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Barriers to Adolescents Seeking Help Scale—brief version (BASH-B): psychometric properties and sociodemographic differences in Chilean university students

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ABSTRACT

The aims of this study are to examine the psychometric properties of the Barriers to Adolescents Seeking Help Scale—brief version (BASH-B) in university students and to examine sociodemographic differences in barriers to help-seeking in students with mental health problems and who are not in treatment. Participants were 1536 university students (Mean age = 19.7 years, 49% women) who completed the BASH-B, psychopathology measures, and sociodemographic information. The analysis included confirmatory factor analysis, reliability, validity based on the relationship with other variables, and bivariate analyses. The two-factor solution (Perceived Need for Autonomy and Help-seeking Fears) had better fit and acceptable internal consistencies for the Fears subscale, but poor for the Autonomy subscale. Among those who screened positive for mental health problems and were not in current treatment ($n=826$), the most important help-seeking barriers were self-reliance and economic resources. Significantly higher Autonomy scores were observed in cisgender men and non-indigenous respondents, while higher Fears scores were observed in participants who are trans, non-heterosexual, of middle and low socioeconomic status, those who formerly lived in rural settings, and those with public health insurance. The Chilean version of the BASH-B had mostly adequate psychometric properties in university students, which contributes to the assessment of barriers to help-seeking in this population. The results suggest group differences in barriers to professional help-seeking, which may be useful when developing actions to promote service use.

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Introduction

Nowadays, pervasive global concerns exist about the mental health of university students due to the high prevalence of mental disorders among them (Sheldon et al., 2021). Among those experiencing psychological distress, it is estimated that only 35% have used mental health services (Osborn et al., 2022), which reveals a high treatment gap. To understand why students with mental health needs have not received treatment, researchers have focused on studying possible barriers or factors that interfere with mental health help-seeking (Eisenberg et al., 2012). One of the most important barriers to seeking professional help for university students is self-reliance or

preferring to solve the problem on one's own (Crockett et al., 2024; Ebert et al., 2019; Samlan et al., 2021). Other frequently reported barriers are preferring to talk to friends or family (Ebert et al., 2019), insecurity about where to seek help and financial cost (Crockett et al., 2024), low perceived need, and lack of time (Horwitz et al., 2020).

Some studies have identified group differences in barriers to mental health help-seeking. For example, women report more time and economic barriers than men, while men report more stigma and concern about the confidentiality of mental health services (Horwitz et al., 2020). Non-heterosexual students report the barriers self-reliance and talking to friends and family at a lower rate than their peers, but are

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more likely to report insecurity about where to consult, time, transportation, and scheduling difficulties (Crockett et al., 2024), financial cost issues, and concerns about the cultural sensitivity of mental health services (Horwitz et al., 2020). Also, racial/ethnic minority students report concerns about the cultural sensitivity of mental health services (Horwitz et al., 2020; Lipson et al., 2018), while inconclusive differences have been found regarding how economic barriers affect transgender and cisgender students (Crockett et al., 2024; Horwitz et al., 2020).

Universities worldwide have different programs to address student mental health needs, such as counseling centers, wellness and health promotion services, supported education programs, among others (Goodman, 2017). These services generally offer psychological counselling and, depending on demand, have modified their models of care, including protocols for prioritizing patients according to severity, brief therapies, limited number of sessions, off-campus referrals, among others (Locke et al., 2016). Even though university health services are generally free for students, multiple barriers to use those services persist for those with unmet mental health needs (Eisenberg et al., 2007). Exploring differences in barriers to help-seeking among university students may allow identification of the most important reasons for not seeking help in groups with unmet mental health needs or in more disadvantaged groups. Identifying these barriers may be especially relevant for health services, on-campus mental health services, and interventions to promote service use.

Few brief instruments exist which can be used to examine barriers to mental health help-seeking among university students and whose psychometric properties are known, which is essential for their use in research. One such instrument, the Barriers to Adolescents Seeking Help Scale—Brief version (BASH-B), was developed to assess barriers to seeking professional mental health help (Wilson et al., 2005) and has a Spanish adaptation for the Chilean adolescent population (Olivari & Guzmán-González, 2018). Although the instrument was designed for use with adolescents (Kuhl et al., 1997), it has also been administered to university populations and young adults (Cartmill et al., 2009; McAndrew et al., 2022; Wilson & Deane, 2012). This 11-item instrument is a shortened version of the original 37-item scale (Kuhl et al., 1997). For the BASH-B, the barriers related to professional mental health help-seeking most frequently reported by young respondents were selected (Wilson et al., 2005). The literature shows adequate internal reliability indices for the BASH-B,

with $\alpha \geq 0.78$ (Kenneally et al., 2023; McAndrew et al., 2022; Wilson et al., 2005; Wilson & Deane, 2012), while analyses of its internal structure have found that the items are grouped into one factor (Olivari & Guzmán-González, 2018) and two factors, labeled Perceived Need for Autonomy and Help-seeking Fears by the authors (Wilson & Deane, 2012). The English version of the BASH-B have been used in countries such as Australia (Cartmill et al., 2009; Wilson et al., 2005; Wilson & Deane, 2012), Canada (McAndrew et al., 2022), and Ireland (Kenneally et al., 2023), and the Spanish version of the instrument have been used in Chile (Olivari & Guzmán-González, 2018) and Mexico (Torres Gallegos et al., 2024).

The use of instruments adapted to the target population is key, especially instruments used internationally that allow comparison of results with other countries and brief instruments that allow the collection of relevant information in a short period of time, such as the BASH-B. To date, we have found no studies that have examined the psychometric properties of the BASH-B in university students. Therefore, the aim of this study is to examine the psychometric properties of the Chilean version of the BASH-B in university students, and secondarily, to analyze socio-demographic differences in barriers to help-seeking in students with mental health problems who are not in treatment. It is hypothesized that the BASH-B will have adequate reliability (McAndrew et al., 2022; Wilson et al., 2005; Wilson & Deane, 2012), its scores will be negatively related to help-seeking intentions (Wilson & Deane, 2012) and service use (Kuhl et al., 1997), and that sociodemographic differences (i.e. gender, sexual orientation, ethnic status) in the BASH-B scores will be observed (Crockett et al., 2024; Horwitz et al., 2020).

Materials and method

Participants

Convenience sampling was used. All first- and second-year students attending a public university in Santiago, Chile were invited to participate ($N=12,404$). A total of 1560 students agreed to do so, which constitutes a response rate of 12.6%. Those over 30 years of age and those with incomplete information for the BASH-B instrument were excluded ($n=24$), leaving a sample of 1536 students. The description of the sample is presented in Table 1. Most of the students were between 18 and 19 years old (Mean age = 19.7 years). They were largely cisgender women and men, heterosexual, of middle socioeconomic status who resided in the Metropolitan region, had lived in

Table 1. Sample characteristics.

	Total sample (<i>n</i> = 1536) % (<i>SE</i>)	Subsample students with MHP		<i>p</i>
		Current treatment		
		No (<i>n</i> = 826) % (<i>SE</i>)	Yes (<i>n</i> = 415) % (<i>SE</i>)	
Age				.034
18–19 years	58.4 (0.8)	60.8 (1.4)	55.3 (2.2)	
20–21 years	32.5 (0.8)	31.4 (1.4)	32.6 (2.2)	
22–29 years	9.2 (0.2)	7.8 (0.6)	12.1 (1.3)	
Gender identity				.002
Cisgender man	43.3 (0.5)	45.4 (1.2)	37.1 (2.3)	
Cisgender woman	49.0 (0.4)	47.6 (1.1)	50.7 (2.2)	
Trans, non-binary or other	7.7 (0.6)	7.0 (0.9)	12.2 (1.6)	
Sexual Orientation				.070
Heterosexual	54.2 (1.2)	52.9 (1.8)	47.3 (2.5)	
Other	45.8 (1.2)	47.1 (1.8)	52.8 (2.5)	
Socioeconomic status				< .001
High	29.9 (1.1)	26.8 (1.6)	34.7 (2.4)	
Medium	54.0 (1.2)	53.9 (1.8)	54.0 (2.5)	
Low	16.2 (0.8)	19.2 (1.3)	11.3 (1.5)	
Region of residency of family				.721
Metropolitan	74.0 (1.1)	73.3 (1.6)	74.3 (2.2)	
Other	26.0 (1.1)	26.7 (1.6)	25.7 (2.2)	
Home environment				.791
Urban	86.6 (0.9)	86.5 (1.2)	87.1 (1.6)	
Rural	13.4 (0.9)	13.5 (1.2)	12.9 (1.6)	
Nationality				.511
Chilean	97.5 (0.4)	97.2 (0.6)	97.9 (0.8)	
Other	2.5 (0.4)	2.8 (0.6)	2.1 (8.4)	
Indigenous status				.041
No	89.7 (0.7)	88.9 (1.0)	92.4 (1.2)	
Yes	10.3 (0.7)	11.1 (1.0)	7.6 (1.2)	
Health insurance				< .001
Private	35.3 (1.0)	29.3 (1.6)	43.2 (2.4)	
Public	62.8 (1.0)	68.4 (1.6)	56.0 (2.4)	
Other/none	1.8 (0.3)	2.3 (0.5)	0.8 (0.4)	

Notes. Percentages were estimated with poststratification weights. *SE*: standard error; MHP: Mental health problems (those who scored positive on the PHQ-9, GAD-7 and/or ASSIST were considered positive for MHP).

an urban environment before entering university, were Chilean nationals, did not identify as belonging to an indigenous ethnic group, and had public health insurance.

Measures

Three self-report instruments were used to screen for mental health problems.

Depressive symptoms

The Patient Health Questionnaire-9 (PHQ-9) (Kroenke et al., 2001) in its Chilean version (Borghero et al., 2018) was used, which assesses the presence and severity of depressive symptoms according to the criteria of the Diagnostic and Statistical Manual of Mental Disorders—fourth edition (DSM-IV). It has

nine items that are answered on a 4-point ordinal scale (0=not at all, 1=several days, 2=more than half the days, 3=nearly every day), where higher scores indicate more symptoms. Scores of 10 points or higher identify respondents with moderate to severe symptoms of depression (Kroenke et al., 2001). This instrument had good internal consistencies for the original version, with α between 0.86 and 0.89 (Kroenke et al., 2001), and the Chilean version with $\alpha=0.78$ (Borghero et al., 2018).

Generalized anxiety symptoms

The Chilean version of the Generalized Anxiety Disorder 7-item (GAD-7) (Spitzer et al., 2006) was used (Crockett et al., 2022), which evaluates the presence and severity of generalized anxiety symptoms according to DSM-IV criteria. This instrument has 7 items that are answered on a 4-point ordinal scale similar to that of the PHQ-9. Scores of 10 points or higher identify respondents with moderate to severe symptoms of generalized anxiety (Spitzer et al., 2006). Internal consistency of the original instrument was $\alpha=0.92$ (Spitzer et al., 2006), and for the Chilean adaptation was $\alpha=0.86$ (Crockett et al., 2022).

Substance use-related risk

The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), which evaluates the amount and frequency of substance use (Humenuik et al., 2010). It consists of eight items for each substance and uses binary (0=no, 1=yes) and ordinal items (from 0=never to 6=daily or almost daily). The Chilean version of the instrument was used (Soto-Brandt et al., 2014). This study used cutoff scores of 11 or higher for moderate to high risk for alcohol use and 4 or higher for all other substances assessed (Humenuik et al., 2010). Internal consistencies (Cronbach's α) for the original instrument were between 0.80 and .94 (Humenuik et al., 2008), and for the Chilean adaptation were between 0.87 and .98 (Soto-Brandt et al., 2014).

Intentions to seek help

Students' intentions to seek help for a mental health problem were assessed using the General Help Seeking Questionnaire—Vignette version (GHSQ-V) (Wilson et al., 2011), in its version adapted for use in Chile (Silva et al., 2022). This instrument has vignettes describing various mental health problems that participants evaluate in order to report how likely they would be to seek help from several sources (e.g. doctor, psychologists, family, friends) if they were in the

place of the protagonist of the vignette. It has eight items that are answered on a 5-point Likert scale (1=very unlikely to 5=very likely). Internal consistencies for the Chilean adaptation of the instrument were between 0.56 and 0.84 (Silva et al., 2022).

Current mental health service use

Students answered questions about lifetime, 12-month, and current mental health service use. Only current service use variables were used for this study in order to have the same temporality as the instruments measuring psychopathology. Three binary questions were used to examine current service use, which included psychological, psychiatric, or medication help for mental health or substance use-related problems (0=no or 1=yes). From the three variables, the variable current mental health service use was created, which was coded as “yes” for those who reported using any of these services.

Barriers to seeking professional help in mental health

The BASH-B (Wilson et al., 2005) adapted for Chilean youth (Olivari & Guzmán-González, 2018) was used. The instrument has 11 items with multiple reasons that could affect professional mental health help-seeking. Each item is answered on a 6-point Likert scale (1=strongly disagree to 6=strongly agree). Higher scores indicate greater barriers to help-seeking. The internal consistency found in the original version of the instrument was $\alpha=0.83$. The cultural and linguistic adaptation of the BASH-B to the Chilean population carried out by Olivari and Guzmán-González (2018) included translation and back-translation by two expert bilingual mental health professionals and two native translators, respectively, comprehension assessment by expert judges, cognitive interviews, and a pilot application of the instrument to a sample of 50 high school students. They found an internal consistency of $\alpha=0.76$. The Chilean version of the instrument can be found in Olivari and Guzmán-González (2018).

Sociodemographic information

The study included the variables age (recoded as 1=18–19 years, 2=20–21 years, and 3=22–29 years), gender identity (created from the variables sex and current gender, coded as 1=cisgender man, 2=cisgender woman, and 3=trans, non-binary, or other gender), sexual orientation (0=heterosexual and 1=other), socioeconomic status (created from the variables educational level and occupation of the

main household provider, coded as 1=high, 2=medium, and 3=low) (Adimark, 2000), region of residence of the family of origin (0=Metropolitan and 1=other), type of environment in which the student lived before entering university (0=urban, 1=rural), nationality (0=Chilean and 1=other), indigenous ethnicity status (0=no and 1=yes), and health insurance (1=private, 2=public, and 3=other/none).

Procedure

The project was approved by the Human Research Ethics Committee, Facultad de Medicina, Universidad de Chile (N° 059-2023). The online survey was sent to the students' e-mail addresses. The participants gave informed consent before answering the survey. At the end of the survey, they received feedback on their general mental health status and information about mental health services. As part of the ethical procedures, all students who responded at least *some days* on item 9 of the PHQ-9 (that measures suicidal ideation and/or self-injury) completed a special section of the survey containing the Columbia Suicide Severity Rating Scale (C-SSRS) (Posner et al., 2011) for the purpose of assessing their suicidal risk. Students who scored high for suicide risk (scores 4, 5 or 6) and were not in treatment were contacted by trained mental health professionals for an assisted referral to a mental health service.

Analyses

First, the psychometric properties of the BASH-B were examined. Items were described using the mean, standard deviation, skewness, kurtosis, and corrected item-test correlation (correlation between the item and the rest of the instrument without that item). The assumption of univariate normal distribution was examined using the Shapiro-Wilk test. Because the univariate normality assumption was not met ($p<0.001$ for items 1–10), the multivariate distribution of the items was rejected. The unifactorial and bifactorial structure obtained by other authors (Olivari & Guzmán-González, 2018; Wilson & Deane, 2012) was examined using Confirmatory Factor Analysis (CFA). The Diagonally Weighted Least Squares estimation method was used, given the items' non-compliance with the multivariate normality assumption and their ordinal format (Flora & Curran, 2004). Model fit was evaluated using the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Normalized Fit Index (NFI), Root Mean Square Error of Approximation (RMSEA), and the Standardized

Root Mean Square Residual (SRMR). Values of CFI, TLI, and NFI > 0.95, and RMSEA and SRMR < 0.08, were considered to indicate an acceptable fit (Hu & Bentler, 1999). The correlation between the subscales was assessed using Pearson correlation. The internal consistency of the subscales was examined using Cronbach's alpha (α) and Spearman-Brown coefficient, the latter being recommended for measures with two items (Eisinga et al., 2013). Validity evidence based on the relationship with other variables was examined using Pearson correlation with the subscales of the GHSQ-V and through point-biserial correlation with the binary variable current treatment. Also, differences in scores in the BASH-B by current service used were described using Wald tests.

Sociodemographic differences in the BASH-B and its items were examined using the Wald test estimated from linear regression models using post-stratification weights. These analyses were conducted only among those students screened positive for moderate or severe symptoms of psychopathology (depression, generalized anxiety, and problematic substance use) and who were not in mental health treatment, with the purpose of examining barriers among those with unmet mental health needs. For these analyses, post-stratification weights (Royal, 2019) were used to adjust for possible differences between those who answered the survey and those who did not based on the variables sex, age, and type of school (public, subsidized, or private) as a proxy variable for socioeconomic status. This information was obtained from the university's student records and was available for the entire study population. The Wald tests using post-stratification weights were estimated using survey data analysis options in Stata 17.0. The psychometric analyses were performed in JASP 0.18.3, Spearman-Brown coefficient was estimated using SPSS

25 and the rest of the analyses were performed in Stata 17.0.

Results

Psychometric properties of the BASH-B

Table 2 contains information on the BASH-B items. Higher scores were observed for items 1 (solving problems alone) and 2 (financial resources), and lower scores for items 7 (embarrassment) and 10 (realizing that I am crazy). The correlations between the items and the rest of the instrument were between 0.24 and 0.55.

According to the CFA, the one-factor model had a poor fit in the sample (CFI = 0.934; TLI = 0.917; NFI = 0.925; RMSEA = 0.066; and SRMR = 0.060), whereas the two-factor model had a satisfactory fit (CFI = 0.963; TLI = 0.952; NFI = 0.954; RMSEA = 0.050; and SRMR = 0.047). In the two-factor model, items 1 and 11 make up the factor "Perceived Need for Autonomy (Autonomy)" and items 2 to 10 make up the factor "Help-seeking Fears (Fears)." The standardized factor loadings were between 0.35 and 0.96. The correlation between factors was 0.35 ($p < 0.001$). Internal consistencies for Factor 1 were $\alpha = 0.58$ and Spearman-Brown coefficient = 0.59; for Factor 2, they were $\alpha = 0.75$ and Spearman-Brown coefficient = 0.74.

Regarding validity based on the relationship with other variables (Table 3), negative and weak, but statistically significant correlations (r between -0.11 and -0.31 ; $p < 0.001$) were observed with each of the subscales of the GHSQ-V and with current service use (i.e. the greater the barriers to help-seeking, the fewer help-seeking intentions and service use). Lower scores were observed in students using mental health services with respect to those that were not, for both the Autonomy subscale (M yes = 3.8 vs M

Table 2. Characteristics of the BASH-B items ($n = 1536$).

	<i>M</i>	<i>SD</i>	Skew.	Kur.	Item-test cor.	Stand. factor loadings
1. If I had a problem, I would solve it myself	4.35	1.29	-0.53	2.67	0.24	0.44
2. Even if I wanted to, I wouldn't have time to see a therapist	3.00	1.57	0.37	2.06	0.35	0.96
3. If I had a problem and told a therapist, he would not keep it secret	2.69	1.81	0.66	1.98	0.45	0.39
4. A therapist might make me do or say something that I don't want to	2.96	1.71	0.41	1.87	0.49	0.53
5. I'd never want my family to know I was seeing a therapist	2.67	1.73	0.72	2.19	0.55	0.59
6. Adults really can't understand the problems young people have	2.97	1.49	0.40	2.28	0.35	0.64
7. Even if I had a psychological problem, I would be embarrassed to seek professional help	2.20	1.49	1.14	3.23	0.50	0.40
8. I could not afford to see a therapist even if I wanted to	3.88	1.81	-0.28	1.70	0.32	0.60
9. No matter what I do, it will not change the problems I have	2.37	1.45	0.93	2.97	0.43	0.36
10. If I went to a therapist, I might find out I was crazy	2.29	1.55	1.03	2.91	0.40	0.49
11. I think I should work out my own problems	3.60	1.52	-0.03	2.08	0.44	0.48

Notes. Skew. : Skewness; Kur. : Kurtosis; Item-test cor.: Item-test correlation; Stand. factor loadings: Standardized factor loadings.

Table 3. Correlation between BASH-B subscales with current mental health treatment and help-seeking intention ($n=1536$).

	Autonomy	Fears
Current mental health treatment	−0.11*	−0.18*
GHSQ-V stress	−0.26*	−0.18*
GHSQ-V anxiety	−0.24*	−0.24*
GHSQ-V depression	−0.24*	−0.28*
GHSQ-V suicidal ideation	−0.22*	−0.31*
GHSQ-V alcohol	−0.20*	−0.27*
GHSQ-V psychosis	−0.16*	−0.26*

* $p < 0.001$.

no = 4.1, $p < 0.001$) and the Fears subscale (M yes = 2.5 vs M no = 2.8, $p < 0.001$).

Sociodemographic differences in barriers to help-seeking

A large percentage of the respondents (82.6%; $n=1246$) screened positive for depression, generalized anxiety, and/or problematic substance use, of whom 66.6% ($n=826$) were not in current treatment. The sociodemographic characteristics among students with mental health problems in treatment versus those not in treatment are shown in Table 1. Table 4 shows the sociodemographic differences for both subscales of the BASH-B among students with positive screening who were not in treatment. For the total sample, higher scores were observed in the Autonomy subscale than in the Fears subscale. On Autonomy, significantly higher scores were observed for cisgender men compared to cisgender women and trans, non-binary, or other gender students ($p \leq 0.007$) and for students not belonging to an indigenous ethnic group relative to those of indigenous ethnicity ($p=0.042$). On the Fears subscale, significantly higher scores were observed in trans, non-binary, or other gender students, non-heterosexual students, students of middle and low socioeconomic status, those who had lived in rural settings, and those with public, other, or no health insurance, with respect to cisgender men, heterosexuals, students of high socioeconomic status, those who lived in urban settings, and those with private health insurance, respectively ($p \leq 0.038$).

Since the Fears subscale is composed of different types of barriers, sociodemographic differences were examined by item (Supplementary Table 1). Statistically significant differences were observed for all sociodemographic variables in one or more items, except for the variable Region of origin. For items 1 and 11, which make up the Autonomy subscale, significantly lower scores were also observed for trans,

Table 4. Sociodemographic differences in BASH-B subscales in those with mental health problems and not in treatment ($n=826$).

	Autonomy		Fears	
	M (SE)	p	M (SE)	p
Total	4.1 (0.0)		3.0 (0.0)	
Age				
18–19 years ^a	4.2 (0.1)		3.0 (0.0)	
20–21 years	4.0 (0.1)	0.134	3.0 (0.1)	0.607
22–29 years	3.9 (0.2)	0.124	3.0 (0.1)	0.824
Gender identity				
Cisgender man ^a	4.3 (0.1)		2.9 (0.1)	
Cisgender woman	4.0 (0.1)	0.007	3.0 (0.0)	0.117
Trans, non-binary or other	3.8 (0.1)	0.001	3.2 (0.1)	0.012
Sexual Orientation				
Heterosexual ^a	4.1 (0.1)		2.8 (0.0)	
Other	4.1 (0.1)	0.497	3.1 (0.0)	< 0.001
Socioeconomic status				
High ^a	4.1 (0.1)		2.7 (0.1)	
Medium	4.1 (0.1)	0.483	3.1 (0.0)	< 0.001
Low	4.2 (0.1)	0.452	3.1 (0.1)	< 0.001
Region of residency of family				
Metropolitan ^a	4.1 (0.1)		3.0 (0.0)	
Other	4.1 (0.1)	0.926	3.1 (0.1)	0.165
Home environment				
Urban ^a	4.1 (0.1)		3.0 (0.0)	
Rural	4.1 (0.1)	0.607	3.1 (0.1)	0.038
Nationality				
Chilean ^a	4.1 (0.0)		3.0 (0.0)	
Other	3.8 (0.3)	0.224	3.2 (0.2)	0.268
Indigenous status				
No ^a	4.1 (0.0)		3.0 (0.0)	
Yes	3.9 (0.1)	0.042	2.9 (0.1)	0.257
Health insurance				
Private ^a	4.1 (0.1)		2.7 (0.1)	
Public	4.1 (0.1)	0.603	3.1 (0.0)	< 0.001
Other/none	4.2 (0.2)	0.654	3.2 (0.1)	0.002

Notes.

^aReference categories. SE: standard error.

non-binary, or other gender students (items 1 and 11), cisgender women, and students of indigenous ethnicity (item 11).

Regarding the items that compose the Fears subscale, multiple statistically significant differences were observed by gender, sexual orientation, ethnicity status, socioeconomic status, type of health insurance, and rurality. Compared to cisgender men, cisgender women scored significantly higher for concerns about confidentiality (item 3), understanding of youth problems (item 6), and economic resources (item 8), while trans, non-binary, or other gender students scored higher for concerns about understanding youth problems (item 6), economic resources (item 8), and fear that they might realize they are crazy (item 10). Compared to heterosexuals, non-heterosexual students scored higher for concerns about confidentiality (item 3), doing or saying something they did not want to (item 4), understanding the problems of young people (item 6), economic resources (item 8), nothing will change the problems they have (item 9), and fear that they might realize they are crazy (item 10). For their part, students of indigenous ethnicity

scored lower for worries about time (item 2) and doing or saying something they did not want to (item 4) and higher for economic resources (item 8). Regarding comparisons by socioeconomic status, higher concerns about confidentiality (item 3), family knowing about professional help (item 5), understanding the youth's problems (item 6), financial resources (item 8), and fear that they might realize they are crazy (item 10) were observed in students of lower socioeconomic status. Differences by socioeconomic status are similar to differences by private versus public, other, or no health insurance. Students who lived in rural areas before entering university scored higher than those who live in urban areas for doing or saying something they did not want to (item 4) and embarrassment (item 7).

Discussion

The findings advanced in this article show that the BASH-B scale has adequate psychometric properties when used with university students and that barriers to professional mental health help-seeking in students with untreated mental health problems differ by gender, indigenous status, sexual orientation, socioeconomic status, rurality, and health insurance. These results substantiate the relevance of using instruments such as the BASH-B to examine barriers to help-seeking in university students while also supporting the literature that indicates that certain groups of students experience more barriers to help-seeking in mental health (Crockett et al., 2024; Horwitz et al., 2020; Lipson et al., 2018).

The results support the two-factor structure for the BASH-B and show adequate internal consistencies for the Fears subscale, but poor internal consistencies for the Autonomy subscale, which could be related to the fact that this subscale is composed of only two items. In terms of validity evidence based on the relationship with other measures, as expected, it was observed that greater barriers to help-seeking were associated with participants not currently being in treatment and having less intentions to seek help. Though weak, these associations are consistent with those reported in other studies (Kuhl et al., 1997; Wilson & Deane, 2012). The BASH-B is a brief instrument that has been used in other countries with young populations (Cartmill et al., 2009; McAndrew et al., 2022; Wilson & Deane, 2012), and the results of this study suggest that it can be a useful tool for examining barriers to mental health help-seeking in the university population despite its limitations.

Several studies have suggested the presence of sociodemographic differences in barriers to mental health help-seeking (Crockett et al., 2024; Horwitz et al., 2020; Lipson et al., 2018; Samlan et al., 2021), which is consistent with the findings of this study. For example, in line with prior research (Samlan et al., 2021; Wilson & Deane, 2012), cisgender men scored higher than cisgender women for the autonomy barrier, which could be related to cultural aspects associated with masculinity, where help-seeking may be seen as a sign of weakness (Lynch et al., 2018). In contrast, students who identified with indigenous ethnicities scored lower in the Autonomy subscale. This result could reflect the importance that some cultures attach to peer, family, and community support in adapting to potentially stressful contexts such as the university environment (Álvarez Díaz & Storey Meza, 2021). These sociodemographic differences could reflect the influence of sociocultural aspects on barriers to professional help-seeking, and how specific groups of students value differently the reasons for not seeking professional help.

In addition, it is worth noting that trans, non-binary, or other gender students, compared to cisgender men, scored lower in the Autonomy subscale and higher in the Fears subscale. In general, differences in barriers to mental health help-seeking in trans, non-binary, or other gender students have attracted limited research attention, with some studies reporting differences in economic barriers and concerns about the cultural sensitivity of services (Horwitz et al., 2020), while others have found no differences compared to cisgender students (Crockett et al., 2024). In this context, it is important to continue to investigate potential barriers that different groups of students might face, particularly groups of greater concern due to their high levels of mental health problems, such as trans, non-binary, or other gender students (Lipson et al., 2019), since research findings can inform efforts to promote the use of mental health services.

Although the BASH-B was grouped into two factors, the results of this study show that it may be useful to examine the items separately because the Fears subscale encompasses different types of barriers. For example, non-heterosexual students scored higher than heterosexual students for six barriers of the Fears subscale, which is consistent with other studies showing that non-heterosexual students report more barriers to help-seeking (Dunbar et al., 2017); also, students of middle and lower socioeconomic status scored higher for five barriers of the

Fears subscale, with particularly high scores for the economic barrier. The statistically significant differences found by socioeconomic status were also observed in association with type of health insurance, which is to be expected because people of higher socioeconomic status in Chile are more likely to get private coverage.

The most frequent barriers observed in this study coincide with those reported in other studies, pointing to self-reliance as one of the main barriers that keep university students from seeking help (Crockett et al., 2024; Ebert et al., 2019). Although autonomy is valued in individualistic Western cultures, studies have observed lower positive attitudes towards help-seeking in people from Eastern versus Western cultures (Chan et al., 2019; Mojaverian et al., 2012). This could account for the possible influence of other factors on the relationship between autonomy and help-seeking. For example, some studies have observed that social support mediates the relationship between cultural values and professional help-seeking (Mojaverian et al., 2012) and the relationship between self-reliance and informal as well as professional help-seeking intentions (Ishikawa et al., 2023). Also, in line with another Chilean study (Crockett et al., 2024), the economic cost barrier also appears to be one of the most frequent, possibly due to the characteristics of the Chilean mental health system, which is marked by perceived difficulties in accessing public care and the high economic cost of private care (Crockett et al., 2022). The least frequent barrier was feeling ashamed to seek help, which suggest that help-seeking could be less stigmatized among university students (Eisenberg et al., 2012), which needs further investigation.

Among the limitations of this study, it is worth noting that a convenience sample was used. This may have introduced some selection bias because, for example, the students who decided to participate may have had more intense symptoms or a history of mental health issues. Additionally, the sample was selected from a public university in the Metropolitan Region, potentially rendering the results non-representative of institutions with other characteristics. Although the screening instruments used to identify participants with mental health problems in this study have been validated in similar populations, their results should not be equated to a diagnosis. Lastly, the Autonomy scale had low reliability coefficients, which may be because it is composed of only 2 items (Eisinga et al., 2013).

This study contributes to the literature by exploring the validity of a brief instrument known to be useful in measuring barriers to professional mental

health help-seeking in university students. Based on its properties, its use is recommended for research or to collect local data to generate initiatives aimed at promoting the use of mental health services. In addition, this study provides evidence for the impact of sociodemographic variables on barriers to help-seeking, showing that barriers are distributed differently according to student characteristics. Consequently, those tasked with designing policies, interventions, and actions to improve access to mental health services should consider these differences. The most frequent barriers (resolving problems alone and economic resources) underscore the need to inform students of the importance of seeking professional help when symptoms are present and show that it is essential to facilitate access to free or low-cost mental health services. Future studies could examine the psychometric properties of the BASH-B in other populations, explore the relationship between self-reliance and professional help-seeking, particularly in men, as well as the meanings and experiences that different groups of students associate with barriers to seeking mental health help. Building on a clearer understanding of how sociodemographic differences affect these barriers, interventions could be designed to reduce gaps in access to services, promoting greater equity in care and responding more effectively to the needs of each group.

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Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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