

# Graduate Student Mental Health: Lessons from American Economics Departments

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EXECUTIVE SUMMARY

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The objectives of the study were to (1) understand the prevalence and severity of mental health issues in Economics PhD programs; (2) understand what students are thinking, feeling, and experiencing during their programs; (3) understand how the thoughts, feelings, and experiences are related to student mental health; and (4) make recommendations on steps programs can take to improve student mental health. The 8 programs participating in the study were: Columbia University, Harvard University, University of Michigan, Massachusetts Institute of Technology (MIT), Princeton University, UC Berkeley, UC San Diego, and Yale University.

Below, we summarize our main findings for each objective.

## PREVALENCE AND SEVERITY OF MENTAL HEALTH ISSUES

- About 18% of students are experiencing moderate to severe symptoms of depression and anxiety. The comparable national rate for depression is 5.6% and 3.4-3.6% for those aged 25-34 (Kocalevent et al. (2013)). A study of the German population found the comparable national rate for anxiety to be 5% (Lowe et al. (2008)).
- 11% of students (56 people) reported having suicidal thoughts on at least several days within the last two weeks.
- 25% of students have at some point in their lives been diagnosed with a mental health issue by a professional. 13% were diagnosed before starting the PhD program, 12% were

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diagnosed after.

- Of those experiencing moderate to severe symptoms of depression, only 27% are currently receiving treatment for depression. 21% of those experiencing moderate to severe symptoms of anxiety are receiving treatment for anxiety, and only 27% of those who have contemplated suicide in the last 2 weeks are receiving any form of mental health treatment.
- The prevalence of depression and anxiety symptoms among Economics PhD students is comparable to the prevalence found in incarcerated populations.
- Loneliness and isolation are major issues. The average Economics PhD student feels considerably lonelier and more isolated than a retired American.
- Women and international students have a higher prevalence of mental health issues than men and U.S. students, respectively.
- The majority of those who are currently receiving mental health treatment are not experiencing moderate or severe symptoms of anxiety or depression. In other words, contrary to social stigma, seeing a mental health professional is not the same thing as having poor mental health. Many of those who seek help are doing better than those who do not.
- Although students generally have a good understanding of whether their own mental health is good or poor, they overestimate how well they are doing relative to other students. For example, of those who reported suicidal thoughts in the last two weeks, 26% thought their mental health was better than average.

## **STUDENT EXPERIENCES IN THEIR PROGRAMS**

- Economics students have biggest regrets about how they organize their time and how they engage with their studies. This is in contrast to natural science PhD students, whose biggest regrets are their area of study and their advisers.

- Only 26% of Economics students report feeling like their work is useful always or most of the time, compared to 70% of Economics faculty and 63% of the entire working age population. Only 19% of Economics students feel that they have opportunities to make a positive impact on their community or society compared to 58% of faculty and 53% of the population.
- 62% of students worry always or most of the time about work when not working, compared to 60% of faculty members. 20.5% of students find themselves too tired for activities in private life always or most of the time, compared to 23% of faculty.
- 13% of students said they seriously contemplated quitting the PhD program once in the past 2 weeks, with an additional 9.5% considering doing so over two or more days.
- While 96% of students say they met with their main adviser at least once in the last 2 months, students report fear of making a bad impression, doubt about the quality of their thoughts and ideas, and lack of progress since the previous meeting as the biggest impediments to meeting with advisers more frequently.
- Many students report being unable to be honest and open with their advisers about the difficulties they are experiencing. Ordered by the gap between desired honesty and actual honesty, from largest to smallest, the top 5 issues are: (1) non-academic career options, (2) preparing for the job market, (3) research progress, (4) issues with other advisers, (5) issues arising from co-authorship with the faculty member.
- Few students feel comfortable raising their hand in a seminar setting. Only 19% of women would be comfortable doing so, compared to 35% of men. No gap exists between U.S. and international students.
- There is a lack of options for students when they are experiencing an issue with advising. Only 42% say they would know where to turn for help with advising if an issue arose.
- 16% of students have experienced some form of sexual harassment in their department since becoming a PhD student.

- 21.5% of women have experienced sexual harassment compared to 13% of men; 21% of U.S. students, compared to 11% of international students.
- 62.5% of the instances of sexual harassment were perpetrated by another graduate student, while 19% came from a professor.

## MENTAL HEALTH AND STUDENT EXPERIENCES

- Older cohorts have worse mental health than younger cohorts. 14.5% of the first-year students are experiencing moderate to severe symptoms of depression and anxiety, compared to 25% of those who are in years 5+ in their program. Similarly, 7% of the first-year students report contemplating suicide in the last 2 weeks, compared to 13% of those in years 5+.
- 27% of those who said they regret doing the PhD and 20% of those who regret their choice of advisers report contemplating suicide in the last 2 weeks. In contrast, those who wish they had engaged more with their studies and organized time more effectively have substantially lower rates of suicidal ideation (11%). 7% of students who said they have no regrets about graduate school contemplated suicide in the last 2 weeks.
- Students who perceive their peers as competitive, who do not have very good friends in the department, and who in general do not have many people with whom they can openly discuss their private feelings without having to hold back have worse mental health.
- The size of one's problem set group in the first year and whether or not a student co-authors with other students or faculty are not correlated with our measures of depression or anxiety. Students who have larger study groups and who do co-author are, though, less likely to feel lonely and isolated.
- Mental health issues do not appear to be affecting students with different values in life differently. In particular, students who believe that tenure at an academic institution is very important for their success in life are not more or less likely to have mental

health issues than students who believe that income or recognition or a family are very important for success in life.

- Having sources of meaning and usefulness appears to be crucial to mental health. Those who have goals to aspire to, feelings of doing useful work, sense of accomplishment, and opportunities to make a positive impact on their surroundings have better mental health than those who do not. At the same time, when work fatigue and worries negatively affect activities in private life, mental health is worse as well.
- Those with worse mental health also have worse performance. They are less likely to voice a thought in a seminar, slightly more likely to have worse first-year grades, and substantially more likely to be seriously contemplating leaving the program. They are also more pessimistic about how well they have done and will do in their courses, teaching, presentations, and research.
- Students who talk to faculty that care about their success and care about them as a person have better mental health than students who do not.
- The frequency with which students meet with their main adviser or with faculty more broadly is not correlated with mental health.
- Students who say they avoid meetings with faculty because those meetings are unpleasant have worse mental health than students who do not feel that meetings are unpleasant. Students for whom fear of the consequences of a bad impression, or doubt about the quality of their work, or lack of progress since the previous meeting are viewed as big impediments to talking to faculty also have worse mental health than those students who do not have such impediments.
- While students who cannot honestly and openly discuss mental health with their adviser have worse mental health, it is also true that students who cannot openly discuss problems with presentations, teaching, research progress, preparing for the job market, considering non-academic jobs, etc. also have worse mental health.

- Whether a student went straight through from his or her undergraduate program into graduate school or whether a student took many or few math courses before graduate school has no bearing on that student's mental health.
- A student's level of engagement with social media, measured in the number of times he or she checks Facebook per day, is also unrelated to mental health.

## RECOMMENDATIONS FOR IMPROVEMENT

- Encourage students to take on research or activities that provide a sense of meaning and usefulness to them in the short term. Help students hedge against failure.
- Provide continuous engagement, making clear to students that someone cares about their success in the program.
- Measure success in different ways to lessen feelings of job insecurity. Support students in preparing the best possible job market paper and dissertation regardless of the students' ambitions or career preferences.
- Communicate with students clearly and frequently.
- Encourage and empower student initiatives to improve work conditions and collegiality.
- Make the coursework years as useful and relevant to the research years as possible.
- Destigmatize conversations about failures, big and small. Destigmatize getting help.
- Create a channel through which faculty can receive constructive feedback on advising. Encourage students and advisers to have conversations about the kind of advising relationship they would like to have.
- If sensing that a student is having trouble, be patient, supportive, and empathetic. Follow up with the student to show you care and to ensure that the student is getting the support he or she needs. Know what resources are out there and help the student access them.

- Discuss failure with advisees early on and commit to being their supportive adviser first and their evaluator second.
- Use the data in this study to encourage students to access mental health resources. Partner with your university's counseling center to educate students and faculty and to publicize clinical services. Let students know that their mental health and wellbeing is a priority for you and should be a priority for them.

## REFERENCES

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