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RESEARCH ARTICLE

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The impact of family history of mental illness on mental health help seeking in university students

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ABSTRACT

Background: University students with a family history of mental illness may have an increased risk of developing mental health problems.

Aims: The aim of the study was to assess differences in mental health help seeking among students with a family history of mental illness compared to those without a family history.

Methods: A total of 1127 university students, aged 18 to 30years, completed an online survey with questions about mental illness, family history of mental illness, help seeking, and psychological symptoms.

Results: Students with a family history of mental illness were more likely to report clinically significant symptoms and more likely to use social media and online support programs. They reported similar rates of in-person help seeking. Those with more than one family member with a mental illness reported greater symptom severity, more use of online programs, and increased likelihood of prescription drug use than those with only one family member.

Conclusions: More research is needed to understand how to increase access to mental health care and to address barriers to help-seeking considering family history of mental illness. University students may not be accessing appropriate treatment and care as required, with the rates of in-person help-seeking being low overall.

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Introduction

Young adults may be vulnerable for the development of a range of mental health conditions (Auerbach et al., 2018; Kessler et al., 2007). Specifically, those at university age may experience the first onset of symptoms during this time or may experience a worsening of existing symptoms (Auerbach et al., 2018; Kessler et al., 2007). Those with a family history of mental illness may have an increased risk of developing mental health problems and greater distress (Dean et al., 2010; McLaughlin et al., 2012; Rohrer et al., 2007), based on environmental factors such as exposure to mental illness, traumatic life events (Sandstrom et al., 2019), parenting styles (Eun et al., 2018), and increased genetic vulnerability (Sandstrom et al., 2019).

Mental health help-seeking may be impacted by a range of socio-demographic and clinical variables, such as severity of symptoms and type of symptoms (Falkenberg et al., 2015). For example, men may be impacted by barriers such as gender role socialisation (Sullivan et al., 2015) and stigma (Byrow et al., 2019). Negative attitudes towards mental health help-seeking may be associated with lower help-seeking behaviours (Schnyder et al., 2017) whilst disclosure concerns are one of the most commonly reported barriers to seeking care (Clement et al., 2015).

Cultural background may impact type of help-seeking, with some cultures preferring different types of help sources compared to others (Markova et al., 2020). Stigma may also vary between cultural groups, with this then further impacting help-seeking for mental health-related conditions in certain populations (Tse & Haslam, 2021).

A recent study of 13,984 university students in eight countries noted that only 25% of students would seek treatment for a mental health condition if they had significant symptoms (Ebert et al., 2019). Young women may be more likely to use mental health services than males, with stigma also being found to play a role in this population group, with males showing higher levels (Vidourek et al., 2014). Perceived severity may instigate help-seeking for university students, along with having limited knowledge of support options available (Eisenberg et al., 2012), lack of time and having a preference for self-management (Czyz et al., 2013). Facilitators of help-seeking have been found to include positive past experiences, encouragement and social support (Gulliver et al., 2010).

Previous research in university student samples has noted that personal stigma was associated with lower levels of help-seeking, with having no personal contact with someone with a mental illness also being associated with higher levels

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of personal stigma (Lally et al., 2013). Norms regarding emotional distress have also been highlighted as being important in some groups of young adults, with young adult LTBTIQ (lesbian, gay, bisexual, trans/transgender, intersex, queer and other) populations asking help only when in crisis, having normalised high levels of distress (McDermott et al., 2018).

Online help-seeking is common among young adults, including university students, with this form of help-seeking potentially addressing public and self-stigma related barriers to care (Noack et al., 2016). A recent systematic review noted that young adults often use social networking sites for social support, with many moderated programs with clinically experienced moderators being researched to assist users to manage their mental health conditions (Ridout & Campbell, 2018). Digital interventions may increase social connectedness and a sense of agency and control of health decisions (Borghouts et al., 2021), showing support for the use of online help-seeking in improving access to mental health information, treatment and care, in this population.

Nonetheless, despite little is known about help-seeking in university students with a family history of mental illness. In younger samples of children and adolescents, family history of mental illness has been found to be associated with increased help-seeking for behavioural and mood concerns in primary care samples (Linkenheil et al., 2021). Here authors noted that sharing concerns was an important facilitator of help-seeking, with parent perspectives playing a part in whether the young person may obtain treatment. Previous research in young adult university student samples has noted that personal stigma was associated with lower levels of help-seeking, with having no personal contact with someone with a mental illness also being associated with higher levels of personal stigma (Lally et al., 2013). However, it is unclear how having a history of mental illness may impact help-seeking in university-aged samples more directly.

Our previous research has noted that mental health apps are used by those with a family history of mental illness at a higher rate than those without a family history (Schlage & Perich, 2020). However, it is unclear how a family history of mental illness may impact on both in-person and online help-seeking, such as seeking out support in mental health forums and the use of mental health programs delivered online.

The aim of the study was 1) to assess differences in mental health help-seeking among university students with a family history of mental illness compared to those without a family history, and 2) to further assess whether the type of family mental illness, severity and number of family members affected may impact help-seeking in Australia. The study sought to assess both aims considering in-person settings with mental health professionals and online support in internet forums and the use of structured online mental health programs. The study also aimed 3) to assess the impact of family history on current symptoms and help-seeking for those who have clinically significant mental health symptoms.

Method

Participants

Participants were recruited from the first-year psychology student cohort at Western Sydney University, Sydney Australia, from 2019 to 2021, where participants received course credit for taking part. The inclusion criteria for the study were being aged 18 – 30 years of age and being able to answer the questionnaire in English.

Procedure

The study was listed in the School of Psychology research participation register for undergraduate students. Participants are informed that they may take part in a range of research studies for course credit that they select from a university-administered website list. Participants self-selected to take part by clicking on the link to the study where they were then directed to the participant information and online consent form. After indicating consent, participants were directed to complete the survey questions online on the Qualtrics survey software platform and were awarded course credit for taking part in the survey upon completion. The course credit counted towards their final course grade for the psychology unit, and it is a requirement of the undergraduate psychology program that all students take part in research, choosing from a list of available research studies. The study was approved by Western Sydney University Human Research Ethics Committee (H13134).

Measures

Demographic questions

Participants were asked a range of questions including age, marital status, gender, religion, country of birth and employment status. Participants also replied to a series of questions relating to mental health status, including "Have you ever been diagnosed with any mental illness? (e.g. depression)", "If yes, what?", "How old were you when you were first diagnosed? (Please list ages and diagnoses for each)", in addition to questions regarding current and past drug and alcohol use.

In-person help-seeking

Participants who reported that they had received a mental health diagnosis were asked the questions "If yes, are you currently receiving treatment?" "Yes or No" and then "From whom are you receiving treatment? (Please list) (e.g. GP, psychologist, counsellor, etc.)". They were also asked if they currently taking any medications, with the question "Are you currently taking any prescribed medications?" and then asked the question "If yes, what medications are you taking and what are these medications for? (please include psychiatric medications)"

Help-seeking online

Participants were asked if they had used any online or social media forums for support with the question, "Have you accessed/used any social media groups or forums for mental health (e.g. Facebook groups for depression support, forums on mental health websites)?". They were also asked if they used any structured mental health online programs designed to treat mental health conditions with the question, "Have you used any structured online programs for mental health (e.g. Mood Gym) if any." Participants were then asked to list the programs and platforms that they used and to rate how helpful they found them on a scale from 0 to 10 with 0 being "Not at all helpful" to 10 representing "Very helpful".

Family history of mental illness

Family history of mental illness was assessed with the question "Has anyone in your immediate family been diagnosed with a mental illness?". Participants then indicated for each family member yes or no – mother (biological), father (biological), brother or sister (biological)), Other (non-biological family members, indicate who). For each family member, participants were asked "If yes, what mental illness?", and then "If yes, are they currently receiving treatment?".

Depression, anxiety and stress scales (DASS-21) (Lovibond & Lovibond, 1995)

The DASS-21 is a 21-item self-report scale which measures depression, anxiety, and stress symptoms over the past week. It may also be used to comprise an overall score indicating general psychological symptoms and distress. Participants rate each statement on a scale from 0 to 3 with 0 indicating "Did not apply to me at all" to 3 "Applied to me very much, or most of the time". Reliability for total DASS-21 scores summing the anxiety, depression and stress subscales together was excellent with $\alpha = 0.95$. A total score cut off of 16 was used, with scores 16 or more being indicative of a screening cut off for clinically significant anxiety or depression in university samples (Chin et al., 2019).

Data analyses

Data was analysed using SPSS 29 (IBM Corp, 2022). Chi square analyses were conducted on categorical variables associated with family history of mental illness (y/n), more than one family member with a mental illness (y/n) and type of family illness (coded as either 1. chronic mental illness which included schizophrenia, bipolar disorder, other psychotic conditions, recurrent depression, severe anxiety, personality disorders, ADHD, ASD or 2. Those reporting anxiety or depression only, participants;" mental health variables (if participants had been ever diagnosed with a mental health condition: y/n, current or past drug use y/n and current alcohol use: y/n), and help-seeking variables (current mental health treatment y/n; use of online forums for mental health support: y/n, and use of structured mental health online program: y/n), and variable of current clinically significant symptoms on the DASS-21 (y/n). For the chi square analyses, p values were set at 0.05.

Chi square analyses were also conducted between the family mental illness variables listed above and demographic variables of gender (male or female), employment (y/n), country of birth (Australia/Overseas). Further chi-square analyses were conducted on family variables listed above and diagnostic subtype.

ANOVAs were conducted to assess continuous variables (age; DASS-21 scores) and family history of mental illness (y/n), more than one family member with a mental illness (y/n) and type of family illness (chronic mental illness comprising of schizophrenia, bipolar disorder, other psychotic conditions, recurrent depression/primarily anxiety or depression), (y/n). Bonferroni adjustments were made, and the alpha was set to 0.0125 to account for multiple testing.

Separate binary logistic regressions were conducted to predict group membership to the three help-seeking variables (current mental health treatment: y/n, use of online forums for mental health support: y/n, and use of structured mental health online program: y/n), using DASS-21 total score and family history of mental illness (y/n) as predictors in the model with age added as a co-variate. Another binary logistic regression was conducted to predict group membership to family history of mental illness (y/n) with DASS-21 total score, and age added as a co-variate.

Results

A total of 1127 participants (M_{age} = 20.52, *SD* 3.21) completed the online survey, with 910 (81%) identifying as female, 214 (19%) as male, and 3 (0.3%) as other. Most participants indicated Australia as their country of birth (N = 853, 76%). Other countries listed included Iraq (N = 30, 3%); India (N = 25, 2%), with the remaining counties being reported by less than 15 participants each. Most participants reported being never married or single (N = 1022, 91%) and 721 (64%) participants reported having a job in addition to study. Further demographic details are provided in Table 1.

Of the total number of participants, 412 (37%) indicated they had at least one immediate family member with a mental illness and 712 (63%) indicating no family history of mental illness. Of those who reported a family history, 177 (43%) reported having more than one family member and 235 (57%) reporting one family member only. Of those who reported a family history of mental illness, 253 (22%) reported their biological mother had a mental illness, 136 (12%) reported their biological father and 223 (20%) reported their sibling. Type of mental illness reported was depression/anxiety by 300 (73%) and severe/chronic mental illness by 112 (27%).

Mental health help-seeking for those with a family history of mental illness compared to those without a family history

Chi-square analyses were conducted comparing those with a family history of mental illness to those without on variables listed above and help-seeking variables. Those with a family history to mental illness were more likely to endorse being

Table 1. Demographic and clinical characteristics of the sample ($n = 1124$).

		Family history (n = 412)		No Family history (n = 658)						
		N	%	N	%	X2	*p*	OR	upper	lower
Gender										
	Female	390	84	520	79	3.849	$p = 0.05$	1.059	1.001	1.12
Country of birth										
	Australia	393	84	460	70	28.695	$p < 0.001$	1.199	1.124	1.278
	Other	76	16	198	30					
Employed	Yes	325	69	396	60	9.869	$p = .002$	1.151	1.056	1.256
Current clinically significant symptoms (DASS)										
	Yes	287	70	417	58	14.333	p < 0.001	1.641	2.122	1.269
Any lifetime mental illness diagnosis										
	Depression/anxiety	153	70	112	78	2.71	$p = 0.1$	1.36	0.937	1.976
	Chronic mental illness (eg schizophrenia)	64	30	31	22					
Using any non prescribed drugs	Past or current (yes)	119	25	79	12	33.784	$p < 0.001$	2.113	1.821	3.411
Alcohol use	None or rarely	375	80	527	80	0.003	$p = 0.956$	1.007	0.794	1.276
	Once a week or more	94	20	131	20					
Current treatment	Yes	110	51	60	42	2.776	$p = 0.096$	1.214	0.961	1.532
Social media support	Yes	94	20	84	13	10.902	$p < 0.001$	1.57	1.199	2.055
Online program	Yes	42	9	31	5	8.142	$p < 0.004$	1.901	1.214	2.977

Table 2. Means scores of DASS subscales.

	Family member with a mental illness N = 412		No family history of mental illnes N = 715			
	Mean	SD	Mean	SD	F	*p*
DASS Depression	16.3495	11.71	13.8853	11.0066	12.503	<0.001
DASS Anxiety	16.7	11.1	13.5	10.68	23.966	<0.001
DASS Stress	20.36	10.24	15.9357	10.029	50.188	<0.001
DASS Total	26.7087	14.93	21.66	14.433	31.158	<0.001

female, born in Australia, employed and non-prescribed drug use (See Table 1). In terms of the help-seeking variables, those with a family history of mental illness were more likely to endorse the use of social media support for mental health and use online mental health programs (See Table 1).

An ANOVA was conducted to test the effect of age on family history of a mental illness. Those with a family history of mental illness were older (M_{age}=20.84; $SD = 3.45$); than those who did not (M_{age}=20.33; $SD = 3.04$); F (11126) 6.536, $p = 0.01$).

An ANOVA was also conducted comparing those with a family history of mental illness (y/n) on DASS-21 scores (depression, anxiety and stress subscales) and DASS-21 total scores. After Bonferroni corrections, those who reported having an immediate family member with a mental illness reported significantly higher scores on the DASS-21 depression, anxiety, stress scores, and total scores than those who did not. See Table 2 for results and mean scores.

Predictors of help-seeking

After controlling for current symptoms on the DASS-21, having a family member with a mental health condition was a significant predictor of the use of social media support and the use of online programs but not help-seeking with a mental health professional (Table 3).

Another binary logistic regression was conducted to predict group membership to family history of mental illness (y/n) with DASS-21 total score and age added as a co-variate. Both DASS-21 total score and age were significant predictors of whether or not the participant had a family history of a mental illness (Table 3).

Type of family mental illness, severity and number of family members affected and help-seeking

See Table 2 for results and mean scores help-seeking those with a family history of depression or anxiety were more likely to report alcohol use (N = 71; 24%) than those who had a family history of a severe or chronic mental health condition (N = 15; 13%); $X2 = 5.212$, $p = 0.022$, OR 1.767; CI 1.058 – 2.951). No other significant results were found.help-seeking those who reported more than one family member with a mental illness were more like to work (N = 132; 75%) than those who had one family member only (N = 151; 64%), $X2 = 5.00$, $p = 0.025$; OR 1.632, CI 1.061 – 2.511).

Those with more than one family member were also more likely to report being diagnosed with a mental health condition (N = 117; 66%) than those who had only one family member with a mental illness (N = 96; 41%); $X2 = 25.778$, $p < 0.001$; OR 2.823, CI 1.882 – 4.236 and were more likely to have used non-prescribed drugs in the past (64; 36%) than

Table 3. Binary Logistic Regression results.

Variable	Predictors	Chi Sq	Nagelkerke R Sq	Wald	SE	Sig	Exp (B)	CI lower	CI Upper
Currently receiving treatment	DASS total	11.954	0.044	5.944	0.008	0.015	0.981	0.966	0.996
	Family history of a mental illness			2.214	0.219	0.137	1.386	0.902	2.13
	Age			4.714	0.031	0.03	0.935	0.88	0.993
Use of online programs	DASS total	26.709	0.061	11.864	0.008	p < 0.001	0.972	0.957	0.988
	Family history of a mental illness			7.926	0.249	p = 0.005	2.016	1.237	3.284
	Age			3.239	0.035	0.072	0.94	0.878	1.006
Use of online social media forums	DASS total	34.411	0.052	21.022	0.006	p < 0.001	0.975	0.964	0.985
	Family history of a mental illness			5.211	0.169	p = 0.022	1.47	1.056	2.047
	Age			4.077	0.024	0.043	0.952	0.907	0.999
Family history of a mental illness	DASS total	37.53	0.045	30.403	0.004	p < 0.001	0.977	0.969	0.985
	Age			7.205	0.019	0.007	0.95	0.914	0.986

those with one family member only (N = 47; 20%), $X2 = 13.392$, $p < 0.001$, OR 2.265, CI 1.455 – 3.528). No other significant results were found.

Two ANOVAs were conducted comparing those with a family history of mental illness (y/n), more than one family member with a mental illness (y/n) and type of family illness (chronic mental illness comprising of schizophrenia, bipolar disorder, other psychotic conditions, recurrent depression/primarily anxiety or depression) on DASS-21 scores (depression, anxiety and stress subscales) and total scores. No results were significant.

Impact of family history on current symptoms and help-seeking for those who have clinically significant mental health symptoms

A total of 704 (63%) of the sample reported current clinically significant symptoms on the DASS-21. Of these, 148 (21%) were currently receiving in-person professional treatment, 60 (9%) had reported using online programs in the past, and 139 (19%) reported the use of online forums at any time in the past. Those with a family history of a mental illness were more likely to report clinically significant symptoms than those without (see Table 1).

Chi-square analysis for those who reported clinically significant symptoms (N = 704) compared those with a family member with a mental illness to those without on help-seeking variables (current mental health treatment: y/n, use of online forums for mental health support: y/n, and use of structured mental health online program: y/n). Those with a family history were more likely to use online programs for mental health ($N = 36$, 60%) than those without ($N = 24$, 40%), $X2 = 10.047$, $p = 0.002$, OR 2.179, CI 1.330 – 3.572). No other significant results were found.

Discussion

Participants with a family history of mental illness were more likely to report clinically significant mental health symptoms than those without a family history of mental illness. However, despite this, they were no more likely to seek in-person help than those without a family history of mental illness. This study found that both groups sought in-person treatment at similar rates, with help-seeking rates being low in the sample overall. The findings of this study confirm other larger studies that also reported low rates of help-seeking, such as those which reported that only 25% of young people would seek treatment for a mental health condition if needed (Ebert et al., 2019).

Participants with a family history of a mental illness, despite symptoms, were more likely to use social media support and online programs for mental health compared to those without a family history of a mental illness. This is a novel finding of this study as little is known about help-seeking for those with a family history of mental illness in either in-person or online settings. Although stigma was not assessed as part of this study, it may be that this form of help-seeking may be particularly appealing for young adults and students with a family history of mental illness as it may address stigma-related barriers. As noted by previous studies, online help-seeking may increase social connectedness and a sense of agency and control (Borghouts et al., 2021) which may also be important for this population.

For those students with a history of mental health symptoms who reported clinically significant symptoms, only the use of online programs differed from those who did not have a family history. Here, a higher percentage of those with a family history of mental illness were found to use online mental health programs, such as Mood Gym. It may be that this form of intervention may be particularly appealing to those with a family history of mental illness. However, despite this result, very few participants endorsed using this form of help-seeking in the sample overall and further research may examine how to improve levels of engagement for this type of intervention.

Type of family mental illness did not appear to be associated with symptom severity or help-seeking; however, the number of immediate family members reported was found to have an impact. Although no differences were found on

help-seeking, those with more than one family member with a mental illness were more likely to report a history of non-prescribed drug use and they also reported more severe symptoms on each symptom scale than those with only one family member.

It was found that those with a family history of anxiety and depression alone were more likely to report using alcohol compared to those who had a family history of severe or recurrent mental illness. Alcohol and substance use is common and socially accepted in this population and can be used as a way of coping (Tureluren et al., 2022), however, more research is needed to understand why this use may differ based on the type of mental illness in their family history.

There were several other differences noted between those with a family history of mental illness and those without on some demographic features such as country of birth, age, and employment status. Here, those with a family history were older and more likely to be employed. It is unclear why this is the case, however, due to the type of sample being recruited through university settings, it may be that those with a family history of mental illness potentially start university later and have less familial financial support than those without. More research is needed as family history of mental illness has not been widely explored in this area.

Country of birth was found to differ between those with a family history of mental illness and those without with those born in Australia being more likely to report having a family member with a mental illness. Cultural differences have been noted in previous research regarding help-seeking (Tse & Haslam, 2021) and it may that those born outside of Australia have not reported the presence of family mental health conditions for a range of cultural reasons. Previous research conducted in Singapore has noted that help-seeking preferences were associated with age, academic year and type of mental health condition (Picco et al., 2019). More research is needed to assess the impact of culture on help-seeking.

The study has several limitations. First, all diagnoses were obtained via self-report, so it is difficult to determine the accuracy of the reported conditions. Also, participants may not have been aware of their family members" conditions, for a variety of reasons such as stigma, so they may have misreported their family history unintentionally. The sample was also predominately Australian-born and identified as female. This limits the generalisability of the findings, and more research is needed in more representative samples with a more balanced mix of gender and cultural backgrounds.

This study found that university students with a family history of mental illness were more likely to report clinically significant mental health symptoms yet report similar rates of in-person help-seeking to those without a family mental illness history. They were, however, more likely to use social media support and online programs for mental health reasons. Although help-seeking did not vary based on the type of family mental illness history, those with more than one family member with a mental illness reported greater symptom severity and increased likelihood of prescription drug use than those with one family member alone. The rates of help-seeking overall for young people experiencing clinically significant symptoms were low. More work is needed to increase access to mental health care and to address barriers to help-seeking in this population considering a family history of mental illness.

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References

Auerbach, R. P., Mortier, P., Bruffaerts, R., Alonso, J., Benjet, C., Cuijpers, P., Demyttenaere, K., Ebert, D. D., Green, J. G., Hasking, P., Murray, E., Nock, M. K., Pinder-Amaker, S., Sampson, N. A., Stein, D. J., Vilagut, G., Zaslavsky, A. M., & Kessler, R. C, (2018). WHO World Mental Health Surveys International College Student Project: Prevalence and distribution of mental disorders. *Journal of Abnormal Psychology*, *127*(7), 623–638. https://doi.org/10.1037/abn0000362

Borghouts, J., Eikey, E., Mark, G., De Leon, C., Schueller, S. M., Schneider, M., Stadnick, N., Zheng, K., Mukamel, D., & Sorkin, D. H. (2021). Barriers to and facilitators of user engagement with digital mental health interventions: Systematic review. *Journal of Medical Internet Research*, *23*(3), e24387. https://doi.org/10.2196/24387

Byrow, Y., Pajak, R., McMahon, T., Rajouria, A., & Nickerson, A. (2019). Barriers to mental health help-seeking amongst refugee men. *International Journal of Environmental Research and Public Health*, *16*(15), 2634. https://doi.org/10.3390/ijerph16152634

Chin, E. G., Buchanan, E. M., Ebesutani, C., & Young, J. (2019). Depression, anxiety, and stress: How should clinicians interpret the total and subscale scores of the 21-item depression, anxiety, and stress scales? *Psychological Reports*, *122*(4), 1550–1575. https://doi.org/10.1177/0033294118783508

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J. S., & Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine*, *45*(1), 11–27. https://doi.org/10.1177/0033294118783508

Czyz, E. K., Horwitz, A. G., Eisenberg, D., Kramer, A., & King, C. A. (2013). Self-reported barriers to professional help-seeking among college students at elevated risk for suicide. *Journal of American College Health*, *61*(7), 398–406. https://doi.org/10.1080/07448481.2013.820731

Dean, K., Stevens, H., Mortensen, P. B., Murray, R. M., Walsh, E., & Pedersen, C. B. (2010). Full spectrum of psychiatric outcomes among offspring with parental history of mental disorder. *Archives of General Psychiatry*, *67*(8), 822–829. https://doi.org/10.1001/archgenpsychiatry.2010.86

Ebert, D. D., Mortier, P., Kaehlke, F., Bruffaerts, R., Baumeister, H., Auerbach, R. P., Alonso, J., Vilagut, G., Martínez, K. I., Lochner, C., Cuijpers, P., Kuechler, A.-M., Green, J., Hasking, P., Lapsley, C.,

Sampson, N. A., & Kessler, R. C, (2019). Barriers of mental health treatment utilization among first-year college students: First cross-national results from the WHO World Mental Health International College Student Initiative. *International Journal of Methods in Psychiatric Research*, *28*(2), e1782. https://doi.org/10.1002/mpr.1782

Eisenberg, D., Hunt, J., & Speer, N. (2012). Help-seeking for mental health on college campuses: Review of evidence and next steps for research and practice. *Harvard Review of Psychiatry*, *20*(4), 222–232. https://doi.org/10.3109/10673229.2012.712839

Eun, J. D., Paksarian, D., He, J. P., & Merikangas, K. R. (2018). Parenting style and mental disorders in a nationally representative sample of US adolescents. *Social Psychiatry and Psychiatric Epidemiology*, *53*(1), 11–20. https://doi.org/10.1007/s00127-017-1435-4

Falkenberg, I., Valmaggia, L., Byrnes, M., Frascarelli, M., Jones, C., Rocchetti, M., Straube, B., Badger, S., McGuire, P., & Fusar-Poli, P. (2015). Why are help-seeking subjects at ultra-high risk for psychosis help-seeking? *Psychiatry Research*, *228*(3), 808–815. https://doi.org/10.1016/j.psychres.2015.05.018

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry*, *10*(1), 113. https://doi.org/10.1186/1471-244X-10-113

IBM Corp. (2020). *IBM SPSS statistics for windows, version 27.0*. IBM Corp.

Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustün, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current Opinion in Psychiatry*, *20*(4), 359–364. https://doi.org/10.1097/YCO.0b013e32816ebc8c

Lally, J., ó Conghaile, A., Quigley, S., Bainbridge, E., & McDonald, C. (2013). Stigma of mental illness and help-seeking intention in university students. *The Psychiatrist*, *37*(8), 253–260. https://doi.org/10.1192/pb.bp.112.041483

Linkenheil, A., Honigfeld, L., & Pidano, A. (2021). Family history of mental health disorders and parental help-seeking for behavioral health concerns in pediatric primary care offices. *Journal of Pediatric Health Care: official Publication of National Association of Pediatric Nurse Associates & Practitioners*, *35*(5), 518–525. https://doi.org/10.1016/j.pedhc.2021.04.004

Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the Depression Anxiety Stress Scales*. (2nd. Ed.) Psychology Foundation.

Markova, V., Sandal, G. M., & Pallesen, S. (2020). Immigration, acculturation, and preferred help-seeking sources for depression: Comparison of five ethnic groups. *BMC Health Services Research*, *20*(1), 648. https://doi.org/10.1186/s12913-020-05478-x

McDermott, E., Hughes, E., & Rawlings, V. (2018). Norms and normalisation: Understanding lesbian, gay, bisexual, transgender and queer youth, suicidality and help-seeking. *Culture, Health & Sexuality*, *20*(2), 156–172. https://doi.org/10.1080/13691058.2017.1335435

McLaughlin, K. A., Gadermann, A. M., Hwang, I., Sampson, N. A., Al-Hamzawi, A., Andrade, L. H., Angermeyer, M. C., Benjet, C., Bromet, E. J., Bruffaerts, R., Caldas-de-Almeida, J. M., de Girolamo, G., de Graaf, R., Florescu, S., Gureje, O., Haro, J. M., Hinkov, H. R., Horiguchi, I., Hu, C., … Kessler, R. C. (2012). Parent psychopathology and offspring mental disorders: Results from the WHO World Mental Health Surveys. *The British Journal of Psychiatry: The Journal of Mental Science*, *200*(4), 290–299. https://doi.org/10.1192/bjp.bp.111.101253

Noack, K., Elliott, N. B., Canas, E., Lane, K., Paquette, A., Lavigne, J.-M., & Michalak, E. E. (2016). Credible, centralized, safe, and stigma–free: What youth with bipolar disorder want when seeking health information online. *UBC Medical Journal*, *8*(1), 27–31. https://doi.org/10.1001/jama.285.20.2612

Picco, L., Seow, E., Chua, B. Y., Mahendran, R., Verma, S., Xie, H., Wang, J., Chong, S. A., & Subramaniam, M. (2019). Help-seeking beliefs for mental disorders among medical and nursing students. *Early Intervention in Psychiatry*, *13*(4), 823–831. https://doi.org/10.1111/eip.12673

Ridout, B., & Campbell, A. (2018). The use of social networking sites in mental health interventions for young people: Systematic review. *Journal of Medical Internet Research*, *20*(12), e12244. https://doi.org/10.2196/12244

Rohrer, J., Rohland, B., Denison, A., Pierce, J. R., Jr,., & Rasmussen, N. H. (2007). Family history of mental illness and frequent mental distress in community clinic patients. *Journal of Evaluation in Clinical Practice*, *13*(3), 435–439. https://doi.org/10.1111/j.1365-2753.2006.00737.x

Sandstrom, A., Sahiti, Q., Pavlova, B., & Uher, R. (2019). Offspring of parents with schizophrenia, bipolar disorder, and depression: A review of familial high-risk and molecular genetics studies. *Psychiatric Genetics*, *29*(5), 160–169. https://doi.org/10.1097/ypg.0000000000000240

Schlage, J., & Perich, T. (2020). Mental health mobile application usage in young adults with a family history of mental illness. *Australian Psychologist*, *55*(6), 660–669. https://doi.org/10.1111/ap.12474

Schnyder, N., Panczak, R., Groth, N., & Schultze-Lutter, F. (2017). Association between mental health-related stigma and active help-seeking: Systematic review and meta-analysis. *The British Journal of Psychiatry: The Journal of Mental Science*, *210*(4), 261–268. https://doi.org/10.1192/bjp.bp.116.189464

Sullivan, L., Camic, P. M., & Brown, J. S. (2015). Masculinity, alexithymia, and fear of intimacy as predictors of UK men's attitudes towards seeking professional psychological help. *British Journal of Health Psychology*, *20*(1), 194–211. https://doi.org/10.1111/bjhp.12089

Tse, J. S., & Haslam, N. (2021). Inclusiveness of the concept of mental disorder and differences in help-seeking between Asian and White Americans. *Frontiers in Psychology*, *12*, 699750. https://doi.org/10.3389/fpsyg.2021.699750

Tureluren, E., Claes, L., & Andriessen, K. (2022). Factors associated with alcohol and substance use in bereaved college and university students. *Omega*, 302228221132904. https://doi.org/10.1177/00302228221132904

Vidourek, R. A., King, K. A., Nabors, L. A., & Merianos, A. L. (2014). Students" benefits and barriers to mental health help-seeking. *Health Psychology and Behavioral Medicine*, *2*(1), 1009–1022. https://doi.org/10.1080/21642850.2014.963586