Multifactorial Discrimination and Student Mental Health: Implications for More Inclusive Higher Education

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Higher education institutions should offer their students a safe, inclusive space that protects their mental health. Addressing this requires a holistic approach fostering a culture of belonging and psychological safety within academic communities. This research explores the association of multifactorial discrimination with student mental health and the potential of social integration to mitigate this effect in order to identify possible levers for higher education institutions. Logistic regression analysis indicates that discrimination is a significant predictor of mental health problems with social integration moderating this relationship. Additionally, an ANOVA reveals that students who experience discrimination rate psychological counselling services less positively than those without such experiences. This highlights the need to strengthen social integration of students at higher education institutions and psychological counselling especially for those facing discrimination.

Keywords: student mental health, discrimination, social integration, inclusivity, psychological counselling

1   Introduction

Higher education institutions play a pivotal role in shaping the future of societies and individuals. They not only drive innovation and foster societal transformation but also actively contribute to steering social development. Within the framework of the United Nations' 2030 Agenda for Sustainable Development, higher education and academic research are acknowledged as key enablers of Sustainable Development Goal 4 (SDG 4), which focuses on ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all (United Nations [UN], 2015). To achieve this, higher education institutions must translate this goal into concrete action, helping to ensure that no one is left behind. Their engagement also reflects a broader commitment to the vision set out in the United Nations' Declaration – a vision grounded in universal respect for human rights and dignity, the rule of law, justice, equality, and non-discrimination, as well as the recognition of racial, ethnic, and cultural diversity (United Nations, 2015).

Fostering an inclusive learning environment is crucial not only for students' professional development but also for their mental health. For young adults, the transition to higher education often represents a period of heightened vulnerability, as they may encounter academic, personal, and societal pressures simultaneously. Particularly in the context of current global crises, the mental health of students in higher education has become an increasingly pressing issue. The COVID-19 pandemic, economic instability marked by inflation, and geopolitical tensions are just a few of the potential stressors affecting students around the world (Bravo et al., 2023; Li et al., 2021).

At the same time, discrimination is a critical issue in higher education, as it not only affects academic performance, but also (further) undermines students' mental health. The impact of discrimination becomes particularly pronounced when individuals face multiple forms of identity-based marginalisation. This phenomenon, known as multifactorial discrimination, occurs when overlapping identity factors interact to compound the negative effects of discrimination (Crenshaw, 1998).

While discrimination is a pervasive challenge, its impact is not felt equally by all students. Social integration has been identified as a critical protective factor that can buffer the psychological impacts of discrimination. Furthermore, some higher education institutions have started to offer their own psychological counselling services, aiming to support students. However, the extent to which social integration can mitigate the cumulative effects of multifactorial discrimination remains underexplored. What is more, little evidence exists regarding the extent to which higher education institutions' psychological counselling services are perceived as helpful by students who have experienced (multifactorial) discrimination. Gaining a better understanding of these matters is crucial for designing effective interventions that enhance inclusivity and mental health in higher education settings. Therefore, the aim of this study is to shed light on the relationship between multifactorial discrimination and student mental health with a focus on the role of social integration and psychological counselling services.

2 Higher Education at a Crossroads: Empirical Background

In recent years, the mental health of university students has garnered increasing academic and public attention, particularly in light of the complex societal and structural challenges they face. A growing body of research highlights how these challenges intersect with various forms of discrimination, compounding psychological distress and impacting student well-being globally. Meta-analytic findings show that current global challenges have compounded existing mental health issues – such as depression, anxiety, and other mental health disorders – within the student population across multiple countries (Bravo et al., 2023; Li et al., 2021). Alarmingly, suicide rates have

also increased among students, highlighting the critical need to address this growing public health issue (Campbell et al., 2022). Previous research has shown that almost two-thirds of people worldwide experience their first episode of mental disorders before the age of 25 (Solmi et al., 2022). The EUROSTUDENT 8 survey further illustrates the magnitude of the issue, revealing that one in ten students across the European Higher Education Area reports mental health challenges severe enough to affect their studies (Hauschildt, 2024).

Discrimination can be defined as unfavourable treatment towards a group or an individual based on perceived or actual identity factors, such as race/ethnicity, gender, sexual orientation, age, weight, impairment, or socioeconomic status (Devakumar et al., 2022). There is evidence for adverse effects of discrimination showing that individuals subjected to such treatment are at higher risk for anxiety, depression, substance use, and other mental health challenges (Carter et al., 2019; Emmer et al., 2024). Among students specifically, exposure to discrimination has been linked to increased stress, depressive symptoms, and even suicidal thoughts (Jochman et al., 2019; Pichardo et al., 2021). Given these risks, higher education institutions have a vested interest in reducing student dropout intentions – an aim that is closely tied to addressing the psychological burden discrimination places on students.

Discrimination is reported across various identity factors – such as gender, race, and sexual orientation – each uniquely affecting mental health. Gender-based discrimination is well studied and shows clear negative effects. Women who are exposed to sexism report increased psychological stress and a reduction in their general well-being (Swim et al., 2001). Similarly serious as the psychological effects of discrimination based on gender identity are those based on sexual orientation. Studies show that people from sexual minority groups suffer significantly more frequently from depression and anxiety disorders than cis-heterosexual people (Fredriksen-Goldsen et al., 2013). Racism is also linked to a higher risk of mental health issues. Students who experience racial discrimination on campus often report feelings of isolation, self-doubt and reduced academic engagement which can lead to long-term impacts on mental health and well-being (Emmer et al., 2024; Jochman et al., 2019). Similar findings were reported for ageism – discrimination based on the identity factor age. Besides its negative impact on mental health, ageism can also lead to social isolation. It can be noted that these negative effects were found not only for hostile discrimination but also benevolent behaviour (Gans et al., 2023). Finally, also social background plays a significant role in this context. Students from low-income households or whose parents have a low educational background are more likely to report stigmatisation due to social disadvantage. These experiences can lead to social isolation, reduced academic self-efficacy and negative psychological consequences (Hoyt et al., 2023).

Several psychological mechanisms help to explain the relationship between discrimination and its negative consequences. One key mechanism is stereotype threat, which arises when individuals internalise fears of confirming negative stereotypes about their social group. This fear can increase stress and affect performance in evaluative situations, such as exams or presentations (Steele & Aronson, 1995). For example, women in male-dominated STEM fields may experience heightened stress and reduced self-efficacy due to stereotype threat, which in turn undermines their academic performance (Nguyen & Ryan, 2008; Walton & Spencer, 2009). Another mechanism, known as self-fulfilling prophecy, highlights how external expectations based on biases can shape individual behaviour. In educational settings, marginalised students who encounter lower expectations from instructors or peers may receive fewer opportunities for engagement and feedback, further reinforcing initial biases (Gershenson et al., 2016; Rosenthal & Jacobson, 1968). These mechanisms often operate in tandem, creating a cycle of disadvantage that perpetuates the effects of discrimination over time.

By reducing feelings of isolation and promoting a sense of belonging, social peer support can mitigate the negative effects of discrimination on mental health. A systematic review and meta-analysis found that peer support programmes significantly reduced symptoms of depression and generalised anxiety disorder in university students (Worsley et al., 2022). Moreover, building strong social networks has been highlighted as a key factor in promoting students' well-being (Campbell et al., 2022).

Acknowledging students' challenges and supporting them, higher education institutions have been setting up psychological counselling services during the last decades. Psychological counselling services are well established in many European countries and target different issues, from learning and social skills to examination stress and depression (e. g., Rückert, 2015). Whether psychological counselling services serve the need is often evaluated by the institutions themselves; systematic empirical analyses are scarce. However, there is evidence that psychological counselling services are effective in reducing students' psychosocial stress (Pizzo et al., 2025; Sperth et al., 2013). While some students might use psychological counselling services for rather generic topics like procrastination or self-organisation, others might use it for even more pressing issues that target their mental health.

Taken together, these findings underscore the multifaceted nature of student vulnerability, particularly among those facing discrimination based on various characteristics. As understanding these stressors is crucial for developing effective interventions and consequently rendering higher education institutions more inclusive for everyone, it is important to investigate if social support (whether manifested as social integration or institutionalised through psychological counselling services) helps to alleviate the mental health burden associated with multifactorial discrimination.

This study therefore investigates the relationship between multifactorial discrimination and student mental health while considering the potential mitigating role of social integration. Adding on this and offering a high practical relevance for enhancing inclusivity in higher education, it examines the perceived helpfulness of psychological counselling services offered by higher education institutions, exploring whether students who experience discrimination find professional support to be a helpful resource. Thus, drawing on a large, cross-national student dataset, this research aims to provide evidence-based insights into how universities can foster inclusive and supportive learning environments through both peer-driven and institutional support mechanisms.

3 Methodology

3.1 Data Source

This study utilises data from the EUROSTUDENT 8 project, a cross-country survey conducted primarily in the spring and summer of 2022 (with some exceptions in 2023). The project collected quantitative data on various topics related to student life, including mental health, discrimination experiences, well-being, social integration in higher education, and academic circumstances. The variables of interest for this study are described in section 3.4; for a comprehensive overview of all topics, see Hauschildt (2024). The Scientific Use File of EUROSTUDENT 8, Version 1.0.0 (Cuppen et al., 2024) consists of 18 countries with 194.758 cases. Based on the variables of interest, in this study, 12 countries with 153.274 cases in total are included: Austria, Croatia, the Czech Republic, Denmark, Finland, Georgia, Hungary, Iceland, Ireland, Malta, the Netherlands, and Poland.

3.2 Target Population

The target population of EUROSTUDENT 8 includes all students enrolled in higher education programmes during the observation period, as defined by the International Standard Classification of Education (ISCED 2011) levels 5, 6, and 7 (UNESCO Institute for Statistics, 2012). This includes short-cycle programmes (programmes with a minimum duration of two years that are usually practice-oriented and may provide a pathway to other higher education programmes), Bachelor's and Master's degrees, traditional diploma programmes, and equivalent qualifications recognised as higher education in each national context. Students on temporal leave, students studying temporarily abroad, students who are not living in the country of survey while studying a distance learning programme, and doctoral students are not part of the target population.

3.3 Sampling and Data Collection

The survey used a standardised online questionnaire to collect data from participants. The questionnaire was distributed nationally within each participating country, following a census or a structured sampling plan. While variations in sampling and recruitment procedures may exist between countries, the dataset represents a comprehensive cross-national perspective on students' experiences. The sample is composed of students from diverse academic disciplines, geographic regions, and demographic backgrounds. While the total sample size varies by country, the aggregation of responses provides robust statistical power for analyses of the student body.

3.4 Operationalisation
3.4.1 Mental Health Problem(s)

Participants indicated whether they have a mental health condition, such as anxiety disorders, depression, eating disorders, personality disorders, ADHD, psychosis, addiction disorders, or other unspecified conditions. These conditions were coded as a binary variable regarding whether students have a mental health condition (1 = yes; 0 = no).

3.4.2 Discrimination Experiences

Experiences of discrimination were measured regarding eleven criteria. The selection of the criteria was based on the European Social Survey (European Social Survey, 2018) and the Intersectional day-to-day Discrimination Index (Scheim & Bauer, 2019) and slightly adapted to the context of higher education. Students indicated whether they have felt discriminated in the context of their studies due to the following criteria: skin colour, ancestry/nationality, religion, gender, sexuality, age, weight, impairment, income, parents' education and mental health. For each criterion, they indicated whether they felt discriminated by fellow students, teaching staff, and/ or other university staff (1 = yes; 0 = no). For this study, students were classified as "with discrimination experience(s)" if they indicated having experienced discrimination based on at least one criterion by at least one group of people and as "without discrimination experience" if they did not indicate a discrimination experience at all. In addition, a variable was calculated indicating whether students reported discrimination experiences based on multiple identity factors. This variable includes students who did not indicate any discrimination experience regarding the eleven criteria (reference category), students who indicated a discrimination experience due to one criterion only, irrespective of the group they felt discriminated by (single discrim.), and students who indicated discrimination experiences due to at least two criteria, irrespective of the group they felt discriminated by (multiple discrim.). It has to be noted that the operationalisation

of discrimination experiences in this study covers self-reports and does not allow to draw any conclusions regarding whether these experiences have also been reported to any official contact points.

3.4.3 Social Integration

In this study, social integration is operationalised using the item "*How often do you feel isolated from fellow students in your study programme?*", originally measured on a scale from 1 (*all of the time*) to 5 (*never*). For the analysis, the item was recoded so that higher values indicate greater perceived isolation (1 = *never feeling isolated*; 5 = *feeling isolated all of the time*). This item captures the subjective perception of social connectedness within the academic context, which is central for social integration within higher education. While social integration can encompass various structural and behavioural indicators (e. g., frequency of interaction, participation in group activities), perceived isolation is particularly salient, as it reflects the individual's internalised sense of belonging and inclusion. By focusing on perceived isolation, the measure captures not only the presence or absence of social ties, but also the quality and adequacy of those ties from the student's perspective. This is especially relevant in higher education settings, where superficial contact may not equate to meaningful integration.

3.4.4 Student Knowledge of and Satisfaction With Psychological Counselling Services

To assess students' awareness and evaluation of psychological counselling services, two variables were examined. The first variable measured awareness of counselling services, asking students whether they were familiar with psychological counselling options specifically designed for students, such as support for exam-related anxiety. Response options included "Yes, I have already used it", "Yes, but I have not used it (yet)", and "No, I have never heard of it". It should be noted that for the "No" response, there are two possible reasons: Either students are unaware of existing services, or their institution does not offer such services at all. The second variable focused on the perceived helpfulness of these services, where students who had accessed psychological counselling were asked to rate its helpfulness on a five-point Likert scale ranging from *very helpful* (1) to *not helpful at all* (5). These measures provide insights into both the accessibility and the perceived impact of counselling services within higher education institutions.

3.4.5 Control Variables

For the analysis, the following control variables were included: gender, age, financial difficulties[1], field of study, and country. *Gender* was coded as *female*, *male*, and *other/not able to assign*. *Age* was categorised into the four groups: *up to 21 years*, *22 to <25 years*, *25 to <30 years*, and *30 years and over*. The variable *financial difficulties* indicates the extent to which students experience financially challenging situations. *Field of study* includes the following categories: *Education; Arts and Humanities; Social Sciences*, *Journalism & Information; Business*, *Administration & Law; Natural Sciences*, *Mathematics & Statistics; ICTs; Engineering*, *Manufacturing & Construction; Agriculture*, *Forestry*, *Fisheries & Veterinary; Health and Welfare; Services*. In addition, the variable *country* was included to control for country-specific differences. Only countries that contained valid responses on the discrimination-related items were included in the analysis.

3.5 Data Analysis

All analyses were conducted in IBM SPSS Statistics (Version 28.0.0.0). First, descriptive statistics were computed to explore the main sociodemographic characteristics of the sample, as well as frequencies or mean scores of the variables of interest.

To examine the relationship between discrimination experiences and mental health problems, a logistic regression was conducted. Bootstrapping (5000 resamples) was used where applicable to obtain robust standard errors and confidence intervals. The dependent variable (Y) was mental health problem(s) (0 = no; 1 = yes). The main predictor (X) was discrimination experiences, coded as no discrimination = reference group, one discrimination experience = single discrim., multiple discrimination experiences = multiple discrim. (see above). Additionally, social integration was included as a potential moderator. Several control variables were added sequentially to the model, including gender, age, financial difficulties, field of study, and country.

3.5.1 Stepwise Model Building

The analysis followed a stepwise approach:

■ **Baseline Model:**
First, the effect of discrimination and social integration on mental health problems was assessed in a simple logistic regression.

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[1] There is some evidence of a link between financial difficulties and mental health problems (e.g., Muja et al., 2024).

■ **Control Variables:**
Next, demographic covariates (gender, age, financial difficulties, field of study, country) were added to the model to account for potential confounding effects.

■ **Moderation Analysis:**
Finally, interaction terms were created by multiplying discrimination experiences and social integration to test whether social integration moderates the relationship between discrimination experiences and mental health problems.

Model Specification

A logistic regression analysis was performed using the LOGISTIC REGRESSION function in SPSS. The ENTER method was used to include predictors step by step. Categorical predictors were dummy-coded using Indicator (1) contrast coding. The significance of each predictor was assessed using Wald's test, and the overall model fit was evaluated using Nagelkerke R^2. Multicollinearity was checked using variance inflation factors (VIFs). The cut-off value for classification was set at 0.5, meaning predicted probabilities above 0.5 were classified as "yes" (1), and those below 0.5 as "no" (0).

Moderation Effect

To test for moderation, product terms (interactions) between discrimination experiences and social integration were computed and included in the final regression model. Specifically, two interaction terms were created: one for the interaction between single discrimination experience and social integration, and one for the interaction between multiple discrimination experiences and social integration. A significant interaction effect would indicate that the effect of discrimination on mental health problems depends on the level of social integration. Simple slopes analyses were conducted to further explore the nature of the interaction.

Satisfaction With Counselling Services

To analyse differences in the evaluation of psychological counselling services among students with varying experiences of discrimination, a one-way ANOVA was conducted. The dependent variable was the satisfaction with counselling services, measured on a five-point scale ranging from *very helpful* (1) to *not helpful at all* (5). The independent variable was the extent of discrimination experiences (no, single, or multiple experiences). Post-hoc tests with Bonferroni correction were applied to examine pairwise differences between groups. This analysis aimed to determine whether discrimination experiences are associated with students' perceptions of the helpfulness of psychological counselling services.

4   Results

4.1   Descriptive Statistics

Reported discrimination experiences as well as mental health status are presented in Table 1. Overall, 25 % of the students report experiencing discrimination in the context of their studies. Among the different types of discrimination, gender-based discrimination is the most frequently reported (10 %), followed by discrimination based on ancestry or nationality (6 %), age (6 %), income (5 %), and mental health status (5 %). Other forms of discrimination are reported less frequently, including weight (4 %), religion (3 %), sexuality (3 %), parents' education (3 %), impairment (2 %), and skin colour (2 %). Regarding the extent of discrimination experiences, 14 % of students report experiencing discrimination based on one factor, while 11 % report facing discrimination based on two or more factors.

Overall, 13 % of students report having a mental health problem, indicating a substantial proportion of students facing mental health-related challenges.

The mean score of social isolation is 2.80 (SD = 1.28), indicating that, on average, students experienced moderate levels of isolation in their academic environment.

Table 1: Shares of Students Indicating Discrimination and Mental Health Problems

	Share of Students
Any Perceived Discrimination	25 %
Discrimination: Gender	10 %
Discrimination: Age	6 %
Discrimination: Ancestry/Nationality	6 %
Discrimination: Income	5 %
Discrimination: Mental Health	5 %
Discrimination: Weight	4 %
Discrimination: Religion	3 %
Discrimination: Sexuality	3 %
Discrimination: Parents' Education	3 %
Discrimination: Impairment	2 %
Discrimination: Skin Colour	2 %
Mental Health Problem(S)	13 %

Source: EUROSTUDENT 8 Scientific Use File, Version 1.0.0 (Cuppen et al., 2024).

4.2 Perceived Discrimination and Mental Health

A logistic regression model was used to examine the association of discrimination experiences and mental health problems among students, including social integration as potential moderator. The final model includes demographic covariates (age, gender, financial difficulties, field of study, country) as well as two interaction terms: one for the interaction between single discrimination and social isolation, and one for the interaction between multiple discrimination and social isolation. This model shows an improved fit, with a Nagelkerke R^2 of 0.157, indicating that 15.7 % of the variance in mental health problems is explained by the predictors (see Table 2).

Table 2: Logistic Regression Models on Mental Health Problems (Logit Effects)

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5
Discrimination (Ref: No Discrim.)						
Single Discrim.	0.477***	0.409***	0.370***	0.369***	0.385***	0.572***
Multiple Discrim.	1.060***	0.968***	0.872***	0.874***	0.910***	1.068***
Social Isolation	0.403***	0.399***	0.382***	0.373***	0.351***	0.369***
Sex (Ref: Female)						
Male		−0.477***	−0.474***	−0.458***	−0.452***	−0.452***
Other/Not Able to Assign		1.424***	1.421***	1.157***	1.259***	1.257***
Age (Ref: Up to 21 years)						
22 to <25 Years		0.058**	0.050*	0.060**	0.028	0.028
25 to <30 Years		0.133***	0.094***	0.100***	0.048	0.048
30 Years and Over		−0.175***	−0.211***	−0.186***	−0.316***	−0.315***
Financial Diff. (Ref: With Diff.)						
Medium Diff.			−0.350***	−0.350***	−0.346***	−0.346***
Without Diff.			−0.505***	−0.502***	−0.516***	−0.515***
Study Fields (Ref: Education)						
Arts And Humanities				0.783***	0.685***	0.684***
Social Sc., Journalism & Inf.				0.473***	0.442***	0.441***
Business, Administration & Law				−0.177***	−0.210***	−0.209***
Natural Sc., Math. & Statistics				0.480***	0.415***	0.414***
Inf. & Communication Tech.				0.334***	0.269***	0.269***
Engineering, Manufacturing				0.007	−0.065***	−0.065
Agric., Forestry, Fisheries & Vet.				0.373***	0.190***	0.190**
Health & Welfare				0.105**	0.002***	0.002
Services				−0.06	−0.246***	−0.245***

Continued on Next Page

Table 2, Continued

	Model 0	Model 1	Model 2	Model 3	Model 4	Model 5
Country (Ref: Austria)						
Croatia					−0.352***	−0.349***
Czech Republic					0.319***	0.319***
Denmark					0.540***	0.542***
Finland					0.934***	0.931***
Georgia					−0.585***	−0.579***
Hungary					−0.410***	−0.409***
Iceland					0.679***	0.678***
Ireland					0.351***	0.352***
Malta					−0.295	−0.293
Netherlands					0.156***	0.157***
Poland					0.337***	0.339***
Interaction Effects						
Single Discrim. x Isolation						−0.057**
Multiple Discrim. x Isolation						−0.046*
Intercept	−3.326***	−3.186***	−2.797***	−3.009***	−3.018***	−3.074***
Number of Estimated Parameters	4	9	11	20	31	33
Nagelkerke R²	0.095	−0.11	0.118	0.137	0.157	0.157

Notes: *** $p \leq .001$; ** $p \leq .01$; * $p \leq .05$. Source: EUROSTUDENT 8 Scientific Use File, Version 1.0.0 (Cuppen et al., 2024).

The analysis shows a significant association between discrimination experiences and mental health problems of students ($p \leq .001$) which remains robust with all control variables held constant. Model 4 shows that students who have experienced one type of discrimination have a 1.5 times higher likelihood (Exp(B) = 1.469) of reporting mental health issues compared to those who have not experienced discrimination. The effect is even stronger for students facing multiple discrimination experiences, who are 2.5 times (Exp(B) = 2.485) more likely to report mental health problems.

The interaction terms between discrimination and isolation are statistically significant (single discrimination x isolation: Exp(B) = 0.945, p = .003; multiple discrimination x isolation: Exp(B) = 0.955, p = .016), indicating that the effect of discrimination on mental health is moderated by social integration. The less students feel isolated from their peers, the less discrimination is associated with mental health problems. Put the other way around, students who experience discrimination (both single and multiple) may be more negatively affected if they also experience isolation.

To test the robustness of these findings and diminish potential circularity issues, we repeated the analysis excluding discrimination experiences based on mental health as

a criterion. The results revealed a very similar model fit (Nagelkerke R^2 = 0.150), with only slightly reduced effect sizes for single (Exp(B) = 1.469, 95 % CI: 1.346–1.603) and multiple discrimination (Exp(B) = 2.485, 95 % CI: 2.069–2.985). Social isolation remained a significant moderator. Thus, the main conclusions regarding the impact of multifactorial discrimination and social integration on student mental health are robust across different model specifications, either including or excluding students' discrimination experiences due to their mental health.

4.3 Knowledge of and Satisfaction With Psychological Counselling Services

Regarding the awareness of the counselling services, the results indicated that 54.5 % of students were aware of the services but had not yet used them, 8.8 % had already used the services, and 36.7 % had never heard of them.

The ANOVA results revealed significant differences in the assessment of counselling services among students with different discrimination experiences (F(2, 7026) = 22.632, $p \leq .001$). Post-hoc Bonferroni comparisons further showed that students who reported no discrimination experience (M = 2.29, SD = 1.174) rated the counselling services significantly more helpful than those who experienced single discrimination (M = 2.44, SD = 1.274; $p \leq .001$) and multiple discrimination (M = 2.53, SD = 1.303; $p \leq .001$). Additionally, students with single discrimination experiences rated the services slightly better than those with multiple discrimination experiences, but this difference was not statistically significant ($p = .233$). These findings indicate that students who have experienced discrimination tend to perceive counselling services as less helpful compared to their peers without such experiences (see Table 3). However, it has to be kept in mind that the question regarding the counselling services was not specifically targeting the discrimination experiences.

Table 3: Post-Hoc Comparisons (Bonferroni) of Helpfulness of Psychological Counselling Services

Group Comparison	Mean Difference	Std. Error	Sig.	95 % Confidence Interval	
				Lower Bound	Upper Bound
No Discrim. vs. Single Discrim.	−.150*	0.041	<.001	−0.25	−0.05
No Discrim. vs. Multiple Discrim.	−.237*	0.038	<.001	−0.33	−0.15
Single Discrim. vs. Multiple Discrim.	−0.087	0.049	.233	−0.21	0.03

Group coding: No Discrim. = No discrimination experience;
Single Discrim. = Single discrimination experience; Multiple Discrim. = Multiple discrimination experiences.
Source: Eurostudent 8 Scientific Use File, Version 1.0.0 (Cuppen et al., 2024).

5   Discussion

Higher education institutions have a mandate to be open to everyone and foster knowledge acquisition as well as personal development. To do so, they do not only need to produce top-notch research and offer high-quality teaching, but they also need to invest in a supportive and inclusive environment. One aspect to support students with the multiple challenges they face nowadays – for example, those with mental health issues – is offering psychological counselling services on campus. Therefore, this study investigated students' mental health and discrimination experiences within the context of higher education – with a focus on a possible moderator of their relationship as well as the perceived helpfulness of psychological counselling services offered to students.

The findings of the present study provide evidence on the significant impact of discrimination experiences on students' mental health. Consistent with previous research (Daftary et al., 2020; Volpert-Esmond et al., 2023), the findings highlight that multiple experiences of discrimination have a particularly pronounced negative effect: Students with multiple discrimination experiences are about two and a half times more likely to also report a mental health problem compared to students without such experiences. Additionally, the analysis revealed statistically significant interaction effects between discrimination experiences and social integration. Social integration can thus be seen as buffer, with those who are socially isolated lacking the resources or coping mechanisms to mitigate the negative effects of discrimination. The effects also hold true when leaving aside discrimination experiences due to mental health status – making the findings even more robust.

The United Nations' Agenda 2030 (United Nations, 2015) recognises the fundamental role of higher education in Sustainable Development Goal 4 (SDG 4) – Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. This highlights that higher education institutions must actively contribute to creating environments that promote equal opportunities, mental well-being, and academic success for diverse student populations. The significant impact of discrimination on students' mental health found in this study emphasises the need for higher education institutions to take proactive measures in fostering inclusive and supportive learning environments. On the one hand, given that mental health challenges can impair academic engagement and grades (e. g., Bruffaerts et al., 2018), higher education institutions must recognise discrimination as a critical barrier to student success and well-being. On the other hand, given that discrimination experiences themselves can be associated with higher dropout intentions (e. g., Menz et al., 2024), focusing on students with those experiences is essential for higher education institutions. The results regarding students' awareness and satisfaction with psychological counselling services

suggest a clear information gap regarding these services that should be addressed by higher education institutions. We found that a significant proportion of students has never heard of psychological counselling services of their higher education institution. While this might not be too problematic for students without a need for counselling, it could also be the case that students in need of psychological support could not find the relevant information. First, establishing psychological counselling services at each higher education institution is important: One possible explanation for the large proportion of students not knowing about services at their higher education institution could be their non-existence. Second, providing target group specific, appealing and comprehensive advertisements for the psychological counselling services they offer is a significant task of higher education institutions that should not be neglected in the future.

The perceived helpfulness of psychological counselling services varies significantly, especially among those who report having experienced discrimination. This points to the possibility that existing support services may not be sufficiently tailored to meet the specific needs of discriminated students. This assumption is reinforced by the fact that a study providing an overview of topics covered in various countries' psychological counselling services does not mention discrimination as one of the main areas targeted (Rückert, 2015). There is a pressing need for discrimination-sensitive counselling that takes these particular concerns into account. Moreover, integrating discrimination-sensitive counselling into a broader, holistic strategy is essential for a more inclusive higher education. This strategy should not only focus on individual counselling, but also promote structural changes within universities. This could include incorporating diversity-awareness training for faculty, fostering open discussions on discrimination and mental health within the curriculum, and ensuring that assessment methods are equitable to all students. By focusing on these aspects, higher education institutions of the future could achieve two things: First, marginalised students who face particular challenges will be supported better, possibly reducing negative outcomes, for example, dropouts of higher education. Second, higher education institutions would take on role model and multiplicator functions for the whole society by showing the importance of investing in students' mental health and an inclusive environment, and thus, shaping the future for all of us.

Furthermore, expanding peer mentoring programmes and student support networks could help mitigate the negative effects of social isolation and create a sense of belonging within the academic community. Strengthening social interaction among students helps to mitigate the negative mental health effects of discrimination, as social support can improve psychological resilience (Dong et al., 2024). Fostering inclusive peer relationships and creating supportive social environments within educational settings can serve as a protective factor against the adverse outcomes of

discrimination. Social interactions provide emotional validation, shared coping strategies, and a sense of belonging, all of which are essential for buffering the psychological distress associated with discrimination. To promote social integration is not only relevant on an individual level – it can also be effectively supported by higher education institutions. They should therefore prioritise initiatives that enhance social cohesion, such as mentorship programmes, peer support networks, and inclusive extracurricular activities, to ensure that students facing discrimination can access the interpersonal resources necessary for maintaining mental well-being. Peer support systems could be effectively integrated into governance structures to make changes sustainable for future generations of students who will then profit from more inclusive, supportive educational experiences.

Beyond individual interventions, higher education institutions of the future must also integrate structural changes that reinforce inclusion at the institutional level. This includes establishing anti-discrimination policies, enhancing access to mental health services, and embedding equity-driven principles in governance and decision-making processes. The findings of the present study point to a clear need for higher education institutions to prioritise mental health as part of their strategic planning. By adopting these measures, higher education institutions can contribute to a future-oriented academic landscape that prioritises student well-being and fosters a more resilient and inclusive learning environment.

6   Limitations and Future Research

While the findings of this study offer valuable insights, it is essential to acknowledge the limitations of the research design. It should be noted that this study is based on cross-sectional data. Therefore, causal conclusions about the effects cannot be drawn. The relatively small interaction effects between discrimination experiences and isolation indicate that while social integration may provide some relief, it does not fully counteract the negative consequences of discrimination. Moreover, the concepts of discrimination experiences and students' feelings of isolation could be confounded to some extent, leading to distorted findings. Furthermore, while the use of quantitative data provides a means for statistical analysis and a broad perspective, it cannot fully represent the depth and complexity of students' individual experiences and perspectives. Future research could further contribute to understanding the relations between discrimination and mental health as well as the moderating role of social integration or other potential moderators by applying longitudinal designs and in-depth qualitative analyses.

Using EUROSTUDENT 8 Microdata (Cuppen et al., 2024) offers the valuable opportunity to get insights into students' situations around the European Higher Education

Area. While in this study, between-country effects were not of particular interest, country effects were only considered as control variables. To investigate further whether differences between countries which, for example, spend more or less budget on the social dimension of students, occur regarding the psychological counselling services, could be fruitful for a deeper understanding of the mechanisms.

7   Conclusion

Mental health issues are raising among students (Burwell, 2018), implying the student body to get more diverse in the future of higher education. The present study supports this assumption in showing that also discrimination experiences are common among students (25 % of students report having experienced discrimination within the context of higher education). To be able to meet students' needs in their worlds, higher education institutions need to know about the link between discrimination experiences and mental health issues, consider the pivotal role of reducing isolation of students, foster effective psychological counselling services, provide students with a rewarding study experience and support them in transferring that experience into the world. By doing this, higher education institutions continue taking on their important role of shaping society and the future.

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