

Looking Inward: Academic Advisors' Mental Health

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We examined academic advisors' clinically significant symptoms of major depressive disorder (MDD) and generalized anxiety disorder (GAD), including whether there are statistically significant relationships between advisors' demographic characteristics, work-related variables, institutional variables, burnout, resilience, and risk of clinically significant MDD/GAD symptoms. We analyzed survey data of academic advisors collected from February to March 2023 (n = 777) and found that 16.9% of advisors met the criteria for MDD while 29.6% met the criteria for GAD, rates higher than national averages. While there were some demographic differences, advisors who experienced higher rates of burnout had increased odds of experiencing MDD and GAD symptoms. In addition, advisors' resilience was associated with decreased odds of experiencing MDD and GAD symptoms.

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In the wake of the COVID-19 pandemic, college and university leaders adjusted operations to curb transmission of the virus in March 2020 (Cameron et al., 2021). While most colleges and universities have since resumed pre-pandemic levels of operations, the disruptions stemming from the COVID-19 pandemic left a lasting impact on higher education. The rapid pace at which the pandemic unfolded, the swift changes in college and university operations, the uncertainty surrounding the virus's threat, and the significant loss of life coalesced into collective traumatic events akin to natural disasters (Copeland et al., 2021). Those collective traumatic events had deleterious effects on individuals' mental health (Magnavita et al., 2021); however, in the context of higher education, researchers

have predominantly focused on the mental health of college students during the pandemic while overlooking employees' mental health, leaving a substantial gap in the literature (Copeland et al., 2021; Soria & Horgos, 2021; Soria, Horgos et al., 2021; Soria, Kelling et al., 2022).

The COVID-19 policies added new stressors and burdens for academic advisors, such as navigating the uncertainties of the pandemic, addressing significant and pressing concerns from struggling students, managing increasing workloads, pivoting to new methods of communication, and balancing responsibilities while working from home and caring for others (Survase & Johnson, 2023; Turner & Farr, 2020). Such stressors contributed to advisors' *burnout*, a psychological syndrome that manifests after prolonged exposure to workplace stress (Maslach et al., 2001; Soria et al., 2023), and compromised advisors' resilience (i.e., their ability to bounce back after adversity; Soria, Boettcher et al., 2022). Elevated burnout and reduced resilience can increase depression or anxiety among academic advisors, thus diminishing their ability to effectively support students (Chiu et al., 2015; Havnen et al., 2020; Koutsimani et al., 2019; Sheerin et al., 2018). Academic advisors are indispensable in fostering college students' success (Drake, 2011; Erlich & Russ-Eft, 2013; Mu & Fosnacht, 2019; Museus, 2021; Tinto, 2006); consequently, it is imperative to prioritize academic advisors' mental health.

Improving mental health means first understanding the rates at which academic advisors experience major depressive disorder (MDD) and generalized anxiety disorder (GAD). The purpose of this study is to examine the frequency with which academic advisors experience MDD and GAD and whether additional variables may be associated with MDD or GAD symptoms. We sought to answer the following questions: What is the frequency with which academic advisors experience clinically significant rates of MDD

and GAD? Are academic advisors' demographic characteristics, work-related variables, institutional variables, burnout, and resilience associated with clinically significant symptoms of MDD and GAD?

Literature Review

Current evidence suggests that one in 10 college and university staff (10.1%) experience MDD (Mazurek Melnyk et al., 2021), a mood disorder characterized by persistent depressed mood, anhedonia, or hopelessness (Hasin et al., 2018). Relatedly, almost one-third of higher education staff (31.0%) experience high rates of GAD (Mazurek Melnyk et al., 2021), a type of anxiety disorder characterized by excessive and uncontrollable anxiety and worry (Crocq, 2017). The rates of MDD and GAD are more elevated among higher education staff than for faculty (4.4% for MDD and 17.8% for GAD; Mazurek Melnyk et al., 2021) and for the general population (8.4% for MDD and 2.7% for GAD among adults; National Institute of Mental Health, 2023a, 2023b). Presently, little is known about the factors that contribute to higher education employees' MDD and GAD symptoms. We do not know the extent to which demographic characteristics, work-related variables, institutional variables, burnout, and resilience are associated with higher education employees' symptoms of MDD and GAD. Therefore, in this literature review, we drew upon available research about MDD and GAD among U.S. adults.

To date, researchers have identified common demographic variables associated with clinically significant symptoms of MDD and GAD. MDD is typically higher among women than men, higher among multiracial and White adults than those with other racial or ethnic backgrounds, and higher among individuals aged 18 to 25 than older adults (National Institute of Mental Health, 2023a). These trends are similar for adult GAD rates (National Institute of Mental Health, 2023b; Terlizzi & Villarreal, 2020). Individuals with chronic illnesses or disabilities (e.g., diabetes, or multiple sclerosis) are more likely to experience MDD or GAD symptoms (Hanna & Strober, 2020; Nelson & Harwood, 2011). Lesbian, gay, bisexual, and transgender adults also have statistically higher rates of anxiety and depression than heterosexual adults (File & Marlay, 2022). Income and education levels are also negatively associated with MDD and GAD (Beydoun & Wang, 2010; Nunes et al., 2022), as

are workplace-related variables. Work intensity, workload, and work stress can increase MDD and GAD, while autonomy, social support, salary satisfaction, and effort-reward balance can decrease them (Melchior et al., 2007; Rivière et al., 2018; Saquib et al., 2019).

Researchers have yet to explore variables associated with institution type, control, or size, but institutional settings may influence higher education employees' mental health; for example, rural educators tend to have worse mental health outcomes than educators in urban areas (Ivey-Stephenson et al., 2017; Morales et al., 2020; National Alliance on Mental Illness, 2023; Steelesmith et al., 2019), a factor attributed to the disproportionately limited availability of mental health providers in rural settings (Morales et al., 2020; National Alliance on Mental Illness, 2023).

During the COVID-19 pandemic, higher education employees had the second-highest rates of burnout across all major industries (Marken & Agrawal, 2022). Burnout among higher education employees has risen at such high rates that it has drawn the attention of policymakers, institutional leaders, and news outlets (McClure, 2021; Morales, 2022; Sallee, 2022). Burnout contributes to MDD and GAD (Chiu et al., 2015; Koutsimani et al., 2019), so the rise in burnout among higher education employees poses a concern for their mental health. While resilience can act as a buffer against stressful life events, burnout, MDD, and GAD (Havnen et al., 2020; Sheerin et al., 2018), resilience among higher education employees waned during the pandemic because educators experienced financial stress, job insecurity, and higher workloads (de los Reyes et al., 2022; Ross et al., 2023).

Research about academic advisors' mental health is essential because of the effects of mental health disorders on individuals and institutions. Individuals with clinically significant symptoms of MDD or GAD experience a lower quality of life, poorer physical health, less sleep reduced holistic well-being, increased emotional exhaustion, lost productivity, decreased job satisfaction, increased absenteeism, and higher healthcare costs (Hirota et al., 2021; Hoffman et al., 2008; Papakostas et al., 2004). The effects of MDD and GAD on academic advisors' employment are also concerning given the significant upheaval in the higher education labor market during the COVID-19 pandemic. During the pandemic, over half of higher education employees considered leaving their jobs (Bichsel et al., 2022), and MDD and GAD are associated

with higher education employees' intentions to leave their positions (Winfield & Paris, 2021); therefore, high rates of MDD and GAD among academic advisors may exacerbate advisors' job turnover. Replacing full-time professional employees can cost up to 150% of employees' annual compensation package and training new academic advisors consumes significant institutional resources (Pitts et al., 2011; Voller, 2012). With those factors in mind, the results of this study may provide timely information to help academic advising administrators curb employee attrition and related costs.

Conceptual Framework

Our conceptual framework incorporates Fink's (2014) integrated model of mental health and Glover et al.'s (2020) framework for identifying and mitigating the equity harms of COVID-19 policy interventions. Fink's integrated model examined the effects of individual characteristics, interpersonal factors, and institutional factors on mental health (Soria & Horgos, 2021; Soria, Kelling et al., 2022). We extended Fink's model by adding burnout and resilience because of the roles that both factors have played in higher education employees' mental health during the COVID-19 pandemic (de los Reyes et al., 2022; McClure, 2021; Morales, 2022; Winfield & Paris, 2021). Additionally, burnout and resilience are commonly used in other frameworks related to employees' mental health within helping professions, including the systems-level approach to clinician wellbeing (National Academy of Medicine, 2019) and the conceptual model of factors affecting clinician well-being and resilience (Brigham et al., 2018).

Glover et al.'s (2020) framework led us to select advisors' demographic characteristics and institutional factors. Glover et al. stipulated that implementing inequitable COVID-19 policies may have generated additional harm upon individuals who were already marginalized, oppressed, and disenfranchised prior to the pandemic. As it relates to the present study, academic advisors with demographic characteristics that made them more vulnerable to MDD and GAD prior to the pandemic and who encountered more significant stressors from pandemic-related policies may have been more likely to experience MDD or GAD because of new policies. For instance, advisors with less education who experienced reductions in wages due to pandemic-initiated furloughs may have experienced higher rates of MDD or GAD. Similarly, advisors or those working in institutions that

are under-resourced, understaffed, or located in rural settings may have experienced greater work demands or isolation from social distancing pandemic policies, leading to a higher likelihood of advisors experiencing MDD or GAD symptoms. Incorporating demographic characteristics, work-related variables, institutional variables, burnout, and resilience within our models enabled us to identify relationships between those variables and clinically significant MDD and GAD symptoms.

Methodology

After obtaining IRB approval, we administered a confidential online survey via Qualtrics to a sample of U.S. academic advisors from February to March 2023. We collected advisors' contact information via web scraping techniques and distributed the survey to 8,122 professional academic advisors (not faculty advisors) on over 1,300 two- and four-year institutional websites. We excluded faculty advisors because of the paucity of scholarship about academic advising professional staff and the large differences between staff and faculty advisors' primary roles and responsibilities, caseloads, and working environment (Allen & Smith, 2008). The survey respondents had a chance to win one of 100 \$10 gift cards.

Participants

We received responses from 2,566 advisors (31.6%) at 737 institutions. Qualtrics randomly assigned three separate survey modules, thereby limiting the time needed to complete items and reduce survey fatigue. Slightly under one-third ($n = 777$) responded to items related to mental health, burnout, and resilience. The sample contained no missing data. Table 1 includes respondents' demographic characteristics and work-related variables. Most respondents identified as cisgender women (75.9%) and were White (77.5%). Additionally, 74.3% of the sample had master's degrees with an average age of 40.08 ($SD = 10.36$). Ninety percent of respondents worked at four-year institutions, an overrepresentation (see Shaw et al., 2021).

Instrument

We used two short measures for mental health disorders: the Patient Health Questionnaire-2 (PHQ-2; Kroenke et al., 2003) and Generalized Anxiety Disorder-2 (GAD-2; Kroenke et al., 2007). We also included abbreviated measures of burnout (Gabbe et al., 2002) and resilience (Connor & Davidson, 2003), items for advisors' demographic

Table 1. Sample Characteristics

	<i>n</i>	%
Demographic Variables		
Genderqueer, genderfluid, nonbinary, or transgender	22	2.8
Man	158	20.3
Woman	590	75.9
Gender identity not listed or did not respond to the item	7	0.9
Asexual	19	2.4
Bisexual	50	6.4
Gay or lesbian	51	6.6
Heterosexual or straight	590	75.9
Pansexual	17	2.2
Queer or questioning	28	3.6
Sexual orientation not listed or did not respond to the item	22	2.8
American Indian, Native American, or Alaska Native	3	0.4
Asian	23	3.0
Black or African American	50	6.4
Hispanic or Latinx	48	6.2
Multiracial	30	3.9
White	602	77.5
Race/ethnicity not listed or did not respond to the item	17	2.2
Does not have a disability	720	92.7
Has a disability	57	7.3
Associate's degree or less	3	0.4
Bachelor's degree	106	13.6
Master's degree	577	74.3
Doctorate or professional degree	90	11.6
Advising Variables		
Employed as an academic advisor for less than five years	308	39.6
Employed as an academic advisor for more than five years	468	60.2
Primarily advises. . .		
Undergraduate students	722	92.9
Graduate students	79	10.2
Institutional Variables		
Public institution	652	83.9
Private non-profit institution	125	16.1
Two-year institution	78	10.0
Four-year institution	699	90.0
Land-grant institution	180	23.2
Not a land-grant institution	597	76.8
Highest degree: associate's	58	7.5
Highest degree: bachelor's	37	4.8
Highest degree: master's	59	7.6
Highest degree: doctorate	589	75.8
City setting	540	69.5
Suburb setting	122	15.7
Town setting	92	11.8
Rural setting	23	3.0

characteristics, and items related to advisors' work (e.g., caseload).

Measures

Dependent Variables

Our dependent measures include a two-item instrument to screen for MDD symptoms known as the PHQ-2 (Kroenke et al., 2003) and a two-item instrument known as the GAD-2 to screen for GAD symptoms (Kroenke et al., 2007). The PHQ-2 includes two questions about the frequency of depressed mood and anhedonia that advisors experienced over the past 2 weeks (scaled from 0 = not at all to 3 = nearly every day). Advisors were asked, "over the last 2 weeks, how often have you been bothered by the following problems?" They responded separately to two items: "little interest or pleasure in doing things" and "feeling down, depressed, or hopeless." The PHQ-2 has been utilized frequently in clinical practice and research and exhibits sound psychometric properties (Gilbody et al., 2007). The internal consistency of the items was good in this study ($\alpha = 0.844$, $\Omega = 0.843$). The PHQ-2 should not be used to establish a final diagnosis or to monitor depression severity; instead, it is a screener for depression. Clinicians should evaluate individuals who screen positive for depression to determine whether they meet the criteria for MDD.

The GAD-2 included two items about the frequency of anxiety experienced by academic advisors over the past 2 weeks (scaled from 0 = not at all to 3 = nearly every day). Advisors were asked, "over the last 2 weeks, how often have you been bothered by the following problems?" They responded separately to the two items, "feeling nervous, anxious, or on edge" and "not being able to stop or control worrying." Like the PHQ-2, the GAD-2 has been utilized frequently in clinical practice and research, and it exhibits sound psychometric properties (Hughes et al., 2018; Plummer et al., 2016). The internal consistency of the items was good in the present study ($\alpha = 0.843$, $\Omega = 0.854$). Like the PHQ-2, the GAD-2 is a screener, not a diagnostic tool. Individuals who meet the clinically significant criteria for GAD should receive clinician evaluation for an official diagnosis and treatment (Kroenke et al., 2003; Kroenke et al., 2007). We summed the PHQ-2 and GAD-2 scores and used the recommended cut-off point of PHQ-2 ≥ 3 and GAD-2 ≥ 3 to represent clinically significant

MDD and GAD symptoms (Kroenke et al., 2003; Kroenke et al., 2007).

Independent Variables

Advisors provided demographic information, including gender, sexual orientation, race/ethnicity, age, disability, and level of education. We included those items given their known associations with adults' MDD and GAD (Beydoun & Wang, 2010; File & Marlay, 2022; Hanna & Strober, 2020; National Institute of Mental Health, 2023a, 2023b; Nelson & Harwood, 2011; Terlizzi & Villarroel, 2020).

Advisors' work-related variables included the number of students they advise per academic year ($M = 383.24$, $SD = 424.01$, range 10 to 5,000), type of students primarily advised (undergraduate or graduate), and length of time in advising position. Advisors rated their level of satisfaction with their salary, benefits, and overall compensation package on a scale from 1 = very unsatisfied to 5 = very satisfied ($M = 2.72$, $SD = 1.21$). Among those variables, only salary satisfaction appeared in prior research related to MDD and GAD (Saquib et al., 2019), although caseload may be associated with workload, which is associated with MDD and GAD (Rivière et al., 2018). Institutional variables included institutional type (e.g., two-year), number of students enrolled ($M = 26,968.32$, $SD = 20,042.02$, range 503 to 110,694), Carnegie classification, and region. Of those variables, only region is associated with reduced mental health outcomes (Ivey-Stephenson et al., 2017; Steelesmith et al., 2019).

We included burnout due to its association with MDD and GAD (Chiu et al., 2015; Koutsimani et al., 2019). Maslach et al. (1997) conceptualized burnout as occurring through three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion is characterized by fatigue, loss of energy, or feelings of depletion related to employment. Depersonalization (also known as cynicism) includes negative attitudes towards the individuals the employees serve. Reduced personal accomplishment occurs when individuals have low morale or a reduction in their workplace productivity (Maslach & Leiter, 2016). We used an abbreviated scale of Maslach's Burnout Inventory (Gabbé et al., 2002; Maslach et al., 1997) to measure academic advisors' emotional exhaustion, depersonalization, and personal accomplishment, all via three scaled items: from 1 = never to 7 = every day (e.g., "I feel emotionally drained from my

work”). Depersonalization and personal accomplishment were also measured on the same scale using three items (e.g., “I don’t really care what happens to some students” and “I feel exhilarated after working closely with my students”). All items were measured on the same scale: 0 = never to 6 = every day. Gabbe et al. (2002) provided evidence for the sound psychometric properties of the shortened burnout scale (e.g., strong construct, predictive validity). The factors had acceptable to good internal consistency in the present study: emotional exhaustion ($\alpha = 0.859, \Omega = 0.867$), depersonalization ($\alpha = 0.724, \Omega = 0.714$), and personal accomplishment ($\alpha = 0.720, \Omega = 0.725$).

Resilience is negatively associated with MDD and GAD, so we included it in our study (Havnen et al., 2020; Sheerin et al., 2018). The abbreviated measure of resilience (Connor & Davidson, 2003) included six items (e.g., “I can deal with whatever comes my way”) on a scale from 1 = not at all true to 5 = true nearly all the time. Connor and Davidson’s scale has sound psychometric properties (Velickovic et al., 2020) and in the present study, the results suggested that our measure of resilience has good internal consistency ($\alpha = 0.802, \Omega = 0.804$).

We converted the demographic, work-related, and institutional variables using effect coding,

except in the case of variables with dichotomous categories. When analyzing variables with multiple categories, dummy coding excludes one group (the common referent group). On the other hand, in effect coding, the coefficients or odds ratios are interpreted in relation to the overall average of the entire sample, allowing for the inclusion of all groups in the analysis.

Data Analyses

First, we used the “lavaan” package in R (Rosseel, 2012) for a confirmatory factor analysis of burnout and resilience items. The factorial model had an acceptable fit (CFI = 0.940, TLI = 0.925, RMSEA = 0.059, SRMR = 0.050; Kline, 2015), and we reported both Cronbach’s (1951) α and McDonald’s (1999) Ω values above because the Ω is a more robust measure of internal consistency (Revelle, 2024).

Next, we used two separate binary logistic regressions examining academic advisors’ odds of experiencing clinically significant symptoms for GAD or MDD. Clinically significant symptoms of generalized anxiety disorder and major depressive disorder are dichotomous variables. Thus, we used the following two logistic regressions:

$$P(Y_1) = \frac{1}{1 + e^{-(b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + \dots + b_{46}x_{46})}}$$

$$P(Y_2) = \frac{1}{1 + e^{-(b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + b_6x_6 + b_7x_7 + b_8x_8 + \dots + b_{46}x_{46})}}$$

where Y_1 = major depressive disorder, Y_2 = generalized anxiety disorder, b_o = intercept, x_{1-25} = demographic variables, x_{26} = emotional exhaustion, x_{27} = depersonalization, x_{28} = personal accomplishment, x_{29} = resilience, x_{30-34} = work-related variables, x_{35-46} = institutional variables.

We used McKelvey and Zavoina’s (1975) pseudo- R^2 value because it is one of the better estimates to evaluate the fit of binary models (Langer, 2016). The results were 0.476 for the MDD model and 0.480 for the GAD model. Hosmer et al.’s (2013) test assessed how well the data fit the model via how much the observed event rates match the expected event rates in subgroups. The results suggest that the models fit

well (MDD: $\chi^2 = 4.530, p = 0.806$; GAD: $\chi^2 = 13.397, p = 0.083$). We examined the variables for multicollinearity and discovered that none of the variance inflation factors (VIF) had values above 5.0, suggesting multicollinearity was not a problem in the models (Field et al., 2012).

Results

In the sample, 16.9% of academic advisors had clinically significant MDD symptoms. The logistic regression model for academic advisors’ clinically significant MDD symptoms suggested that Black or African American advisors had significantly ($p < 0.05$) increased odds of experiencing clinically significant symptoms of MDD compared to advisors from all other racial or ethnic groups (see Table 2).

Table 2. Results of Logistic Regression Analyses

	MDD			GAD				
	OR	95% CI (OR)	<i>p</i>	OR	95% CI (OR)	<i>p</i>		
Demographic Variables								
Genderqueer, nonbinary, or transgender	1.660	0.409	6.730	1.216	1.116	1.316	**	
Man	1.819	0.607	5.449	0.956	0.454	2.015		
Woman	1.499	0.523	4.292	0.628	0.308	1.280		
Gender identity not listed or did not respond to the item	0.221	0.012	4.005	1.703	1.231	2.192	*	
Asexual	1.242	1.042	1.442	1.090	0.502	2.368		
Bisexual	0.686	0.274	1.719	0.870	0.130	1.870		
Gay or lesbian	1.170	0.413	3.310	2.831	0.961	8.345		
Heterosexual or straight	1.007	0.514	1.975	0.569	0.322	0.997	*	
Pansexual	0.174	0.020	1.490	1.052	0.382	2.900		
Queer or questioning	1.261	0.394	4.029	0.556	0.048	6.451		
Sexual orientation not listed or did not respond to the item	1.742	0.133	2.868	0.916	0.294	2.852		
American Indian, Native American, or Alaska Native	0.129	-0.244	0.502	0.173	-0.251	0.597		
Asian	0.523	0.129	2.129	1.277	0.414	3.941		
Black or African American	2.403	1.022	5.648	1.591	0.703	3.604	*	
Hispanic or Latinx	0.680	0.233	1.984	0.909	0.349	2.371		
Multiracial	1.746	0.583	5.234	1.045	0.387	2.822		
White	1.051	0.592	1.866	2.180	1.328	3.746	**	
Race/ethnicity not listed or did not respond to the item	0.637	0.112	3.629	0.238	0.043	1.306		
Has a disability	1.367	0.573	3.262	1.552	0.712	3.381		
Associate's degree or less	1.364	0.213	2.184	1.349	0.073	2.993		
Bachelor's degree	0.991	0.325	3.018	0.961	0.335	2.753		
Master's degree	0.381	0.132	1.098	0.589	0.215	1.615		
Doctorate or professional degree	0.607	0.190	1.941	1.310	0.443	3.874		
Age	1.000	0.970	1.030	0.961	0.938	0.985	***	
Burnout and Resilience								
Emotional exhaustion	3.307	2.348	4.658	***	2.731	2.101	3.551	***
Depersonalization	1.462	1.143	1.869	***	1.277	1.020	1.598	***
Personal accomplishment	0.691	0.558	0.855	***	0.797	0.658	0.966	***
Resilience	0.680	0.532	0.869	***	0.479	0.381	0.604	***
Work-Related Variables								
Number of advisees	1.000	1.000	1.001		1.000	1.000	1.001	
Salary satisfaction	0.666	0.526	0.844	***	0.962	0.804	1.152	
Employed as an academic advisor for less than five years	1.020	0.552	1.886		0.992	0.605	1.626	
Advises undergraduates	0.691	0.234	2.039		0.731	0.282	1.896	
Advises graduate students	0.901	0.323	2.515		1.542	0.672	3.537	
Institutional Variables								
Number of students enrolled	1.002	0.996	1.004		1.004	0.994	1.006	
Public institution	0.911	0.633	1.312		1.437	1.046	1.994	*
Private non-profit institution	0.901	0.323	2.515		-0.017	-0.735	0.700	
Four-year institution	1.023	0.378	2.772		0.929	0.409	2.111	
Land-grant institution	0.803	0.406	1.588		0.826	0.478	1.426	
Highest degree: bachelor's	1.747	0.841	3.628		0.704	0.362	1.368	
Highest degree: master's	0.997	0.517	1.920		1.149	0.734	1.798	
Highest degree: doctorate	0.573	0.346	0.953	*	1.045	0.669	1.633	
City setting	1.590	0.880	2.873		1.045	0.669	1.633	
Suburb setting	1.347	0.663	2.737		0.706	0.409	1.220	
Town setting	0.573	0.252	1.302		0.698	0.396	1.231	
Rural setting	0.815	0.234	2.837		1.942	0.792	4.763	
Intercept	0.361			***	1.883			***

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Moreover, academic advisors' emotional exhaustion and depersonalization were significantly ($p < 0.05$) associated with increased odds of experiencing clinically significant MDD symptoms. Advisors' personal accomplishment, resilience, and salary

satisfaction were significantly ($p < 0.05$) associated with decreased odds of experiencing clinically significant MDD symptoms. Advisors working at doctoral degree-granting institutions had significantly ($p < 0.05$) reduced odds of experiencing clinically

significant MDD symptoms compared to advisors working at other institutional types.

We discovered that 29.6% of academic advisors had clinically significant symptoms of GAD. The logistic regression model for academic advisors' clinically significant GAD symptoms suggested that genderqueer, nonbinary, transgender, and advisors with a gender identity not included in the survey had significantly ($p < 0.05$) higher odds of experiencing clinically significant GAD symptoms (see Table 2). Heterosexual or straight advisors had significantly ($p < 0.05$) lower odds of experiencing GAD symptoms compared to all other advisors. White academic advisors had significantly ($p < 0.05$) higher odds of experiencing GAD symptoms compared to other advisors. Age was also significantly ($p < 0.05$) associated with decreased odds of experiencing clinically significant GAD symptoms.

Academic advisors' emotional exhaustion and depersonalization were significantly ($p < 0.05$) associated with increased odds of experiencing clinically significant GAD symptoms. Advisors' personal accomplishment and resilience were significantly ($p < 0.05$) associated with decreased odds of experiencing clinically significant GAD symptoms. Finally, advisors working at public institutions had significantly ($p < 0.05$) increased odds of experiencing clinically significant GAD symptoms compared to advisors working at private institutions.

Discussion and Recommendations

Our findings suggest that academic advisors have rates of clinically significant MDD (16.9%) and GAD (29.6%) symptoms that are higher than national averages (8.4% for MDD and 2.7% for GAD; National Institute of Mental Health, 2023a, 2023b). Therefore, we recommend advising administrators readily share information about available counseling or employee assistance programs with all advisors. While the rates of clinically significant MDD and GAD symptoms are high, they are not fully diagnostic; therefore, further clinical evaluation is needed. Still, preliminary indications point to concerning trends in academic advisors' mental health.

Among the demographic characteristics, Black or African American advisors had higher odds of experiencing clinically significant MDD symptoms and genderqueer, nonbinary, transgender, and White advisors and advisors with another gender identity not listed on the survey had higher odds of experiencing clinically significant GAD symptoms.

Heterosexual or straight advisors also had reduced odds of experiencing clinically significant GAD symptoms, as did older advisors. Many of those results are reflective of national trends (File & Marlay, 2022; National Institute of Mental Health, 2023a, 2023b); however, in this study, Black or African American advisors had higher odds of experiencing clinically significant MDD symptoms, which is a departure from the literature base. The disproportionate effects of the "dual pandemic" of COVID-19 and systemic racism on Black or African American people, longstanding racial injustices, targeted violence, and trauma experienced by Black or African American people may be undermining Black or African American advisors' well-being (Taylor, 2022). Congruent with our conceptual framework, demographic variables are important to examine in mental health models because some individuals may have had disproportionately negative experiences during the pandemic that affected their mental health (Fink, 2014; Glover et al., 2020).

It is important for advising administrators and campus leaders to understand that some employee groups—Black or African American advisors, White advisors, younger advisors, advisors at public institutions, and genderqueer, nonbinary, transgender advisors—may be more likely to experience MDD or GAD compared to their colleagues. Advising administrators can use trauma-sensitive approaches in their work with academic advisors by acknowledging the impact of trauma, recognizing the symptoms and signs of trauma, integrating knowledge about trauma into policies and practices, and avoiding re-traumatization (Substance Abuse and Mental Health Services Administration, 2014). Advisors who experience trauma may struggle with a reduced window of tolerance for small stressors, minor decisions, or ambiguity, which can negatively affect their feelings of professional efficacy or their ability to manage changes in work (e.g., increases in workload; Hershler et al., 2021). We recommend that advising administrators receive training to learn about trauma and recognize the signs of trauma in employees, which may manifest in different ways (e.g., feeling numb, inability to cope with everyday stressors).

Only one work-related variable was significant in the models: salary satisfaction. Advisors who are satisfied with their salaries have lower odds of experiencing clinically significant MDD symptoms. Although salary satisfaction is associated with decreased depressive symptoms (Yang et al., 2013), salary satisfaction as a component

of job satisfaction is also associated with greater subjective well-being and life satisfaction and decreased depressive symptoms (Liu et al., 2023). Almost half of academic advisors are dissatisfied with their salary (Soria et al., 2023); therefore, we recommend that campus leaders increase advisor salaries, especially when positions require a master's degree or higher. Advising is integral in students' success and should be recognized via commensurate financial investment in academic advising.

Additionally, only two institutional variables were associated with advisors' MDD and GAD symptoms. Advisors who worked at doctoral degree-granting institutions had reduced odds of experiencing clinically significant MDD symptoms, and those who worked at public institutions had increased odds of experiencing clinically significant GAD symptoms. Those findings are novel in the literature, and we speculated that doctoral institutions may be larger and potentially better resourced, providing advisors with a wider social support base and more resources to reduce work-related stress. Advisors at public institutions tend to have a higher caseload of advisees compared to those at private institutions (Robbins, 2013), which may contribute to their higher rates of anxiety. Given the limited significance of institutional variables like control, type, highest degree offered, land grant status, and location in our models, institutional-level variables such as supportive institutional environments may be more important for future researchers to consider (Fink, 2014).

Advisors with higher levels of emotional exhaustion (i.e., feeling emotionally drained from work) had increased odds of experiencing clinically significant MDD and GAD symptoms. The events related to the pandemic, including abrupt shifts in working conditions and locations, temporary layoffs or furloughs, and ambiguity of the pandemic's long-term outcomes may have exacerbated advisors' emotional exhaustion (Glover et al., 2020; Survase & Johnson, 2023). Advising administrators can reduce advisors' emotional exhaustion in several creative ways. Grant et al. (2014) discovered that employees who developed their own self-reflective job titles were better equipped to handle emotional exhaustion because such titles validate self-expression, defuse stress, reduced power distance, and increased interpersonal engagement and enthusiasm in employees. Self-reflective job titles can serve as a buffer to help employees navigate the difficulty and

gravity of their work while allowing them to focus on how they benefit others (Grant et al., 2014). Similarly, administrators should provide advisors with opportunities to engage in job crafting—altering the content of their work and job responsibilities—which can reduce emotional exhaustion and turnover intentions (Shin et al., 2020).

Advisors with higher levels of depersonalization (i.e., feeling cynical about work) more often experienced clinically significant MDD and GAD symptoms. Unsupportive working environments may elevate cynicism and increase risks for clinically significant mental health disorder symptoms (Fink, 2014). To reduce advisors' depersonalization, administrators can provide advisors with both psychological and structural empowerment by reinforcing advisors' feelings of self-efficacy, sharing informal and formal power, promoting advisors' autonomy and ability to affect operations, and distributing opportunities, support, information, and resources (Survase & Johnson, 2023). Because social support groups can increase advisors' personal accomplishment and decrease their depersonalization (Cooley & Yovanoff, 1996; Unterbrink et al., 2012), administrators should dedicate time and space for advisors to engage in advisor support groups on campus, provide resources so that advisors can attend advising-related conferences or events, and encourage advisors to network with advisors in other colleges and universities, especially other institutions with similar contexts (e.g., via a Big 10 advising network, or a community college advisor network).

Advisors with higher levels of personal accomplishment—feeling like they are accomplishing worthwhile things at work and positively influencing students through their work—were less likely to experience clinically significant MDD and GAD symptoms. Fink (2014) similarly found that elevated professional confidence reduced mental health disorders. Addressing advisors' experiences with compassion fatigue, secondary trauma, unmanaged stress, or high workloads is one way for advisors to share concerns or frustrations (Ali & Johns, 2018). Gregerson et al. (2022) suggested that the high volume of work, long working hours, lack of institutional support and resources, and the culture of immediacy predominant in higher education can elevate academic advisors' burnout, reduce their feelings of personal efficacy, and lessen their wellbeing. Self-care alone cannot address those problems. Structural changes are necessary to minimize advisors' workload, offer more flexibility

(e.g., in work location), provide advisors with adequate resources to successfully manage their jobs, and change the workplace culture to support advisors who can grow and thrive—not simply survive—in their positions. Organizational interventions (e.g., reductions in workload) better reduce burnout than individual interventions (e.g., teaching advisors stress management techniques; De Simone et al., 2021).

Advisors with higher resilience levels experience significantly fewer clinically significant MDD and GAD symptoms. Those results are congruent with prior research: in their large meta-analysis of over 101 studies, Koutsimani et al. (2019) discovered that emotional exhaustion, depersonalization, and personal accomplishment were consistently associated with depression and anxiety and that the effects between the variables may be stronger among those who work in education compared to other occupational groups. Sheerin et al. (2018) also found that resilience is a protective factor against MDD and GAD even amid many stressful life events. Social support and community integration can bolster advisors' resilience, so administrators should establish mentoring programs and facilitate mentorship between advisors (Kao et al., 2014). Friis-Healy et al. (2022) proposed a framework for promoting resilience during the pandemic that features control, coherence, and connectedness. Control is the perception that one has the personal resources to respond to adverse life experiences, coherence refers to making sense of those experiences, and connectedness means the social bonds that help with coping during those experiences. Opportunities for advisors to discover and apply their personal strengths, reflect upon and discuss their advising experiences with others, and engage in peer support networks are ideal for building advisors' resilience (Friis-Healy et al., 2022).

Limitations

The limited diversity in the sample may make it difficult to generalize the results to advisors working at different types of institutions (e.g., two-year institutions) or with different demographic characteristics. We limited the survey administration to professional staff advisors, so the results may not be generalizable to faculty advisors or others for whom advising is not a primary function. We administered the survey during February and March 2023 and the timing during a generally busy advising season may have influenced advisors' ability to respond to

the survey and how they responded to the items. We also conducted the study during the ongoing COVID-19 pandemic, which may have influenced advisors' burnout, resilience, and mental health, leading to results that may not be as applicable beyond the pandemic.

Finally, the present study's limitations present fruitful opportunities for future research on academic advisors' wellbeing, burnout, and mental health. We recommend that researchers examine broader samples of advisors, including faculty advisors, and seek greater representation of advisors from two-year colleges in their samples. We encourage quantitative researchers to include broader measures of advisors' sense of belonging and perceptions of supportive work environments in future models related to mental health disorders (Fink, 2014). Moreover, qualitative research may provide richer information about academic advisors' mental health, the factors that exacerbate their symptoms of anxiety and depression, and ways that institutional leaders can invest in advisors' mental health.

Conclusion

This study suggests that academic advisors may experience potentially high rates of clinically significant MDD and GAD symptoms. Under those conditions, academic advisors may be unable to support students effectively, which can compromise institutional goals related to students' success. We encourage advising administrators to be mindful of academic advisors' mental health, use trauma-based approaches in their work with advisors, and take proactive steps to change workplace conditions to reduce advisors' burnout and boost their resilience.

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