PROMOTING GRADUATE STUDENT WELLBEING: CULTURAL, ORGANIZATIONAL, AND ENVIRONMENTAL FACTORS IN THE ACADEMY

A COMISSIONED PAPER FOR THE CGS-JED GRADUATE STUDENT MENTAL HEALTH AND WELLBEING REPORT

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Statement of Task:

- Document and synthesize the extant body of knowledge about cultural, organizational, and environmental factors in the academy that support the intellectual and personal growth and wellbeing of graduate students across the student life-cycle;
- Identify opportunities for graduate school administrators, program directors, and faculty members, as well as other support staff to link mentoring and professional development practices with the promotion of wellbeing among graduate students; and
- Make recommendations for colleges and universities, particularly at the graduate school-level, to facilitate climates where students can thrive in their intellectual and personal growth.

Introduction

The purpose of this essay is to synthesize current knowledge about cultural, organizational, and environmental factors in higher education which are known to support or inhibit the wellbeing of graduate students. Given that students' intellectual growth as graduate students is situated within a multi-dimensional developmental process, I pay special attention to ways that graduate education stakeholders-- including graduate school administrators, directors of graduate studies, faculty members, and other staff-- can link student development with the promotion of wellbeing. Finally, I make recommendations for colleges and universities to facilitate learning environments where students can thrive.

The concept of wellbeing is related to but distinct from that of mental health. Wellbeing can be measured psychometrically or with primary attention to utility, but in either case it is usually captured via subjective self-reporting. Amid this variation, however, minimum indicators of wellbeing in most conceptualizations include positive moods, the absence of negative emotional states, and presence of satisfaction and personal fulfillment. The World Health Organization (2020) defines mental health as "a state of wellbeing in which every individual realizes their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to their community." Wellbeing can be thought of as a broader category than mental health, and indeed the Centers for Disease Control identify nine different dimensions of wellbeing:[1]

- Physical well-being
- Economic well-being
- Social well-being
- Development and activity
- Emotional well-being
- Psychological well-being
- Life satisfaction
- Domain specific satisfaction
- Engaging activities and work
- Together, these definitions speak to the importance of holistic thinking in assessing factors that contribute to graduate student wellbeing.

The CDC dimensions of wellbeing map well onto dimensions of human development that

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1   For further detail about the CDC's conceptualization of wellbeing, please see: https://www.cdc.gov/hrqol/wellbeing.htm#three

education institutions, writ large, are mandated to encourage. The United Nation dimensions of human development notes main functions that institutions can serve: directly enhancing human capabilities, and creating conditions for human development. Within these, encouraging a long and healthy life, advancing knowledge, and enabling access to a standard of living are identified as directly enhancing human capabilities.[2] Creating conditions for human development, on the other hand, involves encouraging participation in political and community life, encouraging environmental sustainability, encouraging human rights, and promoting equality and social justice. As more higher education institutions look inward and strive to align their missions and activities with the changing population and labor market, such broad frameworks as these may prove useful tools in identifying core principles to be protected because they foster both education's mission of human development while also encouraging student wellbeing.
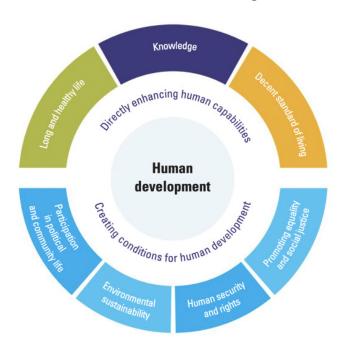
Figure 1. United Nations Dimensions of Human Development

Yet being an enterprise focused on the life of the mind, mental health and wellbeing do carry special salience for graduate education. Symptoms of mental illness may intersect problematically with present cultural expectations surrounding academic performance: productivity, collegiality, concentration, and intense focus and determination are commonly expressed when faculty are asked what makes an excellent graduate student (Kyllonen, 2010). When students are unwell for any reason, they are less likely to manifest these qualities; thus, perhaps one of the most fundamental cultural factors associated with graduate student wellbeing is that cultural beliefs surrounding our vision of a "good" graduate student do not leave room for periods of personal struggle-- as common as we know them to be, and as common as it is that graduate school itself can compromise wellbeing.

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2   For additional context on the interplay between human development and wellbeing see the 2015 UN Human Development Report at https://issuu.com/unpublications/docs/2015_human_development_rpt/13

A strong research base highlights individual and group consequences of wellbeing for graduate education. At the individual level, emotional health directly contributes to physical health. Research by Eisenberg at al. (2009) finds an association between mental health problems and graduate student dropout; specifically, depression is associated with a two-fold increase in leaving programs before completing degree requirements. Resilience, on the other hand, can both directly affect retention as a resource in managing academic challenges and indirectly, by affecting how students manage mental health challenges (Eisenberg, et al., 2016). Over and above these individual consequences, the wellbeing of academic and research teams, classes, departments, and disciplines matters because healthy academic communities are more creative and more productive. For students, faculty, organizations, and the labor market alike, attrition from post-baccalaureate educational programs is costly for everyone involved (Turner and Berry, 2000; Wilson et al., 1997).

Frameworks for Understanding Social and Environmental Determinants of Wellbeing

The charge for this essay -- to capture cultural, organizational, and environmental factors for wellbeing in the academy-- is consistent with a social determinants perspective on wellbeing and mental health. This perspective emphasizes and tries to utilize not only individual factors and forces (e.g., genes, personality, age, social identities) associated with wellbeing, but also ones within the environment (e.g., provision of basic needs, availability of support, quality of relationships) (Braveman and Gottlieb, 2014). It broadens the focus of attention from medical and clinical professionals serving individuals to also include public health and group/ population-level needs. Attention is not just broadened, it is also shifted under a social determinant view-- that is, from individual, psychological, and medical determinants to those within environments over which leaders and group members have some control. Major themes in the social determinants literature, and their relevance for graduate education, include:

1. *The development and maintenance of healthy communities*, in which students and scholars are safe and secure (e.g., housing,income), and in which they experience low risk of conflict or violence in key relationships, working conditions, and neighborhoods.
2. *How communities engage with trends in the social world*, for group-level competencies such as participation patterns, tolerance of difference, and mutual responsibility are associated with secure attachment, relationships, communication, and belonging.
3. *Individuals' ability to manage group dynamics*, including conflict and processes associated with collective learning.

In short, healthy communities support student agency and self-determination, and provide validation, support, and role models that are resources in managing group dynamics and engaging with the broader social world.

Each of these three sets of factors may be important to wellbeing; however, the implicit or explicit frameworks that an organization (e.g., graduate school, department, or research lab) uses to make sense of how social determinants affect wellbeing may affect which actions they see as necessary or appropriate to pursue in creating learning environments conducive to wellbeing. There are at least three different frameworks that higher education institutions draw upon for this interpretation-- sometimes because they have purposefully chosen it, other times because the broader sociopolitical context or other forces push them to operate in that mode.

Neo-liberalism

For example, whether they espouse neo-liberalism or not, virtually all higher education institutions are directly affected by neoliberal pressures by virtue of broader sociopolitical forces. Neoliberalism is "A theory of political, economic practices that proposes human wellbeing can best be advanced by liberating individual entrepreneurial freedoms and skills within an Institutional framework characterized by strong private property rights, free markets, and free trade" (Harvey, 2005). If one argues that wellbeing is best advanced by giving people freedom and skills to act as personal entrepreneurs for their own futures, they may not push back against known threats to wellbeing like uncontrolled expectations for productivity or minimal accountability for advisor behavior. As a result, some values and priorities that drive graduate education are implicitly ones a.) that privilege faculty autonomy at the expense of accountability for student wellbeing, or b.) that privilege a free market for graduate degree recipients at the expense of whether the rules and consequences of that market are conducive to student wellbeing.

Social capital

A second framework, social capital, is extremely important in the literature on wellbeing because there are so many ways that social capital (defined as social networks, norms, and trust (Coleman, 1988)) shapes the quality of one's interactions, their perceptions of social support, and the personal sense of security that graduate students have. "The way we organize our society, the extent to which we encourage interaction among the citizenry and the degree to which we trust an associate with each other in caring communities is probably the most important determinant of our health" (Lomas, 1998, p. 1181). As the remainder of this essay will demonstrate, there are myriad ways that stakeholders of graduate education can cultivate environments that also cultivate students social capital through the improvement of interactions, support structures, and the affective environment in which learning and scholarship occurs. In so doing, they use a widely-documented lever for wellbeing.

Human rights

A third perspective on the social determinants of wellbeing that nonprofit and educational organizations are increasingly amplifying emphasizes institutional responsibility to create environments in which human rights are protected. "A climate that respects and protects basic civil, political, economic, social, and cultural rights is fundamental to the promotion of mental health. Without the security and freedom provided by these rights it is very difficult to maintain a high level of mental health" (Gostin, 2001, 23). Because security and freedom shape wellbeing, and because protecting human rights enables individual and collective security and freedom, when leaders protect human rights they pull a powerful lever for individual and group wellbeing.

Depending upon the framework in use, views may vary about whether responsibility for encouraging wellbeing is understood to rest more or less with institutions (and their members) or students themselves. And although a neoliberal framework may not neatly align with the social capital and human rights based on its underlying assumption that institutional responsibility, and thus accountability, is limited, social capital and human capital can be thought of complementary. Specifically, the quality of social networks, norms, and trust within organizations can be thought of as critical tools in ensuring the conditions of freedom and security within which human rights are protected.

How do known aspects of graduate education threaten wellbeing?

In addition to thinking broadly about the promotion of and threats to wellbeing from an institutional perspective via these three frameworks, we can turn to empirical research for clarity about specific cultural, organizational, and environmental factors that operate as barriers and levers for wellbeing. Figure 2 represents five such families of factors: Individual perceptions and experiences, organizational policies and practices, educational trajectories, community norms and values, and interpersonal interactions.

Individual perceptions and experiences are at the center of this simple figure because wellbeing is subjectively experienced, in part on the basis of social identities and interactions. And as the data in Appendix 1 show, a variety of individual-level characteristics have statistically significant associations with depression and anxiety, controlling in multivariate logistic regression models for a large number of other individual and disciplinary differences. Experiences of discrimination, competitiveness, and support for example, including whether one feels they can talk to their advisor about mental health concerns, have strong relationships with anxiety and depression. Identifying as a woman, as LGBTQ, or as an international student are also associated with anxiety. In short, perceptions and experiences operate as filters through which we can expect all other factors to be discussed in this section to be experienced.

Figure 2. Types of cultural, organizational, and environmental factors associated with graduate student wellbeing.

Organizational Policy and Practice

Both organizational policies and how they are enforced tend to be related to student wellbeing. One strand in the literature on organizational[3] practices and policies that affect

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3   When speaking of organizations in graduate education, I am referring to labs and research groups, PhD programs and departments, colleges and universities, and graduate schools. Some public policies also have direct relevance for graduate education, in addition to those informal and institutional policies that make a difference to students' opportunities and experiences.

student wellbeing concerns graduate students work - life pressures (Evans et al., 2019; Levecque et al., 2017; Martinez, 2013; Rummell, 2015). Financial stress is the single strongest correlate with depression and anxiety across fields in a recent major study of mental health in sample representing over 20,000 graduate and professional students in 89 different universities (Posselt, forthcoming). A related line of questions reflects on the nature of work that graduate students undertake. Especially for international students doctoral candidates and those enrolled in online degree programs, work as a graduate student can be extremely isolating. (Ali, 2006; Erichsen et al., 2011; Irani et al., 2014; Lovitts & Nelson, 2000; Solem et al, 2009). Few organizations have adequate mental health leave policies, forcing students to "just keep going" or to leave if they begin to experience struggles in this regard. Both of these choices can compound existing mental health issues (Hyun et al., 2007; DePaola, 2019). Across this literature, we see that typical policies and standard practices send students, especially from minoritized or marginalized backgrounds, mixed messages about their worth and belonging (Gay, 2004; Posselt, 2018; Gildersleeve et al., 2011; Truong et al., 2016). Gay argues that there are real "goodness-of-fit issues between the needs, interests and skills of students of color, and institutional priorities and protocols" (Gay, 2004, p. 267). These mixed messages about fit and belonging are problematic for wellbeing from a standpoint of perceived support and as it concerns ambiguity about one's present and future.

Educational Trajectories

Related to the last of these points, we know from the literature that student wellbeing is also a function of the trajectories that students are already on. Personal histories and hopes for the future frame how students interpret and engage with the difficulties they experience in graduate school-- and how they navigate these difficulties affects their stress and belonging (Posselt, 2018). The communities from which a student comes-- and those communities' hopes and expectations-- can be a double-edged sword, especially for students from historically marginalized groups in the academy. On the one hand, students may receive strong support from their communities of origin for their engagement in advanced education; however, students may also feel the weight of pressure to perform in particular ways or to live up to high expectations that their community has for them (McCallum, 2016; Taylor & Antony, 2000).

With respect to where students are presently on their educational trajectories, because graduate school selects for a highly ambitious, domain-identified group, how they are feeling about graduate school can become a major factor in how they are feeling, generally (Acker, 1977; Belcastro et al., 1996). And as students look toward the future, the messages that students receive about the labor market (including a perceived hierarchy in the value of post-PhD careers) may amplify student anxiety (Kirn & Benson, 2018; Posselt & Grodsky, 2017; Tsugawa-Nieves, 2017). Graduate school is increasingly not only a continuation from undergraduate education, but also a move that students make mid-career to pivot or invest in longer-term options (Posselt and Grodsky, 2017). But if the labor market for the PhD -- or specific career paths that require the PhD-- is or appears weak, and if students have already foregone years of full-time income to pursue a Ph.D., then anxieties about whether the degree is a good investment may threaten general wellbeing.

Community Norms and Values

Many of the issues discussed to this point are related to core questions students ask themselves about sufficiency. What output will be enough to make the work of the PhD worth it? Is my work enough? Am I enough? Doubts about sufficiency often coexist with ambiguity in what is valued and why, and they are a salient threat to wellbeing as students perceive

a competitive, resource-scarce environment. Therefore, clarity in communication among graduate education organizations and stakeholders about a community's cultural values and norms can be a lever that positively affects student wellbeing by making more clear the rules of the game students are learning to play. Indeed, the transition into disciplinary communities that graduate education involves is a journey of identity formation; in that journey, perceived fit with community norms and priorities is always being negotiated (Gay, 2004; Posselt, 2016; Lewis, forthcoming), and ambiguity about one's competency and performance relative to ambiguous community norms and values is a potent recipe for anxiety. There is a clear need for students to receive consistent, ample feedback and clear expectations (Berdanier et al, 2016; Posselt, forthcoming). There is also some evidence that a culture of competitiveness within the academy in general and among peers specifically is positively associated with depression and anxiety among graduate students. However, support from faculty, students, and family members is among the strongest factors in graduate student wellbeing (Posselt, forthcoming; Hyun et al., 2006). Support reduces isolation, and enables students to see that as important as the work may be, that one's value and success in efforts to meet often-ambiguous norms need not be self-defining.

Interpersonal Interactions

The fourth and final category of factors that literature suggests can be leveraged for graduate student wellbeing concerns graduate students' interpersonal interactions-- especially with faculty advisors and research supervisors. Throughout the literature, there is evidence that faculty have considerable autonomy in carrying out their roles (Loissel, 2019). Graduate students often have a clearer window into what they do with that autonomy than most, in part because graduate students work closely with faculty and are subject to faculty choices. Recent reports from the National Academies of Sciences, Engineering, and Medicine have covered in detail the problems with sexual harassment, and evidence also suggests that rampant racial discrimination-- taking a variety of forms. There are presently poor mechanisms of accountability for these patterns of mistreatment, which threatens the sustainability of and investments in increasing diversity and reducing inequalities (Loissel, 2019; NASEM, 2018; NASEM, 2019). In addition, identified patterns of negative interactions along lines of both gender and race means that women of color are especially subjected to abuses of faculty autonomy and power.

Above and beyond identity-based harassment and mistreatment, researchers find that faculty supervisory styles when working with graduate students often leave students with a troubling combination of minimal job control and significant job demands-- both of which are linked to mental health problems (Levecque et al., 2017). Meanwhile, most faculty who advise and mentor students have little knowledge or skill to set up their research and learning environments to encourage wellbeing, nor to have conversations that enable referrals when they are needed for more serious mental health concerns (Guthrie et al., 2018; Loissel, 2019; Shaw, 2014; NASEM, 2019). Graduate student supervisors admit to feeling poorly equipped for this important work, and may themselves be struggling. Loissel writes, "The stigma of mental health is slowly being erased for mentees, but we are only scratching the surface or providing window dressing for faculty" (Loissel, 2019). Thus, although this essay focuses on factors that can directly be leveraged to promote graduate student wellbeing, we would be remiss to ignore the the wellbeing of academic communities themselves as a potential lever for student wellbeing.

Recommendations

We have, to this point, covered a lot of ground. I have identified a variety of dimensions of wellbeing as defined by national and international organizations and considered their

salience in the graduate education context. I have identified major themes in the research on social and environmental determinants of wellbeing, and how the frameworks that an organization uses to interpret those determinants may affect what actions they deem to be important. Neo-liberalism, social capital, and human rights were provided as three examples of such frameworks. I have also identified several families of factors that empirical research indicates may serve as barriers to and levers for graduate student wellbeing, noting that individual experiences and perceptions serve as filters through which students interpret those factors.

In moving to make recommendations for institutions and the broader graduate education community, recognizing that students' identities and disciplinary and institutional contexts are salient forces that shape experience and perception should lead us to expect 1) that graduate students will differentially experience specific factors as barriers, and 2) that they will differentially view the utility and efficacy of interventions that use these factors as levers. For example, an effort aimed at improving the quality of racial climate for the purposes of promoting student wellbeing may be viewed differently -- even by a group of students with similar racial/ethnic identification--depending upon intersecting identities and the dimensions of climate they view as problematic (Slay et al., 2019). In making recommendations, then, my hope is that readers will appreciate that design and implementation of any intervention need to involve a variety of stakeholders, including students who represent diverse viewpoints. The three broad categories of recommendations I propose are as follows, with the subsequent narrative outlining additional and specific actions:

1. Build a culture of shared responsibility for wellbeing.
2. Train early career scholars for healthier disciplinary cultures.
3. Enable equitable access to varied resources that support wellbeing.

Building a culture of shared responsibility for wellbeing

An important implication of a social determinants view of well-being is to appreciate that well-being is not only a matter of individual, personal responsibility but also institutional, organizational responsibility. To that end, graduate education organizations should link the provision of mentoring and professional development with the promotion of well-being. Both students being mentored and those doing the mentoring should strive to integrate awareness of well-being, and resources to support it, into their interactions. Specific skills that are important to cultivate in this regard include the ability to initiate conversations about mental health, cultivating awareness about the multiple dimensions of well-being and how institutional rules (formal and informal) affect them, and normalizing the expectation that we check-in with ourselves about wellbeing, with counselors as needed, and with colleagues. These 21st century professional development skills enable well-being directly, and enable professionals to act in ways that serve others' wellbeing. Such skills include the development of racial literacy, healthy communication, constructive conflict, and inclusive leadership.

Another step toward building institutional responsibility for wellbeing is to actively treat promotion of well-being and mental health as an all-hands issue-- one in which everyone has a role to play in both proactively creating healthy cultures and in responding to issues as they arise. This is, admittedly, a counter-cultural recommendation, insofar as it is too common presently to think of well-being as the purview of a counseling center and, perhaps, an office of wellness. Instead, training is needed for a variety of actors within institutions to learn the basics of meaningfully promoting well-being. After all, those of us who have spent large fractions of our adult lives in higher education have not been socialized into cultures

that prioritize wellbeing! Such training should go not only to professors, who provide direct supervision and mentoring, but also to teaching assistants, postdoctoral scholars, and lab managers who have significant responsibility for engaging with students on a daily basis with students--graduate and undergraduates like. Their additional training and responsibilities in this regard will require financial resources, but can be thought of as an investment -- both in the institutional culture and in student safety and health.

Within many universities' counseling centers, however, there are specific actions that need to be taken. The decline of stigma and the rise of prevalence in self-reported mental health concerns have combined to increase time to appointment such that students cannot obtain mental health care when they need it. This is an issue that can increase institutions' legal liability, and increasing staff to decrease time to appointment is specific measurable action that can make a difference in the lives of students. As institutions do so, and especially in colleges and universities whose racial and ethnic diversity is on the rise, resources are needed to hire counselors-- not to mention departmental staff and faculty-- who embody the diversity they seek in the student population. Absent such role models, wellbeing among students of color suffers; they struggle to feel supported, to feel known, to feel they belong.

Another practical step that many universities can take is to give extra care to the implications of their communications and public relations for their perceived support for students. Especially as institutions release information about decisions or actions that directly affect students' lives and opportunities, they should invite varied student perspectives. In inviting feedback, leaders can learn what messages students may be receiving and how they differ from the messages the institution intends to send.

Finally, especially given evidence about the import of organizational policies and practices, graduate education leaders working at different levels (e.g., deans, department and program chairs, PI's and directors of labs and projects that involve graduate students) can conduct self-assessments-- again involving a variety of stakeholder groups, including students-- to ensure the structures of graduate education are not at cross-purposes with student wellbeing. What institutional priorities are revealed in existing policies? To what extent is well being prioritized relative to other institutional interests? To what extent do existing policies hold people accountable for actions that directly harm wellbeing, such as harassment, bullying, and other abuses of power? Finally, leaders should take seriously how existing policies and practices do-- and do not-- select for and develop racial literacy and the socio-emotional competencies that are so important when educators interact with students. The ties among equity, inclusion, and well-being are so strong that we must take such questions seriously. The responsibility for creating healthier cultures belongs to all of us.

Training early career scholars for healthier disciplinary cultures

Disciplines are, in essence, knowledge markets: How might we who influence graduate education use known levers that support wellbeing to nudge these knowledge markets in the direction of health and wellbeing? Already, leaders who design and implement graduate education and training opportunities today today are responsible for preparing students for knowledge and labor markets different from the ones that they entered when they completed their own degrees. As COVID-19 transforms our society-- perhaps for a generation or longer--it does so at a moment where the market for graduate degrees, and the knowledge and skills associated with them, were already transforming. We need to work with these shifting sands, and simultaneously nudge individual preferences and behaviors, organizational practices, and with them, our disciplinary cultures toward that which the previous section discussed as factors supporting wellbeing. Several specific steps are recommended: at the national level, discipline level, program level, and individual level.

Nationally, we must work assiduously to counter the narrative that there is a hierarchy to the value of jobs that students obtain with graduate degrees. Stewards of the disciplines, in the language of the Carnegie Initiative on the Doctorate, need not be tied to universities. A variety of efforts, such as the AAU PhD Education Initiative to make diverse career paths "visible, valued, and viable"[4] are indirectly enabling healthier cultures by challenging engrained career path elitism and by enabling individuals who pursue a variety of career paths to feel secure and validated in those choices. Creating systems of recognition and incentive structures that bring honor to careers outside the academy is critical, as is developing a population of mentors and career coaches who work in industry, government, and the non-profit sector.

Meanwhile, more disciplines would do well to reproduce the field of astronomy's "state of the profession" panel, carried out by the National Academies as part of its Decadal Survey. Alongside panels charting the next decade of investments in missions and specific disciplinary subject matter, leading scholars with expertise in equity, diversity, and inclusion have come together to identify and recommend to federal agencies and the professional community specific means of redressing barriers to the health and wellbeing of the community-- for all its members.

This knowledge can be used at the national level by federal agencies, disciplinary societies, and foundations, as well as at the graduate program level. Ideally, program review should gauge quality not only relative to other programs on one's campus, but also to emerging disciplinary standards. And in doing so, those who are designing, reforming, or simply assessing existing programs should calibrate their standards of quality and training, professional development, and mental health care not for the disciplines as they have been or that even we have today, but for emerging developments in them. As with work at the national level, including in discussion and decision making populations who are usually marginalized or excluded -- particularly students from minoritized backgrounds-- can lead to more ethical, equitable processes and outcomes.

Enabling equitable access to varied campus resources that support wellbeing.

Finally, I recommend that graduate education leaders at the program and university levels 1) consider how the varied dimensions of wellbeing align with the resources already on university campuses and 2) develop systems for enabling students to obtain easy access to resources and services. Universities are microcosms of society and there may be units on campus that have been underutilized in serving graduate student community needs. As research on developmental mentoring networks documents, resources that support wellbeing include trusting, respectful relationships with one's advisors as well as with additional mentors who can provide types of guidance and growth that one's advisor does not. Normalizing a network-based approach to graduate student mentoring means counting and compensating the time and labor spent serving students.

The specifics of what this entails need to be worked out at the local level, but as with the recommendations for building a culture of institutional responsibility and training people for healthier disciplinary cultures, it begins with institutional self-assessment and planning carried out by a diverse team. Equitable access means ensuring that costs of obtaining services or resources that support wellbeing are not assumed solely by students' who may already struggle to make ends meet with respect to basic needs, including health, dental, vision care.

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4   https://www.aau.edu/education-community-impact/graduate-education/phd-education-initiative

Behavioral health care should be affordable and easily accessible, as recommended in the Jed Foundation's comprehensive approach to mental health promotion and suicide prevention.[5] However, if wellbeing is the aim, then so too should institutions enable access to fine arts, technology required for academic success, campus recreation centers, faith communities, writing support, and career counseling outside one's advisor.

In closing, working for the good of graduate students' wellbeing means attending to financial, spiritual, physical, occupational, social, and other needs; cultivating partnerships with people and groups on campus and across the country who are in a position to engage with graduate students in an intentional way; and creatively harnessing resources along multiple dimensions of wellbeing in to develop more holistic infrastructures of student support. Historically, higher education and the academy have both underacknowledged the role that wellbeing plays in the success of its members and communities, and underacknowledged the roles that members and communities play in each other's wellbeing. The recent shift to a social determinants view of wellbeing, the ample evidence and theory now available, as well as attention and action from leading foundations and organizations, including the Council of Graduate Schools, all suggest that engrained inattention to wellbeing and our role in encouraging it are changing.

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5   For the complete Jed Foundation report see https://www.jedfoundation.org/wp-content/uploads/2019/07/JED-Comprehensive-Approach_FINAL.pdf

References

Acker, S. (1977). Sex differences in graduate student ambition: Do men publish while women perish?. *Sex Roles*, *3*(3), 285-299.

Ali, A., & Kohun, F. (2006). Dealing with isolation feelings in IS doctoral programs. *International Journal of Doctoral Studies*, *1*(1), 21-33.

Belcastro, B. R., & Koeske, G. F. (1996). Job satisfaction and intention to seek graduate education. *Journal of Social Work Education*, *32*(3), 315-327.

Braveman, P., & Gottlieb, L. (2014). The social determinants of health: it's time to consider the causes of the causes. *Public health reports*, *129*(1_suppl2), 19-31.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, S95-S120.

Coso Strong, A. & Sekayi, D. Exercising professional autonomy: Doctoral students' preparation for academic careers. *Studies in Graduate and Postdoctoral Education* **9**, 243–258 (2018).

Eisenberg, D., Lipson, S., & Posselt, J. R. (2016). Promoting resilience and retention. College Student Mental Health: New Directions for Student Services 156, 87-96.

Erichsen, E. A., & Bolliger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research and Development*, *59*(3), 309-326.

Evans, T. M., Bira, L., Gastelum, J. B., Weiss, L. T., & Vanderford, N. L. (2018). Evidence for a mental health crisis in graduate education. *Nature biotechnology*, *36*(3), 282.

Fanncourt, D., & Finn, S. (2019). What is the evidence on the role of the arts in improving health and well-being? A scoping review. *Health Network Synthesis Report 67*. World Health Organization.

Gay*, G. (2004). Navigating marginality en route to the professoriate: Graduate students of color learning and living in academia. *International Journal of Qualitative Studies in Education*, 17(2), 265-288.

Gildersleeve, R. E., Croom, N. N., & Vasquez, P. L. (2011). "Am I going crazy?!": A critical race analysis of doctoral education. *Equity & Excellence in Education*, *44*(1), 93-114.

Harvey, D. (2007). *A brief history of neoliberalism*. Oxford University Press, USA.

Irani, T. A., Wilson, S. B., Slough, D. L., & Rieger, M. (2014). Graduate student experiences on-and off-campus: Social connectedness and perceived isolation. *International Journal of E-Learning & Distance Education/Revue internationale du e-learning et la formation à distance*, *28*(1).

Kirn, A. & Benson, L. Engineering Students' Perception of the Future: Implications for Student Performance. *Journal of Engineering Education* 1–51 (2018).

Kyllonen, P., Walters, A. M., & Kaufman, J. C. (2005). Noncognitive constructs and their assessment in graduate education: A review. *Educational Assessment,* 10(3), 153-184.

Levecque, K., Anseel, F., De Beuckelaer, A., Van der Heyden, J., & Gisle, L. (2017). Work organization and mental health problems in PhD students. *Research Policy*, *46*(4), 868-879.

Lomas, J. (1998). Social capital and health: implications for public health and epidemiology. *Social science & medicine*, *47*(9), 1181-1188.

McCallum, C. M. (2016). "Mom made me do it": The role of family in African Americans' decisions to enroll in doctoral education. *Journal of Diversity in Higher Education*, *9*(1), 50.

Posselt, J. (2018). Normalizing struggle: Dimensions of faculty support for doctoral students and implications for persistence and well-being. *The Journal of Higher Education*, *89*(6), 988-1013.

Posselt, J. (forthcoming). *Studies in Graduate and Postdoctoral Education.*

Posselt, J. R., & Grodsky, E. (2017). Graduate education and social stratification. *Annual review of sociology*, *43*, 353-378.

Rummell, C. M. (2015). An exploratory study of psychology graduate student workload, health, and program satisfaction. *Professional Psychology: Research and Practice*, *46*(6), 391

Shaw, C. (2014, Oct 22). Overworked and isolated: Work pressure fuels mental illness in academia. *The Guardian*

Slay, K. E., Reyes, K. A., & Posselt, J. R. (2019). Bait and switch: Representation, climate, and tensions of diversity work in graduate education. *The Review of Higher Education*, *42*(5), 255-286.

Taylor, E., & Antony, J. S. (2000). Stereotype threat reduction and wise schooling: Towards the successful socialization of African American doctoral students in education. *Journal of Negro Education*, 184-198

Truong, K. A., Museus, S. D., & McGuire, K. M. (2016). Vicarious racism: A qualitative analysis of experiences with secondhand racism in graduate education. *International Journal of Qualitative Studies in Education*, *29*(2), 224-247.

Tsugawa-Nieves, M. A. *et al.* The Role of Engineering Doctoral Students' Future Goals on Perceived Task Usefulness. in *American Society for Engineering Education Annual Conference and Proceedings* (2017).

Turner, A. L., & Berry, T. R. (2000). Counseling center contributions to student retention and graduation: A longitudinal assessment. *Journal of College Student Development*.

World Health Organization. (2020). Mental Health: A State of wellbeing. http://origin.who.int/features/factfiles/mental_health/en/

Wilson, S. B., Mason, T. W., & Ewing, M. J. (1997). Evaluating the impact of receiving university-based counseling services on student retention. *Journal of counseling psychology, 44*(3), 316.

Factors associated with Anxiety and Depression among Graduate and Professional Students

	Anxiety			Depression		
	Odds Ratio		SE	Odds Ratio		SE
Discrim-often	2.968	***	0.637	2.284	***	0.424
Discrim-some	1.920	***	0.338	1.576	***	0.193
Discrim-rare	1.097		0.117	1.211	*	0.102
Compet-very	1.660	***	0.170	1.345	***	0.111
Support-family	0.782	***	0.027	0.794	***	0.022
Support-friends	0.943		0.039	0.891	***	0.030
Talk to advisor	0.661	***	0.059	0.609	***	0.046
Talk to other faculty	0.786		0.114	0.792	*	0.094
Single	1.051		0.093	1.611	***	0.107
Female	1.645	***	0.170	0.975		0.066
LGBTQ	1.822	***	0.215	1.459	***	0.149
International	0.544	***	0.086	1.057		0.104
Father- LT College	0.946		0.108	0.830	*	0.076
Father- BA/BS	0.991		0.103	0.857	†	0.072
Mother- LT College	0.946		0.113	0.926		0.092
Mother-BA/BS	0.917		0.102	0.876		0.081
Black	0.472	***	0.102	1.176		0.252
Latino	0.817		0.152	1.038		0.127
Amer Indian	1.742	*	0.502	1.264		0.328
Arab Amer	1.360		0.401	1.432	*	0.251
Asian Amer	0.765	†	0.114	1.085		0.110
Asian/Pac Island	0.981		0.625	0.363		0.245
Age	0.932	*	0.028	0.947	*	0.023
Exercise- LT2hrs/wk	1.419	***	0.119	1.625	***	0.106
Finances-struggle	3.162	***	0.394	2.302	***	0.227
Finances-tight	1.318	*	0.151	1.241	**	0.101
Reside on campus	0.768		0.129	0.984		0.113
Degree- JD	0.483	*	0.169	1.250		0.341
Degree-MD	0.429	**	0.114	0.543	**	0.112
Degree-PhD	1.085		0.138	1.185	†	0.110

Table Note: Multivariate Logistic Regressions used in Posselt (2020) to estimate relationships; Reference categories are Father graduate degree, Mother graduate degree, White, Finances not a problem, Degree-MA/MS, Social sciences; †=p<0.1; *=p<0.05; **=p<0.01; ***=p<0.001; Sample for anxiety models covers 2007-2012 Healthy Minds Study cohorts; Sample for depression models covers 2007-2013 Healthy Minds Study cohorts; Models include campus and survey year fixed effects, as well as variables for field of study not shown.

About the Study

A growing body of evidence indicates that mental health challenges are common among graduate students. Unfortunately, many barriers exist to effective support and care. A collaboration between the Council of Graduate Schools (CGS) and The Jed Foundation (JED), Supporting Mental Health and Well-being of Graduate Students was designed to address this gap by creating a foundation for evidence-based policies and programs to support graduate student mental health and well-being. The project was generously supported by the Andrew W. Mellon Foundation and the Alfred P. Sloan Foundation.

About the Council of Graduate Schools (CGS)

CGS is an association of 500 graduate institutions that is dedicated to the advancement of graduate education and research. Working closely with our members, we advocate for graduate education, develop innovative research, and establish best practices. Our projects generate information and data that help graduate deans and their institutions better support graduate students and programs.

About The Jed Foundation (JED)

JED is a nonprofit that protects emotional health and prevents suicide for our nation's teens and young adults. We're partnering with high schools and colleges to strengthen their mental health, substance misuse, and suicide prevention programs and systems. We're equipping teens and young adults with the skills and knowledge to help themselves and each other. We're encouraging community awareness, understanding and action for young adult mental health.