Familiarity With and Use of Accommodations and Supports Among Postsecondary Students With Mental Illnesses

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Objective: **Many persons with serious mental illnesses are interested in pursuing postsecondary education and are doing so in increasing numbers. Accommodations can be essential, but limited research suggests that few formally seek accommodations, although increased efforts to heighten awareness may be changing this. The purpose of this study was to examine whether students with mental illnesses are increasingly aware of, and utilize, accommodations and academic supports and to identify the supports that are most used and perceived to be most helpful.** ***Methods:*** **A national Internet survey was conducted from July 2005 to July 2006, resulting in responses from 190 current and 318 former students with mental illnesses.** ***Results:*** **The study found modest but significant negative correlations between how long ago students left college and their familiarity with accommodations, their request for or receipt of accommodations, and their use of the Office for Students With Disabilities. These results were particularly noticeable when comparing current and former students. Moderate positive correlations that were significant were found between familiarity with accommodations, use of campus disability offices, and request for or receipt of accommodations.** ***Conclusions:*** **There is increased awareness and use of accommodations among students with mental illnesses, but it is also clear that most receive supports directly from instructors without going through the formal accommodations process. Encouraging students to utilize disability offices and greater attention to accommodation barriers may further increase support seeking. Supports that are most used and viewed as most helpful provide direction for service providers and campus personnel in their efforts to facilitate students' educational goals. (*Psychiatric Services* 59:370–375, 2008)**

Many persons with serious mental illnesses have strong interests in enrolling in college and obtaining higher education (1). The most recent estimates suggest that more than 33,000 students with mental illnesses are enrolled in colleges and universities (2), a number that appears to be increasing over time (3–5). The rise in this student population is exposing struggles that college campuses are having in terms of how to respond to the needs of this population. Eighty-six percent of students with mental illnesses withdraw from college before completing their degree (6), a figure that is much higher than the approximately 37% withdrawal rate for the general student population (7). These students face the same challenges that other students without disabilities face in completing their degrees, including paying college tuition and possible poor study skills and lack of confidence (8), as well as unique barriers associated with the emergence or intensification of psychiatric symptoms and hospitalizations associated with the onset or exacerbation of major mental illnesses (9).

Campus services are challenged with how to support students with psychiatric disabilities to maximize academic success (10) because of the effects these disabilities can have on motivation, concentration, and social interactions (11). Policies requiring students in acute psychiatric crisis to withdraw from school are growing (11–13) and are currently being litigated (14). Mental health providers have been described as being unsupportive of student educational goals and have little contact with campus personnel to coordinate supports to assist the student in meeting his or her educational objectives (8).

The Americans With Disabilities Act, Individuals With Disabilities Education Act, and Section 504 of the Rehabilitation Act are intended to protect people with disabilities from discrimination in higher education and ensure that essential supports

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and accommodations are offered. Students with disabilities are as academically successful as students without disabilities when person-specific supports are provided (15,16). Heightened awareness and advocacy efforts about the availability of academic supports have been proposed as a primary reason for their increased use among all students with disabilities (17).

Little is known about familiarity with and use of accommodations among students with mental illnesses, including whether there have been changes in familiarity and use over time. From an implementation standpoint, nothing is known about which accommodations are most used, which are perceived to be most helpful, and the barriers that students face in obtaining accommodations. Greater awareness and advocacy efforts on college campuses over the past few decades should increase familiarity with and use of accommodations. This study tested the hypothesis that there has been an increase in awareness of accommodations, formal requests for accommodations, and use of the Office for Students with Disabilities (OSD) among students with mental illnesses. Descriptive results are presented on the extent to which students obtained specific classroom, assignment, and grading supports, either as formal accommodations or informal arrangements made with instructors, and the degree to which students found them to be helpful. We also compared current and former students in regard to their reasons for not seeking accommodations. Finally, we provide data on the barriers that students experienced accessing accommodations that, if addressed, could increase the use of accommodations.

Methods

Procedures

An Internet survey was conducted that followed principles for effective Internet surveys found in the literature (18). The digital divide in Internet access and use is rapidly closing between various populations based on age, race or ethnicity, and socioeconomic status, and findings have shown that a majority of persons with a psychiatric disability have used a computer and the Internet (19). The survey was administered using "Grapevine," an online services software tool and Web site that was accessible for one year from July 2005 to July 2006. Eligible participants were current or former students at a postsecondary institution who had completed at least one semester and reported a diagnosed mental illness.

Information about the survey was disseminated through supported education programs for students with mental illnesses, OSDs, and student-run, mental health-oriented campus groups in postsecondary institutions throughout the United States. We also distributed information to mental health clubhouses and drop-in centers, numerous highly trafficked mental health Web sites, and various e-mail distribution lists. A raffle with an incentive of cash rewards up to $150 was used to encourage participation, and 14 cash prizes were awarded to individuals who were randomly selected at the end of the survey period. Survey responses were anonymous. Information about the study purposes and procedures preceded the survey, and participants were required to indicate that they understood these before gaining access to the survey. The study received an exempt review approval from the University of Pennsylvania's institutional review board.

Measures

Respondents were asked to indicate on a 5-point Likert scale their level of familiarity with academic accommodations that they may have been entitled to under the law (not at all to extremely), how often they utilized the services of their institution's OSD (never to weekly), and whether they had ever requested or received specific academic accommodations at their most recent college. Those who did not request accommodations were asked to select from a number of reasons why (for example, not familiar with accommodations, did not need them, or fear), and those who did receive supports were asked to choose from a list of challenges that they might have encountered when requesting or receiving supports. A series of questions concerning specific types of academic supports was primarily adapted from a published list (2). Supports were divided into three groups: assignment (for example, extended time to complete assignments), classroom (for example, tutoring in course materials), and examination or grading (for example, extended time for test taking). Respondents were asked whether they had ever requested or received each type of support and how helpful it was (not at all to extremely) if they had. Those who did not use the support were asked how helpful each support might have been. The survey also requested general education information, basic demographic information, and mental health history.

Data analysis

A series of Spearman correlations was conducted to examine the relationship between how long it had been since the student left school and the dependent variables. Chi square tests of proportions were conducted to examine differences between current and former students.

Results

Participants

A total of 520 participants from 357 postsecondary educational institutions completed the survey. Twelve of the surveys were missing at least half of their responses and were discarded, leaving 508 participants (190 current students and 318 former students). Demographic data can be found in Table 1. The range in years since leaving college was 0 (for current students) to 45 years. Former students left their college or university a mean±SD of 10.7±9.5 years ago, with a range of one individual who left in 1961 to three respondents who left just before completing the survey in 2005–2006. The median departure year was 1998. Forty percent of the former students (123 out of 308 participants) left school within ten years of completing the survey. Characteristics of the sample broken out by current and former students can be found in Table 1. There were no differences except that compared with current students, former students were considerably older, more likely to have graduate degrees

Table 1

Demographic and clinical characteristics and familiarity with and use of accommodations among postsecondary students with mental illness, by student status[a]

Characteristic	Current students (N=190) N	Current students (N=190) %	Former students (N=318) N	Former students (N=318) %	Test statistic	df	p
Female	148	78	251	80	χ^2=2.45	1	.29
Race					χ^2=1.49	2	.48
White	155	83	271	86			
Black	9	5	9	3			
Other	22	12	34	11			
Age (M±SD)	31.38±11.42		44.10±10.72		t=12.32	500	<.001
Graduate or professional student or degree	44	23	153	48	χ^2=30.77	1	<.001
Diagnosis					χ^2=6.32	4	.18
Bipolar disorder	66	35	129	41			
Major depression	54	28	92	29			
Schizophrenia spectrum disorder	20	11	31	10			
Anxiety disorder	29	15	49	15			
Other	21	11	17	5			
Receiving outpatient mental health treatment during college	152	83	226	88	χ^2=2.43	1	.12
Taking psychiatric medication while at college	152	80	217	68	χ^2=8.88	1	.003
Has been hospitalized one or more times	112	59	232	68	χ^2=10.92	1	.001
Familiar to some degree with accommodations	135	71	134	42	χ^2=39.11	1	<.001
Used Office for Students With Disabilities	83	44	76	24	χ^2=21.63	1	<.001
Formally requested or received accommodations	90	47	81	26	χ^2=25.06	1	<.001

[a] All data were not available for all participants.

or to be in graduate programs, less likely to report taking psychiatric medications while in college, and more likely to report having been hospitalized for a psychiatric reason at any time in their life.

Familiarity with and action to receive accommodations

We found modest but statistically significant correlations (p<.001) indicating that those who left college longer ago were less familiar with accommodations (r=–.33), were less likely to request or receive accommodations (r=–.26), and were less likely to use the OSD (r =–.25). Across all the students, regardless of when they left school, there were statistically significant (p<.001) positive relationships between familiarity with accommodations and use of the OSD (r=.54) and with requests for or receipt of accommodations (r=.41), and there was a relationship between use of the OSD and likelihood of requesting or receiving accommodations (r=.63).

There were no differences in formally seeking accommodations between individuals reporting a bipolar, major depression, or schizophrenia spectrum diagnosis. Those who were taking psychiatric medications were more likely to formally request accommodations (145 of 368 persons, or 39%) than those who were not (25 of 137 persons, or 18%) (χ^2= 20.00, df=1, p<.001). No statistically significant interactions were found between medication use, hospitalization history, graduate or undergraduate level, and student status (former or current) and accommodation familiarity, formal request for accommodations, use of the OSD, or accommodation use.

Compared with former students, current students were more likely to be familiar with accommodations (p< .001, Φ=.27), to have used services from the OSD (p<.001, Φ=22), and to have formally requested and received accommodations (p<.001, Φ= .21). As with the Spearman correlation findings, the degree of these associations was statistically significant yet modest. Among former students, we found that those who left school more recently were more familiar with accommodations (r=–.27, p< .001), compared with those who departed longer ago. Former students who used the OSD left school more recently (N=72, mean=7.3±6.1 years ago) than those who never used the OSD (N=232, mean=11.8±10.2 years ago) (F=13.4, df=1 and 304, p<.001). And former students who requested formal accommodations left school more recently (mean= 6.9±5.3 years ago) than those who did not seek accommodations (mean= 12.0±10.2 years ago) (F=17.5, df=1 and 304, p<.001).

Current students who did not report requesting formal accommodations (47 of 99 persons, or 47%) were more likely than former students (63 of 234 persons, or 27%) to indicate that they did not need them (χ^2= 13.28, df=1, p<.001). Former students (136 of 234 persons, or 58%) were more likely than current students (36 of 99 persons, or 36%) to indicate that they were not aware that accommodations were available (χ^2= 13.19, df=1, p<.001). The groups did not differ on other reasons—100 of the 333 students (30%) reported not requesting accommodations because they did not want to disclose their disability to teachers, 63 (19%) did not want to disclose to other students, 99

Table 2

Use of accommodations and perceived helpfulness among 508 current and former postsecondary students with mental illness

Variable	Used accommodations			Was very or extremely helpful			Would be very or extremely helpful		
	Total N	N	%	Total N	N	%	Total N	N	%
Assignment									
Extended time to complete assignments	504	222	44	211	161	76	134	79	59
Advance notice of assignments	504	72	14	70	46	66	187	70	37
Substitute assignments in specific circumstances	504	46	9	44	33	75	192	69	36
Assignments completed in dramatic formats (that is, demonstration or role play)	499	40	8	39	23	59	190	30	16
Written assignments instead of oral presentations or vice versa	499	35	7	32	25	78	200	90	45
Assignment assistance during hospitalization	491	33	7	32	20	63	190	91	48
Permission to submit assignments handwritten rather than typed	498	26	5	25	18	72	200	31	16
Classroom									
Private one-on-one meetings with a teacher	498	230	46	219	145	66	128	55	43
Private feedback on academic performance	497	152	31	144	93	65	160	87	54
Use of a tape recorder permitted in class	497	152	31	146	75	51	162	55	34
Beverages permitted in class	498	145	29	141	87	62	159	44	28
Tutoring in course materials	496	119	24	113	69	61	170	57	34
Use of notetaker or able to photocopy another's notes	498	107	21	103	61	59	173	45	26
Modified or preferential seating arrangements, such as near the door or in the front of the classroom	501	93	19	89	71	80	190	48	25
Prearranged or frequent breaks	496	77	16	76	44	58	180	51	28
Early availability of syllabus and textbooks	499	70	14	68	47	69	190	67	35
Availability of course materials (that is, lectures or handouts) on disk	497	57	11	54	38	70	194	91	47
Assigned classmate as a volunteer assistant	492	22	4	21	10	48	207	44	21
Examination or grading									
Provision of a grade of Incomplete (I) rather than a Fail (F) if relapse occurred	495	143	29	137	113	82	163	102	63
Extended time for test taking[a]	502	143	28	136	103	76	190	72	38
Exam in a separate, quiet, and nondistracting room	502	125	25	120	92	77	193	92	48
Exam individually proctored, including in the hospital	497	45	9	45	37	82	197	59	30
Exam in alternate format (that is, from multiple-choice to essay or oral, presentation, role play, or portfolio)	501	42	8	39	22	56	197	75	38
Use of adaptive computer software	501	34	7	32	14	44	200	39	20
Increased frequency of exams	498	18	4	18	7	39	204	41	20

[a] Indicates a statistically significant difference ($p<.002$) in favor of current students having received the support more than former students

(30%) were fearful of being stigmatized by teachers, and 65 (20%) were fearful of being stigmatized by other students.

Most used academic supports and their perceived helpfulness

A total of 382 students (75%) reported receiving at least one academic support, either as an accommodation or informally from instructors, with a mean of 4.4±4.3 supports each. There were no differences between current and former students in terms of the total number of supports received. Students who used services from the OSD received more than twice the number of supports (mean=6.9±4.2) as students who did not (mean= 3.3±3.8) ($F=94.6$, df=1 and 504, $p< .001$).

There were differences in use between current and former students on only one out of 25 of the supports after a Bonferroni correction was used (.05/25, $p<.002$). Ratings of how helpful the supports were and of how helpful they might have been (as rated by students who were not familiar with accommodations and who did not receive these supports) are reported in Table 2.

Barriers experienced by those receiving academic supports

Among the students who obtained any type of academic support (N=382), 215 (56%) reported feeling embarrassed or bothered about disclosing their disability to faculty, 214 (56%) reported a fear of being stigmatized by faculty, 161 (42%) reported that faculty were uncooperative or unreceptive, 157 (41%) reported a fear of being stigmatized by other students, 140 (37%) reported problems identifying which accommodations were appropriate or reasonable, 119 (31%) reported miscommunication or lack of communication regarding accommodations, 102 (27%) reported challenges in obtaining proper documentation to receive the support, and 32 (8%) reported having to pay for accommodations as a barrier.

Discussion and conclusions

Current students with mental illness and those who left school more recently were significantly more familiar with accommodations and with OSDs and were significantly more likely to formally request accommodations, compared with students who departed from school longer ago. The most common reason given by former students for not formally using accommodations was that they did not know about them (58%). The most common reason given by current students was that they did not need them (48%)—a response that reflects self-determination, a key principle of current recovery-oriented system transformation efforts. These results suggest that efforts to educate students, faculty, and other college personnel about accommodations over the years may have had an impact.

Current and former students received a significant amount of informal supports from instructors without going through disability offices. Overall, 34% of the respondents reported formally requesting accommodations, but 76% reported receiving at least one support while in college. This suggests that at least some instructors are attempting to meet the needs of students with mental illnesses without requiring them to go through the formal accommodation process. However, students who formerly requested accommodations obtained more than twice the number of supports as those who did not. This suggests that seeking supports through disability offices may increase the likelihood that students receive guidance from professionals who are familiar with their needs.

Our results also identified a number of commonly used supports, including providing extra time to complete assignments and exams and giving the student a grade of "Incomplete" instead of a "Fail" if a relapse occurs. The most used support involved private meetings with the instructors, and that support was rated among the most helpful types of support. Overall, 22 out of the 25 supports were viewed by at least 50% of the students as very or extremely helpful by those who received them. Most of the supports were also rated as having the potential to be very or extremely helpful by at least 25% of those students who did not know anything about accommodations and who did not obtain the specific support. This suggests that additional efforts to increase knowledge about accommodations and supports may produce additional positive results among the 29% of current students who reported not knowing anything about them. Future research should focus on identifying a student's need for accommodations and examining the outcomes associated with receiving or not receiving the appropriate accommodations.

Current and former students received a significant amount of informal supports from instructors without going through disability offices.

When student-specific supports are provided, students with disabilities succeed at levels commensurate with their abilities and to the same degree as other students (15,16). Not seeking needed supports has been found to be associated with reduced grade-point averages and early withdrawal from school (15). A number of barriers prevent students with mental illnesses from seeking accommodations and affect the experiences of students who do seek them. Although not knowing about the availability of accommodations was clearly the single largest barrier to using them, fears about disclosing their illness to faculty and the potential discrimination that might result, as well as concerns that other students would find out, were expressed in various ways by almost one-third of the students who did not seek accommodations. Students who used supports expressed similar fears. More than 50% reported feeling embarrassed or bothered about disclosing their disability to faculty and feared discrimination, and a number of students who obtained supports also reported that faculty were uncooperative or unreceptive. These fears may be justified by views of students with mental illnesses as disruptive, lacking academic skill, and prone to violence (11,20,21), although findings from a recent study suggest that faculty also have positive attitudes about teaching students with psychiatric disabilities (22).

Only one national household survey has addressed the educational attainment of students with mental illnesses (6). We recognize the limitations of the survey procedures used in our study and cannot definitively attest to the generalizability of the results. There was no obvious source to target our efforts in identifying a population of former students. And if we had surveyed only current students accessed through campus disability or counseling offices, then we would not have obtained the views of the majority of current students who do not use those services. Our Internet survey is open to unknown selection biases, because we have no definitive way of knowing how representative the respondents are. Another bias is that current students, and former students who more recently left school, may be more likely to recall their level of familiarity with and use of accommodations.

Greater attention needs to be paid to education, because it is consistent with interests in promoting community integration of persons with serious mental illnesses through increasing opportunities for persons to live in the community like everyone else, thereby facilitating recovery (23). Many persons with serious mental illnesses have a strong interest in obtaining higher education (1), and we are recognizing that education is a key factor in their em-

ployment success, just as it is for everyone else (24,25).

Current students are much more aware of their academic rights and are more likely to formally seek accommodations. Psychiatrists and other mental health professionals can play a greater role in further encouraging and supporting people in learning about the academic supports available to them. Professionals should gather more information about the types of academic supports that are available in colleges and universities and work with students to utilize these supports. Campus support systems are struggling with meeting the needs of students with mental illnesses, including those with the most serious illnesses. Those who work primarily with these individuals can share their treatment and rehabilitation expertise with disabilities and counseling departments that may not have much experience in this area. Community providers should also be more engaged with campus services in developing plans to best meet students' personal and academic needs, both during times of crisis and proactively.

Finally, negative beliefs about students with mental illnesses likely pervade college campuses to the same degree as in the general population. Discriminatory policies on college campuses, such as requiring students to automatically withdraw from school during acute psychiatric crises (14), are a step backward in this day and age when mental health system efforts are attempting to address negative beliefs, prejudice, and discrimination in the community as a whole. Our study found that these are barriers to students seeking and effectively receiving campus supports. Greater collaboration is needed between campus mental health providers, advocacy organizations, and mental health systems that lie outside the "Ivy Walls" to increase the likelihood that these issues are successfully addressed.

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