

Disparities in College Students' Access to Academic Advising During the COVID-19 Pandemic

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The purpose of this study was to examine whether there are disparities in undergraduate students' access to academic advising during the COVID-19 pandemic. The data were drawn from a multi-institutional survey of 31,575 college students attending 69 U.S. colleges and universities in spring 2021. Approximately one-third (29%) of students did not have access to academic advising during the pandemic, and a variety of demographic, institutional, environmental, and COVID-19 academic, financial, and health-related variables were associated with students' inability to access academic advising during the pandemic. Students from historically marginalized and minoritized identities in higher education were most likely to lack access to academic advising. Recommendations are provided to expand advising resources, use trauma-informed approaches, and offer holistic support to students.

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After an outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes coronavirus disease (COVID-19), the World Health Organization declared a global pandemic in March 2020. Shortly thereafter, higher education leaders in the United States employed a series of policies to reduce the potential spread of COVID-19. Safety measures included moving in-person classes to distance education or online formats; encouraging or requiring nonessential personnel and faculty members to work remotely; reducing campus operations; and closing housing and residence life facilities. The sudden changes created challenging situations for many college students, especially those systemically disadvantaged, marginalized, and minoritized in higher education (Soria & Horgos, 2021a, 2021b; Soria, Horgos, & Shenouda, 2022).

Researchers are beginning to understand better the effects of COVID-19-related policies and experiences on college students as it relates to their financial hardships (Soria, Horgos, & She-

nouda, 2022), academic obstacles (Clabaugh et al., 2021; Soria, Chirikov, et al., 2020), and mental health (Soria & Horgos, 2021a; Wang et al., 2020); however, only a few scholars have examined students' COVID-19-related experiences through the lens of academic advising (Abumalloh et al., 2021; Soria & Horgos, 2020; Wallace & Fields, 2022; Wang & Houdyshell, 2021). One of the more concerning findings generated from early academic advising-related COVID-19 research is that scores of college students were unable to access academic advising during the pandemic (Soria, Chirikov, et al., 2020). There have been no formal analyses of differences in students' access to academic advising based on students' demographic identities. Furthermore, the few academic advising studies published about students' experiences during the COVID-19 pandemic feature single institution samples or descriptive analyses, which can limit generalizability to college students enrolled at other institutions (Abumalloh et al., 2021; Soria, Chirikov, et al., 2020; Wang & Houdyshell, 2021).

This study explored whether there were significant disparities in students' ability to access academic advising during the COVID-19 pandemic. The research question guiding this study was "were there disparities in students' ability to access academic advising by students' demographic characteristics, collegiate experiences, institutional characteristics, and COVID-19-related academic, financial, and health-related experiences?" I aimed to fill a gap in the existing research by including a multi-institutional sample, inferential analyses, and a variety of demographic variables, collegiate experiences, institutional characteristics, and COVID-19 experiences in analyses.

Literature Review

Scholars point to the importance of students' social identities as it relates to their academic advising experiences in higher education (Auguste et al., 2018; Hayes et al., 2020; Museus, 2021; Museus & Ravello, 2021; Soria & Bultmann, 2014; Swecker et al., 2013; Zhang & Dinh, 2017; Zilvinskis et al., 2020). Students from marginalized and systemically excluded backgrounds—including students of color, first-generation students,

low-income and working-class students, students with disabilities, and students with minoritized sexual orientations or gender identities—face a host of barriers in higher education, including discrimination, unwelcoming campus climates, and obstacles in accessing critical campus resources (Jayakumar & Museus, 2012; Museus, 2021; Soria, 2018; Soria & Bultmann, 2014). Academic advisors play an important role in supporting marginalized and systemically excluded students and facilitating their success in higher education (Museus, 2021). Additionally, advisors help students navigate the higher education culture, direct students to important resources and services, and foster students' sense of belonging (Hovland, 1997; Soria, 2012; Strayhorn, 2015). Moreover, academic advisors promote a wide variety of students' outcomes, including academic achievement, retention, learning outcomes, responsibility, academic and career planning, self-efficacy, and overall success in higher education (Chiteng Kot, 2014; Drake, 2011; Erlich & Russ-Eft, 2013; Mu & Fosnacht, 2019; Museus, 2021; Smith & Allen, 2006; Soria, 2012; Swecker et al., 2013; Young-Jones et al., 2013).

During the beginning of the COVID-19 pandemic, academic advisors were especially important in helping college students navigate the uncertainty associated with sudden changes to higher education operations. Likely, students who could not access academic advising during the early phases of the pandemic may have experienced significant struggles as they adapted to new modes of learning and contended with additional financial hardships, academic obstacles, or health-related outcomes. Marginalized and systemically excluded students were more likely than their peers to experience many challenges, including financial setbacks, difficulties transitioning to online learning, and obstacles in accessing learning support resources as the pandemic unfolded in the spring of 2020 (Soria, Chirikov, et al., 2020; Soria, Horgos, & Shenouda, 2022). Any barriers students encountered to accessing academic advising services may have exacerbated existing challenges for marginalized and systemically excluded students, so it is important to investigate whether there were disparities in students' ability to access academic advising during the pandemic.

Informed by these results, academic advisors and administrators can evaluate their services to detect obstacles or barriers to students' access to advising during the ongoing pandemic. Further, advisors may be empowered to develop proactive

solutions to ensure their services are open and accessible to students—especially students who have experienced the greatest challenges in accessing academic advising at their institutions. Academic advisors with a better understanding of the students who experienced the greatest obstacles in accessing their services during the pandemic will be in a better position to direct services, resources, and support to the students who stand to gain the most from additional support in removing those barriers.

Conceptual Framework

Glover et al.'s (2020) conceptual framework for mitigating the equity harms of COVID-19 framed this research study. Glover et al. (2020) suggested that inequitable COVID-19 policy options may inflict interactive and multiplicative harms upon those already marginalized, oppressed, and disenfranchised before the pandemic. For instance, college students who struggled to access academic advising or learning support services before the pandemic may have been more likely than their peers to experience obstacles to academic advising and learning support services during the pandemic. Those who experienced academic obstacles, such as not having access to the technology necessary for online learning, may have struggled to connect with academic advisors remotely. Glover and colleagues (2020) cited several demographic factors associated with equity harms due to COVID-19 policies, including race/ethnicity, gender, family education, disability, social class, and place of residence. I used those demographic variables and others in analyses to discover whether there were disparities in students' access to academic advising during the COVID-19 pandemic.

Methods

Instrument

The Multi-Institutional Study of Leadership (MSL) survey was administered to undergraduate students at 69 U.S. four-year colleges and universities from January to May 2021. In evaluating the psychometric properties of the MSL survey, Dugan (2015) and Tyree (1998) found that common concerns related to self-reported data are not problematic in the survey, and several changes made over time improve the psychometric properties of the instrument. In the spring 2021 iteration of the MSL survey, survey designers added items to capture students' experiences during the COVID-19 pandemic,

including their academic obstacles, financial hardships, and health-related experiences.

Sample

Each participating institution administered the survey to a random sample of 4,000 students. The response rate was 21.0% ($n = 49,307$), although 31,575 students responded to all the items used in the analysis. The sample primarily included cisgender women (67.0%), White students (63.4%), domestic students (95.7%), continuing-generation students (66.2%), nontransfer students (81.0%), middle-class students (42.8%), and students who were enrolled full time (96.1%; see Table 1). Most respondents also attended doctoral universities with very high research activity (30.3%), larger institutions (20,000+ enrollment, 33.4%), public institutions (53.5%), and institutions located in large cities (26.2%; see Table 1).

Measures

I used several independent variables, including students' demographic characteristics, collegiate experiences, institutional characteristics, and COVID-19 experiences (see Table 1). The demographic characteristics included students' gender, race/ethnicity, citizenship, parental education, military status, sexual orientation, social class, disability, and age ($\bar{x} = 21.13$, $s = 4.67$). The variables related to students' collegiate experiences included transfer status, enrollment status, class level, employment, residence, and academic major. Institutional variables included Carnegie classification, institutional size, control, and setting. I converted all the demographic, collegiate, and institutional variables using effect coding (Ro & Bergom, 2020), except for variables with dichotomous categories. Dummy coding omits the referent group from the analysis of variables that have three or more categories; however, in effect coding, the coefficients or odds ratios are interpreted relative to the average of the full sample, and all groups can be included in analyses (Ro & Bergom, 2020). With the dichotomous variables, each coefficient or odds ratio can be interpreted compared to the other level (e.g., full-time enrollment versus part-time enrollment).

The COVID-19 variables included students' financial hardships, academic obstacles, and health-related experiences during the COVID-19 pandemic (see Table 1). All the COVID-19-related survey items were dichotomous (students

responded 0 = no, 1 = yes). Notably, 29.0% of students reported that they could not access academic advising during the pandemic. Students also answered questions about their level of concern (0 = not at all concerned to 4 = very concerned) regarding basic needs insecurity, financial obligations, employment, and their ability to pay for their education during the pandemic.

Analysis

Researchers using MSL data with similar variables had not yielded significant between-institution differences when models were run using ordinary least squares and multilevel techniques (Dugan et al., 2013; Soria & Roberts, 2022). I preliminarily calculated the interclass correlation (ICC), an indicator of between-group differences, and received ICC values < 0.001 . Low ICC values close to 0 indicate greater independence of observations, decreasing the likelihood that differences will arise between ordinary least squares and multilevel techniques (Woltman et al., 2012). Those analyses suggested logistic regressions without hierarchical linear modeling were sufficient for the data set (Cox et al., 2011). Therefore, I analyzed the data using a logistic regression to examine the odds that students could not access academic advising.

After running the logistic regression, I compared the Akaike Information Criterion (AIC) values in the final model against the null model (AIC = 36303.577). I discovered the final model had a lower AIC value (AIC = 33677.296). Typically, models with the lowest AIC values are preferred because of their better fit (Kline, 2010). The model properly classified 72.7% of the cases, and the pseudo- R^2 values were .090 (Cox & Snell, 1989) and .129 (Nagelkerke, 1991). I examined the variables for multicollinearity and discovered that none of the variance inflation factors had values above 5.0, suggesting multicollinearity was not a problem in the models.

Results

The results of the logistic regression suggested that the following groups of students had significantly higher odds of lacking access to academic advising compared to all other students: transgender or gender nonconforming students, bisexual students, first-year and second-year students, low-income or poor students, working-class students, those who live in fraternities or sororities, those

Table 1. Descriptive Information for Participants

	<i>n</i>	%
<i>Gender</i>		
Man	9,711	30.8
Woman	21,168	67.0
Transgender or gender nonconforming	696	2.2
<i>Race/Ethnicity</i>		
Middle Eastern or Northern African	285	0.9
African American or Black	1,580	5.0
American Indian or Alaska Native	89	0.3
Asian American	2,765	8.8
Native Hawaiian or Pacific Islander	27	0.1
Latinx or Hispanic	2,465	7.8
Multiracial	3,569	11.3
White	20,030	63.4
Race Not Listed	765	2.4
<i>International Status</i>		
Domestic student	30,185	95.7
International student	1,370	4.3
<i>Parental Education</i>		
Continuing-generation	20,918	66.2
First-generation	10,657	33.8
<i>Military</i>		
Nonmilitary	31,031	98.3
Military	544	1.7
<i>Transfer Status</i>		
Nontransfer	25,577	81.0
Transfer	5,998	19.0
<i>Enrollment Status</i>		
Full time	30,256	96.1
Part time	1,239	3.9
<i>Sexual Orientation</i>		
Asexual	1,176	3.7
Bisexual	2,958	9.4
Gay	477	1.5
Lesbian	456	1.4
Heterosexual	23,195	73.5
Pansexual	401	1.3
Queer	300	1.0
Questioning or unsure	695	2.2
Preferred response not listed	1,918	6.1
Multiple categories selected	1,489	4.7
<i>Class Level</i>		
First year	7,427	23.6
Second year	7,195	22.8
Third year	8,266	26.3
Fourth year and beyond	8,587	27.3

Table 1. Descriptive Information for Participants (cont.)

	<i>n</i>	%
<i>Social Class</i>		
Low-income or poor	3,120	9.9
Working-class	6,153	19.5
Middle-class	13,526	42.8
Upper-professional or upper-middle-class	8,009	25.4
Wealthy	767	2.4
<i>Employment</i>		
Working in an off-campus job unaffiliated with the school	10,152	32.2
Working in an on-campus job	7,661	24.3
<i>Residence</i>		
Off-campus with partner, spouse, and/or children	2,169	6.9
Off-campus with parent/guardian or other relatives	8,000	25.3
Other off-campus homes, apartments, or rooms	9,103	28.8
College/university residence hall	9,752	30.9
Other on-campus student housing	1,784	5.7
Fraternity or sorority house	542	1.7
Other residences	218	0.7
<i>Academic Majors</i>		
Natural sciences	3,934	12.5
Science, technology, engineering, or mathematics (STEM)	5,550	17.6
Business or communications	5,864	18.6
Health-related	3,070	9.7
Education	1,768	5.6
Humanities	2,584	8.2
Social sciences	4,366	13.8
Undeclared or other	2,778	8.8
<i>Disability</i>		
Deaf or hard of hearing	147	0.5
Blind or visual impairment	261	0.8
Speech or language condition	142	0.5
Learning disability	150	0.5
Physical or musculoskeletal (e.g., multiple sclerosis)	69	0.2
Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder	597	1.9
Psychiatric or psychological condition	1,605	5.1
Neurological condition (e.g., brain injury, stroke)	74	0.2

Table 1. Descriptive Information for Participants (cont.)

	<i>n</i>	%
Medical (e.g., diabetes, severe asthma)	203	0.6
Does not have a disability	25,154	79.7
Disability not listed	226	0.7
Multiple disabilities	3,057	9.7
<i>Carnegie Classification</i>		
Baccalaureate	1,480	8.9
Master's colleges and universities: small and medium programs	985	5.9
Master's colleges and universities: larger programs	4,061	24.5
Doctoral/professional universities	2,444	14.7
Doctoral universities: High research activity	2,575	15.5
Doctoral universities: Very high research activity	5,025	30.3
<i>Institutional Size</i>		
Under 4,999	6,477	20.5
5,000 to 9,999	8,976	28.4
10,000 to 19,999	5,591	17.7
20,000+	10,531	33.4
<i>Control</i>		
Public	16,894	53.5
Private	14,681	46.5
<i>Institutional Setting</i>		
Town or rural	5,433	17.2
Suburb	6,650	21.1
Small city	5,330	16.9
Midsized city	5,892	18.7
Large city	8,270	26.2
<i>COVID-19 Academic Obstacles</i>		
Lack of access to an appropriate study space or distracting home environment	18,726	59.3
Lack of access to technology necessary for online learning (e.g., computer hardware, software, access to reliable internet)	7,021	22.2
Lack of access to academic advising	9,148	29.0

Table 1. Descriptive Information for Participants (cont.)

	<i>n</i>	%
<i>COVID-19 Financial Hardships</i>		
Loss of wages from employment	11,025	34.9
Loss or reduction of scholarship or grant aid	3,605	11.4
Loss or reduction of insurance coverage	2,296	7.3
Loss or cancellation of an expected internship or co-op	6,374	20.2
Loss or reduction of income of other family members	10,330	32.7
<i>COVID-19 Health Effects</i>		
A family member or close friend passed away from COVID-19	4,288	13.6
A family member or close friend contracted COVID-19, requiring hospitalization, and eventually recovered	6,739	21.3
Students contracted COVID-19 requiring hospitalization	659	2.1
<i>COVID-19 Concerns (Concerned or Very Concerned)</i>		
Sufficient access to food	2,178	6.9
Sustainable access to housing	2,694	8.6
Ability to meet routine financial obligations (e.g., utility bills, car loan)	6,905	21.9
Adequate medical care	4,496	14.2
Sustainable employment for self	10,524	34.0
Sustainable employment for a parent/guardian	7,209	23.3
Ability to continue your education	7,348	23.5
Ability to pay for your education in the future	11,359	36.3

with undeclared academic majors, students who have a disability not listed in the survey, and students with multiple disabilities (see Table 2). Additionally, students attending baccalaureate institutions, master's colleges and universities with small/medium/large programs, larger institutions (i.e., more than 10,000 students), public colleges and universities, and institutions located in midsized

Table 2. Logistic Regression Analysis for Lacking Access to Academic Advising

	OR	p	95% Confidence Interval (OR)	
			Lower Bound	Upper Bound
Man	0.908		0.799	1.032
Woman	1.006		0.939	1.077
Transgender or gender nonconforming	1.095	*	1.017	1.180
Middle Eastern or Northern African	1.270		0.974	1.656
African American or Black	0.854		0.724	1.009
American Indian or Alaska Native	0.880		0.539	1.436
Asian American	1.091		0.940	1.265
Native Hawaiian or Pacific Islander	1.092		0.480	2.484
Latinx or Hispanic	0.898		0.769	1.047
Multiracial	0.897		0.776	1.037
White	0.899		0.788	1.026
Race Not Listed	1.212		0.969	1.516
International student	0.762	***	0.642	0.904
Age	0.977	***	0.967	0.987
First-generation	1.230		1.104	1.398
Military	1.115		0.890	1.397
Nontransfer	1.016		0.938	1.101
Full time	1.196	*	1.017	1.405
Asexual	1.118		0.975	1.282
Bisexual	1.113	*	1.011	1.225
Gay	0.822		0.666	1.014
Lesbian	1.125		0.922	1.374
Heterosexual	1.069		0.996	1.148
Pansexual	0.953		0.770	1.181
Queer	1.030		0.806	1.317
Questioning or unsure	0.887		0.746	1.055
Preferred response not listed	0.913		0.716	1.163
Multiple categories selected	1.022		0.784	1.333
First year	1.124	***	1.061	1.191
Second year	1.053	*	1.004	1.105
Third year	0.987		0.942	1.035
Fourth year and beyond	0.856	***	0.812	0.903
Low-income or poor	1.249	***	1.087	1.436
Working-class	1.106	***	1.039	1.177
Middle-class	0.969		0.919	1.022
Upper-professional or upper-middle-class	0.867	***	0.795	0.945
Wealthy	0.863	***	0.807	0.922
Working in an off-campus job unaffiliated with the school	1.567	***	1.427	1.647
Working in an on-campus job	0.834	***	0.780	0.892
Off-campus with partner, spouse, and/or children	0.905		0.799	1.026
Off-campus with parent/guardian or other relatives	0.893		0.825	1.001
Other off-campus homes, apartments, or rooms	1.040		0.964	1.122
College/university residence hall	1.071		0.989	1.161
Other on-campus student housing	1.017		0.907	1.140
Fraternity or sorority house	1.366	***	1.149	1.625
Other residences	0.799		0.595	1.072
Natural sciences	0.945		0.881	1.015
Science, technology, engineering, or mathematics (STEM)	0.878	***	0.820	0.939

Table 2. Logistic Regression Analysis for Lacking Access to Academic Advising (cont.)

	OR	p	95% Confidence Interval (OR)	
			Lower Bound	Upper Bound
Business or communications	1.069		0.995	1.136
Health-related	0.991		0.915	1.074
Education	1.035		0.934	1.146
Humanities	0.925		0.847	1.009
Social sciences	1.059		0.990	1.133
Undeclared or other	1.122	***	1.034	1.218
Does not have a disability	0.963		0.856	1.084
Deaf or hard of hearing	1.006		0.682	1.485
Blind or visual impairment	0.830		0.621	1.109
Speech or language condition	0.981		0.477	2.021
Learning disability	1.144		0.801	1.634
Physical or musculoskeletal (e.g., multiple sclerosis)	0.698		0.401	1.214
Attention Deficit Disorder or Attention Deficit Hyperactivity Disorder	0.984		0.801	1.210
Psychiatric or psychological condition	1.014		0.869	1.184
Neurological condition (e.g., brain injury, stroke)	1.154		0.712	1.871
Medical (e.g., diabetes, severe asthma)	0.814		0.589	1.126
Disability not listed	1.480	***	1.098	1.995
Multiple disabilities	1.147	**	1.000	1.316
Baccalaureate	1.280	***	1.124	1.457
Master's colleges and universities: small and medium programs	1.161	**	1.026	1.313
Master's colleges and universities: larger programs	1.081	***	1.009	1.157
Doctoral/professional universities	0.928		0.858	1.004
Doctoral universities: High research activity	0.833	***	0.762	0.910
Doctoral universities: Very high research activity	0.806	***	0.728	0.891
Under 4,999	0.697	***	0.632	0.769
5,000 to 9,999	1.052		0.987	1.121
10,000 to 19,999	1.211	***	1.128	1.300
20,000+	1.125	***	1.035	1.222
Public	1.132	**	1.036	1.236
Town or rural	0.884	*	0.803	0.972
Suburb	1.040		0.981	1.103
Small city	0.964		0.905	1.027
Midsize city	1.105	**	1.038	1.176
Large city	0.995		0.939	1.054
Lack of access to an appropriate study space or distracting home environment	1.578	***	1.487	1.674
Lack of access to technology necessary for online learning (e.g., computer hardware, software, access to reliable internet)	1.842	***	1.729	1.962
Loss of wages from employment	1.230	***	1.154	1.312
Loss or reduction of scholarship or grant aid	1.285	***	1.179	1.401
Loss or reduction of insurance coverage	1.319	***	1.184	1.469
Loss or cancellation of an expected internship or co-op	1.251	***	1.168	1.339
Loss or reduction of income of other family members	1.096	***	1.024	1.173
A family member or close friend passed away from COVID-19	1.141	***	1.051	1.238
A family member or close friend contracted COVID-19, requiring hospitalization, and eventually recovered	1.182	***	1.103	1.267
Students contracted COVID-19 requiring hospitalization	1.530	***	1.273	1.839

Table 2. Logistic Regression Analysis for Lacking Access to Academic Advising (cont.)

	OR	p	95% Confidence Interval (OR)	
			Lower Bound	Upper Bound
Sufficient access to food	1.093	***	1.035	1.154
Sustainable access to housing	1.047	***	1.013	1.082
Ability to meet routine financial obligations (e.g., utility bills, car loan)	1.167	***	1.094	1.189
Adequate medical care	1.059	***	1.016	1.104
Sustainable employment for self	1.046	***	1.013	1.080
Sustainable employment for a parent/guardian	0.973		0.940	1.007
Ability to continue your education	1.185	***	1.144	1.228
Ability to pay for your education in the future	1.004		0.970	1.039
Constant	0.234	***		

Note. * $p < .05$,
 ** $p < .01$,
 *** $p < .001$

cities had higher odds of not being able to access academic advising. First-generation students had higher odds of lacking access to academic advising than continuing-generation students. Full-time students also had higher odds of lacking access to academic advising than part-time students. Students who worked in off-campus jobs had higher odds of being unable to access academic advising compared to students who did not work in off-campus jobs.

The student groups who experienced reduced odds of being unable to access academic advising (in other words, they were more likely to have access to academic advising) compared to others included older students, fourth-year students, upper-professional or upper-middle-class students, wealthy students, students who lived off campus with a parent/guardian or relative, students in STEM majors, students attending doctoral universities with high or very high research activities, students enrolled at smaller campuses (under 4,999 students), and students who lived in town or rural settings. Additionally, international students had lower odds of being unable to access academic advising than domestic students, who had higher odds. Students who worked in on-campus jobs had lower odds of being unable to access academic advising compared to students who did not work in on-campus jobs, who had higher odds.

Students who experienced most of the COVID-19 academic obstacles, financial hardships, and health-related outcomes were significantly more

likely than their peers who did not have those experiences to lack access to academic advising. Only two COVID-19 experience variables were not associated with increased odds of being unable to access academic advising: students' concern about sustainable employment for a parent/guardian and students' concern about their ability to pay for their education in the future. Students who experienced COVID-19-related academic obstacles, financial hardships, and negative health-related outcomes were significantly more likely to lack access to academic advising.

Discussion

Almost one-third of the students in the sample—29%—could not access academic advising during the COVID-19 pandemic. In addition, various demographic, collegiate, institutional, and COVID-19 related factors were associated with the odds that students could not access academic advising during the COVID-19 pandemic. Several groups of students who were minoritized or marginalized before the pandemic had significantly higher odds of lacking access to academic advising during the pandemic. This includes transgender or gender nonconforming students, bisexual students, low-income or poor students, working-class students, first-generation students, students who have a disability not listed in the survey, and students with multiple disabilities. Those findings may be consistent with the conceptual framework (Glover

et al., 2020). However, some students who may not have been marginalized before the pandemic (e.g., students in fraternities or sororities) also experienced greater challenges in accessing academic advising. Furthermore, students who experienced academic obstacles, financial hardships, and negative health-related outcomes during the pandemic were also more likely than those who did not have those experiences to lack access to academic advising, suggesting that the challenges students experienced during the pandemic could be multiplicative (Glover et al., 2020).

Several college environmental variables were also associated with an increased probability of lacking access to academic advising: fraternity/sorority residence, off-campus employment, academic level (first-year and second-year students), undeclared academic major, and full-time enrollment status. Additionally, the following institutional variables were associated with students' increased odds of lacking access to academic advising: institutions' Carnegie classification (baccalaureate, master's colleges with small and larger programs), control (public institutions), size (over 10,000 students enrolled), and location (midsized cities). Embedded in those different institutional contexts are likely distinct COVID-19-related policies or procedures, contexts (e.g., student-to-advisor ratios), and academic advising models that could have contributed to potential barriers to students' ability to access academic advising (Glover et al., 2020; Gordon et al., 2008).

Recommendations

There are several actions that academic advisors can undertake in light of the results. For one, academic advisors can assess students' ability to access their services, a step that can also reveal potential barriers for students. For instance, the results suggested that first-generation students and students from working-class and low-income/poor backgrounds had less access to academic advising during the pandemic compared to their continuing-generation and middle- and upper-class peers. Low-income, poor, working-class, and first-generation students were more likely than their peers to serve as caregivers to others and to have distracting home environments during the pandemic, which could have made it difficult for them to meet remotely with their advisors (Soria & Horgos, 2020; Soria, Horgos et al., 2020a; Soria, Horgos et al., 2020b). Low-income, poor, and working-class students are traditionally more likely to be

employed longer hours while enrolled in higher education (Soria et al., 2013), so perhaps those students experienced difficulties accessing remote academic advising sessions because of their employment responsibilities.

Additionally, first-generation students, students from working-class and low-income/poor backgrounds, and students with disabilities were more likely to experience academic obstacles during the pandemic, including lacking sufficient technology to participate in online classes (Soria & Horgos, 2020; Soria, Horgos et al., 2020a; Soria, Horgos et al., 2020b), which could also mean they lacked the technology to engage in online advising meetings. Similarly, transgender, gender nonconforming, and bisexual students were more likely to live in unsafe environments where their identities were not respected and where they encountered emotional abuse or violence during the pandemic (Soria & Horgos, 2021b)—factors that could have compromised their ability to meet with advisors remotely in their residence. In assessing the groups of students likely to experience challenges or barriers to advising, advisors will be better positioned to direct students to resources and support their ability to engage with advisors (e.g., via laptop rentals, peer advising, or alternative advising formats).

The results provide insights into academic factors associated with students' lack of access to academic advising. Younger students, first-year and second-year students, students attending full time, and students with undeclared majors were less able to access academic advisors than their peers. Some students may attend campuses with a general group or cluster of advisors instead of a single advisor; for instance, undeclared students may be assigned to a general advising office rather than a single point of contact advisor. General advising models may also be offered at larger institutions or public institutions with a higher student-to-advisor ratio, making it challenging for students to access advisors with a high caseload. In those instances, academic advisors may want to shift to group advising models, employ peer advisors, communicate more frequently via text or email, or offer more advising resources on a website or embedded within a learning management system course. Advisors can also partner with faculty members to disseminate information to students or deliver presentations in classes to have the widest possible reach. During the ongoing pandemic (and beyond), it will remain important for advising personnel to ensure that all students

have access to advising services and receive consistent communication about how to connect with their academic advisors; however, those messages should be more strongly reinforced among younger students, first-year and second-year students, students attending full time, and students with undeclared majors.

The speed at which the COVID-19 pandemic unfolded, the uncertainty of the virus's ongoing threat to individuals' health, the loss of life, and the significant academic and financial challenges represent collective traumatic events for many college students (Copeland et al., 2021; Soria, Horgos, & Roberts, 2022). As a result, academic advisors should employ trauma-informed approaches and offer wraparound support to college students (Imad, 2022; Soria, Horgos, & Roberts, 2022). The Substance Abuse and Mental Health Services Administration (2014) conceptualized trauma-informed care as realizing the impact of trauma, recognizing the symptoms and signs of trauma, responding by integrating knowledge about trauma into policies and practices, and proactively resisting re-traumatization. Advisors should receive training to learn about the immediate and long-term effects of trauma and recognize the signs of trauma in students, which may manifest in different ways (e.g., inability to cope with everyday stressors, hypervigilance, numbing, or avoidance). Advisors will be better positioned to respond to trauma by employing psychological or mental health first aid strategies, which can help students feel less threatened, cope with their situation, and feel like they are in a safe space. Advisors can offer safety, comfort, and stabilization through strategies like engaging students in breathing exercises, distracting students with simple questions, or bringing students to safer locations, such as counseling centers, where they can receive appropriate mental health care (Firestein, 2019). Students who experience trauma may struggle with a reduced window of tolerance for ambiguity, daily life stressors, or minor decisions (Hershler et al., 2021), so advisors should offer clear, readily available advising-related information and resources in multiple locations and reduce the cognitive and emotional strain associated with class registration, selecting an academic major, or navigating campus.

During the pandemic, college students experienced increases in financial hardships, including basic needs insecurity, loss of employment and wages, and concerns about their ability to meet

financial obligations. Further, many students experienced academic obstacles, lost family members or friends, had family members or friends contract COVID-19, or contracted COVID-19 themselves. All those COVID-19 experiences were associated with elevated odds of lacking access to academic advising, perhaps because some students may have been concurrently struggling with several potentially traumatic experiences. When seeking to expand students' access to academic advising services, advisors should simultaneously share information about additional campus resources to support students' holistic well-being, such as basic needs resources or mental health resources (Soria, Horgos, & Roberts, 2022).

Limitations and Directions for Future Research

This study has limitations; for instance, it is common in survey research to experience non-response bias, which can lead to inaccurate population estimates (Fosnacht et al., 2017). The effect sizes equivalent to the odds ratios were small for most of the independent variables described in the results section (Chen et al., 2010). Although the survey captured many demographic variables not commonly captured in institutional surveys, which is an advantage to this study, some demographic items were missing from the survey (e.g., caregiving status) that may have decreased the generalizability of the findings to academic advisors based upon the students they serve. One strength of the study was that it included students enrolled at many four-year institutions; however, the study was also limited in its generalizability to other institutional types, such as 2-year colleges, for-profit institutions, or minority-serving institutions. The item regarding students' lack of access to academic advising did not provide any further context of those barriers (e.g., not accessible by email, lack of available appointments). Furthermore, I did not assess academic advising models, student-advisor ratios, or other contextual factors on the individual campuses that may have contributed to students' lack of access to academic advising or their general academic advising experiences during the pandemic.

The limitations of this study present implications for future research. For instance, the limited dependent variable did not provide insights into the nature of students' inability to access

academic advising services during the pandemic, so additional quantitative studies with more thorough measures or qualitative studies can highlight the nuances of those academic advising barriers. It is also important to collect information from students with different identities (e.g., caregivers) or students enrolled at vocational or 2-year community colleges, where academic advising tends to be underresourced, meaning that student-advisor ratios tend to be higher, advising efforts may be more fragmented. Students may have longer wait times and shorter advising sessions (Donaldson et al., 2016). Future researchers should also investigate the significant effects of academic advising barriers on college students' long-term outcomes.

Conclusion

The COVID-19 pandemic upended the lives of many students enrolled in higher education institutions. The results of this study suggest that close to one-third of students (29%) did not have access to academic advising during the pandemic. The results also suggest that some marginalized or minoritized students before the pandemic (i.e., transgender, bisexual, low-income or poor, working-class, and first-generation students) were more likely to lack access to academic advising than their peers. Additional academic variables and institutional variables were also associated with students' elevated odds of not being able to access academic advising. Finally, students who experienced academic obstacles, financial hardships, and negative health-related outcomes during the pandemic were more likely to lack access to academic advising. A lesson learned from these unprecedented times is that academic advisors must assess whether all students have equitable opportunities to use their services and examine potential barriers to student access to advising. Advisors also need to provide holistic resources to support students and offer innovative ways to engage students in advising.

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