0.045	0.034	0.081	0.122
is_0	0.159	1.546	0.070	0.281
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	1,977	1,886	1,880	1,873
Individuals (n)	8,682	7,955	7,901	7,830

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 28 Multi-level intersectional random intercept models for the prevalence of gender-based violence – students

	Any form	Physical violence	Psychological violence	Economic violence
Women (Ref: Men)	1.590***	0.700***	1.537***	1.002
	(0.0729)	(0.0624)	(0.0798)	(0.108)
Non-binary people (Ref: Men)	1.951***	0.863	1.531***	1.008
	(0.193)	(0.145)	(0.194)	(0.270)
Sex at birth not aligned to current gender identity	1.050	1.224	1.234**	0.469**
	(0.106)	(0.291)	(0.131)	(0.173)
Disability or chronic illness	1.547***	1.689***	1.515***	1.754***
	(0.101)	(0.151)	(0.0971)	(0.121)
Ethnic minority background	1.447***	1.714***	1.546***	2.183***
	(0.105)	(0.177)	(0.0983)	(0.205)
Asexual (Ref: Heterosexual)	0.871*	0.783	0.908	0.949
	(0.0691)	(0.194)	(0.0944)	(0.269)
Bisexual (Ref: Heterosexual)	1.591***	1.356***	1.560***	1.374***
	(0.0509)	(0.131)	(0.0563)	(0.156)
Homosexual (Ref: Heterosexual)	1.330***	0.965	1.232**	1.092
	(0.100)	(0.174)	(0.114)	(0.188)
Queer (Ref: Heterosexual)	1.702***	0.991	1.589***	1.590***
	(0.176)	(0.222)	(0.155)	(0.257)
Another sexual orientation (Ref: Heterosexual)	1.332***	2.088***	1.570***	2.115***
	(0.132)	(0.347)	(0.158)	(0.403)
International	1.001	0.878	1.076	1.165
	(0.0811)	(0.113)	(0.116)	(0.176)
Doctoral level or equivalent (Ref: Bachelor's or equivalent level)	1.391***	0.712	1.263**	1.924***
	(0.174)	(0.203)	(0.148)	(0.253)
Master's level or equivalent (Ref: Bachelor's or equivalent level)	1.170***	0.831**	1.185***	1.170**
	(0.0671)	(0.0641)	(0.0735)	(0.0746)
Living in a university residence or on campus	1.186***	1.239***	1.118	1.198
	(0.0762)	(0.0956)	(0.0834)	(0.224)
Age (mean-centred)	0.972***	0.975**	0.979***	1.016*
	(0.00306)	(0.0103)	(0.00426)	(0.00890)
Time spent at the institution (mean-centred)	1.191***	1.067***	1.183***	1.131***
	(0.0136)	(0.0249)	(0.0153)	(0.0129)
Constant	0.852	0.0671***	0.542***	0.0573***
	(0.160)	(0.0188)	(0.112)	(0.0320)
v_0	0.058	0.157	0.066	0.248
u_0	0.028	0.071	0.027	0.000
is_0	0.009	0.043	0.015	0.207
Countries (n)	15	15	15	15
RPOs (n)	42	42	42	42
Intersectional strata (n)	3,119	3,115	3,016	2,890
Individuals (n)	20,353	20,337	19,197	17,389

(table continued below)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	Any form	Sexual violence	Sexual harassment	Online violence
Women (Ref: Men)	1.590***	1.801***	1.990***	0.878**
	(0.0729)	(0.302)	(0.138)	(0.0544)
Non-binary people (Ref: Men)	1.951***	1.057	1.582***	0.944
	(0.193)	(0.579)	(0.227)	(0.234)
Sex at birth not aligned to current gender identity	1.050	1.645	1.326***	1.181
	(0.106)	(0.885)	(0.142)	(0.210)
Disability or chronic illness	1.547***	1.791***	1.510***	1.871***
	(0.101)	(0.184)	(0.0956)	(0.135)
Ethnic minority background	1.447***	1.487*	1.278**	1.487**
	(0.105)	(0.329)	(0.142)	(0.233)
Asexual (Ref: Heterosexual)	0.871*	0.612**	1.040	1.018
	(0.0691)	(0.153)	(0.135)	(0.217)
Bisexual (Ref: Heterosexual)	1.591***	2.270***	1.823***	1.670***
	(0.0509)	(0.274)	(0.0721)	(0.107)
Homosexual (Ref: Heterosexual)	1.330***	1.509	1.556***	1.450**
	(0.100)	(0.438)	(0.128)	(0.232)
Queer (Ref: Heterosexual)	1.702***	1.740***	1.718***	1.712***
	(0.176)	(0.346)	(0.111)	(0.319)
Another sexual orientation (Ref: Heterosexual)	1.332***	2.210*	2.151***	1.639**
	(0.132)	(1.064)	(0.214)	(0.377)
International	1.001	1.618***	0.958	1.088
	(0.0811)	(0.245)	(0.0750)	(0.140)
Doctoral level or equivalent (Ref: Bachelor's or equivalent level)	1.391***	0.981	1.444***	0.877
	(0.174)	(0.189)	(0.163)	(0.113)
Master's level or equivalent (Ref: Bachelor's or equivalent level)	1.170***	1.147	1.167**	0.869
	(0.0671)	(0.140)	(0.0831)	(0.0832)
Living in a university residence or on campus	1.186***	1.482***	1.295***	1.189
	(0.0762)	(0.155)	(0.0830)	(0.126)
Age (mean-centred)	0.972***	0.931***	0.957***	0.995
	(0.00306)	(0.0162)	(0.00518)	(0.00998)
Time spent at the institution (mean-centred)	1.191***	1.193***	1.162***	1.134***
	(0.0136)	(0.0382)	(0.0158)	(0.0188)
Constant	0.852	0.00330***	0.156***	0.0473***
	(0.160)	(0.00157)	(0.0291)	(0.0119)
v_0	0.058	0.178	0.120	0.000
u_0	0.028	0.143	0.036	0.051
is_0	0.009	0.706	0.052	0.135
Countries (n)	15	15	15	15
RPOs (n)	42	42	42	42
Intersectional strata (n)	3,119	2,851	2,829	2,807
Individuals (n)	20,353	16,907	16,633	16,327

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Intersectional determinants and the consequences of gender-based violence

In this section we examine the effects of gender-based violence feeling socially excluded, feeling unsafe or feeling unwell, as well as on work and studies. The independent variables now include both variables that capture incidents related to each form of gender-based violence and the same set of intersectional determinants used above.

Exposure to gender-based violence is associated with worse outcomes. Most forms of gender-based violence are associated with worse outcomes, when controlling for other factors (Table 29). Disclosing any form of gender-based violence in the survey is systematically associated with feeling more unsafe or feeling unwell. For example, reporting any incident of sexual violence is associated with a much higher propensity to feel unsafe (e^{β} = 3.014, p < 0.01). All forms of gender-based violence measured, except for sexual violence, are associated with higher feelings of social exclusion and detrimental consequences for work. Finally, all forms of gender-based violence measured, except physical violence, are associated with detrimental consequences for studies.

Insights from the interviews:

Several of the interviews clearly illustrated that the reporting itself, and thus the public disclosure of incidents of gender-based violence, was fraught with difficulties. This could be a fear of retaliation, as the following quote shows, where students are described as being afraid of being punished by professors if they talk about their experience. Because disclosing any incidents of gender-based violence would make victims feel even more unsafe, they prefer to silence it. For some, this was expressed very explicitly:

> *It is true that the students also do not want to report, well, we are there in that process. That they are making a lot of public denunciation, but they are not managing to process what the legal processes are be able to move this. And the students say, they are afraid because they [professors] are going to retaliate and I believe them because it is true that in my department that culture of retaliation has been created a lot.* (Professor at the time of the interview, woman, 40-49)

> *I feel I'm completely convinced if I report this, this is going to go against me.* (Lecturer at the time of the interview, woman, age 40-49)

Some interviewees expressed a sense of hopelessness about reporting experiences of gender-based violence as they felt no one would believe the person reporting it anyway. This was a key reason behind the vast majority of cases not being reported at all:

> *Most of the cases that I have discussed with the victims had, and me myself, had like this mentality [of victim blaming], that nobody would believe what happened, and there will be no consequences for the harasser. The most, most of the cases that I know, that was not disclosed at all.* (Graduate Student at the time of the interview, woman, age 18-24)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

A sense of hopelessness was supplemented with a fear of negative consequences in advancing in studies/or future career:

> *You hear these stories that people say […] you should actually file a complaint about that, but people say 'Yeah, but it wouldn't make a difference'. And it would only be hard on my career. So, people self-silence […] to protect themselves.* (Associate Professor at the time of the interview, woman, age 40-49)

Fear of retaliation and the sense of hopelessness resemble descriptions of cultures of silence. Rather than bringing further harm to oneself by disclosing an experience of gender-based violence, the interviewees instead explained how they keep silent or simply moved away:

> *I see that the intimidation works. In the end, I no longer wanted to work there. My colleague doesn't want to work there anymore. So strong women leave such workplaces because they are too intimidated. And they don't really feel that their concerns [will be heard], they don't dare to file a complaint and they're too intimidated to file a complaint. So, they leave this workplace.* (Non-academic staff at the time of the interview, woman, 50-59)

It was clear from the interviews that there was a perceived ambivalence between the knowledge that one should report, and the knowledge of what can happen to the person who reports and how it can affect one's credibility:

> *[Reporting the case in a university] doesn't really create the environment of safety, and it doesn't encourage the victims to come forward with their experiences. Well, I have encouraged my friends to report these cases, but they actually are scared what will happen with them in the future, if they report that. Because [it is a network of professionals in our study field and the country is rather small], so everybody knows each other somehow. [In this environment], I don't want to say anything that I would make myself look bad. Because everyone will think that I'm the liar or the blamer.* (Graduate Student at the time of the interview, woman, age 18-24)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Students vs staff: students are less at risk of social exclusion, but more at risk of feeling unsafe and feeling unwell. Students, compared with staff, are less likely overall to feel social excluded (e^{β} = 0.823, p < 0.01), though they are more likely to feel unsafe (e^{β} = 1.299, p < 0.01) and feel unwell (e^{β} = 1.450, p < 0.01) (Table 29).

Insights from the interviews:

The interviews clearly illustrate how social exclusion, feeling unsafe or feeling unwell is entangled with hierarchical positions within the academic system. Some interviews describe the particular vulnerability of doctoral candidates and early career academics. PhD Candidates are described as almost totally submissive, with their future entirely in the hands of those higher up in the hierarchy and their possible benevolence. This sense of powerlessness permeates interviews repeatedly.

The situations described in this quote describe how a PhD Candidate who is a victim of sexual harassment literally has no real choice because she will not get any help:

> *I wouldn't believe it, if it was not me, I wouldn't believe that that is happening. […] I have all the facts. So the good thing is that being a scientist, I'm collecting the data. And now I have so much data. So I have evidence […]. When you go to the hierarchy, they tell you to shut up, and most women will just shut up because they're so frightened, you know, what they tell you is that your career is gonna be screwed. If you're a PhD student and you're facing sexual harassment by a promoter, what do you do, you have no choice, basically, your PhD is screwed. And so what they do is just place the woman in another place where she cannot do her PhD, you know, it's another topic. And so she leaves and she leaves within a year, within two years when she gives up because she sees she's not going to be helped*. (Associate Professor at the time of the interview, woman, age 40-49)

The following interviewee equates the situation of PhD candidates and postdocs with playing with tigers, where hasty movements are associated with danger:

> *You should be clever and try not to make sharp moves. So you're playing with a tiger really, but there's no other way. And you can't complain to anybody because then you are in a direct fight with that tiger.* (Early-career researcher at the time of the interview, woman, age 40-49)

Being early in one's career at a university is crudely likened in another interview to being completely a victim of someone else's power, as belonging to someone else:

> *If you are now [an early-career] researcher in that university, in that institute, you cannot be considered equal […]. You can't be your own researcher. You just have to be a victim of somebody's power.* (Non-academic staff at the time of the interview, woman, age 50-59)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

The denigration of students by staff can be particularly traumatic and have drastic consequences. The student is described as having felt so bad about the behaviour of a member of staff that it leads to an attempted suicide, which only gives rise to an incident report that later vanishes. The following account illustrates the traumatic consequences that psychological violence and harassment can have:

> *We had accounts from students that a staff member had told them that they were worthless as an artist, and they should just go ******* die. That was reported. The student unfortunately obviously took great upset list and on campus they attempted to, uhm, take their life. So, they went to a stairwell and attempt to take their life. Thankfully they were found by another student. And they got off to hospital and they made it there. They were physically fine. That was reported by the students to the Student Union. We had all the documentation from what happened in terms of that. We got the student that was hospitalised to engage with us and tell us the details. Obviously, a student trying to take their own life on campus. You would assume that an incident report would be formed. You would assume that a safety assessment would have been done. So, we basically went through the whole process and although there was initially an incident report when it went to review and committee stages, there was then no longer an incident report.* (Early-career esearcher at the time of the interview, queer man, age 25-29)

Gender identity: Women and non-binary people more likely to feel social excluded and unsafe. Women, compared to men, are more likely to feel unsafe (e^{β} = 2.360, p < 0.01), to feel unwell (e^{β} = 1.436, p < 0.01), to feel socially excluded (e^{β} = 1.385, p < 0.01) or to suffer detrimental consequences for work (e^{β} = 1.123, p < 0.05) (Table 29). Non-binary people, compared with men, are also more likely to feel socially excluded (e^{β} = 1.717, p < 0.01) and feel unsafe (e^{β} = 1.922, p < 0.01).

Insights from the interviews:

The interviews illustrated the feelings of social exclusion and lack of safety among women, arising from the culture of the institutions in which they worked or studied. For example, an interviewee describes how women lower in rank were removed from meetings, even though these meetings were held in their office space. In some cases, the exclusion is described as the manager literally ordering the women lower in the hierarchy to leave the room when the professors (all men) are present:

> *So we have a section [in the faculty], which is comprised currently of three male professors and I'm the only female lecturer and we also have one female researcher, and the situation now is that we [two female employees] are completely cut off from their meetings, plannings, everything. This has been happening for two years already. […] And the head of the section demanded that I go out, when professors come, and they would always come from kind of up in the morning at 11:00. […] And that was the problem.* (Assistant Professor at the time of the interview, woman, age 30-39)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

In other cases, exclusion was described as being presented in terms of an ultimatum, where it ultimately appears that the victim herself chooses exclusion. For example, one PhD candidate described how she was forced by her supervisor to choose between career and family, in a way clearly related to her being a woman:

> *I was excluded from all activities. […] My supervisor, the head of department, called me and asked, what about my thesis? And I said, I'm working on it. But he said in that time, well, we see that you are going to have other plans, meaning my pregnancy. So in that time, I was very sensitive and I was crying and […] I didn't feel very well. […] My professor [PhD supervisor] told me that I can choose between career and family […] and I wasn't in a position to reply. […] I can tell openly and I still remember those words, that moment when my PhD supervisor said: choose - career or family.* (Researcher on temporary contract at the time of the interview, woman, age 50-59)

Some interviews describe how social exclusion can occur, in more explicit terms, by those who with non-normative gender identities, expressions, and understandings, and who can be reprimanded in a perceived aggressive manner as a result:

> *I think that sometimes I have also felt that my perspective of gender, my way of doing gender, my performativity of gender in the department is not very much welcomed. I have been, you know, like, isolated, the comments that I have heard, not in a direct way, but mostly, like in a very diplomatic way, are conducted towards the message of saying, 'You are not welcomed, nor your approaches of gender [are accepted]'. So, just to give you a very brief and concrete example, […] my professors send me an email saying 'I'm going to teach you how we in [country] must contribute to feminist theories. So if you're coming from, again, from a very global south perspective, on gender, you must address your professors as the professor. And you also have to say - I am a female, I am a male, I'm a transgender - you have to automatically save your credentials into some gender. And that's the way that we are going to preach to you. So even if you don't want to reveal your identity, you have to because this is the way that we are doing it'. So I found it like it was too direct, too aggressive.* (PhD candidate at the time of the interview, woman, age 30-39)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Trans: trans people are more likely to feel unsafe and to feel unwell, but suffer less consequences for work. Trans people (defined as non-alignment between sex at birth and current gender identity), when controlling for other socio-demographic determinants and prevalence of gender-based violence, are more likely to feel unsafe (e^{β} = 2.283, p < 0.01) and to feel unwell (e^{β} = 1.716, p < 0.01) (Table 29). However, they are less likely to report detrimental consequences for work (e^{β} = 0.339, p < 0.01).

Insights from the interviews:

Some trans students decided to discontinue their studies because they were disproportionately exposed to harassment and bullying and therefore did not feel safe:

> *There's been a lot of instances where students were either assaulted or bullied, harassed […] disproportionately with active trans students, nonbinary student, gender nonconforming students. Uhm, they left because they didn't feel safe.* (Early-career researcher, queer man, age 25-29)

In the interviews, descriptions emerged of how trans people who are open about their trans identity or trans expression would suffer negative consequences as a result in their work:

> *There's a lot of, uhm, there, there's a lot of people who are, are closed [closeted]. I have a friend that is... how do you say it? He's not, uh, transgender person, but he is, he is, uh... He likes... He's a drag queen. And he doesn't want to know that anyone knows about that. So, people here are very closed about their preferences. Uh, they do not like to speak about it. If someone finds out their career is almost over or they have to move to another faculty or they just, they, they can't take it. So, there's been a few examples during these years that it's been a big issue.* (Post-doctoral researcher at the time of the interview, woman, age 30-39)

Sexual orientation: bisexual, homosexual and queer people are more likely to feel unsafe, to feel unwell and to experience detrimental consequences for studies. All minoritised sexual orientation measured, with the exception of people who are asexual, report higher consequences, including feeling unsafe and feeling unwell (Table 29). They also are more likely to experience detrimental consequences for studies, though this is not the case for work except for homosexual respondents (e^{β} = 1.341, p < 0.05). Feeling socially excluded appears unrelated to sexual orientation.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Disability: feeling socially excluded, unsafe and unwell, as well as experiences detrimental consequences for work or studies is higher among people who have a disability or chronic illness. People that have a disability or chronic illness are more likely to report feeling socially excluded (e^{β} = 1.323, p < 0.01), feeling unsafe (e^{β} = 1.267, p < 0.01) and feeling unwell (e^{β} = 1.702, p < 0.01) (Table 29). In addition, they are also more likely to report detrimental consequences for work (e^{β} = 1.239, p < 0.05) or studies (e^{β} = 1.440, p < 0.01).

Insights from the interviews:

One quote shows an example of social exclusion by withholding information and support:

> *We had a colleague. He was Asian. Yeah, but, and he had hearing disability, so he couldn't hear. […] And they [students/staff] will not interact with him. For example, just to tell you an example, there was a free day in [our country] that we were not supposed to go to work. I went because I needed to pick up something and he was there. And then he came to me like, why is nobody here? Nobody told him, nobody let him know that "Sorry, but you're not supposed to be here today, because it is a holiday and you should go home". I just came to pick up some things and he said "Ah, nobody told me. I didn't know. I was not informed." Maybe they send the email in [our native language}, and he couldn't read in this [native language] for whatever reason, or they say like, yeah, it's understandable, you know, but it's like, how is this kind of adaptation to people, you know, so that's really, really bad.* (PhD candidate, woman, age 30-39)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Minority ethnic status: being from a minority ethnic background is linked to higher feelings of being unsafe and consequences for studies. Respondents from a minority ethnic background were not more likely to feel social excluded nor to feel unwell, though they were more likely to feel unsafe (e^{β} = 1.231, p < 0.01) (Table 29). They were not more likely to experience work-related consequences, though they were more likely to report study-related consequences (e^{β} = 1.211, p < 0.01).

Insights from the interviews:

This bystander observation describes how the victim was afraid of being mistrusted and of how the stereotypical sexualisation of her ethnicity would be used to her disadvantage. Again, the most likely solution speculated upon seems to be that the victim leaves academia:

> *She told me of how one of the supervisors had been hammering on her hotel door in the morning at conference. She exactly opened the door and asked what he wanted, she felt it was rather clear what he wanted. And he was not sober. And this was terrifying. For her. She had quite a bit of an issue with bullying to which we mostly managed to deal with but this particular case, she did not want me to take further feeling that they would not believe her over the supervisor. And unfortunately, I'd have to say that she was probably right about that. I think what also spoke against her was that she was Latin American, I think there was also she pointed this out to me, I think she's perfectly right to the boss, the sort of hot Latin American girls to it. That they felt that they sexualised also her ethnicity. I think, she's not wrong about that at all. […] It's very damaging that way as one might decide to leave […] academia and your entire expected career and life is running to seem as unfortunate.* (Lecturer at the time of the interview, woman, age 50-59)

International status: being an international staff/student is unrelated to most consequences. International staff/ students are not more likely than domestic staff/students to report any consequences (Table 29). The only exception is that international students are less likely to experience consequences for studies than domestic students (e^{β} = 0.787, p < 0.05).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Insights from the interviews:

Not knowing the country or the RPO, its laws or policies can stop people from making any formal complaints, and make people feel vulnerable:

> *I'm scared because I'm not part of this country and I don't know how the law works […]. It could get scary for anyone. […] They could like teach them about basic laws and where to report things. […] No one, no one taught me about things like that like this. These things like if something happened, where, where do I go to who? Who do I contact? The only thing I knew was like if you get into emergency just called the police or the ambulance.* (PhD candidate at the time of the interview, woman, age 18-24)

Unfamiliarity with national and local rules and procedures can be a deterrent to report for fear of, among other things, losing a scholarship and visa:

> *For example, you get involved in something very serious, […] and you try to report it, but as an international student because you're not part of that, you're not from this country, it might go the other way around. […] If something happens, […] someone like stabs someone or something, and you witness it […]. For me, if anyone saw it, of course I want to report it, of course, but like I might be scared because what happens as an international student. I'm here on a visa, it can, it can get rejected, I could lose my scholarship, I could, I could get into trouble. So this scares me. And that's maybe this is one of the reasons why I [did not report it] because I knew if I did like report what happened with me on that day when these drunk people were like making comments about me. I thought no one saw that. If I go to someone they would ask questions, […] they would interrogate me and it was scary.* (PhD candidate at the time of the interview, woman, age 18-24)

> *You're scared to death because […] if this woman takes away my visa, they're not going to renew it […], which you think could be your future job, so [it's] total lack of protection.* (Researcher at the time of the interview, woman, age 40-49)

These words illustrate the lack of institutional preparedness and a lack of procedures to ensure that visiting academics are aware of their rights and opportunities for support:

> *I didn't do anything institutional. […] I didn't know and I don't know if it existed, like a bureau for helping people in this situation. I know that, now, it exists in my institution, but I don't know what it does. But at the time, I wasn't into the institution. I was just a visiting postdoc, so I didn't know anything. And then when he went hard with these accusations, which might have hindered my possibilities to get a job in the future, because all the jury, the national jury, knew about this letter and maybe knew about the accusations.* (Senior Researcher at the time of the interview, woman, age 40-49)

Age: being older is associated with lower feelings of being unsafe and being unwell, as well as to lower experiences of detrimental consequences for work or studies. Every additional year in age is associated with a decrease in feeling unsafe (e^{β} = 0.986, p < 0.01) and feeling unwell (e^{β} = 0.973, p < 0.01) (Table 29). It is also as associated with lower experiences of detrimental consequences for studies (e^{β} = 0.963, p < 0.01) or work (e^{β} = 0.973, p < 0.01).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 29 Multi-level intersectional random intercept models for the consequences of gender-based violence – all staff and students

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Physical violence	1.321**	2.794***	1.343***	2.397***	1.263
	(0.149)	(0.186)	(0.0933)	(0.474)	(0.320)
Psychological violence	7.276***	2.713***	1.631***	2.776***	1.949***
	(0.384)	(0.210)	(0.0393)	(0.193)	(0.131)
Economic violence	3.092***	2.347***	1.605***	3.337***	1.656***
	(0.338)	(0.178)	(0.0320)	(0.328)	(0.242)
Sexual violence	1.088	3.014***	1.765***	1.801	1.570**
	(0.146)	(0.343)	(0.361)	(0.681)	(0.308)
Sexual harassment	2.234***	2.468***	1.527***	1.787***	1.509***
	(0.0560)	(0.177)	(0.0702)	(0.206)	(0.0645)
Online violence	2.319***	2.428***	1.396***	1.678***	1.710***
	(0.181)	(0.165)	(0.0853)	(0.307)	(0.296)
Student (Ref: Staff)	0.823***	1.299***	1.450***		
	(0.0501)	(0.0992)	(0.108)		
Women (Ref: Men)	1.385***	2.360***	1.436***	1.123**	1.014
	(0.0573)	(0.220)	(0.0397)	(0.0628)	(0.0403)
Non-binary people (Ref: Men)	1.717***	1.922***	1.158	1.549	0.803
	(0.267)	(0.259)	(0.170)	(0.518)	(0.254)
Sex at birth not aligned to current gender identity	0.940	2.283***	1.716***	0.339***	1.376
	(0.202)	(0.501)	(0.212)	(0.0689)	(0.445)
Disability or chronic illness	1.323***	1.267***	1.702***	1.239**	1.440***
	(0.0466)	(0.0892)	(0.0697)	(0.130)	(0.139)
Ethnic minority background	1.040	1.231***	1.133	1.152	1.211***
	(0.0750)	(0.0633)	(0.0877)	(0.135)	(0.0728)
Asexual (Ref: Heterosexual)	0.945	1.105	1.321*	0.933	1.066
	(0.115)	(0.121)	(0.215)	(0.188)	(0.201)
Bisexual (Ref: Heterosexual)	1.115	1.278***	1.541***	1.261	1.817***
	(0.0959)	(0.0630)	(0.0978)	(0.217)	(0.133)
Homosexual (Ref: Heterosexual)	1.107	1.539***	1.465***	1.341**	1.441***
	(0.0755)	(0.159)	(0.0987)	(0.164)	(0.150)
Queer (Ref: Heterosexual)	1.110	1.555***	2.753***	1.476	1.942***
	(0.115)	(0.219)	(0.366)	(0.438)	(0.316)
Another sexual orientation (Ref: Heterosexual)	0.930	1.588***	2.324***	1.015	1.796***
	(0.115)	(0.182)	(0.217)	(0.372)	(0.396)
International	1.094	0.857	1.029	1.078	0.787**
	(0.0789)	(0.120)	(0.0802)	(0.140)	(0.0847)
Age (mean-centred)	0.999	0.986***	0.973***	0.973***	0.963***
	(0.00460)	(0.00300)	(0.00338)	(0.00256)	(0.00374)
Time spent at the institution (mean-centred)	1.014***	1.010***	0.996	1.020***	1.083***
	(0.00248)	(0.00302)	(0.00404)	(0.00415)	(0.0229)
Constant	0.255***	0.0190***	0.319***	3.379***	2.877***
	(0.0842)	(0.00671)	(0.0691)	(1.120)	(0.952)
v_0	0.056	0.164	0.079	0.110	0.149
u_0	0.009	0.163	0.004	0.034	0.037
is_0	0.028	0.088	0.048	0.052	0.061
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

The consequences of gender-based violence is examined specifically among staff, both academic and non-academic staff, to examine the effects of being academic or non-academic, of contract type and of working hours (Table 30).

Academic vs non-academic staff: non-academic staff report fewer consequences than academic staff. The consequences of gender-based violence are lower for non-academic staff than academic staff across all forms, including feeling socially excluded (e^{β} = 0.918, p < 0.01), feeling unsafe (e^{β} = 0.843, p < 0.01), feeling unwell (e^{β} = 0.832, p < 0.01) and consequences for work (e^{β} = 0.842, p < 0.01) (Table 30).

Contract type: permanent staff are more likely to feel unsafe that those of fixed-term contracts. There are few differences in consequences between staff on fixed-term and permanent contracts, except for feeling unsafe which is more reported by staff working on permanent contracts compared with staff on fixed-term contracts (e^{β} = 1.165, p < 0.05) (Table 30).

Working hours: staff working full-time hours are more likely to feel unwell. Few differences exist in consequences between staff on full-time contracts (35 hours a week or more), compared with staff working part-time (Table 30). The only exception is that staff working full-time hours are more likely to feel unwell (e^{β} = 1.236, p < 0.01).

Thereafter, the consequences of gender-based violence are examined among academic staff, to examine the effects of grades (Table 31).

Academic grades: higher grades are associated with lower consequences for well-being and for work. Academic staff working at Grades A or B were less likely to report feeling unwell (e^{β} are 0.704, p < 0.01 and 0.763, p < 0.01 respectively), than staff at Grade D level (Table 31). Further, academic staff at Grade A were less likely to report consequences for work (e^{β} = 0.565, p < 0.01).

Finally, the consequences of gender-based violence are examined among students, to examine the effects of level of studies and whether residing on campus or not (Table 32).

Study level: postgraduate students are less likely than undergraduate students to report consequences for studies but more likely to feel socially excluded. Doctoral candidates, compared to undergraduate students, are much less likely to report feeling unwell (e^{β} = 0.684, p < 0.01) (Table 32). Both doctoral and masters students are also less likely to report consequences for their studies (e^{β} are 0.354, p < 0.01 and 0.764, p < 0.01 respectively) but more likely to feel social excluded (e^{β} are 1.174, p < 0.05 and 1.099, p < 0.05 respectively.

Campus residence: living on campus is associated with not feeling safe, but no other consequences. Students that reside on campus in university residences were more likely to report not feeling safe (e^{β} = 1.502, p < 0.01), though there are no differences in relation to feeling socially excluded, feeling unwell or consequences for studies (Table 32).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 30 Multi-level intersectional random intercept models for the consequences of gender-based violence – academic and non-academic staff

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work
Physical violence	1.594***	2.549***	1.608***	2.437***
	(0.0892)	(0.298)	(0.137)	(0.475)
Psychological violence	8.456***	2.939***	1.600***	2.776***
	(0.517)	(0.201)	(0.0448)	(0.208)
Economic violence	3.624***	2.494***	1.665***	3.288***
	(0.426)	(0.191)	(0.0418)	(0.328)
Sexual violence	1.208	3.259***	2.291***	1.785
	(0.355)	(0.640)	(0.474)	(0.674)
Sexual harassment	2.355***	2.167***	1.469***	1.786***
	(0.111)	(0.180)	(0.0561)	(0.204)
Online violence	2.252***	2.429***	1.305***	1.627***
	(0.164)	(0.211)	(0.102)	(0.287)
Women (Ref: Men)	1.468***	2.229***	1.459***	1.154**
	(0.0785)	(0.246)	(0.0710)	(0.0664)
Non-binary people (Ref: Men)	3.090***	2.143***	0.983	1.541
	(0.729)	(0.504)	(0.229)	(0.511)
Sex at birth not aligned to current gender identity	0.734	1.434	1.035	0.333***
	(0.316)	(0.615)	(0.284)	(0.0662)
Disability or chronic illness	1.435***	1.236***	1.619***	1.252**
	(0.0823)	(0.102)	(0.0927)	(0.128)
Ethnic minority background	1.054	1.208*	1.167*	1.161
	(0.105)	(0.122)	(0.108)	(0.135)
Asexual (Ref: Heterosexual)	1.011	0.819	1.362	0.944
	(0.258)	(0.173)	(0.338)	(0.192)
Bisexual (Ref: Heterosexual)	1.218	1.253**	1.214*	1.258
	(0.191)	(0.128)	(0.139)	(0.211)
Homosexual (Ref: Heterosexual)	1.061	1.443***	1.567***	1.331**
	(0.130)	(0.168)	(0.169)	(0.166)
Queer (Ref: Heterosexual)	1.088	1.293	2.707***	1.489
	(0.232)	(0.374)	(0.818)	(0.435)
Another sexual orientation (Ref: Heterosexual)	0.781	0.870	2.710***	1.006
	(0.181)	(0.227)	(0.974)	(0.361)
International	1.202**	0.856	1.084	1.016
	(0.0961)	(0.163)	(0.119)	(0.115)
Non-academic staff	0.918***	0.843***	0.832***	0.842***
	(0.0277)	(0.0401)	(0.0488)	(0.0504)
Permanent staff	1.094	1.165**	0.885*	0.978
	(0.104)	(0.0804)	(0.0627)	(0.0869)
Full-time contract (35+ hours)	1.067	0.980	1.236***	1.050
	(0.0720)	(0.0954)	(0.0708)	(0.0532)
Age (mean-centred)	1.001	0.994	0.984***	0.974***
	(0.00508)	(0.00454)	(0.00353)	(0.00257)
Time spent at the institution (mean-centred)	1.006**	1.001	0.991**	1.020***
	(0.00312)	(0.00466)	(0.00415)	(0.00494)
Constant	0.198***	0.0365***	0.639	4.603***
	(0.0997)	(0.0258)	(0.182)	(1.131)
v_0	0.078	0.192	0.063	0.118
u_0	0.002	0.186	0.017	0.031
is_0	0.015	0.049	0.036	0.055
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	2,467	2,390	2,476	2483
Individuals (n)	13,325	12,653	13,271	13,450

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 31 Multi-level intersectional random intercept models for the consequences of gender-based violence – academic staff

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work
Physical violence	1.343*	2.491***	1.359*	1.557**
	(0.233)	(0.303)	(0.215)	(0.339)
Psychological violence	7.597***	2.619***	1.635***	2.524***
	(0.664)	(0.257)	(0.0727)	(0.257)
Economic violence	3.634***	2.422***	1.536***	3.394***
	(0.417)	(0.162)	(0.0524)	(0.246)
Sexual violence	1.088	3.234***	1.873***	1.599
	(0.466)	(0.754)	(0.420)	(0.745)
Sexual harassment	2.282***	2.249***	1.494***	1.839***
	(0.122)	(0.200)	(0.0472)	(0.196)
Online violence	2.452***	2.777***	1.331***	1.416*
	(0.303)	(0.326)	(0.110)	(0.264)
Women (Ref: Men)	1.590***	2.450***	1.497***	1.130**
	(0.116)	(0.274)	(0.112)	(0.0642)
Non-binary people (Ref: Men)	3.150***	1.477	0.998	2.022**
	(1.281)	(0.456)	(0.224)	(0.636)
Sex at birth not aligned to current gender identity	0.802	1.530	0.919	0.242***
	(0.350)	(0.701)	(0.379)	(0.0918)
Disability or chronic illness	1.338**	1.099	1.693***	1.412**
	(0.157)	(0.121)	(0.160)	(0.206)
Ethnic minority background	1.010	1.418***	1.290**	1.306
	(0.131)	(0.146)	(0.149)	(0.279)
Asexual (Ref: Heterosexual)	1.034	0.877	2.147***	1.229
	(0.389)	(0.256)	(0.614)	(0.313)
Bisexual (Ref: Heterosexual)	1.132	1.434***	1.038	1.497*
	(0.284)	(0.177)	(0.130)	(0.347)
Homosexual (Ref: Heterosexual)	1.109	1.458**	1.565***	1.357
	(0.233)	(0.232)	(0.236)	(0.377)
Queer (Ref: Heterosexual)	1.111	1.443	2.636**	2.205*
	(0.274)	(0.506)	(1.180)	(1.048)
Another sexual orientation (Ref: Heterosexual)	0.829	0.916	2.422**	0.889
	(0.259)	(0.329)	(1.022)	(0.289)
International	1.157*	0.763	1.105	0.916
	(0.0971)	(0.142)	(0.111)	(0.112)
Permanent staff	1.161	1.155	0.878	0.945
	(0.134)	(0.134)	(0.102)	(0.109)
Full-time contract (35+ hours)	1.062	0.976	1.405***	1.092
	(0.0889)	(0.0849)	(0.105)	(0.107)
Grade A (Ref: Grade D)	1.135	1.057	0.704***	0.565***
	(0.131)	(0.141)	(0.0855)	(0.0748)
Grade B (Ref: Grade D)	1.170	0.957	0.763***	0.840*
	(0.142)	(0.148)	(0.0633)	(0.0811)
Grade C (Ref: Grade D)	1.160	0.927	0.915	1.010
	(0.119)	(0.0931)	(0.0753)	(0.103)
Age (mean-centred)	1.003	0.995	0.986***	0.976***
	(0.00769)	(0.00618)	(0.00394)	(0.00361)
Time spent at the institution (mean-centred)	1.002	0.993	0.990**	1.021**
	(0.00489)	(0.00678)	(0.00395)	(0.00850)
Constant	0.145***	0.0333***	0.632	7.667***
	(0.0763)	(0.0207)	(0.296)	(3.574)
v_0	0.048	0.201	0.046	0.140
u_0	0.000	0.136	0.034	0.000
is_0	0.050	0.012	0.034	0.046
Countries (n)	15	15	15	15
RPOs (n)	43	43	43	43
Intersectional strata (n)	1,832	1,770	1,830	1,839
Individuals (n)	7,553	7,190	7,510	7,604

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 32 Multi-level intersectional random intercept models for the consequences of gender-based violence – students

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for studies
Physical violence	1.228	3.004***	1.066	1.224
	(0.197)	(0.268)	(0.0780)	(0.322)
Psychological violence	6.452***	2.570***	1.675***	2.001***
	(0.563)	(0.249)	(0.0472)	(0.139)
Economic violence	2.110***	1.982***	1.331***	1.775***
	(0.163)	(0.151)	(0.0824)	(0.248)
Sexual violence	1.128	2.746***	1.483	1.556**
	(0.180)	(0.469)	(0.416)	(0.304)
Sexual harassment	2.126***	2.783***	1.651***	1.547***
	(0.0690)	(0.201)	(0.123)	(0.0704)
Online violence	2.373***	2.381***	1.507***	1.675***
	(0.278)	(0.213)	(0.142)	(0.295)
Women (Ref: Men)	1.327***	2.644***	1.478***	0.999
	(0.0594)	(0.238)	(0.0770)	(0.0389)
Non-binary people (Ref: Men)	1.357	2.003***	1.310**	0.810
	(0.291)	(0.329)	(0.178)	(0.273)
Sex at birth not aligned to current gender identity	1.083	2.474***	1.874***	1.334
	(0.299)	(0.469)	(0.298)	(0.454)
Disability or chronic illness	1.258***	1.342***	1.876***	1.430***
	(0.0681)	(0.121)	(0.111)	(0.136)
Ethnic minority background	1.071	1.249***	1.120	1.220***
	(0.0815)	(0.0733)	(0.118)	(0.0688)
Asexual (Ref: Heterosexual)	0.936	1.172	1.242	1.026
	(0.113)	(0.149)	(0.217)	(0.199)
Bisexual (Ref: Heterosexual)	1.125	1.255***	1.671***	1.819***
	(0.0958)	(0.0697)	(0.112)	(0.133)
Homosexual (Ref: Heterosexual)	1.144	1.599***	1.340**	1.419***
	(0.0939)	(0.258)	(0.165)	(0.143)
Queer (Ref: Heterosexual)	1.164	1.705***	2.731***	1.865***
	(0.158)	(0.236)	(0.464)	(0.315)
Another sexual orientation (Ref: Heterosexual)	1.024	1.807***	2.152***	1.760***
	(0.131)	(0.286)	(0.402)	(0.375)
International	1.017	0.817*	0.984	1.000
	(0.0913)	(0.0943)	(0.0711)	(0.103)
Doctoral level or equivalent (Ref: Bachelor's or equivalent level)	1.174**	0.913	0.684***	0.354***
	(0.0925)	(0.0733)	(0.0532)	(0.0321)
Master's level or equivalent (Ref: Bachelor's or equivalent level)	1.099**	1.089	0.913*	0.764***
	(0.0461)	(0.0688)	(0.0475)	(0.0488)
Living in a university residence or on campus	0.983	1.502***	0.997	0.916
	(0.0525)	(0.105)	(0.0588)	(0.0596)
Age (mean-centred)	0.992*	0.974***	0.967***	0.972***
	(0.00492)	(0.00387)	(0.00435)	(0.00462)
Time spent at the institution (mean-centred)	1.048***	1.026***	0.994	1.106***
	(0.0106)	(0.00843)	(0.00682)	(0.0222)
Constant	0.172***	0.0275***	0.804	2.872***
	(0.0537)	(0.00923)	(0.189)	(0.984)
v_0	0.049	0.184	0.095	0.073
u_0	0.012	0.158	0.004	0.037
is_0	0.029	0.069	0.018	0.066
Countries (n)	15	15	15	15
RPOs (n)	42	42	42	42
Intersectional strata (n)	2,747	2,669	2,740	2,754
Individuals (n)	15,698	14,570	15,698	15,753

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

PART III: NATIONAL AND ORGANISATIONAL CHARACTERISTICS

In this section, we incorporate national and organisational level characteristics in the analysis. Indicators were obtained from national and organisational mappings (Fajmonová et al., 2021; Huck et al., 2022). This analysis focuses on the relationship between the prevalence of gender-based violence and its consequences, and the following:

- National policies, and whether they are generic (i.e. focus on gender equality in RPOs more widely, though include the issue of gender-based violence) or dedicated to gender-based violence.
- National policies that focus on different Ps.
- Organisational policies, and whether they are generic (i.e. focus on gender equality in the institutional more widely, though include the issue of gender-based violence) or dedicated specifically to gender-based violence.
- Organisational policies that focus on different Ps.
- Organisational policies that consider intersectional groups.
- Organisational policies that consider potentially vulnerable groups.
- Different procedural aspects of organisational policies (objectives, indicators, monitoring, evaluation and budget).

All models include variables measuring different determinants, based on socio-demographic and functional diversity. A level corresponding to intersectional strata is also included. In addition, the analysis includes control variables for level of innovation (scores of the innovation Scoreboard 2021), for level of gender equality (scores of the World Economic Forum's Global Gender Gap Index 2022) and for levels of economic development (GDP per capital in $, thousands 2020). Results are deemed to be statistically significant if they reach a value of p that falls at or below 0.05, though results that are statistically significant at the 0.1 level are marked in the table for information but not further considered.

A note of caution on interpreting these results is necessary. Coefficients express associations, and not causal relationships. Further, any interpretation of directionality (particularly with an implied causation) is also problematic. For example, a negative relationship between the existence of a national/organisational characteristic and prevalence/consequences cannot, and should, not be interpreted as this characteristic *leading* to lower prevalence/consequences. This is more obvious in cases where there are positive relationships, in which case the suggestion that any national/organisational characteristic *leads* to higher prevalence or consequences would be worrying. Instead, it is possible to hypothesise that certain measures, policies or legislation might have been put into place as a result of a high prevalence of gender-based violence. Interpretation is notoriously difficult for prevalence in any case. Lower prevalence might at first glance seem to be a desirable outcome, though this is not the case if it simply reflects low disclosure rather than low prevalence. In fact, higher prevalence can be desirable: as public awareness rises, victims should be empowered to speak out, report and seek justice and reparation.

To supplement this analysis, extracts from the case studies (Ranea et al., 2022) are provided, to exemplify how policies are implemented, or not, in practice.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

National policies on gender-based violence

This section looks at whether having national policies in place is related to the prevalence of gender-based violence and its consequences, and whether there are differences for policies that are generic (i.e. focus on gender equality in RPOs more widely, though include the issue of gender-based violence) or dedicated to gender-based violence (Fajmonová et al., 2021). This is because supranational and national policies can act as powerful governance mechanisms that can effect change (either specifically, or within a broader gender equality/higher education policy). Supranational and national policies can be an important driver for initiating policies and actions at the institutional level, setting framework conditions for those policies, and the implementation of such policies. Therefore, it is important to understand what role national authorities claim, what instruments they use and whether they monitor and evaluate the policies they put in place.

Having a policy specifically dedicated to gender-based violence in higher education might therefore allow the policy to be more comprehensive and hence have greater impact. In particular, dedicated gender-based violence policies may be more comprehensive and tailored to the specificities of this sector and actors involved in the sector; address prevalence (e.g. calling for prevalence studies in the context of RPOs or requiring RPOs to monitor cases of gender-based violence and report on them) more than broader policies; address the needs of victims/survivors and bystanders in a more holistic way. Furthermore, the mapping looked at whether policies addressed different forms of gender-based violence, with the idea that policies that are more comprehensive in relation to forms of gender-based violence might have better reporting systems and lower negative consequences on victims.

Of the 15 RPOs examined in this analysis, eight were located in a country where there is no national policy addressing gender-based violence in RPOs, four were located in a country where there exists a generic national policy on gender equality in RPOs that also addressed the issue of gender-based violence, and three in a country that has a dedicated national policy on gender-based violence in RPOs.

Prevalence

Table 33 shows that having a generic national policy on gender equality that addresses gender-based violence is related to lower prevalence of gender-based violence (e^{β} = 0.777, p < 0.05) compared to those that have no policy in place. When broken down across different forms of gender-based violence, prevalence shows a negative relationship with psychological harassment (e^{β} = 0.782, p < 0.05) and sexual harassment (e^{β} = 0.712, p < 0.05). There is no statistically significant relationship between national policies dedicated to gender-based violence in RPOs and to the overall prevalence of gender-based violence and to any of its forms, with the exception of physical violence (e^{β} = 1.270, p < 0.05).

Consequences

Table 34 shows no statistically significant relationship between having a generic or dedicated policy, except for a positive relationship between having a generic policy and consequences of gender-based violence upon studies (e^{β} = 1.730, p < 0.01).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 33 Multi-level intersectional random intercept models for the prevalence of gender-based violence and national policies on gender-based violence

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
Generic national policy on gender equality in RPOs more widely, that includes the issue of gender-based violence	0.777**	0.900	0.782**	0.807	0.727	0.712**	0.937
	(0.0912)	(0.140)	(0.0910)	(0.164)	(0.176)	(0.0953)	(0.116)
National policy specifically dedicated to gender-based violence in RPOs	1.203*	1.270**	1.210*	1.192	0.951	1.297	0.910
	(0.126)	(0.151)	(0.118)	(0.141)	(0.332)	(0.234)	(0.129)
Student (Ref: Staff)	0.692***	1.618***	0.710***	0.450***	2.413***	0.742***	0.988
	(0.0375)	(0.244)	(0.0435)	(0.0666)	(0.529)	(0.0494)	(0.0908)
Women (Ref: Men)	1.753***	0.740***	1.691***	1.245***	2.116***	2.342***	0.973
	(0.0706)	(0.0481)	(0.0730)	(0.0672)	(0.338)	(0.110)	(0.0835)
Non-binary people (Ref: Men)	1.976***	0.823	1.506***	1.489**	1.107	1.939***	1.024
	(0.267)	(0.116)	(0.163)	(0.231)	(0.465)	(0.294)	(0.210)
Sex at birth not aligned to current gender identity	1.121	1.466*	1.338***	0.585**	1.976*	1.243**	1.165
	(0.142)	(0.312)	(0.123)	(0.125)	(0.802)	(0.127)	(0.229)
Disability or chronic illness	1.591***	1.699***	1.547***	1.655***	1.699***	1.479***	1.646***
	(0.0845)	(0.111)	(0.0741)	(0.120)	(0.143)	(0.0750)	(0.112)
Ethnic minority background	1.356***	1.701***	1.419***	2.160***	1.375**	1.261***	1.556***
	(0.0729)	(0.143)	(0.0609)	(0.144)	(0.220)	(0.107)	(0.118)
Asexual (Ref: Heterosexual)	0.889*	0.838	0.871	1.043	0.660**	1.113	1.005
	(0.0586)	(0.180)	(0.0840)	(0.179)	(0.134)	(0.118)	(0.164)
Bisexual (Ref: Heterosexual)	1.506***	1.375***	1.434***	1.408***	2.123***	1.653***	1.533***
	(0.0578)	(0.112)	(0.0550)	(0.100)	(0.203)	(0.0467)	(0.122)
Homosexual (Ref: Heterosexual)	1.368***	1.117	1.252***	1.123	1.435**	1.567***	1.422***
	(0.101)	(0.185)	(0.0762)	(0.117)	(0.213)	(0.0839)	(0.187)
Queer (Ref: Heterosexual)	1.672***	1.046	1.552***	1.524***	1.557**	1.655***	1.724***
	(0.221)	(0.240)	(0.181)	(0.197)	(0.277)	(0.0862)	(0.211)
Another sexual orientation (Ref: Heterosexual)	1.269**	2.019***	1.354**	1.579***	1.817	1.860***	1.635**
	(0.135)	(0.326)	(0.161)	(0.249)	(0.685)	(0.164)	(0.321)
International	0.942	0.857	0.987	1.302**	1.375***	0.922	0.918
	(0.0621)	(0.112)	(0.0782)	(0.140)	(0.166)	(0.0583)	(0.0973)
Age (mean-centred)	0.982***	0.976***	0.987**	1.012***	0.950***	0.963***	0.999
	(0.00403)	(0.00635)	(0.00496)	(0.00474)	(0.0126)	(0.00440)	(0.00477)
Time spent at the institution (mean-centred)	1.082***	1.057***	1.076***	1.039***	1.097***	1.067***	1.030***
	(0.00432)	(0.00526)	(0.00330)	(0.00269)	(0.0159)	(0.00539)	(0.00426)
Innovation Scoreboard	3.261**	1.521	2.824**	0.319	1.785	3.372*	1.484
	(1.604)	(1.292)	(1.297)	(0.296)	(2.751)	(2.275)	(0.888)
WEF Global Gender Gap Index	0.0431***	0.0462**	0.0413***	0.0236**	0.0103	0.0951*	0.369
	(0.0386)	(0.0676)	(0.0338)	(0.0433)	(0.0346)	(0.130)	(0.484)
GDP pc ($1,000)	0.999	1.007**	0.999	0.998	1.014*	0.999	1.005

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.00210)	(0.00326)	(0.00180)	(0.00334)	(0.00746)	(0.00415)	(0.00319)
Constant	12.89***	0.128**	8.969***	9.565*	0.0112**	1.034	0.0879***
	(8.025)	(0.104)	(5.409)	(11.98)	(0.0228)	(0.847)	(0.0771)
v_0	0.010	0.015	0.009	0.042	0.092	0.020	0.000
u_0	0.028	0.065	0.028	0.022	0.128	0.038	0.058
is_0	0.098	0.160	0.118	0.184	0.280	0.103	0.219
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451	5,401	5,368	5,335
Individuals (n)	35,850	35,807	34,343	31,713	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 34 Multi-level intersectional random intercept models for the consequences of gender-based violence and national policies on gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Generic national policy on gender equality in RPOs more widely, that includes the issue of gender-based violence	1.116	0.794	1.058	1.214	1.730***
	(0.102)	(0.184)	(0.0862)	(0.161)	(0.216)
National policy specifically dedicated to gender-based violence in RPOs	1.263	0.908	0.899	1.233	0.787
	(0.212)	(0.225)	(0.110)	(0.258)	(0.288)
Physical violence	1.322**	2.787***	1.340***	2.382***	1.266
	(0.150)	(0.186)	(0.0926)	(0.469)	(0.322)
Psychological violence	7.279***	2.707***	1.632***	2.772***	1.953***
	(0.386)	(0.210)	(0.0390)	(0.193)	(0.130)
Economic violence	3.102***	2.346***	1.608***	3.355***	1.662***
	(0.338)	(0.179)	(0.0323)	(0.331)	(0.241)
Sexual violence	1.087	3.011***	1.761***	1.811	1.567**
	(0.145)	(0.343)	(0.362)	(0.684)	(0.305)
Sexual harassment	2.230***	2.462***	1.525***	1.786***	1.509***
	(0.0554)	(0.175)	(0.0694)	(0.206)	(0.0649)
Online violence	2.320***	2.424***	1.396***	1.671***	1.710***
	(0.181)	(0.164)	(0.0851)	(0.305)	(0.295)
Student (Ref: Staff)	0.823***	1.297***	1.441***		
	(0.0506)	(0.100)	(0.104)		
Women (Ref: Men)	1.388***	2.358***	1.437***	1.121**	1.015
	(0.0577)	(0.220)	(0.0395)	(0.0619)	(0.0399)
Non-binary people (Ref: Men)	1.714***	1.920***	1.158	1.546	0.800
	(0.266)	(0.259)	(0.169)	(0.516)	(0.252)
Sex at birth not aligned to current gender identity	0.941	2.283***	1.717***	0.341***	1.380
	(0.202)	(0.501)	(0.212)	(0.0698)	(0.447)
Disability or chronic illness	1.321***	1.266***	1.697***	1.235**	1.433***
	(0.0466)	(0.0897)	(0.0696)	(0.129)	(0.137)
Ethnic minority background	1.045	1.230***	1.136*	1.160	1.208***
	(0.0753)	(0.0635)	(0.0871)	(0.134)	(0.0720)
Asexual (Ref: Heterosexual)	0.945	1.105	1.319*	0.934	1.061
	(0.115)	(0.121)	(0.215)	(0.189)	(0.200)
Bisexual (Ref: Heterosexual)	1.115	1.278***	1.542***	1.257	1.811***
	(0.0960)	(0.0627)	(0.0981)	(0.216)	(0.133)
Homosexual (Ref: Heterosexual)	1.107	1.539***	1.466***	1.339**	1.439***
	(0.0759)	(0.160)	(0.0990)	(0.163)	(0.149)
Queer (Ref: Heterosexual)	1.108	1.554***	2.743***	1.458	1.931***
	(0.114)	(0.220)	(0.363)	(0.430)	(0.315)
Another sexual orientation (Ref: Heterosexual)	0.930	1.588***	2.325***	1.019	1.789***

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.115)	(0.182)	(0.218)	(0.372)	(0.391)
International	1.088	0.855	1.026	1.074	0.787**
	(0.0785)	(0.120)	(0.0805)	(0.141)	(0.0846)
Age (mean-centred)	0.999	0.986***	0.973***	0.972***	0.962***
	(0.00464)	(0.00300)	(0.00336)	(0.00261)	(0.00377)
Time spent at the institution (mean-centred)	1.014***	1.010***	0.996	1.021***	1.084***
	(0.00251)	(0.00305)	(0.00404)	(0.00410)	(0.0229)
Innovation Scoreboard	2.736	6.884*	0.676	2.654	0.283
	(1.678)	(6.872)	(0.342)	(2.335)	(0.254)
WEF Global Gender Gap Index	0.612	0.0266**	0.669	0.614	3.531
	(0.647)	(0.0470)	(0.781)	(0.905)	(4.565)
GDP pc ($1,000)	1.003	1.010**	1.016***	1.009*	1.016**
	(0.00376)	(0.00454)	(0.00372)	(0.00474)	(0.00646)
Constant	0.179***	0.0876*	0.301*	1.885	1.028
	(0.108)	(0.116)	(0.189)	(1.811)	(0.928)
v_0	0.017	0.071	0.017	0.032	0.045
u_0	0.011	0.161	0.004	0.031	0.040
is_0	0.028	0.087	0.048	0.051	0.062
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

National policies on gender-based violence that address the 7Ps

The mapping at national level gathered information on whether or not national policies, where they existed, addressed one of the 7Ps. The extent to which national policies address respective Ps is examined in relation to how they relate to the prevalence of gender-based violence and its consequences (Fajmonová et al., 2021).

In the mapping, the 7Ps were assessed using the following:

- Prevalence: Does the document set a mechanism for collecting data on the prevalence of gender-based violence?
- Prevention: Does the document set any preventive measures (e.g. that the RPO must run trainings on gender-based violence, etc)?
- Protection: Does the document set any measures which ensure the safety and meet the needs of (potential) victims? (e.g. reporting the occurrence of or potential for abuse or harassment, measures against revictimisation of reporting persons)
- Prosecution: Does the document mention measures related to prosecution or disciplinary action (e.g. investigative measures, disciplinary measures...)?
- Provision of services: Does the document mention the provision of services for victims of gender-based violence (e.g. counselling, mediation, redress procedures)? Does the document mention the provision of services focused on perpetrators of gender-based violence (e.g. counselling, follow-up)?
- Partnerships: Does the document mention partnerships and support their creation (e.g. cooperation of different stakeholders on combating gender-based violence in academia)?
- Policies: This was not assessed directly, and was instead coded based on the information provided. A distinction was made between the (non)existence of a law or a policy at the national/regional level to combat gender-based violence in universities and research organisations, and the fact that some of those laws or policies impose the need to adopt policies to combat gender-based violence. Policy is included if the national/regional law or policy addressed the need to create a comprehensive policy, especially at the institutional level.

The number of national policies which addressed one of the 7Ps were:

- Four national policies addressed prevalence
- Seven national policies addressed prevention
- Five national policies addressed protection
- Four national policies addressed prosecution
- Seven national policies address provision of services
- One national policy addressed partnerships
- Six national policies addressed institutional policies.

There is a high degree of correlation between some of the variables capturing whether national policies specifically focus on one of the 7Ps, with several values above 0.8 and some at or approaching 1, signalling the need to address multicollinearity before undertaking any analysis (Table 35).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 35 Correlation matrix between the different Ps addressed by national policies

	Prevalence	Prevention	Protection	Prosecution	Provision	Partnerships	Policies
Prevalence	1						
Prevention	0.64	1					
Protection	0.99	0.64	1				
Prosecution	0.79	0.52	0.80	1			
Provision	0.64	1	0.64	0.52	1		
Partnerships	0.26	0.17	0.26	0.32	0.17	1	
Policies	0.86	0.75	0.86	0.69	0.75	0.22	1

To remedy issues related to multicollinearity, the seven variables were aggregated into three summary scores, on the basis of a Principal Components Analysis (PCA). The first three components capture 94% of variation, with pre-rotation eigenvalues of 4.79, 1.01 and 0.77 respectively. The orthogonally rotated loadings are provided in Table 36.

Table 36 Rotated loadings for the 7Ps addressed by national policies

	Component 1	Component 2	Component 3
Prevalence	.906		
Prevention		.934	
Protection	.910		
Prosecution	.854		
Provision		.934	
Partnerships			.984
Policies	.744	.552	

Note: varimax rotation. Loadings < |0.3| are blanked.

The three components are used to generate three predictive scores regrouping different Ps in the analysis below. The first component regroups national policies that address prevalence, protection, prosecution and policies at the institutional level; the second component regroups national policies that address prevention and provision; and the third component includes national policies that address partnerships.

Prevalence

Table 37 shows that national policies that address prevalence, protection, prosecution and policies at the institutional level are positively related to the prevalence of gender-based violence (e^{β} = 1.169, p < 0.01), as well as to psychological violence (e^{β} = 1.172, p < 0.01) and sexual harassment (e^{β} = 1.154, p < 0.01). National policies that specifically address partnerships are not related to the overall prevalence of gender-based violence, though they are positively associated to physical violence (e^{β} = 1.278, p < 0.01), economic violence (e^{β} = 1.170, p < 0.05) and sexual harassment (e^{β} = 1.138, p < 0.05). In contrast, national policies that address prevention and provision are negatively related to the overall prevalence of gender-based violence (e^{β} = 0.845, p < 0.01), as well as in the case of psychological violence (e^{β} = 0.846, p < 0.01) and sexual harassment (e^{β} = 0.843, p < 0.01).

Consequences

Table 38 shows that national policies that address prevalence, protection, prosecution and policies are positively related to feeling unsafe (e^{β} = 1.136, p < 0.05). National policies that address prevention and provision on the contrary are negatively related to feeling unsafe (e^{β} = 0.846, p < 0.05). National policies that address partnerships are positively related to social exclusion (e^{β} = 1.163, p < 0.01), but negatively associated with feeling unwell (e^{β} = 0.829, p < 0.01) and consequences for work (e^{β} = 0.824, p < 0.01).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 37 Multi-level intersectional random intercept models for the prevalence of gender-based violence and national policies on gender-based violence that address the 7Ps

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
National policies that address prevalence, protection, prosecution and policies	1.169***	1.033	1.172***	1.056	1.041	1.154***	1.019
	(0.0396)	(0.0355)	(0.0439)	(0.0779)	(0.133)	(0.0634)	(0.0555)
National policies that address prevention and provision	0.845***	0.972	0.846***	0.925	0.889	0.843***	0.956
	(0.0338)	(0.0586)	(0.0395)	(0.0884)	(0.104)	(0.0350)	(0.0507)
National policies that address partnerships	1.007	1.278***	0.979	1.170**	1.475*	1.138**	1.098
	(0.0389)	(0.0718)	(0.0304)	(0.0887)	(0.299)	(0.0735)	(0.0829)
Student (Ref: Staff)	0.693***	1.613***	0.711***	0.450***	2.460***	0.742***	0.993
	(0.0374)	(0.240)	(0.0435)	(0.0665)	(0.550)	(0.0488)	(0.0911)
Women (Ref: Men)	1.752***	0.740***	1.690***	1.243***	2.205***	2.335***	0.972
	(0.0704)	(0.0479)	(0.0729)	(0.0670)	(0.371)	(0.109)	(0.0835)
Non-binary people (Ref: Men)	1.978***	0.825	1.509***	1.491**	1.132	1.938***	1.025
	(0.268)	(0.116)	(0.163)	(0.231)	(0.462)	(0.294)	(0.210)
Sex at birth not aligned to current gender identity	1.119	1.458*	1.335***	0.583**	1.969*	1.237**	1.162
	(0.141)	(0.308)	(0.124)	(0.125)	(0.773)	(0.125)	(0.227)
Disability or chronic illness	1.589***	1.690***	1.545***	1.653***	1.655***	1.477***	1.643***
	(0.0845)	(0.111)	(0.0741)	(0.120)	(0.154)	(0.0741)	(0.111)
Ethnic minority background	1.352***	1.701***	1.414***	2.157***	1.327*	1.254***	1.551***
	(0.0728)	(0.143)	(0.0614)	(0.143)	(0.216)	(0.107)	(0.118)
Asexual (Ref: Heterosexual)	0.887*	0.835	0.869	1.042	0.622**	1.111	1.006
	(0.0585)	(0.179)	(0.0834)	(0.179)	(0.139)	(0.118)	(0.164)
Bisexual (Ref: Heterosexual)	1.504***	1.378***	1.433***	1.409***	2.081***	1.649***	1.532***
	(0.0574)	(0.111)	(0.0547)	(0.100)	(0.189)	(0.0469)	(0.123)
Homosexual (Ref: Heterosexual)	1.369***	1.117	1.253***	1.124	1.369**	1.568***	1.419***
	(0.101)	(0.184)	(0.0761)	(0.118)	(0.210)	(0.0841)	(0.188)
Queer (Ref: Heterosexual)	1.670***	1.042	1.549***	1.522***	1.458**	1.651***	1.722***
	(0.220)	(0.239)	(0.180)	(0.196)	(0.272)	(0.0853)	(0.210)
Another sexual orientation (Ref: Heterosexual)	1.267**	2.016***	1.351**	1.575***	1.733	1.854***	1.637**
	(0.135)	(0.327)	(0.161)	(0.249)	(0.642)	(0.164)	(0.320)
International	0.942	0.860	0.987	1.304**	1.319**	0.923	0.918
	(0.0622)	(0.113)	(0.0782)	(0.140)	(0.173)	(0.0579)	(0.0976)
Age (mean-centred)	0.982***	0.977***	0.988**	1.012***	0.949***	0.963***	1.000
	(0.00403)	(0.00628)	(0.00496)	(0.00475)	(0.0128)	(0.00440)	(0.00476)
Time spent at the institution (mean-centred)	1.082***	1.057***	1.076***	1.039***	1.099***	1.067***	1.030***
	(0.00432)	(0.00517)	(0.00331)	(0.00270)	(0.0155)	(0.00537)	(0.00426)
Innovation Scoreboard	3.306**	6.399**	2.347*	0.730	30.72**	6.112***	3.494**
	(1.599)	(5.647)	(1.025)	(0.785)	(50.94)	(3.458)	(2.000)
WEF Global Gender Gap Index	0.0176***	0.319	0.0124***	0.0806	0.180	0.145	0.606

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.0167)	(0.489)	(0.0101)	(0.160)	(0.692)	(0.208)	(0.991)
GDP pc ($1,000)	1.000	0.986**	1.002	0.986*	0.978	0.990*	0.995
	(0.00389)	(0.00642)	(0.00314)	(0.00783)	(0.0212)	(0.00561)	(0.00734)
Constant	23.93***	0.0288***	21.47***	3.555	0.000829***	0.723	0.0516**
	(14.12)	(0.0281)	(11.57)	(5.400)	(0.00225)	(0.710)	(0.0653)
v_0	0.005	0.007	0.006	0.039	0.129	0.002	0.000
u_0	0.026	0.056	0.026	0.021	0.126	0.046	0.056
is_0	0.098	0.153	0.118	0.185	0.139	0.103	0.216
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451	5,401	5,368	5,335
Individuals (n)	35,850	35,807	34,343	31,713	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 38 Multi-level intersectional random intercept models for the consequences of gender-based violence and national policies on gender-based violence that address the 7Ps

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
National policies that address prevalence, protection, prosecution and policies	1.012	1.136**	1.022	1.063	0.815*
	(0.0442)	(0.0739)	(0.0399)	(0.0559)	(0.0936)
National policies that address prevention and provision	1.036	0.846**	0.989	1.024	1.294***
	(0.0386)	(0.0719)	(0.0376)	(0.0573)	(0.0927)
National policies that address partnerships	1.163***	0.871*	0.829***	0.824***	1.037
	(0.0484)	(0.0719)	(0.0410)	(0.0448)	(0.119)
Physical violence	1.320**	2.785***	1.342***	2.385***	1.264
	(0.149)	(0.185)	(0.0924)	(0.467)	(0.322)
Psychological violence	7.266***	2.704***	1.631***	2.767***	1.953***
	(0.387)	(0.210)	(0.0388)	(0.193)	(0.130)
Economic violence	3.097***	2.344***	1.608***	3.361***	1.662***
	(0.338)	(0.178)	(0.0322)	(0.331)	(0.241)
Sexual violence	1.084	3.010***	1.767***	1.812	1.567**
	(0.144)	(0.343)	(0.363)	(0.683)	(0.306)
Sexual harassment	2.226***	2.459***	1.523***	1.785***	1.509***
	(0.0548)	(0.175)	(0.0699)	(0.206)	(0.0650)
Online violence	2.318***	2.422***	1.398***	1.669***	1.714***
	(0.180)	(0.164)	(0.0859)	(0.305)	(0.297)
Student (Ref: Staff)	0.824***	1.298***	1.449***		
	(0.0504)	(0.100)	(0.108)		
Women (Ref: Men)	1.387***	2.356***	1.440***	1.122**	1.015
	(0.0575)	(0.220)	(0.0399)	(0.0623)	(0.0400)
Non-binary people (Ref: Men)	1.712***	1.919***	1.158	1.547	0.802
	(0.266)	(0.259)	(0.169)	(0.518)	(0.254)
Sex at birth not aligned to current gender identity	0.938	2.282***	1.724***	0.342***	1.381
	(0.201)	(0.501)	(0.211)	(0.0703)	(0.446)
Disability or chronic illness	1.319***	1.266***	1.697***	1.236**	1.436***
	(0.0470)	(0.0897)	(0.0686)	(0.130)	(0.137)
Ethnic minority background	1.046	1.228***	1.136*	1.157	1.210***
	(0.0763)	(0.0631)	(0.0873)	(0.132)	(0.0724)
Asexual (Ref: Heterosexual)	0.944	1.105	1.320*	0.930	1.064
	(0.114)	(0.120)	(0.215)	(0.190)	(0.201)
Bisexual (Ref: Heterosexual)	1.117	1.277***	1.541***	1.255	1.811***
	(0.0956)	(0.0625)	(0.0975)	(0.215)	(0.132)
Homosexual (Ref: Heterosexual)	1.107	1.539***	1.465***	1.342**	1.438***
	(0.0758)	(0.159)	(0.0976)	(0.163)	(0.149)
Queer (Ref: Heterosexual)	1.107	1.554***	2.744***	1.455	1.934***

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.114)	(0.220)	(0.363)	(0.429)	(0.316)
Another sexual orientation (Ref: Heterosexual)	0.930	1.587***	2.329***	1.012	1.793***
	(0.115)	(0.181)	(0.218)	(0.372)	(0.393)
International	1.087	0.855	1.024	1.075	0.785**
	(0.0789)	(0.120)	(0.0794)	(0.141)	(0.0845)
Age (mean-centred)	0.999	0.986***	0.973***	0.972***	0.962***
	(0.00461)	(0.00300)	(0.00337)	(0.00264)	(0.00378)
Time spent at the institution (mean-centred)	1.013***	1.010***	0.996	1.021***	1.084***
	(0.00251)	(0.00305)	(0.00406)	(0.00404)	(0.0230)
Innovation Scoreboard	6.959***	3.663	0.239***	0.833	0.535
	(3.311)	(3.368)	(0.100)	(0.616)	(0.448)
WEF Global Gender Gap Index	2.362	0.00310***	0.107**	0.0728*	14.26
	(1.994)	(0.00632)	(0.120)	(0.100)	(32.48)
GDP pc ($1,000)	0.990***	1.022***	1.031***	1.026***	1.009
	(0.00295)	(0.00811)	(0.00499)	(0.00525)	(0.00826)
Constant	0.0676***	0.389	1.233	11.17**	0.363
	(0.0363)	(0.580)	(0.982)	(11.56)	(0.603)
v_0	0.008	0.059	0.010	0.024	0.048
u_0	0.013	0.161	0.004	0.027	0.042
is_0	0.028	0.086	0.047	0.050	0.061
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Organisational policies on gender-based violence

RPOs adopt various kinds of policies, which implicitly or explicitly relate to gender-based violence. Those can be general strategic documents, codes of ethics, gender equality plans or policies specifically dedicated to gender-based violence such as actions plans or guidance. Policies dedicated specifically to gender-based violence are more comprehensive in terms of the number of Ps covered and in terms of the forms of gender-based violence and their definitions (Huck et al., 2022). Having a policy specifically dedicated to gender-based violence in higher education may allow the policy to be more comprehensive and hence have greater impact.

This variable is obtained by looking into the framing of institutional policies, whether they are specifically dedicated to combatting gender-based violence, or whether they are framed as part of broader policy goals such as the fight against violence in general, gender equality, EDI, or the improvement of the institution overall. Dedicated gender-based violence policies may: be more comprehensive and tailored to the specificities of the institution and its actors; address prevalence (did they carry out prevalence studies, do they collect data on cases and report) more than broader policies; address the needs of victims/survivors and bystanders in a more holistic way.

Of the 43 RPOs included in the analysis, two do not have an organisational policy on gender-based violence, 19 have an organisational policy that is framed in a broader way, and 22 have an organisational policy that is dedicated to gender-based violence.

Prevalence

Table 39 shows that generic organisational policies or dedicated policies on gender-based violence, compared to not having one, are not related to the prevalence of gender-based violence. Nonetheless, there is a negative relationship with certain forms of gender-based violence. Organisational policies that are a more general document but mention gender-based violence are negatively related to the prevalence of psychological violence (e^{β} = 0.850, p < 0.01), sexual harassment (e^{β} = 0.847, p < 0.05) and online violence (e^{β} = 0.694, p < 0.01). In addition, an organisation policy dedicated to gender-based violence is only negatively related to online violence (e^{β} = 0.664, p < 0.01).

Consequences

Institutions where there is a wider policy that mentions gender-based violence are associated with lower social exclusion (e^{β} = 0.808, p < 0.01) (Table 40). Dedicated organisational policies on gender-based violence are positively related to consequences for work (e^{β} = 1.447, p < 0.01) and for studies (e^{β} = 1.368, p < 0.05).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 39 Multi-level intersectional random intercept models for the prevalence of gender-based violence and organisational policies on gender-based violence

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
Generic organisational policy that includes the issue of gender-based violence	0.938	0.785	0.850***	0.699	0.705	0.847**	0.694***
	(0.0374)	(0.234)	(0.0427)	(0.203)	(0.400)	(0.0610)	(0.0615)
Organisational policy specifically dedicated to gender-based violence	0.995	0.870	0.882	0.875	0.893	0.862*	0.664***
	(0.105)	(0.300)	(0.0979)	(0.247)	(0.517)	(0.0743)	(0.0511)
Student (Ref: Staff)	0.691***	1.610***	0.709***	0.454***	2.413***	0.741***	0.984
	(0.0365)	(0.238)	(0.0425)	(0.0674)	(0.524)	(0.0484)	(0.0892)
Women (Ref: Men)	1.753***	0.739***	1.690***	1.239***	2.162***	2.344***	0.971
	(0.0705)	(0.0485)	(0.0731)	(0.0671)	(0.353)	(0.111)	(0.0828)
Non-binary people (Ref: Men)	1.975***	0.822	1.505***	1.487**	1.118	1.937***	1.019
	(0.268)	(0.117)	(0.162)	(0.231)	(0.450)	(0.293)	(0.208)
Sex at birth not aligned to current gender identity	1.121	1.461*	1.336***	0.584**	1.975*	1.242**	1.167
	(0.141)	(0.312)	(0.123)	(0.125)	(0.767)	(0.126)	(0.229)
Disability or chronic illness	1.591***	1.699***	1.548***	1.653***	1.675***	1.479***	1.644***
	(0.0844)	(0.112)	(0.0738)	(0.120)	(0.149)	(0.0750)	(0.111)
Ethnic minority background	1.357***	1.704***	1.420***	2.180***	1.353*	1.264***	1.563***
	(0.0735)	(0.145)	(0.0625)	(0.146)	(0.215)	(0.108)	(0.117)
Asexual (Ref: Heterosexual)	0.888*	0.838	0.871	1.048	0.643**	1.112	1.006
	(0.0586)	(0.181)	(0.0841)	(0.180)	(0.137)	(0.118)	(0.165)
Bisexual (Ref: Heterosexual)	1.506***	1.375***	1.434***	1.410***	2.086***	1.655***	1.530***
	(0.0581)	(0.113)	(0.0552)	(0.100)	(0.183)	(0.0465)	(0.121)
Homosexual (Ref: Heterosexual)	1.369***	1.120	1.252***	1.125	1.405**	1.568***	1.420***
	(0.101)	(0.186)	(0.0764)	(0.116)	(0.206)	(0.0841)	(0.189)
Queer (Ref: Heterosexual)	1.670***	1.044	1.550***	1.523***	1.491**	1.652***	1.722***
	(0.220)	(0.242)	(0.180)	(0.197)	(0.267)	(0.0862)	(0.210)
Another sexual orientation (Ref: Heterosexual)	1.265**	2.016***	1.350**	1.582***	1.771	1.857***	1.635**
	(0.135)	(0.325)	(0.160)	(0.249)	(0.641)	(0.164)	(0.318)
International	0.941	0.859	0.987	1.303**	1.342**	0.922	0.920
	(0.0623)	(0.114)	(0.0784)	(0.140)	(0.167)	(0.0576)	(0.0971)
Age (mean-centred)	0.982***	0.976***	0.987**	1.012***	0.949***	0.963***	0.999
	(0.00402)	(0.00646)	(0.00497)	(0.00474)	(0.0122)	(0.00437)	(0.00484)
Time spent at the institution (mean-centred)	1.083***	1.058***	1.076***	1.039***	1.098***	1.067***	1.030***
	(0.00431)	(0.00535)	(0.00330)	(0.00267)	(0.0149)	(0.00536)	(0.00436)
Innovation Scoreboard	2.176	1.140	1.720	0.359	3.034	1.644	1.300
	(1.375)	(1.496)	(1.172)	(0.426)	(4.085)	(1.284)	(0.733)
WEF Global Gender Gap Index	0.0678**	0.0506	0.0682**	0.0432	0.00925	0.254	0.432
	(0.0760)	(0.0949)	(0.0739)	(0.0954)	(0.0364)	(0.477)	(0.493)
GDP pc ($1,000)	1.002	1.010**	1.002	0.998	1.013***	1.004	1.005***

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.00222)	(0.00467)	(0.00206)	(0.00414)	(0.00515)	(0.00420)	(0.00169)
Constant	10.18***	0.156	7.905***	6.749	0.0108*	0.648	0.118***
	(8.050)	(0.193)	(5.932)	(10.00)	(0.0284)	(0.739)	(0.0827)
v_0	0.030	0.022	0.030	0.087	0.152	0.059	0.000
u_0	0.027	0.059	0.027	0.003	0.135	0.038	0.060
is_0	0.099	0.166	0.119	0.181	0.154	0.104	0.216
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451	5,401	5,368	5,335
Individuals (n)	35,850	35,807	34,343	31,713	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 40 Multi-level intersectional random intercept models for the consequences of gender-based violence and organisational policies on gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Generic organisational policy that includes the issue of gender-based violence	0.808***	0.472	0.946	1.334*	1.042
	(0.0406)	(0.266)	(0.0513)	(0.201)	(0.0844)
Organisational policy specifically dedicated to gender-based violence	0.938	0.571	0.939	1.447***	1.368**
	(0.0803)	(0.359)	(0.0904)	(0.206)	(0.203)
Physical violence	1.321**	2.785***	1.340***	2.388***	1.262
	(0.148)	(0.184)	(0.0927)	(0.470)	(0.318)
Psychological violence	7.268***	2.707***	1.631***	2.770***	1.950***
	(0.382)	(0.211)	(0.0390)	(0.192)	(0.130)
Economic violence	3.094***	2.342***	1.607***	3.357***	1.655***
	(0.338)	(0.178)	(0.0310)	(0.333)	(0.241)
Sexual violence	1.086	3.000***	1.761***	1.820	1.561**
	(0.144)	(0.341)	(0.362)	(0.684)	(0.306)
Sexual harassment	2.229***	2.461***	1.524***	1.785***	1.508***
	(0.0556)	(0.175)	(0.0696)	(0.206)	(0.0640)
Online violence	2.320***	2.422***	1.396***	1.672***	1.715***
	(0.183)	(0.165)	(0.0854)	(0.307)	(0.295)
Student (Ref: Staff)	0.824***	1.298***	1.444***		
	(0.0467)	(0.101)	(0.105)		
Women (Ref: Men)	1.385***	2.355***	1.436***	1.122**	1.011
	(0.0560)	(0.219)	(0.0405)	(0.0616)	(0.0396)
Non-binary people (Ref: Men)	1.723***	1.912***	1.158	1.540	0.803
	(0.268)	(0.258)	(0.169)	(0.512)	(0.252)
Sex at birth not aligned to current gender identity	0.939	2.289***	1.717***	0.342***	1.375
	(0.202)	(0.503)	(0.211)	(0.0708)	(0.440)
Disability or chronic illness	1.322***	1.265***	1.697***	1.240**	1.435***
	(0.0470)	(0.0898)	(0.0691)	(0.129)	(0.138)
Ethnic minority background	1.041	1.231***	1.136	1.151	1.207***
	(0.0740)	(0.0624)	(0.0882)	(0.136)	(0.0734)
Asexual (Ref: Heterosexual)	0.947	1.106	1.320*	0.933	1.062
	(0.116)	(0.121)	(0.215)	(0.188)	(0.200)
Bisexual (Ref: Heterosexual)	1.114	1.275***	1.541***	1.256	1.810***
	(0.0954)	(0.0626)	(0.0976)	(0.215)	(0.134)
Homosexual (Ref: Heterosexual)	1.109	1.538***	1.463***	1.339**	1.442***
	(0.0759)	(0.159)	(0.0980)	(0.163)	(0.149)
Queer (Ref: Heterosexual)	1.106	1.553***	2.746***	1.462	1.932***
	(0.115)	(0.220)	(0.363)	(0.431)	(0.317)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Another sexual orientation (Ref: Heterosexual)	0.931	1.587***	2.330***	1.015	1.800***
	(0.116)	(0.182)	(0.218)	(0.372)	(0.397)
International	1.089	0.856	1.026	1.071	0.781**
	(0.0785)	(0.120)	(0.0793)	(0.141)	(0.0837)
Age (mean-centred)	0.998	0.986***	0.973***	0.972***	0.962***
	(0.00475)	(0.00303)	(0.00338)	(0.00248)	(0.00367)
Time spent at the institution (mean-centred)	1.014***	1.010***	0.996	1.021***	1.084***
	(0.00259)	(0.00301)	(0.00402)	(0.00401)	(0.0230)
Innovation Scoreboard	3.279**	9.337	0.836	3.345*	2.174
	(1.772)	(15.87)	(0.495)	(2.262)	(2.121)
WEF Global Gender Gap Index	0.226	0.0294*	0.534	0.243	0.117
	(0.255)	(0.0538)	(0.705)	(0.314)	(0.237)
GDP pc ($1,000)	1.005	1.009*	1.014***	1.010***	1.009**
	(0.00306)	(0.00508)	(0.00401)	(0.00379)	(0.00408)
Constant	0.412	0.125*	0.356	2.633	6.156
	(0.290)	(0.156)	(0.257)	(2.290)	(8.213)
v_0	0.017	0.087	0.019	0.052	0.147
u_0	0.007	0.125	0.004	0.025	0.020
is_0	0.029	0.086	0.048	0.051	0.057
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Organisational policies on gender-based violence that address the 7Ps

The extent to which organisational policies address the 7Ps relate to prevalence and consequences of gender-based violence is examined next. This was assessed in the mapping (Huck et al., 2022) through the following questions:

- Prevalence: Does the document set a mechanism for collecting data on the prevalence of gender-based violence in the RPO? By prevalence we mean both prevalence studies estimating the frequency of a behaviour in a given population as well as the collection of administrative data.
- Prevention: Does the document set any preventive measures (e.g. that the RPO must run trainings)?
- Protection: Does the document set any measures which ensure the safety and meet the needs of (potential) victims? (e.g. reporting the occurrence of or potential for abuse or harassment, measures against revictimisation of reporting persons)
- Prosecution: Does the document mention measures related to prosecution or disciplinary action (e.g. investigative measures, disciplinary measures)?
- Provision of services: Does the document mention the provision of services for victims, bystanders and/or perpetrators of gender-based violence (e.g. counselling, mediation, redress procedures)?
- Partnerships: Does the document mention partnerships and support for their creation (e.g. cooperation of different stakeholders on combating gender-based violence in academia)?
- Policies: This was not assessed directly, and was instead coded based on the information provided. Any RPO that has at least one document specifically addressing gender-based violence or any of its forms was considered relevant under this category. In addition, any RPO that had an institutional procedure for reporting and investigation in place was also considered to have covered this category.

The number of organisational policies which addressed one of the 7Ps were:

- 28 organisational policies addressed prevalence
- 36 organisational policies addressed prevention
- 38 organisational policies addressed protection
- 39 organisational policies addressed prosecution
- 36 organisational policies address provision of services
- 20 organisational policies addressed partnerships
- 38 organisational policies addressed the topic of gender-based violence and/or had an institutional procedure for reporting and investigation in place (policies)

The correlation matrix between variables that capture whether organisational policies address of the 7Ps (Table 41) does not include coefficient above 0.8, suggesting that there are no issues with multi-collinearity (unlike in the case how whether national policies address the 7Ps).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 41 Correlation matrix between the different Ps addressed by organisational policies

	Prevalence	Prevention	Protection	Prosecution	Provision	Partnerships	Policies
Prevalence	1						
Prevention	0.68	1					
Protection	0.49	0.44	1				
Prosecution	0.17	0.31	0.52	1			
Provision	0.06	0.18	0.42	0.75	1		
Partnerships	0.26	0.32	0.12	0.32	0.42	1	
Policies	-0.09	-0.02	0.07	0.70	0.51	0.16	1

Prevalence

Table 42 shows that organisational policies that specifically address prosecution is positively related to overall prevalence (e^{β} = 1.517, p < 0.05). On the contrary organisational policies that specifically address the topic of gender-based violence and/or has an institutional procedure for reporting and investigation in place are negatively related to overall prevalence (e^{β} = 0.654, p < 0.01). Organisational policies that address protection are negatively related to most forms of gender-based violence including physical violence (e^{β} = 0.585, p < 0.01), economic violence (e^{β} = 0.691, p < 0.01), sexual harassment (e^{β} = 0.612, p < 0.01) and online violence (e^{β} = 0.610, p < 0.01). Organisational policies that address prosecution and prevalence, however, tend to be positively associated with some forms of gender-based violence. For organisational policies that address prevalence, this is the case for physical violence (e^{β} = 1.342, p < 0.01) and economic violence (e^{β} = 1.399, p < 0.01). For organisational policies that address prosecution this is the case for psychological violence (e^{β} = 1.525, p < 0.05), sexual harassment (e^{β} = 1.887, p < 0.01) and online violence (e^{β} = 1.825, p < 0.05).

Consequences

Social exclusion is not related to the focus of organisational policies on any of the 7Ps (Table 43). Where organisational policies address prevention or policies, this is negatively associated to feeling unsafe (e^{β} are 0.578, p < 0.05 and 0.673, p < 0.05 respectively). Organisational policies that address provision of services are associated with lower levels of feeling unwell (e^{β} = 0.865, p < 0.01). Organisational policies that address prosecution are negatively related to consequences for work (e^{β} = 0.545, p < 0.05). Organisational policies that focus on any of the 7Ps is unrelated to consequences for studies.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 42 Multi-level intersectional random intercept models for the prevalence of gender-based violence and organisational policies on gender-based violence that address the 7Ps

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
Organisational policies that specifically address Prevalence	1.042	1.342***	1.079	1.399***	1.056	1.162	0.942
	(0.101)	(0.144)	(0.0953)	(0.137)	(0.161)	(0.174)	(0.112)
Organisational policies that specifically address Prevention	1.019	0.902	0.962	0.816***	0.786	0.977	1.148
	(0.118)	(0.123)	(0.0981)	(0.0487)	(0.211)	(0.160)	(0.118)
Organisational policies that specifically address Protection	0.838	0.585***	0.874	0.691**	0.896	0.612***	0.610***
	(0.148)	(0.0920)	(0.154)	(0.122)	(0.317)	(0.116)	(0.101)
Organisational policies that specifically address Prosecution	1.517**	1.170	1.525**	1.253	0.844	1.887***	1.825**
	(0.267)	(0.198)	(0.310)	(0.245)	(0.507)	(0.418)	(0.508)
Organisational policies that specifically address Provision of services	1.168	1.426***	1.173	1.223*	1.187	1.022	0.915
	(0.179)	(0.190)	(0.202)	(0.148)	(0.500)	(0.208)	(0.198)
Organisational policies that specifically address Partnerships	1.097	0.865	1.064	0.894	1.078	1.144	0.833
	(0.144)	(0.150)	(0.149)	(0.124)	(0.290)	(0.179)	(0.127)
Organisational policies that specifically address Policies	0.654***	0.757	0.652***	0.844	0.668	0.633***	0.773***
	(0.0797)	(0.137)	(0.0929)	(0.111)	(0.228)	(0.0829)	(0.0712)
Student (Ref: Staff)	0.692***	1.604***	0.709***	0.448***	2.373***	0.740***	0.982
	(0.0351)	(0.236)	(0.0407)	(0.0632)	(0.497)	(0.0474)	(0.0855)
Women (Ref: Men)	1.749***	0.738***	1.687***	1.239***	2.119***	2.333***	0.971
	(0.0696)	(0.0483)	(0.0724)	(0.0669)	(0.332)	(0.110)	(0.0832)
Non-binary people (Ref: Men)	1.971***	0.822	1.503***	1.488**	1.111	1.929***	1.018
	(0.268)	(0.116)	(0.162)	(0.236)	(0.440)	(0.292)	(0.209)
Sex at birth not aligned to current gender identity	1.122	1.466*	1.339***	0.584**	1.979*	1.244**	1.170
	(0.142)	(0.310)	(0.123)	(0.126)	(0.762)	(0.126)	(0.229)
Disability or chronic illness	1.591***	1.701***	1.548***	1.656***	1.690***	1.480***	1.649***
	(0.0841)	(0.112)	(0.0731)	(0.122)	(0.146)	(0.0754)	(0.112)
Ethnic minority background	1.358***	1.712***	1.421***	2.176***	1.379**	1.262***	1.569***
	(0.0736)	(0.141)	(0.0620)	(0.146)	(0.214)	(0.108)	(0.118)
Asexual (Ref: Heterosexual)	0.888*	0.837	0.870	1.049	0.666**	1.113	1.006
	(0.0585)	(0.180)	(0.0841)	(0.181)	(0.134)	(0.119)	(0.166)
Bisexual (Ref: Heterosexual)	1.507***	1.377***	1.435***	1.410***	2.111***	1.652***	1.540***
	(0.0584)	(0.111)	(0.0562)	(0.101)	(0.189)	(0.0473)	(0.123)
Homosexual (Ref: Heterosexual)	1.370***	1.121	1.254***	1.126	1.439**	1.569***	1.426***
	(0.0997)	(0.185)	(0.0755)	(0.118)	(0.203)	(0.0842)	(0.191)
Queer (Ref: Heterosexual)	1.669***	1.043	1.548***	1.521***	1.534**	1.650***	1.723***
	(0.221)	(0.239)	(0.181)	(0.199)	(0.263)	(0.0858)	(0.212)
Another sexual orientation (Ref: Heterosexual)	1.269**	2.010***	1.353**	1.581***	1.813*	1.858***	1.635**
	(0.135)	(0.318)	(0.160)	(0.245)	(0.648)	(0.164)	(0.317)
International	0.944	0.860	0.989	1.307**	1.379***	0.926	0.918

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.0622)	(0.114)	(0.0784)	(0.140)	(0.168)	(0.0569)	(0.0983)
Age (mean-centred)	0.982***	0.976***	0.987**	1.012***	0.950***	0.963***	0.999
	(0.00401)	(0.00639)	(0.00495)	(0.00467)	(0.0121)	(0.00435)	(0.00476)
Time spent at the institution (mean-centred)	1.083***	1.058***	1.076***	1.039***	1.097***	1.067***	1.030***
	(0.00432)	(0.00510)	(0.00330)	(0.00267)	(0.0150)	(0.00536)	(0.00435)
Innovation Scoreboard	1.488	0.901	1.275	0.213	0.794	1.470	2.265
	(0.833)	(0.733)	(0.662)	(0.217)	(1.091)	(1.051)	(1.404)
WEF Global Gender Gap Index	0.123**	0.0454**	0.106**	0.0483	0.0265	0.403	0.303
	(0.118)	(0.0619)	(0.100)	(0.103)	(0.0933)	(0.561)	(0.464)
GDP pc ($1,000)	1.002	1.012***	1.002	1.001	1.017***	1.003	1.006**
	(0.00206)	(0.00446)	(0.00187)	(0.00367)	(0.00591)	(0.00323)	(0.00294)
Constant	7.159***	0.185	5.388***	6.589	0.0127*	0.482	0.0926***
	(4.261)	(0.208)	(3.096)	(9.163)	(0.0305)	(0.370)	(0.0846)
v_0	0.000	0.004	0.000	0.061	0.141	0.000	0.000
u_0	0.037	0.055	0.038	0.006	0.120	0.066	0.044
is_0	0.099	0.165	0.119	0.180	0.189	0.103	0.218
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451	5,401	5,368	5,335
Individuals (n)	35,850	35,807	34,343	31,713	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 43 Multi-level intersectional random intercept models for the consequences of gender-based violence and organisational policies on gender-based violence that address the 7Ps

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Organisational policies that specifically address Prevalence	1.064	1.336*	1.010	1.064	1.285
	(0.0601)	(0.205)	(0.0708)	(0.161)	(0.304)
Organisational policies that specifically address Prevention	0.859	0.578**	0.868	1.022	0.735
	(0.0811)	(0.128)	(0.0918)	(0.165)	(0.142)
Organisational policies that specifically address Protection	0.944	0.656	1.009	1.105	0.831
	(0.126)	(0.240)	(0.142)	(0.282)	(0.229)
Organisational policies that specifically address Prosecution	1.227	2.243*	1.199	0.545**	0.872
	(0.224)	(0.929)	(0.198)	(0.151)	(0.245)
Organisational policies that specifically address Provision of services	0.956	0.792	0.865***	1.126	1.149
	(0.136)	(0.160)	(0.0391)	(0.191)	(0.213)
Organisational policies that specifically address Partnerships	1.065	1.091	1.083*	1.128	0.760*
	(0.107)	(0.187)	(0.0497)	(0.0914)	(0.121)
Organisational policies that specifically address Policies	1.055	0.673**	1.006	1.253*	0.990
	(0.107)	(0.110)	(0.129)	(0.163)	(0.143)
Physical violence	1.320**	2.799***	1.342***	2.378***	1.266
	(0.150)	(0.185)	(0.0929)	(0.468)	(0.319)
Psychological violence	7.278***	2.714***	1.629***	2.772***	1.950***
	(0.382)	(0.208)	(0.0386)	(0.192)	(0.130)
Economic violence	3.101***	2.348***	1.608***	3.356***	1.662***
	(0.337)	(0.178)	(0.0314)	(0.334)	(0.243)
Sexual violence	1.088	3.007***	1.758***	1.827	1.558**
	(0.145)	(0.340)	(0.361)	(0.676)	(0.303)
Sexual harassment	2.231***	2.468***	1.524***	1.784***	1.503***
	(0.0552)	(0.177)	(0.0697)	(0.205)	(0.0643)
Online violence	2.318***	2.431***	1.397***	1.682***	1.716***
	(0.180)	(0.164)	(0.0852)	(0.307)	(0.296)
Student (Ref: Staff)	0.819***	1.298***	1.449***		
	(0.0525)	(0.102)	(0.105)		
Women (Ref: Men)	1.383***	2.358***	1.436***	1.121**	1.017
	(0.0569)	(0.218)	(0.0400)	(0.0614)	(0.0408)
Non-binary people (Ref: Men)	1.716***	1.917***	1.159	1.566	0.813
	(0.267)	(0.258)	(0.170)	(0.519)	(0.253)
Sex at birth not aligned to current gender identity	0.937	2.289***	1.708***	0.337***	1.375
	(0.202)	(0.502)	(0.208)	(0.0681)	(0.435)
Disability or chronic illness	1.323***	1.265***	1.697***	1.233**	1.442***
	(0.0468)	(0.0904)	(0.0684)	(0.130)	(0.140)
Ethnic minority background	1.039	1.233***	1.135	1.153	1.211***

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.0755)	(0.0644)	(0.0874)	(0.136)	(0.0728)
Asexual (Ref: Heterosexual)	0.945	1.105	1.322*	0.933	1.068
	(0.116)	(0.120)	(0.214)	(0.185)	(0.202)
Bisexual (Ref: Heterosexual)	1.115	1.277***	1.544***	1.252	1.812***
	(0.0957)	(0.0623)	(0.0987)	(0.213)	(0.134)
Homosexual (Ref: Heterosexual)	1.105	1.540***	1.465***	1.340**	1.440***
	(0.0761)	(0.160)	(0.100)	(0.163)	(0.150)
Queer (Ref: Heterosexual)	1.106	1.554***	2.754***	1.470	1.942***
	(0.115)	(0.219)	(0.367)	(0.433)	(0.320)
Another sexual orientation (Ref: Heterosexual)	0.929	1.594***	2.346***	1.028	1.791***
	(0.116)	(0.183)	(0.220)	(0.376)	(0.397)
International	1.090	0.858	1.029	1.080	0.783**
	(0.0795)	(0.120)	(0.0789)	(0.142)	(0.0853)
Age (mean-centred)	0.999	0.986***	0.973***	0.973***	0.963***
	(0.00470)	(0.00301)	(0.00337)	(0.00249)	(0.00364)
Time spent at the institution (mean-centred)	1.014***	1.010***	0.996	1.021***	1.083***
	(0.00258)	(0.00303)	(0.00407)	(0.00402)	(0.0230)
Innovation Scoreboard	2.208	3.944	0.843	1.942	0.899
	(1.538)	(5.035)	(0.478)	(1.467)	(0.648)
WEF Global Gender Gap Index	0.539	0.0858	0.787	0.366	0.324
	(0.681)	(0.195)	(1.125)	(0.431)	(0.456)
GDP pc ($1,000)	1.005	1.011**	1.013***	1.011**	1.014***
	(0.00361)	(0.00512)	(0.00404)	(0.00446)	(0.00386)
Constant	0.205*	0.0625*	0.259*	3.608*	6.501*
	(0.167)	(0.0978)	(0.209)	(2.399)	(6.764)
v_0	0.032	0.165	0.025	0.048	0.060
u_0	0.005	0.091	0.000	0.017	0.031
is_0	0.028	0.087	0.048	0.050	0.064
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Intersectional lens in organisational policies on gender-based violence

The UniSAFE project is informed by a feminist understanding of both gender and violence, and takes the importance of the intersections of multiple inequalities into account (Strid et al., 2021). The mapping considered whether organisational policies on gender-based violence incorporated an intersectional approach (gender at the intersection with other axes of inequalities) and if so, to specify which inequalities it addressed (Huck et al., 2022). Organisational policies did not necessarily discuss internationality or intersectional inequalities directly, but could also focus on protected grounds of discrimination.

Among the 43 RPOs included in the analysis, three had no organisational policy on gender-based violence, 29 had an organisational policy but which did not consider intersectional issues, and 12 had an organisational policy that considered intersectionality.

Insights from the case studies:

Regarding the policy design, seven of the 16 institutions involved in the case studies do not implicitly or explicitly refer to intersectionality in the documents regulating institutional response. In two RPOs, at least one of the documents mentions discrimination on the ground of sexual orientation in relation to gender. At least one of the documents of four other RPOs acknowledges the existence of a larger set of systems of power or multiple grounds of inequalities, but does not mention their combination or relation to gender-based violence. Finally, at least one document in two RPOs recognise that discrimination can be based on multiple grounds; however, the document for one of these RPOs fails to even mention the combination of other systems of power in gender-based violence.

At the implementation level, six RPOs completely lack an intersectional approach to gender-based violence. When implementing actors referred to intersectionality in the case studies, they usually did so upon request and alleged it is not very relevant (“there are few reported cases”) or that they lacked the expertise and capacity to take action. In other cases, implementing actors declared that the measure adopts an intersectional approach, but no evidence to support their claim was found. There seems to be some acknowledgment that an intersectional approach in policies addressing gender-based violence is necessary, however, the perception of irrelevance and incompetence places it as “difficult” and secondary.

A little more than half of the institutions in the case studies (nine out of 16) mention sexual orientation, gender identity and/or gender expression in their official institutional responses, be it as a separate ground of discrimination, as intersecting gender-based discrimination or aggravating gender-based violence. The intersection of gender and sexual orientation/gender identity is the most frequently acknowledged, often under the “LGBTQ+” or “sexual diversity” labels. For instance, in one of the institutions, the policy documents explicitly state that discriminatory behaviour against transsexual or transgender people is within the range of punishable behaviour. Implementing actors in a few institutions do refer to gender identity discrimination as aggravating factors to gender-based violence. At the practical level, however, the institutional responses have been insufficient. Mostly, participant institutions fail to raise awareness, encourage reporting, and collect data on gender-based violence affecting LGBT+ people, as well as to address gender-based violence and discrimination/violence based on gender

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 101006261

identity/sexual orientation as working in a simultaneous and combined way; very few of them establish partnerships with LGBTQ+ organisations; services do not incorporate awareness and sensibility to intersectional, homophobic and transphobic violence or do not know how to do it. This gap has not gone unnoticed: for instance, in one of the case studies, student representatives highlighted the absence of an intersectional approach that includes LGBTQ+ people.

Even though evidence suggest that people at the intersection of gender and disability might be more exposed to gender-based violence, in the case studies, only five out of 16 institutions mentioned disability (also state of health, illness, or diverse ability) in policy documents on addressing and preventing gender inequalities or gender-based violence. Implementing actors did not mention it at all. When referred to, disability appears among other grounds of discrimination (such as gender identity and ethnic origin), but overall it is not addressed specifically. Data collection on this form of intersectional violence is absent; awareness-raising actions do not mention it; no institution seems to have established partnerships with organisations dealing with discrimination based on disability or health status; and existing services fail to address it.

The intersection of gender and minority ethnic background is associated with a higher risk of experiencing gender-based violence, however, it was scarcely referred to in case studies. Only a quarter of the institutions studied (four in 16) mention this form of discrimination in policy documents on addressing and preventing gender inequalities or gender-based violence; only two of them explicitly acknowledge the intersection of gender and race/ethnicity. The recognition of race/ethnicity as a ground of discrimination did not necessarily unfold in institutional action. In some organisations, implementing actors recognise the need for a combined approach. For instance, a participant in the case studies noted that the intersectional of gender and race/ethnicity was apparent in services. In some cases, implementing actors sought to include the intersection of gender and race/ethnicity in training and awareness-raising action themselves, even though there was no clear institutional directive to do so; in other cases, implementing actors claim they lack the knowledge to adopt an intersectional approach. As a result, institutions do not collect data on victims' racial or ethnic origins; the intersection of gender and race/ethnicity is only minimally and unsystematically included in prevention actions and is absent in services addressing gender inequalities and gender-based violence; and institutions do not establish partnerships with organisations addressing the issue.

In the case studies, the intersectional of gender and age was scarcely present in institutional responses to gender-based violence. Only three out of 16 institutions mention this form of discrimination in policy documents on addressing and preventing gender inequalities or gender-based violence. Overall, implementing actors did not mention it. When referred to, age appears among other grounds of discrimination (such as gender identity and ethnic origin) and is not addressed separately. Data collection on this form of intersectional violence is absent; awareness-raising actions do not mention it; no institution seems to have established partnerships with organisations dealing with discrimination based on age; and existing services fail to address it.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Prevalence

Organisational policies on gender-based violence that considered intersectionality were negatively related to the overall prevalence of gender-based violence (e^{β} = 0.870, p < 0.01), compared to RPOs where there was no organisational policy in place (Table 44). This was also the case for psychological violence (e^{β} = 0.794, p < 0.01), sexual harassment (e^{β} = 0.842, p < 0.05) and online violence (e^{β} = 0.691, p < 0.01). However, there was no statistically significant relationship between organisational policies that did not adopt an intersectional lens and the prevalence of gender-based violence, with the exception of online violence (e^{β} = 0.680, p < 0.01).

Consequences

There is no statistically significant relationship between the existence of an intersectional lens within organisational policies on gender-based violence and the consequences examined win this analysis (Table 45), apart from a negative relationship with feelings of social exclusion (e^{β} are 0.822, p < 0.01 and 0.829, p < 0.01 respectively for organisational policies that do not and do adopt an intersectional lens, compared to RPOs with an organisational policy).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 44 Multi-level intersectional random intercept models for the prevalence of gender-based violence and intersectional lens in organisational policies on gender-based violence

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
Organisational policies that do not consider intersectionality	0.981	0.769	0.880*	0.665	0.704	0.853*	0.680***
	(0.0504)	(0.243)	(0.0668)	(0.200)	(0.370)	(0.0731)	(0.0654)
Organisational policies that consider intersectionality	0.870***	0.863	0.794***	0.733	0.727	0.842**	0.691***
	(0.0469)	(0.280)	(0.0334)	(0.202)	(0.434)	(0.0656)	(0.0511)
Student (Ref: Staff)	0.690***	1.606***	0.709***	0.449***	2.386***	0.741***	0.985
	(0.0382)	(0.238)	(0.0444)	(0.0664)	(0.508)	(0.0490)	(0.0885)
Women (Ref: Men)	1.754***	0.739***	1.690***	1.241***	2.131***	2.344***	0.971
	(0.0710)	(0.0488)	(0.0734)	(0.0675)	(0.339)	(0.111)	(0.0830)
Non-binary people (Ref: Men)	1.977***	0.820	1.507***	1.485**	1.110	1.937***	1.019
	(0.267)	(0.116)	(0.162)	(0.232)	(0.445)	(0.292)	(0.207)
Sex at birth not aligned to current gender identity	1.119	1.464*	1.335***	0.586**	1.974*	1.242**	1.167
	(0.141)	(0.313)	(0.123)	(0.124)	(0.765)	(0.126)	(0.228)
Disability or chronic illness	1.592***	1.699***	1.548***	1.652***	1.687***	1.479***	1.644***
	(0.0841)	(0.112)	(0.0736)	(0.119)	(0.144)	(0.0750)	(0.111)
Ethnic minority background	1.360***	1.704***	1.422***	2.172***	1.373**	1.264***	1.561***
	(0.0732)	(0.143)	(0.0616)	(0.144)	(0.214)	(0.108)	(0.117)
Asexual (Ref: Heterosexual)	0.888*	0.838	0.871	1.045	0.659**	1.112	1.007
	(0.0587)	(0.181)	(0.0839)	(0.180)	(0.135)	(0.118)	(0.164)
Bisexual (Ref: Heterosexual)	1.508***	1.374***	1.435***	1.408***	2.104***	1.655***	1.528***
	(0.0582)	(0.114)	(0.0552)	(0.0991)	(0.187)	(0.0465)	(0.120)
Homosexual (Ref: Heterosexual)	1.369***	1.120	1.252***	1.124	1.430**	1.568***	1.420***
	(0.101)	(0.186)	(0.0763)	(0.117)	(0.205)	(0.0840)	(0.188)
Queer (Ref: Heterosexual)	1.671***	1.045	1.551***	1.522***	1.525**	1.652***	1.722***
	(0.219)	(0.241)	(0.180)	(0.198)	(0.265)	(0.0862)	(0.211)
Another sexual orientation (Ref: Heterosexual)	1.265**	2.014***	1.350**	1.578***	1.800	1.856***	1.636**
	(0.135)	(0.328)	(0.160)	(0.251)	(0.649)	(0.164)	(0.318)
International	0.941	0.860	0.986	1.308**	1.364***	0.922	0.920
	(0.0619)	(0.114)	(0.0781)	(0.141)	(0.164)	(0.0577)	(0.0979)
Age (mean-centred)	0.982***	0.976***	0.987**	1.012***	0.950***	0.963***	0.999
	(0.00403)	(0.00648)	(0.00497)	(0.00471)	(0.0120)	(0.00438)	(0.00486)
Time spent at the institution (mean-centred)	1.083***	1.058***	1.076***	1.039***	1.097***	1.067***	1.030***
	(0.00432)	(0.00531)	(0.00331)	(0.00266)	(0.0149)	(0.00536)	(0.00435)
Innovation Scoreboard	1.685	0.879	1.438	0.179*	1.400	1.541	1.529
	(0.867)	(0.775)	(0.700)	(0.179)	(1.857)	(1.205)	(0.666)
WEF Global Gender Gap Index	0.0791*	0.0703*	0.0748**	0.0675	0.0223	0.266	0.360
	(0.104)	(0.106)	(0.0919)	(0.135)	(0.0899)	(0.519)	(0.373)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

GDP pc ($1,000)	1.004*	1.009**	1.004*	1.000	1.015***	1.005	1.004**
	(0.00247)	(0.00432)	(0.00208)	(0.00394)	(0.00531)	(0.00430)	(0.00182)
Constant	9.765***	0.146	7.726***	7.481	0.00881*	0.641	0.127***
	(8.268)	(0.176)	(6.109)	(9.799)	(0.0231)	(0.736)	(0.0876)
v_0	0.032	0.023	0.033	0.068	0.142	0.058	0.000
u_0	0.024	0.060	0.024	0.013	0.139	0.039	0.060
is_0	0.099	0.166	0.119	0.183	0.183	0.104	0.216
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451	5,401	5,368	5,335
Individuals (n)	35,850	35,807	34,343	31,713	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 45 Multi-level intersectional random intercept models for the consequences of gender-based violence and intersectional lens in organisational policies on gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Organisational policies that do not consider intersectionality	0.822***	0.480	0.965	1.337*	0.914
	(0.0495)	(0.273)	(0.0616)	(0.215)	(0.0977)
Organisational policies that consider intersectionality	0.829***	0.497	0.930	1.239	1.138
	(0.0551)	(0.300)	(0.0628)	(0.227)	(0.111)
Physical violence	1.321**	2.781***	1.340***	2.393***	1.262
	(0.149)	(0.184)	(0.0927)	(0.473)	(0.319)
Psychological violence	7.275***	2.703***	1.630***	2.772***	1.952***
	(0.385)	(0.209)	(0.0389)	(0.192)	(0.130)
Economic violence	3.100***	2.341***	1.608***	3.357***	1.658***
	(0.337)	(0.178)	(0.0314)	(0.332)	(0.242)
Sexual violence	1.087	2.991***	1.761***	1.817	1.566**
	(0.145)	(0.337)	(0.363)	(0.681)	(0.304)
Sexual harassment	2.231***	2.458***	1.524***	1.785***	1.507***
	(0.0557)	(0.175)	(0.0697)	(0.205)	(0.0641)
Online violence	2.318***	2.418***	1.396***	1.671***	1.712***
	(0.182)	(0.163)	(0.0854)	(0.306)	(0.297)
Student (Ref: Staff)	0.820***	1.296***	1.444***		
	(0.0508)	(0.101)	(0.106)		
Women (Ref: Men)	1.385***	2.353***	1.437***	1.123**	1.012
	(0.0566)	(0.218)	(0.0405)	(0.0619)	(0.0401)
Non-binary people (Ref: Men)	1.719***	1.911***	1.158	1.548	0.802
	(0.267)	(0.257)	(0.169)	(0.513)	(0.255)
Sex at birth not aligned to current gender identity	0.939	2.284***	1.715***	0.339***	1.382
	(0.202)	(0.499)	(0.211)	(0.0691)	(0.446)
Disability or chronic illness	1.321***	1.265***	1.697***	1.239**	1.435***
	(0.0469)	(0.0892)	(0.0685)	(0.130)	(0.139)
Ethnic minority background	1.043	1.232***	1.137*	1.159	1.205***
	(0.0742)	(0.0629)	(0.0871)	(0.132)	(0.0732)
Asexual (Ref: Heterosexual)	0.946	1.105	1.320*	0.932	1.065
	(0.116)	(0.121)	(0.215)	(0.188)	(0.201)
Bisexual (Ref: Heterosexual)	1.115	1.275***	1.542***	1.260	1.810***
	(0.0965)	(0.0626)	(0.0975)	(0.216)	(0.134)
Homosexual (Ref: Heterosexual)	1.108	1.536***	1.464***	1.341**	1.439***
	(0.0759)	(0.158)	(0.0976)	(0.162)	(0.150)
Queer (Ref: Heterosexual)	1.109	1.550***	2.748***	1.465	1.936***

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.116)	(0.219)	(0.362)	(0.432)	(0.317)
Another sexual orientation (Ref: Heterosexual)	0.931	1.585***	2.331***	1.019	1.797***
	(0.116)	(0.181)	(0.219)	(0.375)	(0.394)
International	1.091	0.857	1.025	1.072	0.783**
	(0.0780)	(0.119)	(0.0795)	(0.143)	(0.0837)
Age (mean-centred)	0.998	0.986***	0.973***	0.973***	0.962***
	(0.00473)	(0.00301)	(0.00338)	(0.00251)	(0.00374)
Time spent at the institution (mean-centred)	1.014***	1.010***	0.996	1.021***	1.083***
	(0.00255)	(0.00301)	(0.00404)	(0.00401)	(0.0229)
Innovation Scoreboard	2.073	5.058	0.848	2.471	0.983
	(1.259)	(5.321)	(0.443)	(1.820)	(0.842)
WEF Global Gender Gap Index	0.356	0.0511**	0.516	0.305	0.317
	(0.412)	(0.0727)	(0.654)	(0.377)	(0.590)
GDP pc ($1,000)	1.006**	1.010**	1.015***	1.012***	1.009***
	(0.00321)	(0.00434)	(0.00390)	(0.00390)	(0.00340)
Constant	0.371	0.114*	0.353	2.603	5.217
	(0.260)	(0.149)	(0.248)	(2.113)	(6.559)
v_0	0.026	0.096	0.019	0.040	0.118
u_0	0.007	0.127	0.004	0.033	0.026
is_0	0.028	0.086	0.047	0.051	0.059
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Vulnerable groups in organisational policies on gender-based violence

The mapping of institutional policies considered whether or not, in additional to any potential intersectional lens, there was a consideration of groups potentially more vulnerable to gender-based violence (Huck et al., 2022). In the mapping, the groups that were examined include: international students and staff (linked to mobility status, migration, geography), early-career researchers (linked to age, career status), staff with temporary contracts (linked to precarious status), new and expectant mothers (linked to family status, health).

Among the 43 RPOs included in the analysis, two do not have an organisational policy on gender-based violence, 17 have an organisational policy on gender-based violence but which does not consider vulnerable groups and 24 have an organisational policy that considers vulnerable groups.

Insights from the case studies:

The association between international status and gender-based violence is not taken into account in institutional responses to gender-based violence. In the case studies, neither documents establishing policies to address and prevent gender discrimination nor gender-based violence acknowledge international status as a vulnerability factor. Thus, institutions in the case studies do not collect data on this issue; it is absent in prevention actions and services addressing gender inequalities or gender-based violence; and institutions do not establish partnerships with organisations linked to international students and staff (Ranea et al., 2022).

Prevalence

RPOs with organisational policies that specifically considered potentially vulnerable groups (Table 46) – compared to those without any organisational policies – were associated with a lower prevalence of gender-based violence overall (e^{β} = 0.941, p < 0.05), as well as of psychological violence (e^{β} = 0.847, p < 0.01), sexual harassment (e^{β} = 0.845, p < 0.05) and online violence (e^{β} = 0.692, p < 0.01). There is no statistically significant relationship between RPOs with organisational policies on gender-based violence that do not consider potentially vulnerable groups, apart from a negative relationship with online violence (e^{β} = 0.657, p < 0.01).

Consequences

There is no statistically significant relationship between the presence of organisational policies on gender-based violence that consider potentially vulnerable groups and the consequences examined win this analysis (Table 47), apart from a negative relationship with feelings of social exclusion in the case of organisational policies that consider vulnerable groups compared to RPOs without an organisational policy on gender-based violence (e^{β} = 0.828, p < 0.01).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 46 Multi-level intersectional random intercept models for the prevalence of gender-based violence and vulnerable groups in organisational policies on gender-based violence

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
Organisational policies that do not consider vulnerable groups	0.946	0.822	0.857	0.803	0.801	0.864	0.657***
	(0.102)	(0.286)	(0.105)	(0.310)	(0.484)	(0.129)	(0.0876)
Organisational policies that consider vulnerable groups	0.941**	0.796	0.847***	0.655	0.702	0.845**	0.692***
	(0.0258)	(0.240)	(0.0301)	(0.216)	(0.408)	(0.0578)	(0.0493)
Student (Ref: Staff)	0.691***	1.606***	0.709***	0.446***	2.378***	0.741***	0.986
	(0.0370)	(0.239)	(0.0432)	(0.0656)	(0.501)	(0.0482)	(0.0884)
Women (Ref: Men)	1.753***	0.739***	1.690***	1.243***	2.133***	2.344***	0.971
	(0.0705)	(0.0487)	(0.0729)	(0.0672)	(0.339)	(0.111)	(0.0827)
Non-binary people (Ref: Men)	1.975***	0.822	1.505***	1.491**	1.111	1.938***	1.019
	(0.267)	(0.117)	(0.162)	(0.234)	(0.444)	(0.292)	(0.208)
Sex at birth not aligned to current gender identity	1.121	1.462*	1.336***	0.583**	1.975*	1.242**	1.166
	(0.141)	(0.313)	(0.123)	(0.124)	(0.765)	(0.126)	(0.229)
Disability or chronic illness	1.591***	1.698***	1.548***	1.656***	1.685***	1.479***	1.644***
	(0.0842)	(0.112)	(0.0736)	(0.120)	(0.146)	(0.0751)	(0.111)
Ethnic minority background	1.358***	1.708***	1.421***	2.184***	1.375**	1.265***	1.559***
	(0.0723)	(0.140)	(0.0610)	(0.145)	(0.215)	(0.108)	(0.115)
Asexual (Ref: Heterosexual)	0.888*	0.837	0.871	1.044	0.658**	1.112	1.007
	(0.0586)	(0.181)	(0.0838)	(0.179)	(0.134)	(0.118)	(0.164)
Bisexual (Ref: Heterosexual)	1.507***	1.376***	1.434***	1.411***	2.105***	1.655***	1.528***
	(0.0582)	(0.114)	(0.0553)	(0.0985)	(0.186)	(0.0464)	(0.121)
Homosexual (Ref: Heterosexual)	1.369***	1.120	1.252***	1.128	1.429**	1.569***	1.420***
	(0.101)	(0.186)	(0.0763)	(0.117)	(0.205)	(0.0842)	(0.188)
Queer (Ref: Heterosexual)	1.670***	1.045	1.550***	1.522***	1.523**	1.652***	1.722***
	(0.219)	(0.241)	(0.180)	(0.196)	(0.265)	(0.0861)	(0.211)
Another sexual orientation (Ref: Heterosexual)	1.265**	2.014***	1.350**	1.578***	1.796	1.857***	1.636**
	(0.135)	(0.327)	(0.160)	(0.247)	(0.646)	(0.164)	(0.318)
International	0.941	0.859	0.987	1.311**	1.364**	0.922	0.919
	(0.0619)	(0.114)	(0.0778)	(0.141)	(0.165)	(0.0577)	(0.0963)
Age (mean-centred)	0.982***	0.976***	0.987**	1.012***	0.950***	0.963***	0.999
	(0.00401)	(0.00650)	(0.00495)	(0.00474)	(0.0121)	(0.00438)	(0.00488)
Time spent at the institution (mean-centred)	1.083***	1.058***	1.076***	1.039***	1.097***	1.067***	1.030***
	(0.00430)	(0.00530)	(0.00329)	(0.00271)	(0.0149)	(0.00537)	(0.00438)
Innovation Scoreboard	1.798	0.824	1.526	0.176**	1.439	1.561	1.492
	(0.999)	(0.719)	(0.784)	(0.150)	(1.913)	(1.261)	(0.700)
WEF Global Gender Gap Index	0.0805**	0.0814	0.0767**	0.0814	0.0297	0.275	0.308
	(0.0968)	(0.147)	(0.0869)	(0.153)	(0.121)	(0.527)	(0.281)
GDP pc ($1,000)	1.003	1.011**	1.003*	1.003	1.017***	1.005	1.004**

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.00181)	(0.00466)	(0.00154)	(0.00329)	(0.00525)	(0.00405)	(0.00193)
Constant	9.843***	0.125	7.675***	5.562	0.00623*	0.617	0.147***
	(8.275)	(0.185)	(6.002)	(6.858)	(0.0168)	(0.719)	(0.0988)
v_0	0.031	0.025	0.032	0.046	0.151	0.058	0.000
u_0	0.027	0.060	0.026	0.021	0.132	0.039	0.060
is_0	0.099	0.165	0.119	0.184	0.179	0.104	0.216
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451	5,401	5,368	5,335
Individuals (n)	35,850	35,807	34,343	31,713	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 47 Multi-level intersectional random intercept models for the consequences of gender-based violence and vulnerable groups in organisational policies on gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Organisational policies that do not consider vulnerable groups	0.814*	0.525	0.919	1.272*	1.163
	(0.0919)	(0.281)	(0.0651)	(0.185)	(0.269)
Organisational policies that consider vulnerable groups	0.828***	0.451	0.948	1.333*	1.011
	(0.0449)	(0.242)	(0.0469)	(0.210)	(0.0973)
Physical violence	1.321**	2.786***	1.340***	2.390***	1.263
	(0.149)	(0.185)	(0.0926)	(0.471)	(0.321)
Psychological violence	7.276***	2.706***	1.631***	2.771***	1.950***
	(0.386)	(0.209)	(0.0389)	(0.192)	(0.131)
Economic violence	3.101***	2.342***	1.608***	3.357***	1.658***
	(0.338)	(0.179)	(0.0317)	(0.334)	(0.242)
Sexual violence	1.087	2.999***	1.762***	1.819	1.562**
	(0.144)	(0.339)	(0.362)	(0.680)	(0.306)
Sexual harassment	2.231***	2.460***	1.524***	1.786***	1.506***
	(0.0559)	(0.176)	(0.0696)	(0.206)	(0.0646)
Online violence	2.317***	2.421***	1.396***	1.671***	1.713***
	(0.181)	(0.164)	(0.0860)	(0.305)	(0.298)
Student (Ref: Staff)	0.820***	1.296***	1.444***		
	(0.0505)	(0.100)	(0.107)		
Women (Ref: Men)	1.385***	2.354***	1.436***	1.122**	1.015
	(0.0563)	(0.218)	(0.0403)	(0.0610)	(0.0404)
Non-binary people (Ref: Men)	1.719***	1.913***	1.157	1.545	0.805
	(0.267)	(0.259)	(0.169)	(0.516)	(0.254)
Sex at birth not aligned to current gender identity	0.939	2.286***	1.716***	0.340***	1.377
	(0.202)	(0.502)	(0.210)	(0.0690)	(0.444)
Disability or chronic illness	1.321***	1.265***	1.697***	1.239**	1.439***
	(0.0466)	(0.0898)	(0.0690)	(0.129)	(0.139)
Ethnic minority background	1.042	1.234***	1.134*	1.153	1.210***
	(0.0741)	(0.0634)	(0.0852)	(0.131)	(0.0744)
Asexual (Ref: Heterosexual)	0.946	1.105	1.320*	0.932	1.064
	(0.115)	(0.121)	(0.215)	(0.188)	(0.201)
Bisexual (Ref: Heterosexual)	1.115	1.276***	1.540***	1.257	1.816***
	(0.0965)	(0.0624)	(0.0979)	(0.217)	(0.134)
Homosexual (Ref: Heterosexual)	1.107	1.538***	1.463***	1.340**	1.445***
	(0.0762)	(0.159)	(0.0980)	(0.162)	(0.150)
Queer (Ref: Heterosexual)	1.109	1.552***	2.744***	1.464	1.939***
	(0.115)	(0.219)	(0.364)	(0.431)	(0.319)
Another sexual orientation (Ref: Heterosexual)	0.931	1.587***	2.329***	1.017	1.797***

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

	(0.115)	(0.182)	(0.218)	(0.377)	(0.399)
International	1.090	0.857	1.025	1.073	0.783**
	(0.0787)	(0.120)	(0.0791)	(0.142)	(0.0845)
Age (mean-centred)	0.998	0.986***	0.973***	0.972***	0.963***
	(0.00471)	(0.00306)	(0.00342)	(0.00250)	(0.00388)
Time spent at the institution (mean-centred)	1.014***	1.010***	0.996	1.021***	1.083***
	(0.00255)	(0.00302)	(0.00405)	(0.00402)	(0.0230)
Innovation Scoreboard	2.060	5.054	0.846	2.510	0.844
	(1.267)	(5.078)	(0.439)	(1.860)	(0.657)
WEF Global Gender Gap Index	0.344	0.0590*	0.489	0.288	0.621
	(0.401)	(0.0942)	(0.637)	(0.376)	(1.012)
GDP pc ($1,000)	1.006*	1.012***	1.014***	1.011***	1.013***
	(0.00334)	(0.00406)	(0.00379)	(0.00412)	(0.00437)
Constant	0.383	0.0947*	0.387	2.829	2.622
	(0.308)	(0.130)	(0.286)	(2.519)	(3.252)
v_0	0.025	0.106	0.018	0.043	0.101
u_0	0.008	0.120	0.005	0.031	0.040
is_0	0.028	0.086	0.048	0.051	0.063
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Implementation aspects of organisational policies on gender-based violence

The inclusion of different aspects of organisational policies on gender-based violence (objectives; indicators; monitoring; evaluation; budget) is based on the good practice criteria for policy making developed by Wroblewski (2018), developed to analyse gender equality policies specifically in Research and Innovation (R&I) in the European Research Area. The mapping (Huck et al., 2022) adapted them to the UniSAFE project's needs and these include (only for the implementation aspects):

- the formulation of a set of assumptions why and how the policy should reach its targets and target groups (objectives and indicators)
- the inclusion of sufficient and sustainable funding (budget)
- the set-up of a monitoring and evaluation mechanism on a regular basis with regards to its implementation status and impact (monitoring and evaluation).

Implementation aspects need to be set up and included in the policy for it to be effective. This may very much have an influence on the capacity for RPOs to monitor and report on cases of gender-based violence (prevalence) and on responding to these cases (consequences). National researchers were asked a series of questions on processual aspects of the policy implementation:

- Does the document define concrete objectives to be reached?
- Does the document contain (implicit or explicit) measurable or verifiable indicators to assess the degree of implementation?
- Does the document set a mechanism for monitoring incidents of gender-based violence at the institutional level?
- Is the collected monitoring data evaluated at the institutional level?
- Is there a budget allocated to implement the policy?

The number of RPOs with organisational policies on gender-based violence that address these respective aspects are:

- 23 RPOs have organisational policies that address objectives
- 11 RPOs have organisational policies that address indicators
- 27 RPOs have organisational policies that address monitoring
- 21 RPOs have organisational policies that address evaluation
- 14 RPOs have organisational policies that address budget

Prevalence

The inclusion of sufficient and sustainable funding (budget) is negatively related to the overall prevalence of gender-based violence (e^{β} = 0.892, p < 0.05), and specifically to psychological violence (e^{β} = 0.872, p < 0.01) (Table 48) On the contrary, having indicators and monitoring in place is positively associated with the overall prevalence of gender-based violence (e^{β}s are 1.149, p < 0.05 and 1.334, p < 0.01 respectively. For organisational policies on gender-based violence that define indicators to assess whether objectives have been reached are positively related to psychological violence (e^{β} = 1.262, p < 0.01). Further, organisational policies that include mechanisms for monitoring incidents are positively associated with psychological violence (e^{β} = 1.349, p < 0.01), economic violence (e^{β} = 1.304, p < 0.01) and sexual harassment (e^{β} = 1.369, p < 0.01).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Consequences

Organisational policies on gender-based violence that make provision for a budget are positively associated with a higher number of consequences for studies ($e^{\beta} = 1.346$, $p < 0.05$) and consequences for well-being ($e^{\beta} = 1.108$, $p < 0.05$) (Table 49). Where objectives are defined within organisational policies, there are fewer consequences on studies ($e^{\beta} = 0.773$, $p < 0.01$). Finally, where organisational policies monitor incidents, this is related to lower adverse consequences on well-being ($e^{\beta} = 0.884$, $p < 0.01$).).

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 48 Multi-level intersectional random intercept models for the prevalence of gender-based violence and implementation aspects of organisational policies on gender-based violence

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
Organisational policies that address objectives	1.044	1.065	1.018	0.952	0.717	0.914	0.963
	(0.0817)	(0.117)	(0.0751)	(0.0559)	(0.192)	(0.0640)	(0.0765)
Organisational policies that address indicators	1.149**	0.921	1.262***	1.095	0.807	1.093	0.771
	(0.0788)	(0.0855)	(0.0755)	(0.0793)	(0.153)	(0.151)	(0.146)
Organisational policies that address monitoring	1.334***	1.273*	1.349***	1.304***	1.377*	1.369***	0.997
	(0.101)	(0.158)	(0.0998)	(0.0854)	(0.225)	(0.104)	(0.135)
Organisational policies that address evaluation	1.085	1.092	1.096	1.002	1.121	1.108	1.145**
	(0.0855)	(0.128)	(0.0755)	(0.0633)	(0.207)	(0.112)	(0.0781)
Organisational policies that address budget	0.892**	0.958	0.872***	1.092	0.800	0.921	1.117
	(0.0418)	(0.0673)	(0.0426)	(0.0901)	(0.139)	(0.0957)	(0.150)
Student (Ref: Staff)	0.690***	1.626***	0.707***	0.448***	2.427***	0.740***	0.991
	(0.0347)	(0.241)	(0.0407)	(0.0622)	(0.537)	(0.0475)	(0.0917)
Women (Ref: Men)	1.754***	0.741***	1.693***	1.245***	2.210***	2.345***	0.973
	(0.0695)	(0.0471)	(0.0722)	(0.0670)	(0.372)	(0.111)	(0.0828)
Non-binary people (Ref: Men)	1.971***	0.826	1.502***	1.490***	1.141	1.937***	1.024
	(0.266)	(0.116)	(0.162)	(0.230)	(0.461)	(0.293)	(0.208)
Sex at birth not aligned to current gender identity	1.125	1.466*	1.345***	0.588**	1.981*	1.246**	1.167
	(0.142)	(0.310)	(0.124)	(0.125)	(0.771)	(0.127)	(0.230)
Disability or chronic illness	1.591***	1.702***	1.546***	1.653***	1.664***	1.480***	1.649***
	(0.0838)	(0.112)	(0.0733)	(0.120)	(0.155)	(0.0750)	(0.111)
Ethnic minority background	1.350***	1.691***	1.413***	2.149***	1.328*	1.257***	1.557***
	(0.0729)	(0.143)	(0.0605)	(0.141)	(0.215)	(0.107)	(0.114)
Asexual (Ref: Heterosexual)	0.888*	0.836	0.870	1.045	0.629**	1.113	1.007
	(0.0583)	(0.179)	(0.0837)	(0.181)	(0.138)	(0.118)	(0.164)
Bisexual (Ref: Heterosexual)	1.503***	1.377***	1.432***	1.415***	2.080***	1.652***	1.529***
	(0.0576)	(0.111)	(0.0543)	(0.100)	(0.188)	(0.0468)	(0.122)
Homosexual (Ref: Heterosexual)	1.370***	1.120	1.253***	1.122	1.382**	1.570***	1.417***
	(0.101)	(0.184)	(0.0762)	(0.120)	(0.209)	(0.0844)	(0.188)
Queer (Ref: Heterosexual)	1.671***	1.045	1.551***	1.525***	1.464**	1.652***	1.722***
	(0.220)	(0.241)	(0.181)	(0.198)	(0.269)	(0.0859)	(0.209)
Another sexual orientation (Ref: Heterosexual)	1.267**	2.011***	1.353**	1.585***	1.740	1.855***	1.627**
	(0.135)	(0.323)	(0.161)	(0.247)	(0.640)	(0.163)	(0.318)
International	0.943	0.853	0.989	1.304**	1.330**	0.922	0.914
	(0.0620)	(0.112)	(0.0779)	(0.139)	(0.173)	(0.0569)	(0.0982)
Age (mean-centred)	0.981***	0.976***	0.987***	1.012**	0.949***	0.963***	1.000
	(0.00398)	(0.00649)	(0.00494)	(0.00478)	(0.0128)	(0.00435)	(0.00488)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Time spent at the institution (mean-centred)	1.083***	1.058***	1.076***	1.039***	1.099***	1.067***	1.030***
	(0.00434)	(0.00538)	(0.00331)	(0.00268)	(0.0154)	(0.00540)	(0.00435)
Innovation Scoreboard	3.388***	0.919	3.457***	0.343	0.657	2.248	0.902
	(1.509)	(0.719)	(1.443)	(0.345)	(0.990)	(1.529)	(0.465)
WEF Global Gender Gap Index	0.0469***	0.0380**	0.0389***	0.0483	0.0103	0.129	0.477
	(0.0392)	(0.0550)	(0.0250)	(0.101)	(0.0376)	(0.196)	(0.472)
GDP pc ($1,000)	0.999	1.010***	0.998	0.996	1.024***	1.002	1.007**
	(0.00188)	(0.00356)	(0.00163)	(0.00462)	(0.00642)	(0.00415)	(0.00301)
Constant	9.038***	0.144**	6.591***	4.473	0.0126*	0.724	0.0842***
	(4.158)	(0.135)	(2.395)	(6.546)	(0.0312)	(0.701)	(0.0519)
v_0	0.000	0.007	0.000	0.066	0.171	0.021	0.000
u_0	0.028	0.051	0.023	0.000	0.093	0.039	0.048
is_0	0.098	0.164	0.118	0.183	0.138	0.103	0.218
Countries (n)	15	15	15	15	15	15	15
RPOs (n)	43	43	43	43	43	43	43
Intersectional strata (n)	5,790	5,782	5,641	5,451	5,401	5,368	5,335
Individuals (n)	35,850	35,807	34,343	31,713	31,060	30,678	30,251

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 49 Multi-level intersectional random intercept models for the consequences of gender-based violence and implementation aspects of organisational policies on gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Organisational policies that address objectives	0.973	0.760	0.953	0.935	0.773***
	(0.0622)	(0.131)	(0.0430)	(0.109)	(0.0639)
Organisational policies that address indicators	1.021	0.987	0.960	1.103	0.807
	(0.0769)	(0.147)	(0.0311)	(0.126)	(0.127)
Organisational policies that address monitoring	1.021	1.125	0.884***	1.119	0.957
	(0.108)	(0.148)	(0.0400)	(0.108)	(0.108)
Organisational policies that address evaluation	0.934	0.894	1.050	1.033	1.089
	(0.0698)	(0.176)	(0.0434)	(0.131)	(0.173)
Organisational policies that address budget	0.972	1.195	1.108**	0.914	1.346**
	(0.0554)	(0.199)	(0.0545)	(0.0759)	(0.162)
Physical violence	1.321**	2.786***	1.341***	2.390***	1.265
	(0.150)	(0.184)	(0.0923)	(0.471)	(0.320)
Psychological violence	7.284***	2.708***	1.632***	2.767***	1.952***
	(0.386)	(0.211)	(0.0387)	(0.193)	(0.130)
Economic violence	3.103***	2.344***	1.608***	3.355***	1.650***
	(0.337)	(0.178)	(0.0310)	(0.329)	(0.242)
Sexual violence	1.086	3.003***	1.763***	1.809	1.556**
	(0.145)	(0.340)	(0.362)	(0.682)	(0.299)
Sexual harassment	2.233***	2.461***	1.525***	1.784***	1.505***
	(0.0556)	(0.175)	(0.0695)	(0.206)	(0.0640)
Online violence	2.319***	2.422***	1.395***	1.672***	1.716***
	(0.182)	(0.165)	(0.0852)	(0.302)	(0.294)
Student (Ref: Staff)	0.819***	1.292***	1.440***		
	(0.0505)	(0.100)	(0.104)		
Women (Ref: Men)	1.386***	2.356***	1.438***	1.121**	1.013
	(0.0560)	(0.220)	(0.0400)	(0.0620)	(0.0412)
Non-binary people (Ref: Men)	1.721***	1.918***	1.160	1.547	0.812
	(0.269)	(0.258)	(0.171)	(0.517)	(0.259)
Sex at birth not aligned to current gender identity	0.938	2.283***	1.715***	0.341***	1.365
	(0.202)	(0.500)	(0.212)	(0.0712)	(0.445)
Disability or chronic illness	1.320***	1.265***	1.698***	1.236**	1.440***
	(0.0461)	(0.0890)	(0.0681)	(0.128)	(0.140)
Ethnic minority background	1.042	1.231***	1.141*	1.155	1.208***
	(0.0746)	(0.0630)	(0.0872)	(0.137)	(0.0707)
Asexual (Ref: Heterosexual)	0.946	1.106	1.318*	0.932	1.065
	(0.117)	(0.121)	(0.215)	(0.189)	(0.200)

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Bisexual (Ref: Heterosexual)	1.116	1.278***	1.541***	1.255	1.812***
	(0.0962)	(0.0620)	(0.0973)	(0.215)	(0.133)
Homosexual (Ref: Heterosexual)	1.108	1.538***	1.465***	1.342**	1.438***
	(0.0761)	(0.160)	(0.0990)	(0.165)	(0.151)
Queer (Ref: Heterosexual)	1.108	1.554***	2.752***	1.462	1.929***
	(0.116)	(0.220)	(0.361)	(0.435)	(0.314)
Another sexual orientation (Ref: Heterosexual)	0.931	1.588***	2.330***	1.027	1.796***
	(0.117)	(0.181)	(0.218)	(0.375)	(0.394)
International	1.091	0.856	1.025	1.080	0.780**
	(0.0788)	(0.120)	(0.0804)	(0.141)	(0.0852)
Age (mean-centred)	0.998	0.986***	0.973***	0.972***	0.963***
	(0.00477)	(0.00303)	(0.00342)	(0.00243)	(0.00388)
Time spent at the institution (mean-centred)	1.014***	1.010***	0.996	1.021***	1.083***
	(0.00256)	(0.00299)	(0.00402)	(0.00404)	(0.0230)
Innovation Scoreboard	2.236	7.162**	0.704	2.872	0.452
	(1.611)	(6.035)	(0.388)	(2.357)	(0.408)
WEF Global Gender Gap Index	0.362	0.0595*	0.716	0.208	0.988
	(0.459)	(0.0858)	(0.954)	(0.281)	(1.778)
GDP pc ($1,000)	1.007	1.010***	1.014***	1.011**	1.013***
	(0.00428)	(0.00365)	(0.00388)	(0.00479)	(0.00449)
Constant	0.296	0.0459***	0.310	4.172*	3.052
	(0.230)	(0.0497)	(0.242)	(3.258)	(3.844)
v_0	.0287136	.0595817	.0181426	.0394474	.0941603
u_0	.0073052	.1462398	0	.0259607	.0165606
is_0	.0282556	.0864115	.0460373	.0507985	.0621282
Countries (n)	15	15	15	15	15
RPOs (n)	43	43	43	43	42
Intersectional strata (n)	5,216	5,061	5,218	2,485	2,754
Individuals (n)	29,047	27,247	28,993	13,473	15,755

Note: odds ratios, SE in parentheses
*** p<0.01, ** p<0.05, * p<0.1

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

DISCUSSION

The report has analysed the prevalence and consequences of gender-based violence among different groups since gender-based violence is shaped by social structures of oppressions - shaped by gender but also intersecting factors such as terms of employment, ethnicity, and sexual orientation. The analysis is based on multi-level intersectional modelling, that controls, statistically, for a range of factors, including the time spent in the institution where respondents study or work.

The findings of this report suggest that the prevalence of gender-based violence is relatively uniform across countries. Similarly, variance is low between RPOs which suggests that the prevalence of gender-based violence is largely unrelated to the RPOs in which respondents work or study, and/or to the country in which they reside. Further, the findings suggest that prevalence is relatively uniform across most intersectional groups, though a few disclose more experiences of gender-based violence.

The findings are, for instance, that when controlling for these other variables, students are less affected by gender-based violence overall, but more at risk of physical and sexual violence (but not sexual harassment) than staff members. Finally, staff and students are about equally affected by online violence. Experiences of gender-based violence are not only related to student and staff status but also to the terms of employment/position. Some doctoral candidates, early-career researchers and researchers and teaching staff who sought promotion to a higher position were, for instance, identified, in the qualitative interviews, as particularly vulnerable.

Findings on gender identity are that: women are most at risk of sexual violence and sexual harassment; men are most at risk of physical violence; non-binary people are most at risk of sexual harassment, psychological violence and economic violence, controlling for other factors; and trans people are more affected by psychological violence and sexual harassment, controlling for other factors. Groups of respondents who belong to a minoritised sexual orientation group (apart from asexual respondents) had a higher prevalence of overall gender-based violence – compared to heterosexual respondents, controlling for other factors.

When controlling for these other factors, all forms of gender-based violence are more prevalent across people with a disability or chronic illness. People from a minority ethnic group also have higher prevalence of all forms of gender-based violence. While staff and students that were international (i.e. people who have moved from the country where they have obtained their highest level of qualification to study or work in another country), rather than domestic, were overall as likely to experience gender-based violence. The only exceptions are economic violence and sexual violence. Being an international staff/student is associated with higher risk of economic violence and sexual violence. Increasing age is associated with lower prevalence of most forms of gender-based violence. Each additional year of age decreased the overall prevalence of gender-based violence. Exceptions are economic violence, which increased with age and online violence which is unrelated to age.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Most forms of gender-based violence are associated with worse outcomes, when controlling for other factors. Disclosing any form of gender-based violence in the survey is systematically associated with feeling more unsafe or feeling unwell. All forms of gender-based violence measured, except for sexual violence, are associated with higher feelings of social exclusion and detrimental consequences for work. Finally, all forms of gender-based violence measured, except physical violence, are associated with detrimental consequences for studies.

Students are less at risk of social exclusion, but more at risk of feeling unsafe and feeling unwell, while controlling for other factors. Women and non-binary people are also more likely to feel socially excluded and unsafe. In the qualitative interviews, more than one third of the interviewees described that social exclusion of victims would manifest in a form of treating victims as, for example, difficult, crazy, mad or paranoid with whom it is difficult to work.

Trans people were more likely to feel unsafe and to feel unwell, but suffered fewer consequences for work. Bisexual, homosexual and queer people are more likely to feel unsafe, to feel unwell and to experience detrimental consequences for studies. All minoritised sexual orientation groups measured, with the exception of people who are asexual, report higher consequences, including feeling unsafe and feeling unwell. They also were more likely to experience detrimental consequences for studies, though this is not the case for work except for homosexual respondents. Feeling socially excluded appears unrelated to sexual orientation.

Having a disability or chronic illness increased reports of feeling socially excluded, unsafe and unwell, as well as experiences detrimental for work or studies, when controlling for other factors. Being from a minority ethnic background was linked to higher feelings of being unsafe and consequences for studies. Respondents from a minority ethnic background were not more likely to feel social excluded nor to feel unwell, though they were more likely to feel unsafe. They were not more likely to experience work-related consequences, though they were more likely to report study-related consequences. Being an international staff/student was unrelated to most consequences, and they were not more likely than domestic staff/students to report any consequences.

Adverse outcomes are consistently higher among people that have experienced any form of gender-based violence, and can therefore be regarded as consequences of gender-based violence. This is most marked for social exclusion, which 70% of those having experienced gender-based violence report. The consequences of gender-based violence are relatively uniform across countries and RPOs in both form and magnitude. When controlling for other factors, the consequences of gender-based violence are lower for non-academic staff than academic staff across all forms, including feeling socially excluded. Permanent staff were more likely to feel unsafe that those of fixed-term contracts and staff working full-time hours were more likely to feel unwell. Postgraduate students were less likely than undergraduate students to report consequences for studies but more likely to feel socially excluded.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

The analysis allows for a distillation of the main findings related to the relationship between national or organisational characteristics and the prevalence of gender-based violence, overall and in relation to specific forms (physical violence, psychological violence, economic violence, sexual violence, sexual harassment, and online violence). Table 50 presents the national/organisational characteristics that are negatively or positively related to the prevalence of gender-based violence and its different forms, at the 5% level of statistical significance. A negative relationship can be interpreted as lower prevalence, all other variables being the same, and conversely.

This is followed in Table 51 by the national/organisational characteristics that are negatively or positively related to the consequences gender-based violence. A negative relationship indicates few consequences, all else being equal, while a positive relationship indicates more consequences.

It is important to remember that it is not possible to establish a causal effect, for example, to conclude that the introduction of a national or organisational policy *decreases* the prevalence of gender-based violence. The question of directionality also matters. This analysis cannot differentiate between scenarios where the introduction of a policy has successfully decreased prevalence (negative association), or where a policy has been introduced in response to a high prevalence (positive association). Equally, it is not possible to identify when a policy has successfully increased capacity for victims to disclose and report experiences of gender-based violence.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 50 Summary of findings – relationship between national/organisational characteristics and the prevalence of gender-based violence

	Any form	Physical violence	Psychological violence	Economic violence	Sexual violence	Sexual harassment	Online violence
Generic national policy on gender equality in RPOs more widely, that includes the issue of gender-based violence	-		-			-	
National policy specifically dedicated to gender-based violence in RPOs		+					
National policies that address prevalence, protection, prosecution and policies	+		+			+	
National policies that address prevention and provision	-		-			-	
National policies that address partnerships		+		+		+	
Generic organisational policy that includes the issue of gender-based violence			-			-	-
Organisational policy specifically dedicated to gender-based violence							-
Organisational policies that specifically address prevalence		+		+			
Organisational policies that specifically address prevention				-			
Organisational policies that specifically address protection		-		-		-	-
Organisational policies that specifically address prosecution	+		+			+	+
Organisational policies that specifically address provision of services		+					
Organisational policies that specifically address partnerships							
Organisational policies that specifically address institutional policies	-		-			-	-
Organisational policies that do not consider intersectionality							-
Organisational policies that consider intersectionality			-			-	-
Organisational policies that do not consider vulnerable groups							-
Organisational policies that consider vulnerable groups	-		-			-	-
Organisational policies that address objectives							
Organisational policies that address indicators	+		+				
Organisational policies that address monitoring	+		+	+		+	
Organisational policies that address evaluation							+
Organisational policies that address budget	-		-				

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 51 Summary of findings – relationship between national/organisational characteristics and the consequences of gender-based violence

	Feeling socially excluded	Feeling unsafe	Feeling unwell	Consequences for work	Consequences for studies
Generic national policy on gender equality in RPOs more widely, that includes the issue of gender-based violence					+
National policy specifically dedicated to gender-based violence in RPOs					
National policies that address prevalence, protection, prosecution and policies		+			
National policies that address prevention and provision		-			+
National policies that address partnerships	+		-	-	
Generic organisational policy that includes the issue of gender-based violence	-				
Organisational policy specifically dedicated to gender-based violence				+	+
Organisational policies that specifically address prevalence					
Organisational policies that specifically address prevention		-			
Organisational policies that specifically address protection					
Organisational policies that specifically address prosecution				-	
Organisational policies that specifically address provision of services			-		
Organisational policies that specifically address partnerships					
Organisational policies that specifically address institutional policies		-			
Organisational policies that do not consider intersectionality	-				
Organisational policies that consider intersectionality	-				
Organisational policies that do not consider vulnerable groups					
Organisational policies that consider vulnerable groups	-				
Organisational policies that address objectives					-
Organisational policies that address indicators					
Organisational policies that address monitoring			-		
Organisational policies that address evaluation					
Organisational policies that address budget			+		+

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Interpretation is fundamental when it comes to analysing the prevalence of gender-based violence. Lower prevalence is not necessarily a desirable outcome, nor does it necessarily reflect reality. Prevalence measures disclosed incidents of gender-based violence, however, the actual prevalence rate remains unknown. On the one hand, self-selection bias might artificially inflate prevalence: this is the case for example if people that have experienced gender-based violence are more prone to respond to the survey. However, studies of sexual violence on campus have shown near identical levels of reporting using self-selection and human subject pool sampling (Rosenthal & Freyd, 2018) and in studies of violence against women and men, the only evidence of non-response bias found was for differences between the sample and the background population concerning the sociodemographic characteristics (Simmons & Swahnberg, 2019). On the other hand, respondents may not disclose experiences of gender-based violence. In practice, there are many reasons why disclosure does not happen. This includes low awareness that experiences of violence were in fact violence, and is related to the normalisation of violence, and social desirability response bias, which is related to underreporting in surveys (van de Mortel, 2008). The UniSAFE survey asks about specific incidents rather than relying on labels (e.g. not using the word 'rape' but incidents that may constitute rape such as 'whether someone was forced into sexual intercourse by being held down or hurt in some way'). Nonetheless, not understanding nor framing an incident as violence may limit recollection and, thereafter, disclosure. Finally, many experiences of gender-based violence remain undisclosed because of the stigma attached to them, fear of victimisation and indeed re-victimisation, and low confidence that people and institutions can provide a resolution. Where that is the case, prevalence might be low despite a high number of incidents. In these cases, higher (disclosed) prevalence can thus be regarded as a positive outcome.

In fact, it is interesting to note that many of the national/organisational characteristics related to higher prevalence tend to be related to mechanisms that make gender-based violence more visible (e.g. via policies that put into place measurement, monitoring and evaluation), and/or less acceptable (e.g. via policies that make perpetrator accountable through prosecution mechanisms). On the contrary, characteristics related to lower prevalence tend to focus on prevention and provision of services, with the frame of the development of policies and procedures to tackle the issue. For these reasons, looking at the prevalence of gender-based violence alone is insufficient. Instead, we turn to a look at the potential consequences that gender-based violence can have and how it can be associated with feeling excluded, feeling unsafe and feeling unwell, as well as to consequences experienced in relation to work or studies.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

ANNEX

Table 52 Correlation matrix – all staff and students

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Student	1.00															
2	Women	0.05	1.00														
3	Men	-0.06	-0.96	1.00													
4	Non-binary	0.05	-0.19	-0.09	1.00												
5	Trans	0.07	-0.15	-0.04	0.68	1.00											
6	Disability or chronic illness	-0.01	0.00	-0.03	0.09	0.09	1.00										
7	Ethnic minority background	0.04	-0.03	0.02	0.04	0.04	0.05	1.00									
8	Asexual	0.05	0.00	-0.02	0.08	0.09	0.04	0.01	1.00								
9	Bisexual	0.17	0.09	-0.11	0.05	0.06	0.05	0.02	-0.04	1.00							
10	Heterosexual	-0.20	-0.01	0.07	-0.23	-0.23	-0.09	-0.05	-0.27	-0.71	1.00						
11	Homosexual	0.03	-0.12	0.11	0.06	0.06	0.02	0.04	-0.02	-0.06	-0.40	1.00					
12	Queer	0.07	-0.02	-0.06	0.30	0.29	0.06	0.02	-0.02	-0.05	-0.29	-0.03	1.00				
13	Another sexual orientation	0.05	0.00	-0.04	0.12	0.09	0.04	0.03	-0.01	-0.04	-0.23	-0.02	-0.01	1.00			
14	International	0.01	-0.03	0.02	0.02	0.01	-0.01	0.15	0.01	0.01	-0.02	0.00	0.01	0.00	1.00		
15	Age (mean-centred)	-0.75	-0.06	0.07	-0.05	-0.07	0.05	-0.04	-0.04	-0.17	0.20	-0.03	-0.07	-0.05	-0.02	1.00	
16	Time spent at the institution (mean-centred)	-0.56	-0.05	0.07	-0.04	-0.05	0.02	-0.05	-0.03	-0.12	0.15	-0.03	-0.06	-0.04	-0.08	0.78	1.00

Table 53 Correlation matrix – academic and non-academic staff

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Women	1.00																
2	Men	-0.98	1.00															
3	Non-binary	-0.13	-0.07	1.00														
4	Trans	-0.07	-0.03	0.50	1.00													
5	Disability or chronic illness	0.02	-0.03	0.04	0.05	1.00												
6	Ethnic minority background	-0.03	0.02	0.03	0.04	0.05	1.00											
7	Asexual	0.00	-0.01	0.04	0.02	0.02	0.01	1.00										
8	Bisexual	0.03	-0.04	0.04	0.05	0.04	0.02	-0.02	1.00									
9	Heterosexual	0.05	-0.02	-0.19	-0.19	-0.06	-0.04	-0.29	-0.66	1.00								
10	Homosexual	-0.13	0.12	0.04	0.02	0.01	0.02	-0.02	-0.04	-0.54	1.00							
11	Queer	-0.01	-0.05	0.26	0.31	0.04	0.02	-0.01	-0.02	-0.29	-0.02	1.00						
12	Another sexual orientation	-0.01	-0.02	0.17	0.15	0.04	0.03	-0.01	-0.02	-0.22	-0.01	-0.01	1.00					
13	International	-0.05	0.04	0.04	0.02	-0.02	0.14	0.02	0.02	-0.04	0.00	0.04	0.02	1.00				
14	Permanent contract	-0.03	0.03	-0.04	-0.04	0.03	-0.05	-0.02	-0.08	0.10	-0.02	-0.07	-0.04	-0.12	1.00			
15	Full-time	-0.09	0.09	-0.01	-0.01	0.00	0.00	-0.01	-0.04	0.04	0.01	-0.04	-0.01	0.02	0.20	1.00		
16	Age (mean-centred)	-0.04	0.04	-0.03	-0.04	0.04	-0.05	-0.01	-0.09	0.13	-0.04	-0.08	-0.04	-0.10	0.53	0.10	1.00	
17	Time spent at the institution (mean-centred)	-0.05	0.05	-0.03	-0.03	0.02	-0.05	-0.01	-0.07	0.10	-0.03	-0.06	-0.03	-0.14	0.47	0.10	0.75	1.00

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 54 Correlation matrix – academic staff

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Women	1.00																				
2	Men	-0.98	1.00																			
3	Non-binary	-0.12	-0.08	1.00																		
4	Trans	-0.06	-0.05	0.54	1.00																	
5	Disability or chronic illness	0.03	-0.04	0.04	0.06	1.00																
6	Ethnic minority background	-0.02	0.02	0.02	0.04	0.05	1.00															
7	Asexual	0.00	-0.01	0.06	0.05	0.03	0.02	1.00														
8	Bisexual	0.04	-0.05	0.06	0.06	0.04	0.01	-0.02	1.00													
9	Heterosexual	0.04	0.00	-0.20	-0.20	-0.07	-0.04	-0.26	-0.65	1.00												
10	Homosexual	-0.12	0.11	0.04	0.03	0.01	0.02	-0.02	-0.04	-0.56	1.00											
11	Queer	0.01	-0.06	0.26	0.30	0.04	0.02	-0.01	-0.02	-0.28	-0.02	1.00										
12	Another sexual orientation	0.00	-0.04	0.17	0.17	0.05	0.03	-0.01	-0.02	-0.22	-0.01	-0.01	1.00									
13	International	-0.04	0.03	0.04	0.01	0.00	0.16	0.04	0.02	-0.04	0.00	0.03	0.01	1.00								
14	Permanent contract	-0.07	0.08	-0.05	-0.05	-0.01	-0.07	-0.04	-0.08	0.11	-0.03	-0.07	-0.04	-0.09	1.00							
15	Full-time	-0.08	0.08	0.00	0.00	-0.01	-0.01	-0.02	-0.05	0.05	0.00	-0.03	-0.03	0.04	0.25	1.00						
16	Grade A	-0.14	0.14	-0.03	-0.02	-0.02	-0.04	-0.02	-0.04	0.05	-0.01	-0.03	-0.03	-0.03	0.36	0.14	1.00					
17	Grade B	0.01	-0.01	-0.02	-0.04	0.00	-0.03	-0.02	-0.04	0.06	-0.02	-0.05	-0.03	-0.04	0.36	0.13	-0.38	1.00				
18	Grade C	0.04	-0.05	0.02	0.03	-0.01	0.04	0.04	0.00	-0.03	0.01	0.03	0.01	0.07	-0.32	-0.07	-0.28	-0.42	1.00			
19	Grade D	0.08	-0.09	0.03	0.05	0.02	0.03	0.00	0.08	-0.10	0.02	0.05	0.06	0.00	-0.46	-0.22	-0.25	-0.38	-0.27	1.00		
20	Age (mean-centred)	-0.07	0.08	-0.04	-0.04	0.03	-0.05	-0.03	-0.08	0.12	-0.05	-0.07	-0.04	-0.12	0.60	0.13	0.47	0.23	-0.24	-0.49	1.00	
21	Time spent at the institution (mean-centred)	-0.07	0.08	-0.05	-0.05	0.00	-0.05	-0.04	-0.06	0.10	-0.03	-0.06	-0.03	-0.16	0.52	0.13	0.47	0.15	-0.25	-0.38	0.80	1.00

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Table 55 Correlation matrix – students

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1	Women	1.00																		
2	Men	-0.95	1.00																	
3	Non-binary	-0.23	-0.10	1.00																
4	Trans	-0.20	-0.04	0.72	1.00															
5	Disability or chronic illness	-0.01	-0.03	0.11	0.12	1.00														
6	Ethnic minority background	-0.03	0.02	0.04	0.03	0.05	1.00													
7	Asexual	-0.01	-0.02	0.09	0.10	0.05	0.00	1.00												
8	Bisexual	0.11	-0.13	0.05	0.05	0.06	0.00	-0.06	1.00											
9	Heterosexual	-0.03	0.11	-0.24	-0.23	-0.11	-0.04	-0.26	-0.72	1.00										
10	Homosexual	-0.12	0.10	0.06	0.07	0.02	0.05	-0.03	-0.08	-0.35	1.00									
11	Queer	-0.04	-0.06	0.31	0.29	0.07	0.01	-0.02	-0.07	-0.29	-0.03	1.00								
12	Another sexual orientation	0.01	-0.04	0.11	0.08	0.05	0.03	-0.02	-0.05	-0.22	-0.03	-0.02	1.00							
13	International	-0.01	0.00	0.01	0.00	-0.01	0.16	0.01	0.01	-0.01	0.01	0.01	-0.01	1.00						
14	Doctoral level or equivalent	-0.03	0.03	-0.01	-0.02	0.00	0.04	0.00	-0.02	0.03	0.00	-0.02	-0.01	0.16	1.00					
15	Master's level or equivalent	0.01	-0.01	0.00	-0.01	0.01	-0.01	-0.01	-0.04	0.04	0.00	0.00	0.00	0.03	-0.18	1.00				
16	Bachelor's level or equivalent	0.01	-0.01	0.01	0.02	-0.01	-0.01	0.01	0.05	-0.05	0.00	0.01	0.01	-0.12	-0.38	-0.84	1.00			
17	Living in a university residence or on campus	-0.03	0.03	0.00	0.01	-0.01	0.04	0.03	0.02	-0.03	0.01	0.00	0.01	0.12	-0.04	-0.03	0.05	1.00		
18	Age (mean-centred)	-0.04	0.04	-0.01	-0.02	0.09	0.03	0.00	-0.08	0.06	0.01	-0.02	0.00	0.07	0.26	0.20	-0.32	-0.10	1.00	
19	Time spent at the institution (mean-centred)	-0.01	0.01	-0.01	-0.01	0.03	-0.02	-0.01	-0.03	0.03	0.00	-0.01	0.00	-0.07	0.13	0.24	-0.30	-0.09	0.30	1.00

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

REFERENCES

Bauer, G. R., Churchill, S. M., Mahendran, M., Walwyn, C., Lizotte, D., & Villa-Rueda, A. A. (2021). Intersectionality in quantitative research: A systematic review of its emergence and applications of theory and methods. *SSM - Population Health*, *14*, 100798.

Bondestam, F., & Lundqvist, M. (2020). Sexual harassment in higher education – a systematic review. *European Journal of Higher Education*, *10*(4), 397-419.

Cho, S., Crenshaw, K. W., & McCall, L. J. (2013). Toward a Field of Intersectionality Studies: Theory, Applications, and Praxis. *Signs: Journal of Women in Culture and Society*, *38*, 785 - 810.

Council of Europe. (2011). *Council of Europe Convention on preventing and combating violence against women and domestic violence*.

Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. University of Chicago Legal Forum,

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford law review*, *43*, 1241-1299.

D'ignazio, C., & Klein, L. F. (2020). *Data Feminism*. MIT press.

Evans, C. R., Williams, D. R., Onnela, J.-P., & Subramanian, S. V. (2018). A multilevel approach to modeling health inequalities at the intersection of multiple social identities. *Social science & medicine*, *203*, 64-73.

Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., Strid, S., Hearn, J., Husu, L., Allori, A., & Wuiame, N. (2021). *UniSAFE D3.2 Report on the European Policy Baseline.*

Hancock, A.-M. (2007). When Multiplication Doesn't Equal Quick Addition: Examining Intersectionality as a Research Paradigm. *Perspectives on Politics*, *5*(1), 63-79.

Hearn, J., Strid, S., Humbert, A. L., Balkmar, D., & Delaunay, M. (2022). From Gender Regimes to Violence Regimes: Re-thinking the Position of Violence. *Social Politics: International Studies in Gender, State & Society*, *29*(2), 682-705.

Heise, L., & Garcia-Moreno, C. (2002). Violence by intimate partners. In E. G. Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), *World report on violence and health*. World Health Organization.

Heise, L. L. (1998). Violence against women: an integrated, ecological framework. *Violence Against Women*, *4*(3), 262-290.

Huck, A., Andreska, Z., Dvořáčková, J., & Linková, M. (2022). *UniSAFE D5.1 Inventory of policies and measures to respond to GBV in European universities and research organisations*.

Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). *The world report on violence and health*.

Leckie, G. (2013a). *Cross-Classified Multilevel Models - Concepts. LEMMA VLE Module 12*.

Leckie, G. (2013b). *Three-Level Multilevel Models - Concepts. LEMMA VLE Module 11*.

Leckie, G., & Charlton, C. (2013). runmlwin: A Program to Run the MLwiN Multilevel Modeling Software from within Stata. *Journal of Statistical Software*, *52*(11), 1 - 40.

Lipinsky, A., Schredl, C., Baumann, H., Lomazzi, V., Freund, F., Humbert, A. L., Tanwar, J., & Bondestam, F. (2021). *UniSAFE D4.1 Final UniSAFE-Survey Questionnaire*.

McCall, L. (2005). The Complexity of Intersectionality. *Signs: Journal of Women in Culture and Society*, *30*, 1771-1800.

Merlo, J. (2018). Multilevel analysis of individual heterogeneity and discriminatory accuracy (MAIHDA) within an intersectional framework. *Social science & medicine*, *203*, 74-80.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

Musso, M. G., Proietti, M., & Reynolds, R. R. (2020). Towards an integrated approach to violence against women: persistence, specificity and complexity. *International Review of Sociology*, *30*(2), 249-278.

Naezer, M., van den Brink, M., & Benschop, Y. (2019). *Harassment in Dutch academia: Exploring manifestations, facilitating factors, effects and solutions*.

O'Connor, P., Hodgins, M., Woods, D. R., Wallwaey, E., Palmen, R., Van Den Brink, M., & Schmidt, E. K. (2021). Organisational Characteristics That Facilitate Gender-Based Violence and Harassment in Higher Education? *Administrative Sciences*, *11*(4), 138.

Pilinkaitė Sotirovic, V., & Blazytė, G. (2022). *UniSAFE D5.3 Report on interviews with researchers at higher risk of gender-based violence (Confidential report)*.

Ranea, B., Pajaras, L., Bustelo, M., & Pereira, B. (2022). *UniSAFE D5.2 Report on Case Studies on the Effects and Consequences of Institutional Responses to Gender-based Violence along the 7Ps in Research Performing Organisations (Confidential deliverable report).*

Rasbash, J. (2008). Multilevel structures and classifications. In *LEMMA (Learning Environment for Multilevel Methods and Applications)*. Centre for Multilevel Modelling, University of Bristol.

Rosenthal, M. N., & Freyd, J. J. (2018). Sexual violence on campus: No evidence that studies are biased due to self-selection. *Dignity: A Journal on Sexual Exploitation and Violence*, *3*(1), 1-12.

Simmons, J., & Swahnberg, K. (2019). Can nonresponse bias and known methodological differences explain the large discrepancies in the reported prevalence rate of violence found in Swedish studies? *PLOS ONE*, *14*(5), e0216451.

Spierings, N. (2012). The inclusion of quantitative techniques and diversity in the mainstream of feminist research. *European Journal of Women's Studies*, *19*(3), 331-347.

Steele, F. (2008). *Introduction to Multilevel Modelling Concepts*.

Steele, F. (2009). *Multilevel Models for Binary Responses*.

Strid, S., Humbert, A. L., Hearn, J., Bondestam, F., & Husu, L. (2021). *UniSAFE D3.1 Theoretical and Conceptual Framework*.

van de Mortel, T. F. (2008). Faking It: Social Desirability Response Bias in Self-report Research [Other Journal Article]. *The Australian Journal of Advanced Nursing*, *25*(4), 40-48.

Walby, S., Armstrong, J., & Strid, S. (2012). Intersectionality: Multiple Inequalities in Social Theory. *Sociology*, *46*(2), 224-240.

Wemrell, M., Stjernlöf, S., Aenishänslin, J., Lila, M., Gracia, E., & Ivert, A.-K. (2019). Towards understanding the Nordic paradox: A review of qualitative interview studies on intimate partner violence against women (IPVAW) in Sweden. *Sociology Compass*, *13*(6), e12699.

Wroblewski, A. (2018). *D3.1 Report on national roadmaps and mechanisms in ERA priority 4*.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261

ACKNOWLEDGEMENT

This report benefits from the contributions to the data acquisition, analysis, and interpretation in tasks performed in WP3, WP4 and WP5 to which all partners have contributed. These tasks were led by Marcela Linková (ISAS), Anke Lipinsky (GESIS), María Bustelo (UCM), and Vilana Pilinkaitė Sotirovič (LSTC), respectively. Notably, researchers on the survey dataset in WP4 include, in alphabetical order, Horst Baumann, Fredrik Bondestam, Anne Laure Humbert, Anke Lipinsky, Claudia Schredl and Jagriti Tanwar.

The following UniSAFE deliverables were used for this report:

Fajmonová, V., Huck, A., Andreska, Z., Dvořáčková, J., Linková, M., Struzińska, K., Strid, S., Hearn, J., Husu, L., Allori, A., & Wuiame, N. (2021). *UniSAFE D3.2: Report on the European Policy Baseline.* Public deliverable submitted to the European Commission 30/09/2021. Zenodo. https://doi.org/10.5281/zenodo.5780037

Huck, A., Andreska, Z., Dvořáčková, J., & Linková, M. (2022). *UniSAFE D5.1: Inventory of Policies and Measures to Respond to Gender-Based Violence in European Universities and Research Organisations*. Public deliverable submitted to the European Commission 31/01/2022. Zenodo. https://doi.org/10.5281/zenodo.5939082

Lipinsky, A., Schredl, C., Baumann, H., Lomazzi, V., Freund, F., Humbert, A. L., Tanwar, J., & Bondestam, F. (2021). *UniSAFE D4.1: Final UniSAFE-Survey Questionnaire*. Public deliverable submitted to the European Commission 30/11/2021. Zenodo. https://doi.org/10.5281/zenodo.7220636

Ranea, B., Pajaras, L., Bustelo, M., & Pereira, B. (2022). *UniSAFE D5.2: Report on Case Studies on the Effects and Consequences of Institutional Responses to Gender-based Violence along the 7Ps in Research Performing Organisations.* Public deliverable to be submitted to the European Commission December 2022.

Pilinkaitė Sotirovič, V., & Blažytė, G. (2022). *UniSAFE D5.3: Report on Interviews with Researchers at Higher Risk of Gender-Based Violence.* Confidential deliverable submitted to the European Commission 31/07/2022.

Schredl, C., Lipinsky, A., Baumann, H., Humbert, A. L., & Tanwar, J. (2022). *UniSAFE D4.2: Survey Dataset and Codebook.* Confidential deliverable submitted to the European Commission 26/07/2022.

Schredl, C., Lipinsky, A., Baumann, H., Humbert, A. L., Tanwar, J., Bondestam, F. (2022). *UniSAFE D4.3: Initial Analysis and Quantitative Indicators Report.* Confidential deliverable submitted to the European Commission 28/07/2022

Strid, S., Humbert, A. L., Hearn, J., Bondestam, F., & Husu, L. (2021). *UniSAFE D3.1: Theoretical and Conceptual Framework*. Public deliverable submitted to the European Commission 30/04/2021. Zenodo. https://doi.org/10.5281/zenodo.7333232

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006261