

Graduate Student and Faculty Mental Health: Evidence from European Economics Departments

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Overview of this Paper

Motivation

- High rates of mental health issues among graduate students at top US Economics departments in 2017 (Bolotnyy et al. 2022)

Research question

- What's the state of mental health of graduate students and faculty at European Economics departments?

Methodology

- Online surveys among PhD students and faculty at 14 Economics departments in November 2021

Results

- Higher prevalence of mental health issues in Europe than in US study

Road Map

- 1 Sample and Survey Design
- 2 Findings
 - Student Mental Health
 - Student Experiences in the Program
 - Impact of the COVID-19 Pandemic
 - Faculty Mental Health
- 3 Conclusion

Survey Structure

- Online (link sent by e-mail to students and faculty)
- Fall 2021 (COVID-19 delay)
- Student survey (45 min) and faculty survey (15 min)
 - ▶ Clinically validated instruments that measure prevalence and severity of mental health conditions (PHQ-9, GAD-7..)

Sample Selection

- 14 departments in Europe and Great Britain.
 - ▶ Bonn, Bocconi, CEU, EUI, LSE, Mannheim, PSE, Stockholm, Pompeu Fabra, UCL, Uppsala, Warwick, Zurich
 - ▶ Focus on departments with US style programs (graduate schools)
 - ▶ Departments selected into participating.
- Population:
 - ▶ 1,173 Economics PhD students, 556 participated (response rate: 47.4%)
 - ▶ 814 faculty members, 255 participated (response rate: 42%)
- Student demographics similar to US Graduate Student Mental Health study (GSMH)
 - ▶ 35% female, lower racial diversity, more first generation students

▶ Student table by dept

▶ Faculty table by dept

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Student Results: Symptoms of Depression

Measure

- PHQ-9 (Patient Health Questionnaire, Kroenke et al 2001).

Results

- **27.3%** of students with moderate or severe symptoms of depression

Comparison

- US GSMH Study 2017: **17.7%** (Bolotnyy et al. 2022)
- Harvard graduate students: **23.6%** (Dench et al. 2020)
- All ages Europe April 2021: **23.8%** (European COVID Survey, Hayek et al. 2022)

▶ Questionnaire

Student Results: Symptoms of Anxiety

Measure

- General Anxiety Disorder Questionnaire (GAD-7) (Spitzer et al. 2006)

Result

- **25.9%** of students with with moderate or severe symptoms of anxiety

Comparison

- US GSMH Study 2017: **17.6%** (Bolotnyy et al. 2022)
- Harvard graduate students: **23.1%** (Dench et al. 2020)
- All ages Europe April 2021: **23.8%** (European COVID Survey, Hayek et al. 2022)

▶ Questionnaire

Student Results: Suicidal (and Self-harm) Ideation

Measure

- PHQ-9 item 9: Thoughts that would be better off dead and of hurting oneself in some way on at least several days in the previous 2 weeks

Result

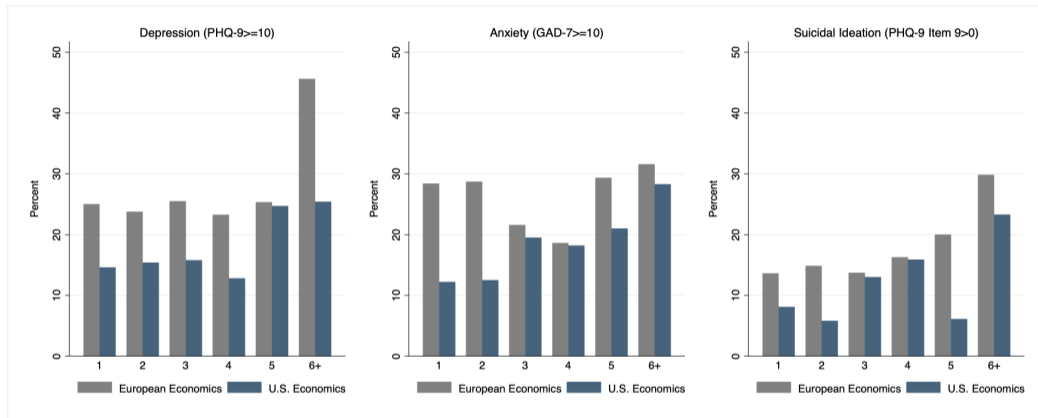
- **17.2%** of students

Comparison

- US GSMH study 2017: **11.3%** (several days +)
- US adults ages 18-25: **7.4%** (at some point in past year) (CDC 2015)
- Meta-analysis 6 months into COVID-19: **5–15%** (Giner et al. 2022)

▶ 2nd survey tool results

Mental Health Issues Increase by Year in Program



- Mental health issues increase with program years
- Higher relative anxiety in Y1 and Y2 may be due to COVID-19 pandemic or qualifiers.

Fewer Students in Treatment Compared to US

Percent of students in treatment

For any mental illness	12.4%
Of those w/moderate-severe depression or anxiety	19.2%

- Comparison % of people w/moderate-severe symptoms in treatment:
 - ▶ US GSMH Study 2017: **25.2%** (Bolotnyy et al. 2022)
 - ▶ Harvard graduate students: **41.4%** (Dench et al. 2020)
- Note: Departments in different countries with different healthcare systems

Additional Measures of Wellbeing: Loneliness and Impostor Phenomenon

Loneliness

- **9.7%** of students feel a high degree of loneliness: often lack companionship, often feel left out, often feel isolated from others (UCLA Loneliness Scale)

Impostor Phenomenon (IP)

- Feeling like a fraud and worrying about being 'found out', experiencing stress, fear, self-doubt, and discomfort with achievements (Clance and Imes, 1978)
 - ▶ **59%** of students w/ frequent or intense IP
 - ▶ **93%** of students w/ moderate, frequent, or intense IP

Student Experiences in the Program

- Work and learning environment similar to US (work hours, satisfaction,...)
- **Advising and time management**
 - ▶ **30.2%** of students feel like they do not receive enough feedback to understand if they are on track with their progress
 - ▶ Time management number one stressor over past year (extensive stressor for 52.3%) and number one regret of PhD [▶ Stressors](#) [▶ Regrets](#)

Sexual Harassment

- Average prevalence: **25.9%**, 60% higher than in US study
- **34.5%** of women experienced some form of sexual harassment (18.7% of men)
- Most common perpetrator: grad students (9.9%), but also professors (4.1%, 0.6% in US study)
- Most common type of harassment: inappropriate or offensive comments about own or someone else's body, appearance, or sexual activities (9.4%) [▶ Types of harassment](#)

To what extent are the higher EU rates in 2021 compared to US in 2017 attributable to the COVID-19 pandemic?

- European departments closed for 8 months on average
- Rough estimation based on Harvard internal data
 - ▶ Harvard internal longitudinal study on mental health (2016 - 2022)
 - ★ Focus on social sciences (including Econ).
 - ▶ If mental health issues prevalence in the US sample of 2017 followed the Harvard trend, the COVID-19 pandemic would explain:
 - ★ 74.0% of the US-EU difference in moderate-severe depression prevalence
 - ★ 30.1% of the US-EU difference in moderate-severe anxiety prevalence.

Faculty Mental Health: Results

	All	Tenure track	Non-tenure track	Tenured
Depression (PHQ-9)	11.6%	25.7%	28.6%	6.2%
Anxiety (GAD-7)	11.9%	20.6%	28.6%	8%
Depression or Anxiety	15.8%	31.4%	42.9%	9.6%
Suicidality 2-weeks	6.1%	8.6%	0%	6.1%

- Overall prevalence of depression and anxiety symptoms only drops with tenure
- Mental health initiatives for untenured faculty important

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Conclusion

- Moderate-severe symptoms of depression and anxiety among European economics PhD students in 2021 are more prevalent than in US PhD students
- Increasing mental health problems by years in program
- European PhD students with moderate-severe anxiety or depression less likely to be in treatment
- Similar work and learning experiences in US and Europe, with exception of sexual harassment
- Students struggle with time management and advisor relationships
- COVID-19 unlikely to explain entire US-EU difference
- Highest rates of mental health issues among untenured faculty

Thank you!

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Sample: Students

Programs	Total invited	Total responded	% responded	% of all responses
Bocconi University	61	45	73.8%	8.1%
Bonn Graduate School of Economics	117	60	51.3%	10.8%
Central European University	21	11	52.4%	2%
European University Institute	100	74	74%	13.3%
London School of Economics	135	37	27.4%	6.7%
Mannheim Graduate School of Economics	103	45	43.7%	8.1%
Paris School of Economics	144	53	36.8%	9.5%
Sciences Po	37	11	29.7%	2%
Stockholm School of Economics	37	14	37.8%	2.5%
Universitat Pompeu Fabra	97	36	37.1%	6.5%
University College London	87	33	37.9%	5.9%
University of Warwick	87	39	44.8%	7%
University of Zurich	95	72	75.8%	12.9%
Uppsala Universitet	52	26	50%	4.7%
Total	1173	556	47.4%	100%

Response rate in US study: 45% (N=513) [◀ Back](#)

Sample: Faculty

Programs	Total invited	Total responded	% responded	% of all responses
Bocconi University	44	18	40.9%	7.1%
Bonn Graduate School of Economics	52	10	19.2%	3.9%
Central European University	58	16	27.6%	6.3%
European University Institute	13	8	61.5%	3.1%
London School of Economics	71	31	43.7%	12.2%
Mannheim Graduate School of Economics	47	31	66%	12.2%
Paris School of Economics	139	20	14.4%	7.8%
Sciences Po	34	0	0%	0%
Stockholm School of Economics	28	11	39.3%	4.3%
Universitat Pompeu Fabra	140	28	20%	11%
University College London	64	27	42.2%	10.6%
University of Warwick	65	26	40%	10.2%
University of Zurich	38	18	47.4%	7.1%
Uppsala Universitet	21	11	52.4%	4.3%
Total	814	255	31.3%	100%

Response rate in US study: 42% (N=187) [◀ Back](#)

Depression: Patient Health Questionnaire (PHQ-9)

- Commonly used. Threshold of ≥ 10 : Sensitivity 88%; Specificity 88% (Kroenke et al 2001).

PHQ-9

GAB5 Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all (0)	Several days (1)	More than half the days (2)	Nearly every day (3)
1. Little interest or pleasure in doing things (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Feeling down, depressed, or hopeless (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Trouble falling or staying asleep, or sleeping too much (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Feeling tired or having little energy (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Poor appetite or overeating (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Trouble concentrating on things, such as reading the newspaper or watching television (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Moving or speaking so slowly that other people could have noticed? Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Thoughts that you would be better off dead or of hurting yourself in some way (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Anxiety: Generalized Anxiety Disorder (GAD-7)

- Commonly used. Threshold of ≥ 10 : Sensitivity 89%; Specificity 82% (Spitzer et al 2006).

Q496 Over the last 2 weeks, how often have you been bothered by any of the following problems?

	Not at all (0)	Several days (1)	More than half the days (2)	Nearly everyday (3)
1. Feeling nervous, anxious or on edge (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Not being able to stop or control worrying (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Worrying too much about different things (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Trouble relaxing (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Being so restless that it is hard to sit still (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Becoming easily annoyed or irritable (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Feeling afraid as if something awful might happen (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Suicidal Ideation

- ① In the past year, have you ever seriously thought about attempting suicide?
- ② In the past year, have you ever made a plan for attempting suicide?
- ③ In the past year, have you ever attempted suicide?

Suicidal Ideation

- 1 In the past year, have you ever seriously thought about attempting suicide?
 - 2 In the past year, have you ever made a plan for attempting suicide?
 - 3 In the past year, have you ever attempted suicide?
- ***Our study: suicidal thoughts: 11%; suicide plan: 1.8%; suicide attempt: 0.4%**
 - Harvard undergrads: suicidal thoughts: 6%; suicide plan: 1%; suicide attempt: 0.2%
(Dench et al. 2020)

Mental Health by Demographics

Category	All	Female	Race Minority	LGBTQI+	First Gen
Moderate or severe depression	27.3%	28.2%	29.3%	42.6%	25.7%
Moderate or severe anxiety	25.9%	27.7%	29.3%	26.2%	21.1%
Suicidal ideation (PHQ-9 Item 9)	17.3%	14.9%	17.3%	24.6%	12.8%

- Women and minority race with higher anxiety and depression symptoms
- LGBTQI+ with high levels of anxiety and depression symptoms

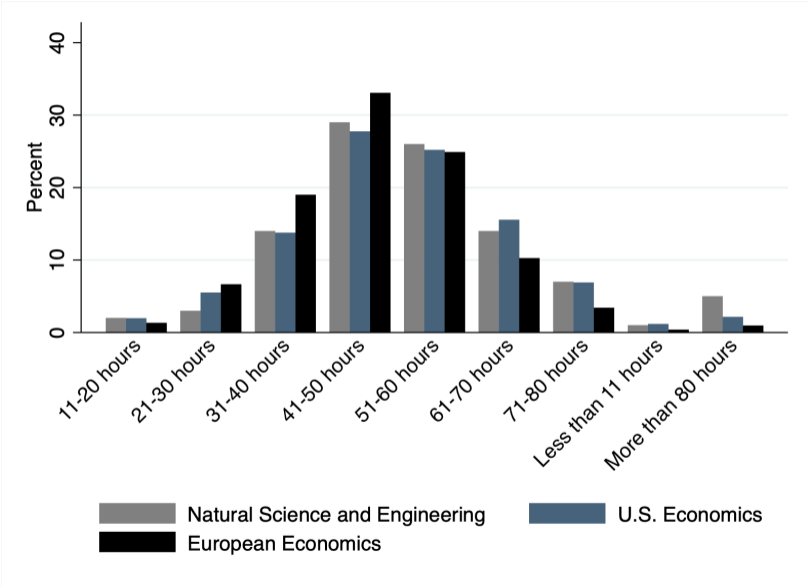
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Most Common Types of Sexual Harassment

In order from most common to least common, respondents experienced:

- 1 inappropriate or offensive comments about your or someone else's body, appearance, or sexual activities (9.4%)
- 2 sexual remarks, jokes, or stories that were insulting or offensive to you (6.1%),
- 3 requests to go out for dinner, have drinks, or have sex even though you said, "No" (1.5%),
- 4 crude or gross sexual comments or tried to get you to talk about sexual matters when you did not want to (1.4%),
- 5 email(s), text(s), phone call(s), or instant message(s) with offensive sexual remarks, jokes, stories, pictures, or videos that you did not want to receive (1.1%).

Students Work Hours



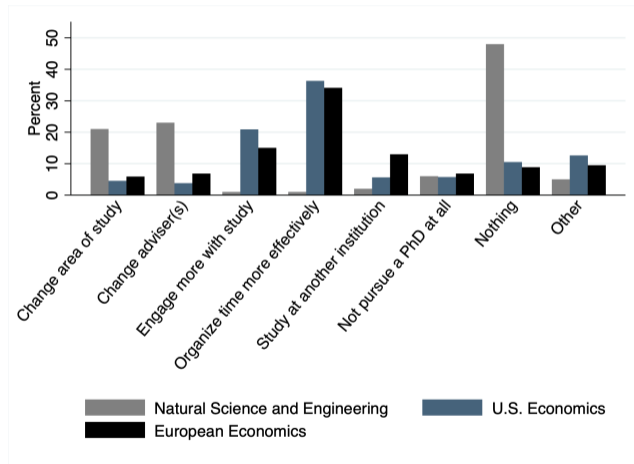
Student Experience: Stressors

Percent of students for whom ... was an **extensive** source of stress during past year



Regrets

What would you do differently right now if you were starting your program?



Student Perceptions about Mental Health at Department

- 22.3% of students think that mental health is a priority in the department
- 32% believe that their department is conducive to and supportive of mental health and well-being
- 31% of students are encouraged to speak up about potential mental health issues
- 37% of students are encouraged to seek help for mental health issues through support within the department
- 25.7% of students think they can talk honestly or very honestly about their mental health with their advisors (advisors guess: 27.1%)

Student Experiences and the COVID-19 Pandemic

Percent of students for whom the pandemic impacted ... **a lot or to a great extent**

