

International Conference on Social and Education Sciences



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October 13-16, 2022

Austin, TX, USA

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Doctoral Student Mental Health and the Utilization of Services: Review of the Healthy Minds Study

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Abstract: Doctoral students experience mental health concerns, while 12% to 30.9% utilize support services such as counseling and prescription medication. Overall, one out of two students do not graduate. This quantitative correlational study explored the relationship between doctoral students' mental health status and the utilization of mental health services using data from the 2018-2019 Healthy Minds Study (HMS) data set, resulting in a doctoral student sample of n = 5,568. The findings include statistically significant relationships between students' sense of belonging, GPA, relationship status and gender to an associated increase in mental health concerns with approximately 28% using services. Findings support that Institutions of Higher Education and doctoral program faculty could play a role in mitigating doctoral students' mental health concerns. To summarize the task set forth for the leaders in higher education, Brene Brown (2018) states "...daring leaders who live into their values are never silent about hard things" (p.184).

Keywords: Doctoral Student Mental Health, Service Utilization, Sense of Belonging, Healthy Minds Study

Citation: Elkins, E. (2022). Doctoral Student Mental Health and The Utilization of Services: Review of The Healthy Minds Study. In M. Shelley, V. Akerson, & I. Sahin (Eds.), *Proceedings of IConSES 2022-International Conference on Social and Education Sciences* (pp. 57-65), Austin, TX, USA. ISTES Organization.

Introduction

Among Institutions of Higher Education (IHEs) in the United States, researchers report concerns over doctoral student mental health (Evans et al., 2018; George et al., 2017; Hunter & Devine, 2016), especially with the expanding awareness that only 50% of doctoral students complete their degree (George et al., 2017; Hunter & Devine, 2016; Martinez et al., 2013). There is a strong connection that has been shown within the research that academic performance is affected by mental health; with services and programs directed at improving student's mental health to support student success (George et al., 2017; Hunter & Devine, 2016; Lipson, Abelson, et al, 2019; Martinez et al., 2013; Tinto, 1993).

With the COVID-19 pandemic, research highlights that student in higher education continue to struggle and even more importantly, are showing increased rates of mental health concerns with reports of exacerbations due to the social isolation, loneliness, and general uncertainty due to the federal and state safety and health





guidelines (Chirikov et al., 2020; Lumpkin, 2021).

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Background

Mental Health (MH) concerns are "conditions involving changes in emotion, thinking or behavior (or a combination of these). Mental illnesses are associated with distress and/or problems functioning in social, work or family activities" (American Psychiatric Association [APA], 2018, p.1). Within the college student population, MH concerns include depression, anxiety, substance abuse, trauma/abuse, suicide, along with other contributing factors such as sleep difficulties, physical illness, stress and management of work-life balance (Eisenberg & Lipson, 2019; Gruttadaro & Crudo, 2012; Lipson, Abelson, et al., 2019).

For doctoral students from 2019-2020, the prevalence of depression disorders was twice as often and anxiety disorders was one and a half times more than the previously recorded rates (Chirikov et al., 2020). In addition, Evans et al., (2018) reported that graduate students are 6 times more likely to indicate a mental health concern with 41% of graduate students experienced anxiety and 39% of graduate students experienced depression. Contributing factors to doctoral student MH concerns include both academic and social components such as advisor-advisee relationships, family and financial support, work-life balance, and program alignment to career aspirations (Di Pierro, 2017; Evans et al., 2018; George et al., 2017; Hunter & Devine, 2016; Martinez et al., 2013).

Mental health support services include counseling, medical appointments and medication dispensing at the discretion of a qualified practitioner (Fischbein & Bonfine, 2019; Hyun et al., 2006; Woolston, 2017). In a study by Hyun et al. (2006), 50.2% of doctoral students reported they had considered seeking care for their mental health concerns, but only 30.9% actually used services. In a large global sample of 5,700 doctoral students: 12% demonstrated help seeking behaviors, while 20% attempted to seek help, however reported that they did not feel supported by their program (Woolston, 2017). In addition, Fischbein and Bonfine (2019) determined that 16.6% of doctoral students (MD & PharmD) used counseling services, 24.9% used meds for academic concerns and 22.8% utilized meds for other reasons. Generally, more students are prescribed counseling versus medications as compared to the general population,

Increasing service utilization would benefit doctoral students in order to be empowered, improve advocacy and enable them to persist thereby improving the 50% attrition rate (Evans et al., 2018; Di Pierro, 2017; George et al., 2018; Hunter & Devine, 2016; Lovitts, 2000; Lovitts, 2001; Martinez et al, 2013; Tinto, 1993). Individually, persistent MH concerns can influence current and future educational/academic struggles, physical health concerns, social impairment/difficulties, and reduced job performance and unemployment (Di Pierro, 2017; Evans et al., 2018, George et al., 2018, Hunter & Devine, 2016; Lipson & Eisenberg, 2018). At the institutional level, as IHEs are becoming increasingly dependent on student tuition revenue for financial sustainability, it is important to reduce the current national attrition rate and support students to degree completion (Brimley et al., 2012; Lovitts, 2001).



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More research is warranted in the area of doctoral/graduate student MH, contributing factors, and support/services that improve student's ability to persist to program completion especially with the external influences of the COVID-19 pandemic. Thereby improving IHEs ability to progress to independent and long-term financial sustainability. The purpose of this study was to explore the relationship between the perception of doctoral students' mental health status and the utilization of mental health services.

Method

The study is a quantitative non-experimental correlational design that utilizes a large publicly collected data set obtained from the Healthy Minds Study (HMS) (Eisenberg & Lipson, 2019). The HMS (Eisenberg & Lipson, 2019) contains collected information via a survey designed and disseminated by the Healthy Minds Network. Big data analytics utilizing a previously collected dataset allows for improved generalizability and validity through large sample sizes (Hussain, 2019; Wu et al., 2013).

Data Collection

Access to the HMS (Eisenberg & Lipson, 2019) was provided through an application process that was completed as directed by The Healthy Minds Network website. Access was granted to the dataset and codebook on June 30, 2020. Inclusion criteria for the subset is any student who self-identified as a active, enrolled doctoral student, specifically (JD, MD, PhD) within the survey. The HMS (Eisenberg & Lipson, 2019) is approved by the Institutional Review Board (IRB) at the University of Michigan, School of Health Sciences and Behavioral Sciences and the National Institute of Health (Eisenberg & Lipson, 2019). This study and dataset were anonymous as there is no identifying information and Russell Sage College IRB approved the project (#912-2020-2021) on November 9, 2020.

Data Analysis

Data analysis was performed with the IBM Statistical Package for the Social Sciences Version 26 (SPSS-26) software. Descriptive and relational statistics were utilized to explore relationships between the variables and analyze the participants in the study. The correlational tests performed assessed the strength and direction of the relationships between variables. With non-parametric testing, correlation coefficients are rarely larger than (f = .50) and often are small, making it difficult to assess the strength of the relationship (Cohen, 1988). Therefore, Cohen (1988, p. 355) scale was used as a means to assess the strength of relationships as a small effect size is .10, a medium effect size is .25, and a large effect size is .40.

Results

Within the HMS (Eisenberg & Lipson, 2019) data set, the total sample size of doctoral (JD, MD, PhD, and Other) student respondents is n = 5,568. There are 61.6% females and 38.4% male respondents, with the age



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range of 18-73 years old. Other demographic variable responses included: doctoral degree type, enrollment status, Race, GPA, relationship status, and sense of belonging.

There was a statistically significant positive relationship between respondents' increased disagreement with their sense of belonging to their campus community and increased perceptions of anxiety ($\tau_b = .166$, p < .01), depression (PHQ-9: $\tau_b = .187$, p < .01; PHQ-2: $\tau_b = .170$, p < .01), eating and body image disorders ($\tau_b = .079$, p < .01), suicidal thoughts ($\tau_s = .105$, p < 0.01), lifetime history of abuse ($\tau_b = .084$, p < .01), emotional assault ($\tau_s = .081$, p < .01) and drug usage ($\tau_s = .039$, p < .01). A statistically significant negative relationship between increase in disagreement with their sense of belonging and the perceived positive mental health ($\tau_b = -0.269$, p < .01). There was a statistically significant positive relationship between respondents who experience increased disagreement with their sense of belonging to their campus community and an associated increase in the utilization of counseling services ($\tau_s = .100$, p < .01), and the utilization of prescription medication ($\tau_s = .119$, t = .01).

In terms of doctoral students' use of counseling, there was a small (Cohen, 1988) statistically significant relationship between the respondents' perception of their experiences of anxiety ($r_s = .158$, p < .01), depression (PHQ-9: $r_s = .127$, p < .01; PHQ-2: $r_s = .128$, p < .01), positive mental health ($r_s = -.092$, p < .01). For doctoral students' use of prescription medications, there was a small to medium (Cohen, 1988) statistically significant relationship between the respondents' perception of their experiences of anxiety ($r_s = .232$, p < .01), depression (PHQ-9: $r_s = .267$, p < .01; PHQ-2: $r_s = .273$, p < .01), positive mental health ($r_s = -.152$, p < .01), body image and eating disorders ($r_s = .102$, p < .01). Approximately, 28% of students from the sample responded yes to questions related to their current use of counseling services and/or prescription medications.

Discussion

Students' perception of their "sense of belonging or feeling that they are part of the campus community" plays an important role related to their mental health experiences. Tinto (1993) theory of doctoral student persistence supports that at IHEs a student's ability to integrate into the social system plays a significant role in their ability to successfully complete their academic programming. The faculty, staff, and peers play a part in this connection (George et al., 2017; Tinto, 1993), as humans ultimately are hard wired for connection as it provides purpose and meaning to life (Brown, 2012). The perception of connection or a students' sense of belonging to the campus community is based on "individuals' judgements about the degree to which the institution...is committed to student welfare" (Tinto, 1993, p. 117). Conley et al. (2017) report that college students' mental health concerns "place them at risk for a variety of later more serious difficulties, including academic failure and [increased] dropout... [along with] serious psychological problems...decreased social functioning and quality of life" (p.134). Mental health problems have an association with interpersonal difficulties such as low quality of social support, loneliness, interpersonal conflict and poor social problem solving (Conley et al., 2017; Hazell et al., 2020).



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Chirikov et al. (2020) and Lumpkin (2021) report that since the start of the pandemic the rates of anxiety, depression, and a reduction in sleep are measurably higher in students. The larger portion of literature surrounding students' sense of belonging and the impact that has on their educational experience has been primarily focused on undergraduate students, very little has been performed for the graduate and doctoral student population (Stachl & Baranger, 2020). Interestingly enough, over the last decade the research supports that the utilization of mental health support services has increased throughout the educational system (Atkins et al., 2010, Chirikov et al., 2020; Evans et al., 2018). Much of this is due to the adoption and implementation of policies at the federal and state government level (Stephan et al., 2007). However, the prevalence of mental health concerns has not improved in conjunction with the use of support services (Escalante, 2020).

As doctoral students' perceptions of positive mental health increases, there is a significant relationship to an increase in sense of belonging and a decrease in the utilization of counseling and prescription medications. From the findings of this study, positive mental health was showing a significant inverse relationship as opposed to the poor mental health outcomes. Using positive mental health assessments and screenings could reduce the stigma and fear related students' concerns, allow for more open communication, connection and thereby enhance students' ability to complete their academic programming. With the well documented concerns regarding disclosure due to academic culture, it may be possible to change the conversation regarding mental health utilizing a strength-based approach (Evans et al., 2018; DiPierro, 2017; Hazell et al., 2020; Hunter & Devine, 2016; Lovitts, 2001).

Conclusion

There is an influx of information supporting the increase of mental health concerns, especially during the COVID-19 pandemic. However, IHEs have been dealing with increased demands for mental health support services to meet the growing needs of their students. From the findings of this study, the doctoral student population is experiencing concerns related to their mental health, using support services and IHEs are in the prime position to create a cultural shift that could promote better engagement and interactions between doctoral students and programming faculty, allowing doctoral students to achieve their full potential. As Wheatley (2017) states "we are not broken people. It's our relationships that need repair. It's relationships that bring us back to health, wholeness, holiness" (p. 240). The current higher educational system needs to build better relationships, develop and enhance students' sense of belonging and connectedness to the educational community. People are our most essential and valued asset (Brimley et al., 2012; Wheatley, 2017). When students are able to feel connected and supported to succeed in the educational system, they proceed forth into the professions and global market force to continue the work, all while leaving a resounding hope for the change, adaptation and survival of future generations (Wheatley, 2017). To summarize the task set forth for the leaders in higher education, Brene Brown (2018) states "...daring leaders who live into their values are never silent about hard things" (p.184).

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Recommendations

With the current study's aforementioned findings, conclusions and discussion, as well as the continued concern regarding the 40-60% doctoral student attrition rate (Hunter & Devine, 2016; Lovitts, 2001), there are several recommendations proposed regarding policy at the institutional level, practice within IHEs, and future research inquiry.

In terms of policy recommendations, doctoral program accreditation organizations should implement a required policy for data collection of doctoral students' mental health and well-being. The data collected should include mental/emotional health screenings, identification, services, protocols, and outcomes on an annual basis for every doctoral student upon enrollment and throughout their academic program. The following recommendation would be initiated at the institutional level of leadership, as a means to promote policy and practice changes within IHEs to advocate for the needs of the programs students' overall well-being.

Institutions of Higher Education should review faculty load requirements/job description to include time/load release for student advisement, along with tenure and promotion expectations. Policies should be explored and created by the Provost/ Chief Academic Officer in collaboration with the shared faculty governance to redistribute load requirements for faculty. With the global economic crisis, financial constraints from declining enrollment and sustainability concerns relative to IHEs have led many institutions to increase the annual faculty load requirements. The load increase, cut salary expenditures for IHEs however, faculty are now required to teach more classes, and/or larger class sizes that ultimately reduces faculty-student interactions. The administration within IHEs have realized that it is to their financial advantage to retain students versus recruit new ones (Council for Graduate schools, & The JED Foundation, 2021; Lovitts, 2001). Recognizing the findings from this study about students' sense of connection and concerns related to faculty student engagements, primarily due to the academic culture of productivity, along with support in the literature that there is a financial incentive to retain enrolled students. It is important for the administration to recognize that faculty play a role in the students' sense of belong and require more time not connected to productivity demands. Policy changes to faculty workload requirements hopefully would provide more faculty student engagement, therefore increasing the students' ability to learn, thrive, and complete their degree requirements.

Institutions of Higher Education should integrate mental health support providers and services into the doctoral programs, specific to schools or departments based on the organization structure. Much of the literature supports that IHE support services are struggling to keep up with the demand due to limited staff and budgetary restrictions (Chessman & Taylor, 2019; Lipson et al., 2015; Lipson, Abelson, et al. 2019). This policy and additional staff would provide support to students' as well as faculty who have not been trained or experienced enough to handle a student's mental health concern or potential mental health crisis.

Recommendations for practice, Institutions of Higher Education should implement faculty, staff and administration trainings to promote the development of supportive communication and advising strategies that

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build awareness of doctoral student mental health concerns. Utilizing the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014) framework may provide appropriate guideposts for implementation in the higher education system. Doctoral departments should implement community building activities to promote a stronger sense of community for doctoral students. Strategies to create engagements and conversations about mental health concerns could include brown bag luncheons, panel discussion, and symposiums with external experts on mental health concerns, and potential coping strategies. These maybe utilized to increase awareness and provide communication that normalizes human struggle and send the message that students' do not have to travel that road silent and alone. Creating community opportunities within departments allow students to share their lived experiences, encourages comradery, and potentially gain new connections that may assist doctoral students.

Recommendations for future inquiry is further research both quantitative and qualitative, specifically on doctoral students' sense of belonging and connection to IHEs, departments, faculty, and peer interactions. Multiple studies may need to be performed in order to gain a clearer sense of individuals' connectivity and how that impacts their mental health, what services (if any) are used and what are the outcomes and/or efficacy of those services. Included in those studies, a look at gender differences and gender identities based on their perceptions of roles, connection and social components of the academic program and how that influences their decisions and motivations for progression and continuation with their programming.

References

- American Psychiatric Association. (2018, August). What is mental illness. Retrieved from https://www.psychiatry.org/patients-families/what-is-mentalillness#:~:text= It%20is%20a%20medical %20problem, Mental%20illness%20is%20common.
- Atkins, M. S., Hoagwood, K. E., Kutash, K., & Seidman, E. (2010). Toward the integration of education and mental health in schools. *Administration and Policy in Mental Health and Mental Health Services Research*, 37(1-2), 40-47. 10.1007/s10488-010-0299-7.
- Brimley Jr. V., Verstegen, D.A., & Garfield, R.R. (2012). *Financing education in a climate of change* (11th ed). The Allyn & Bacon Educational Leadership Series.
- Brown, B. (2012). *Daring Greatly: How the courage to be vulnerable transforms the way we love, love, parent, and lead.* Gotham Books hardcover.
- Brown, B. (2018). Dare to lead: Brave work, tough conversations, whole hearts. Random House.
- Chessman, H. & Taylor, M. (2019, August 12). College student mental health and well-being: A survey of presidents. *American Council on Education*. Retrieved from https://www.higheredtoday.org/2019/08/12/college-student-mental-health-well-survey-college-presidents
- Chirikov, I., Soria, K.M., Horgos, B., and Jones-White, D. (2020). *Undergraduate and graduate students' mental health during the COVID-19 pandemic*. SERU Consortium, University of California-Berkeley and University of Minnesota. https://cshe.berkeley.edu/seru-covid-survey-reports.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. (2nd ed). Lawrence Erlbaum

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Associates.

- Conley, C.S., Shapiro, J.B, Kirsch, A.C., and Durlak, J.A. (2017). A Meta-Analysis of indicated mental health prevention programs for at-risk higher education students. *Journal of Counseling Psychology*, 64(2), 121-140. http://dx.doi.org/10.1037/cou0000190
- Council of Graduate Schools, & The Jed Foundation. (2021). Supporting graduate student mental health and well-being: Evidence-informed recommendations for the graduate community. Council of Graduate Schools, & The JED Foundation.
- Di Pierro, M. (2017). Mental health and the graduate student experience. *The Journal of Quality and Participation*, 40(1), 24-27.
- Eisenberg, D. & Lipson, S.K. (2019) The healthy minds study data report. Healthy Minds Network. [Dataset & Codebook]. https://healthymindsnetwork.org/wp-content/uploads/2019/09/HMS_national-2018-19.pdf
- Escalante, A. (2020, August 11). Researchers doubt that certain mental disorders are disorders at all. *Forbes*. https://www.forbes.com/sites/alisonescalante/2020/08/11/researchers-doubt-that-certain-mental-disorders-are-disorders-at-all/?
- 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). 283-285.
- Fischbein, R. & Bonfine, N. (2019). Pharmacy and medical students' mental health symptoms, experiences, and attitudes, and help-seeking behaviors. *American Journal of Pharmaceutical Education*, 83(10), 2204-2215.
- George, C.E., Saclarides, E.S., & Lubienski, S.T. (2017). A difference in priorities? Why US and international students consider leaving doctoral programs. *Studies in graduate and postdoctoral education*, 9(1), 38-57. http://dx.doi.org/10.1108/SGPE-D-17-00040.
- Gruttadaro, D. & Crudo, D. (2012). *College students speak: A survey report on mental health*. National Alliance on Mental Illness (NAMI). Retrieved from http://www.nami.org/namioncampus.
- Hazell, C.M., Chapman, L., Valeix, S.F., Roberts, P., Niven, J.E., & Berry, C. (2020). Understanding the mental health of doctoral researchers: A mixed methods systematic review with meta-analysis and meta-synthesis. *Systematic Reviews*, *9*, 197: 1-46. https://doi.org/10.1186/s13643-020-01443-1
- Hunter, K.H. and Devine, K. (2016). Doctoral students' emotional exhaustion and intentions to leave academia. International Journal of Doctoral Studies, 11, 35-61. Doi:http://ijds.org/volume11/IJDSv11p035-061Hunter2198.pdf
- Hussain, S.J. (2019, October 2nd). What is big data & why is big data important in today's era. *Medium*. https://medium.com/@syedjunaid.h47/what-is-big-data-why-is-big-data-important-in-todays-era-8dbc9314fb0a
- Hyun, J.K., Quinn, B.C., Madon, T., & Lustig, S. (2006). Graduate student mental health: Needs assessment and utilization of counseling services. *Journal of College Student Development*, 47(3), 247-266.
- Lipson, S.K., Abelson, S., Ceglarek, P., and Eisenberg, D. (2019). Investing in student mental health: Opportunities and Benefits for College Leadership. *American Council on Education*: Washington, D.C.
- Lipson, S.K., Gaddis, M., Heinze, J., Beck, K., and Eisenberg, D. (2015). Variations in student mental health

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- and treatment utilization across US colleges and universities. *Journal of American College Health*, 63(6), 388-396.
- Lovitts, B.E. (2001). Leaving the Ivory Tower: The causes and consequences of departure from doctoral study. Lanham, MD: Rowman & Littlefield.
- Lovitts, B.E.., & Nelson, C. (2000). The hidden crisis in graduate education: Attrition from PhD programs. Retrieved from http://www.aaup.org/AAUP/pubsres/academe/2000/ND/Feat/lovi.html
- Lumpkin, L. (2021, June 10). Rates of anxiety and depression among college students continue to soar, researchers say. *The Washington Post*.
- Martinez, E., Ordu, C., Della Sala, M.R., and McFarlane, A. (2013). Striving to obtain a school-work-life balance: The full-time doctoral student. *International Journal of Doctoral Studies*, 8. 39-59.
- Stachl, C.N. & Baranger, A.M. (2020). Sense of belonging within the graduate community of a research-focused STEM department: Quantitative assessment using a visual narrative and item response theory. *PLOS ONE*, *15*, 5: 1-16.https://doi.org/10.1371/journal.pone.0233431.
- Stephan, S. H., Weist, M., Kataoka, S., Adelsheim, S., & Mills, C. (2007). Transformation of children's mental health services: The role of school mental health. *Psychiatric Services*, 58(10), 1330-1338. 10.1176/ps.2007.58.10.1330
- Substance Abuse and Mental Health Services Administration (2014, July). *SAMHSA's concept of trauma and guidance for a trauma-informed approach*. HHS Publication No. (SMA) 14-4884. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2014. https://ncsacw.samhsa.gov/userfiles/files/SAMHSA_Trauma.pdf
- Tinto, V. (1993). *Leaving college: rethinking the causes and cures of student attrition* (2nd ed). The University of Chicago Press.
- Wheatley, M.J. (2017). Who do we choose to be? Facing reality, claiming leadership, restoring sanity.
- Woolston, C. (2017, October 26). Graduate survey: A love-hurt relationship. Nature, 550, 549-552.
- Wu, X., Zhu, X., Wu, G., & Ding, W. (2013). Data mining with big data. *IEEE Transactions on Knowledge and Data engineering*, 26(1). 97-107. doi: 10.1109/TKDE.2013.109.