Internationalization and Its Discontents: Help-Seeking Behaviors of Students in a Multicultural Environment Regarding Acculturative Stress and Depression

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Abstract: Stress and depression can be seen as the major obstacles for sustained education and attainment of foreign students, and in turn, the sustainability of an education system as a whole. However, the mainstream consideration following Berry's model on acculturation does not take into account whether students of the host countries are immune to these problems. This study aims to examine the prevalence and predictors of help-seeking behaviors among international and domestic students in a multicultural environment by employing ANOVA and polynomial regression. Some significant results from this study are: (1) Informal sources were the most prevalent sources of help-seeking among international and domestic students, while formal help-seeking was not popular; (2) international students were more likely to overcome emotional difficulties alone and seek help on the Internet than domestic students; (3) acculturative stress was a positive predictor of formal, informal, and miscellaneous help-seeking behaviors among international students and informal help-seeking behaviors or among domestic students; and (4) depression was negatively correlated with the willingness of international students to seek help from informal sources. The findings hint at the risk of acculturative stress faced by domestic students in a multicultural environment being overlooked and the lack of help-seeking sources for international students. The study also provides empirical evidence for policy-planners to design a sustainable education system better at supporting students dealing with depression and acculturative stress.

Keywords: sustainable education; internationalization; international university; higher education; help-seeking; acculturative stress; depression; international student; social connectedness; Japan

1. Introduction

1.1. Internationalization in Education and Its Discontents

As globalization is making the world more interconnected than ever, the exchange of knowledge and workforce, the two key driving factors of the world development, has increased both in quality and quantity. As a result, international student inbound and outbound have significantly increased. According to UNESCO, the number of international students worldwide has grown over 25% in

5 years, from 2012 to 2017 [1]. In Japan, the growth rate is even more impressive. From 2012 to 2017, the number of international students in Japan increased by 93.9%, from 137,756 to 267,042 students [2,3].

As living in a new environment is a double-edged experience [4], studying abroad could, on the one hand, provide students with good opportunities for personal and intellectual development, and on the other hand, might pose threats to their well-being, especially their mental health. Mental health problems were found to be more prevalent in the university population than the general population and non-student populations of the same age [5,6]. Mental health risks among international students are even more prominent than among domestic students. In one study done in Japan, depression is much more prevalent among international students (37.81%) than domestic students (29.85%); international students also suffer from a higher level of acculturative stress than domestic students [7]. The problems which arise in the process of acculturation for people who move overseas have been treated in Berry's model in 1983 and 1997 [8,9], however, whether people in the host countries are immune is not often raised in the mainstream discussion. In contrast, the trend of growing inbound and outbound students is likely to be popular even in emerging economies [10,11] since internationalization of education has been shown to revitalize the economy in some cases [12] and can be considered an on-the-spot-export product in certain countries [13,14]. That means the mental health risks posed by acculturation in times of growing internationalization for domestic students might be an important under-researched area. As a consequence, conducting a comparative study is essential for examining the effects of internationalization on education more holistically. In addition, since mitigating the risks of poor mental health among university students is crucial to policy-making, this study wishes to advance the literature and provide empirical evidence regarding help-seeking behaviors in both international and domestic students in international universities.

In next sub-sections, the literature review on help-seeking behaviors among international and domestic students is conducted to clarify the objectives of this study. Materials and methods being employed in this study are described in Section 2, while all findings from the statistical analysis are explained in Section 3. In the Discussion section, most important findings are highlighted and discussed on the basis of other theoretical frameworks and empirical results.

1.2. Help-Seeking Behavior among International and Domestic Students

Mental health issues among university students appear to grow in both prevalence and severity [5,15]. However, it was reported that many students with mental disorders do not receive appropriate treatment [6]. Depending on types of mental health problems, 37% to 84% of university students in a study conducted by Eisenberg, Golberstein, and Gollust reported not receiving any support services [16]. According to American College Health Association, only 24% of depressed college students received treatment [15]. This is understandable, considering the percentage of students seeking help across all types of psychiatric disorders is relatively low, with fewer than 25% of individuals suffering from a psychiatric disorder and having sought help in the year prior to the survey [17]. A study on university students in England indicated that 30% and 17% of students with mild psychological distress sought help and met counselor respectively, while 58% and 30% of students suffering severe psychological distress sought help and received counselling [18]. One study conducted at a university from Ireland showed that around 30% of students looked for help from professional sources; informal sources were more commonly used than formal sources [19].

Help-seeking rate is also not high among international students. Based on a survey of 172 international students from 75 countries, Dadfar and Friedlander showed that only 22% had sought help from professionals; of the 22%, 66.6% and 41.7% were willing to seek help from counselors/psychologists and psychiatrists respectively [20]. Around 65% of international samples in the study of Han and Pong expressed their willingness to seek professional help [21]. Another study on Turkish students in United States indicated that international students preferred to seek help from friends (50%) rather than from formal sources, such as psychologist (14%), counselor (11%), psychiatrist

(8%), and academic adviser (2%); interestingly, not seeking help from anyone (12%) was also an option among international students [22].

In Japan, college students are less likely to have positive attitudes toward formal help-seeking sources compared to informal sources [23,24]. The most common sources of support for Japanese college students were friends (60%) and siblings (40%), while the percentage of Japanese college students seeking help from professional sources was relatively low, at only 4.3%. Besides that, the number of students trying to solve mental health problems alone was relatively high, about 35% [25]. To the best of our knowledge, no research has compared how international and domestic students differ in their behavior regarding both formal and informal sources of help; most studies focus only on formal sources. Moreover, it appears that research on the prevalence of help-seeking intention among international and domestic students in Japan, a country with rapid internationalization of education [2,3], remains limited.

1.3. Predictors of Help-Seeking Behaviors

As theories of help-seeking behavior have not been unified into a single framework [26], this section will provide an overview of the theoretical background. The *Health Belief Model* takes an individualistic approach in explaining professional help-seeking behavior. According to this model, providing students with knowledge and changing their attitudes and beliefs regarding mental health would increase the number of students accessing to service [27]. This model has been supported by empirical evidence among domestic [28–30] and international students [20]. For example, Thomas, Caputi, and Wilson found that recognition of mental health problems and benefits of receiving treatment, and openness to treatment would influence the behavior of university students in seeking professional help [30]. A research by Dadfar and Friedlander on international students pointed out that Confidence/Appropriateness and Stigma/Privacy are strong predictors of help-seeking from professionals [20].

Similar to the *Health Belief Model*, the *Andersen Behavioral Model* also considers professional help-seeking behaviors at the personal level, albeit with a stronger emphasis on social and structural elements [31]. The model consists of three main factors determining health behavior: predisposing characteristics (e.g., demographic, social structure, and health beliefs,), enabling resources (e.g., health personnel and facilities availability, income, and health insurance) and need (e.g., perceived need). It has also received much support from various scientists in both studies on the populations of domestic students [24,32] and international students [33,34]. A meta-analysis of 5713 undergraduate and graduate students found that cultural background of individual students influenced their decision of seeking professional psychological help [32]. Acculturation has also been found to be positively predictive of help-seeking from professional sources, namely in the case of Mexican students in the United States [33].

Help-seeking sources do not consist solely of professionals; they might be informal sources (parents, friends, e.g.,). The essential roles of informal sources for help-seeking are highlighted in the *Network Episode Model* [26]. This idea of considering informal sources as other channels for help-seeking has been supported by many studies [19,25,33,35]. In particular, Goodwin et al. found that informal help-seeking sources were more popular among university students than formal help-seeking sources, and students availing of informal sources reported greater level of well-being [19]. In addition, a study on help-seeking behaviors among Japanese college students revealed that seeking help from informal sources were relatively prevalent and predicted by collective identity of Japanese students [25].

There are also several other help-seeking options that are necessary to mention, such as help-seeking on the Internet and self-help. It was recorded that 56% of people used the Internet as a source to find health related information [36] and the Internet was a useful source for easing mental health problems [37,38]. Gould et al., Ybarra, and Suman promoted the Internet as an essential source of help-seeking among university students [36,39]. On the other hand, a high number of

Japanese students trying to deal with mental health problems alone was recorded: 35% of students in study of Yeh et al. [25] and 65% of Japanese male students in the study of Chan and Hayashi [35].

1.4. Research Objectives

To the best of our knowledge, no comparative study on formal, informal and miscellaneous help-seeking behaviors among international and domestic students has been conducted. Moreover, it appears that there is scarcely any research on the correlation between depression, acculturative stress, social connectedness, and formal/informal help-seeking behaviors among international and domestic students. Thus, this study aims to fulfill two objectives:

1   Examine and compare the help-seeking behaviors of domestic and international students in a Japanese international university.
2   Evaluate the association of depression, social connectedness, and acculturative stress on help-seeking behaviors among international and domestic students in Japan.

2. Materials and Methods

2.1. Study Site

In this study, Ritsumeikan Asia Pacific University (APU) was selected as the study site for several reasons. The university, located in Oita Prefecture, is Japan's first truly international university and currently the most international university in Japan [40]. It was established in April 2000 with an objective to become a campus with equal proportions of international and domestic students. As of 2017, 50.1% of total students in APU were international students that originated from 86 countries and regions [41]. Besides the high percentage of international students, 50% of the faculty members in APU are international, which makes APU the university with the greatest share of international faculty in Japan [40]. Overall, APU's high internationality makes it a very appropriate study site for understanding the difference between help-seeking behaviors of domestic students and international students in Japan.

2.2. Participants

Participants of the current investigation were 67 domestic (25%) and 201 (75%) international students (see Table 1). There was a substantial difference in gender of the respondents: the percentage of females (63.43%) was two times higher than the percentage of males (36.57%). Most domestic respondents (53.73%) reported having had 2 to 3 years of stay since they first came to the international university.

English proficiency was much higher in international students (76.12% could speak English fluently) than domestic students (19.40% could speak English fluently). As for Japanese proficiency, international respondents possessed relatively low Japanese level with only 12.44% able to speak Japanese fluently. On average, nearly 60% of both domestic and international respondents reported not having an intimate partner (e.g., girlfriend, boyfriend, wife, or husband). Fewer domestic students (23.88%) considered themselves religious than international students (37.31%).

Among 201 international students, 61% of international students were from South East Asia (Vietnam, Indonesia, Thailand, and Malaysia), 25% were from East Asia (China, Korea, and Taiwan), 9% were from South Asia, and 5% from other regions.

Table 1. Socio-demographic characteristics.

	Total Students	Domestic Students	International Students
	N = 268 **Weighted %**	**N = 67** **Weighted %**	**N = 201** **Weighted %**
Gender			
Male	36.57%	37.31%	36.32%
Female	63.43%	62.69%	63.68%
Age			
17–19	33.96%	28.36%	35.82%
20–22	48.13%	62.69%	43.28%
>22	17.91%	8.96%	20.90%
Length of stay			
1 year	42.91%	29.85%	47.26%
2–3 years	45.15%	53.73%	42.29%
>3 years	11.94%	16.42%	10.45%
English proficiency			
Low	8.21%	22.39%	3.48%
Average	29.85%	58.21%	20.40%
High	61.94%	19.40%	76.12%
Japanese proficiency			
Low	34.33%	1.49%	45.27%
Average	33.21%	5.97%	42.29%
High	32.46%	92.54%	12.44%
Intimate partner			
No	58.58%	59.70%	58.21%
Yes	38.43%	40.30%	37.81%
Religion			
No	66.04%	76.12%	62.69%
Yes	33.96%	23.88%	37.31%

2.3. Instruments

The respondents were asked to complete a Demographic questionnaire, the Patient Health Questionnaire-9 (PHQ-9) [42], the Social Connectedness Scale (SCS) [43], the modified Acculturative Stress Scale for International Students (ASSIS) [44], and the General Help Seeking Questionnaire [45]. Among these measurements, the measuring instruments of depression (PHQ-9), acculturative stress (ASSIS), and Social Connectedness (SCS) were similar to previous study [7].

2.3.1. Socio-Demographic Questionnaire

In the Demographic questionnaire, participants were asked to provide information about their age, gender, country of origin, educational level, length of stay (length of stay in Japan for international students and length of stay in APU for domestic students), English proficiency, Japanese proficiency, intimate partner, and religion. Self-reported language proficiency was rated on a 5-point Likert scale from 1 (beginner) to 5 (native), while information regarding of intimate partner and religion were asked using a yes-no type question.

2.3.2. Measure of Help-Seeking Behaviors

Currently, there is no universally accepted measure of help-seeking behavior. The two most widely used tools to measure help-seeking in adolescents are Barriers to Adolescent Seeking Help questionnaire (BASH) [46] and the General Help Seeking Questionnaire (GHSQ) [45]. In this study, GHSQ was selected because it has been employed in many studies of help-seeking behaviors in both college students [19,47,48] and adolescents [49–51]. Moreover, the GHSQ covers not only formal

sources of help-seeking but also informal and miscellaneous sources of help-seeking. The content of the questionnaire can also be easily modified depending on the target of the study.

The GHSQ is a flexible tool that can be used to assess intentions of help-seeking from a wide range of sources (both formal and informal). The questionnaire consists of two subscales covering two types of problem: personal-emotional problems and suicidal ideation problems. In this study, we only used the subscale measuring the help-seeking intention when students had personal-emotional problems.

As adolescents have a tendency to seek help from Internet during tough time [39,52], the Internet was added in the GHSQ as a potential help-seeking source of students. Thus, the modified-GHSQ consisted of 11 potential sources which were divided in to 3 groups: formal sources, informal sources, and miscellaneous. The formal sources included metal health professionals and doctors [53,54]. Informal sources included parents, intimate partners, friends, family relatives, and religious leaders [53]. The remaining sources were listed in the miscellaneous group because some of them could be both formal and informal sources and their characteristics do not show a clear pattern.

Each item in GHSQ was rated on a Likert scale, which ranged from 1 (extremely unlikely) to 7 (extremely likely). In order to examine the prevalence of help-seeking behavior among students, students who reported from 5 (likely) to 7 (extremely likely) in any source were considered as seeking help from that source. An individual was considered to be predominantly seeking help from a certain group of sources (formal, informal, or miscellaneous) depending on the average score of all sources belonging to said group. For example, if the scores of seeking help from intimate partner, parent, friend, relative, and religious leader, averaged to equal or more than 5, the individual would be seen as likely to seek help from informal sources. The similar logic applied to formal and miscellaneous sources. Eventually, seeking help and not seeking help from a source were coded as 1 and 0 respectively.

2.3.3. Measure of Depression

The level of depression was measured using the Patient Health Questionnaire (PHQ-9) [42] for two reasons. First, PHQ-9 has been used to diagnose depression and estimate depressive severity in various populations including university students and international students [16,55–57]. Second, the questionnaire has been used in studies of university students in some countries around the world, such as United States, Japan, China, New Zealand, Ethiopia, and Trinidad and Tobago [7,56,58–60].

PHQ-9 is a nine-item self-assessed questionnaire based on the Diagnostic and Statistical Manual for Mental Disorders-4th edition (DSM-IV) criteria for diagnosis of depression. Besides diagnosing major depressive disorder and other depressive disorders, the questionnaire also estimates the severity of depression by inquiring on the frequency of various symptoms over the past two weeks. The frequency is scored from 0 (not at all) to 3 (nearly every day). Sample items from PHQ-9 are 'Little interest or pleasure in doing things' and 'feeling down, depressed, or hopeless'. The internal consistency of the questionnaire in the current study was acceptable at 0.81 and 0.80 for international and domestic student samples respectively.

2.3.4. Measure of Social Connectedness

To measure the level of social connectedness in both domestic and international students, we employed the Social Connectedness Scale (SCS) [43] as have done other studies [61–63]. The SCS is a self-administered questionnaire examining individual's emotional distance or connectedness between itself and other people based on Self Psychology theory [43]. The questionnaire consists of eight questions, which is rated on a 6-point Likert scale ranging from 1 (Strongly disagree) to 6 (Strongly agree). 'I feel disconnected from the world around me' is a sample item from SCS. The result in the current study was modified using Microsoft Excel so that the higher the score, the higher the level of social connectedness. In the current study, internal consistency was at 0.95 for both international and domestic students, which was even higher than Cronbach's alpha in other studies [62–66].

2.3.5. Measure of Acculturative Stress

The Acculturative Stress Scale for International Students (ASSIS) [44] was selected and modified as a measure of acculturative stress in the current investigation. ASSIS, a 36-item questionnaire about acculturative stress of international students, consists of 7 subscales: Perceived discrimination (eight items), Homesickness (four items), Perceived hatred (5 items), Fear (4 items), Cultural shock (3 items), Guilt (2 items), and Miscellaneous (10 items). Each item was rated based on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total acculturative stress is the sum of 36 items. The higher the total score, the greater acculturative stress students possess.

To keep the ASSIS appropriate with the study site, some modifications were made. As our study site was an English-speaking campus in a Japanese-speaking country, we added 'I feel nervous to communicate in Japanese' based on the item 'I feel nervous to communicate in English'. Moreover, because SCS already covered factors related to social connectedness, we omitted the item 'I feel intimidated to participate in social activities' to keep the score from 36 to 180 like the original version.

The ASSIS has been widely used in many studies of acculturation in international students [64,67,68]. The internal consistencies in those studies was from 0.92 to 0.95. Compared to other studies, internal consistencies of the ASSIS for both domestic and international students were relatively higher at 0.95.

2.4. Procedure

We used Google Form as the tool for data collection due to its simple management and easy accessibility. After designing, the questionnaire was sent to the Ethical Committee Board of APU for internal review. The link to the questionnaire was later distributed in several classes through the University's internal course management system and Vietnamese community group in late 2018. A 5 min presentation was done to explain the purpose, contents, and confidentiality of the questionnaire. Besides that, we also noted that filling the questionnaire was voluntary, and encouraged students to answer truthfully. The response rate was 40.05% (268/669). Some late responses were also recorded.

2.5. Methodology

There were two stages in this analysis. In the first stage, the help-seeking behaviors among domestic and international students were not only visually compared through graphs and tables, but also examined using one-way ANOVA test. In the second stage, the determinants of help-seeking behaviors among domestic and international students were examined using the polynomial regression analysis.

Raw data was downloaded from Google Form, edited in Microsoft Excel and stored as CSV file. Then, STATA statistical software (version 15.1) was used to run the regression analysis. Before running the multiple regression analysis, correlations among all variables were tested to avoid multicollinearity. Moreover, multiple regression model also comprised Robust analysis to exclude outliers [69]. In regression analysis, *p*-value shows whether independent variables are statistically significant or not. It is conventional to consider variables with *p*-value < 0.05 to be statistically significant [70].

2.5.1. Dependent Variables

Dependent variables in the multiple regression model include both the 11-individual help-seeking sources and the three groups of help-seeking sources (see Table 2). First, each help-seeking group was used as dependent variable to examine general associations between independent variables and three major help-seeking groups. The score of help-seeking group was measured by taking the average of all help-seeking sources within that group. After using help-seeking groups as dependent

variables, help-seeking sources in each group were also employed as dependent variables for finer statistical analysis.

Table 2. Dependent variables.

Group		Source		Description
Name	**Variable**	**Name**	**Variable**	
Formal	*"Formal"*	Mental health professionals	*"Pro"*	The likeliness to seek help from psychologist, social worker, counsellor, e.g., from 1 to 7
		Doctors	*"Doctor"*	The likeliness to seek help from doctor, general practitioner (GP), e.g., from 1 to 7
Informal	*"Informal"*	Intimate partner	*"Partner"*	The likeliness to seek help from girlfriend, boyfriend, husband, wife, e.g., from 1 to 7
		Friends	*"Friend"*	The likeliness to seek help from friends from 1 to 7
		Parents	*"Parent"*	The likeliness to seek help from parents from 1 to 7
		Family relatives	*"Relative"*	The likeliness to seek help from family members and other relatives from 1 to 7
		Religious leaders	*"Religion"*	The likeliness to seek help from Priest, Rabbi, Chaplain, e.g., from 1 to 7
Miscellaneous	*"Miscell"*	Phone helpline	*"Phone"*	The likeliness to seek help from helpline, e.g., from 1 to 7
		Internet	*"Internet"*	The likeliness to seek help from website, social media, e.g., from 1 to 7
		Alone	*"Alone"*	The likeliness to seek help from solving things alone from 1 to 7
		Other sources	*"Other"*	The likeliness to seek help from other sources not listed in the questionnaire from 1 to 7

2.5.2. Independent Variables

There was a total of 10 independent variables measured by four different methods: demographic questionnaire, PHQ-9, SCS, and ASSIS (see Table 3). Three of the independent variables (gender, intimate partner, and religion) were recorded under nominal scale, whereas the remaining independent variable's type was ordinal data.

Table 3. Independent variables. PHQ-9: Patient Health Questionnaire-9; SCS: Social Connectedness Scale; ASSIS: Acculturative Stress Scale for International Students.

Measure	Independent Variables		Type of Data	Description
	Name	**Code**		
Demographic questionnaire	Gender	*"Gender"*	Nominal	0 (male) and 1 (female)
	Age	*"Age"*	Ordinal	Age of respondents
	Length of stay	*"Stay"*	Ordinal	Length of stay from the time of change
	Japanese proficiency	*"Japanese"*	Ordinal	From 1 (beginner) to 5 (native)
	English proficiency	*"English"*	Ordinal	From 1 (beginner) to 5 (native)
	Intimate partner	*"InPartner"*	Nominal	0 (No) and 1 (Yes)
	Religion	*"InReligion"*	Nominal	0 (No) and 1 (Yes)
PHQ-9	Depression severity	*"Depression"*	Ordinal	Depression scores from 0 to 27
SCS	Social connectedness	*"SoConnect"*	Ordinal	Social connectedness scores from 8 to 48
ASSIS	Acculturative stress	*"AccStress"*	Ordinal	Acculturative stress scores from 36 to 180

3. Results

3.1. Help-Seeking Behaviors

Table 4 shows the difference of the mean scores and standard deviation (SD) of all variables between domestic and international students. One-way ANOVA was also used to examine the significant differences in socio-demographic characteristics, the main predictors (depression, acculturative stress and social connectedness), and help-seeking sources between two groups of students.

Within socio-demographic characteristics, the differences in English and Japanese proficiencies between international students and domestic students were found to be statistically significant at *p*-value < 0.001. To elaborate, international students seemed to speak English more fluently than domestic students, and vice versa for Japanese proficiency. Additionally, international students were also more likely to consider themselves religious than domestic students (0.373 > 0.238, *p*-value < 0.05). As for the main predictors, only the level of acculturative stress was statistically significant at *p*-value < 0.001, which means that international students were more likely to possess higher acculturative stress than domestic students (75.562 > 62.835).

Table 4. Sample characteristics and group differences between international and domestic students.

Socio-Demographic Characteristics	International Students (N = 201)		Domestic Students (N = 67)		*p*-Value
	Mean	**SD**	**Mean**	**SD**	
Gender	0.636	0.482	0.626	0.487	0.884
Age	21.029	3.033	20.402	1.661	0.108
Length of stay	2.064	1.375	2.402	1.142	0.070
English proficiency	3.895	0.730	2.910	0.883	0.000 ***
Japanese proficiency	2.522	0.911	4.820	0.601	0.000 ***
Intimate partner	0.393	0.489	0.402	0.494	0.894
Religion	0.373	0.484	0.238	0.429	0.044 *
Main predictors					
Depression	8.044	4.904	8.611	5.116	0.4181
Social Connectedness	37.417	9.131	37.641	9.603	0.863
Acculturative stress	75.562	22.555	62.835	20.236	0.0001 ***
Help-seeking sources					
Formal sources	0.179	0.384	0.179	0.386	1.000
Professionals	0.233	0.424	0.208	0.409	0.675
Doctors	0.174	0.380	0.164	0.373	0.852
Informal sources	0.348	0.477	0.432	0.499	0.215
Partner	0.532	0.500	0.567	0.499	0.621
Friends	0.442	0.497	0.582	0.496	0.048 *
Parents	0.462	0.499	0.656	0.478	0.005 **
Relatives	0.243	0.430	0.253	0.438	0.870
Religion leaders	0.074	0.263	0.059	0.238	0.6815
Miscellaneous sources	0.094	0.293	0.044	0.208	0.200
Phone helpline	0.104	0.306	0.134	0.343	0.504
Alone	0.273	0.446	0.149	0.359	0.039 *
Internet	0.198	0.400	0.149	0.359	0.375
Others	0.094	0.293	0.029	0.171	0.088

*, **, *** are statistically significant at 0.05, 0.01, and 0.001, respectively.

Formal help-seeking sources. There was no statistically significant difference between international and domestic students in formal help-seeking behaviors. Even though the percentage of international students looking to mental health professionals and doctors for emotional help was higher than that of domestic students, the difference was negligible (see Figure 1). Within formal sources, mental health professionals, such as psychologists, social workers, and counsellors, seemed to be a more popular emotional help-seeking source than doctors and GPs among both international students (23.38% > 17.41%) and domestic students (20.9% > 16.42%).

Informal help-seeking sources. The percentages of international and domestic students seeking emotional help from informal sources were relatively high (see Figure 2). The three most common sources of help-seeking among domestic students were parents, friends, and intimate partner with 65.67%, 58.21%, and 56.72% respectively, whereas top three help-seeking sources among international students were partner, parents, and friends with 53.23%, 46.27%, and 44.28% respectively. The prevalence of students looking for help from intimate partner, friends, and parents, was

dramatically higher than other two informal sources (family relatives and religious leaders). Overall, a higher proportion of domestic students (43.28%) sought emotional help from informal sources than that of international students (34.83%). Although there was no statistically significant difference in terms of informal sources between international and domestic students, international and domestic students were significantly different in terms of seeking help from friends (*p*-value < 0.05) and parent (*p*-value < 0.01).

	Professionals	Doctors	Formal Sources
International Students	23.38	17.41	17.91
Domestic Students	20.90	16.42	17.91
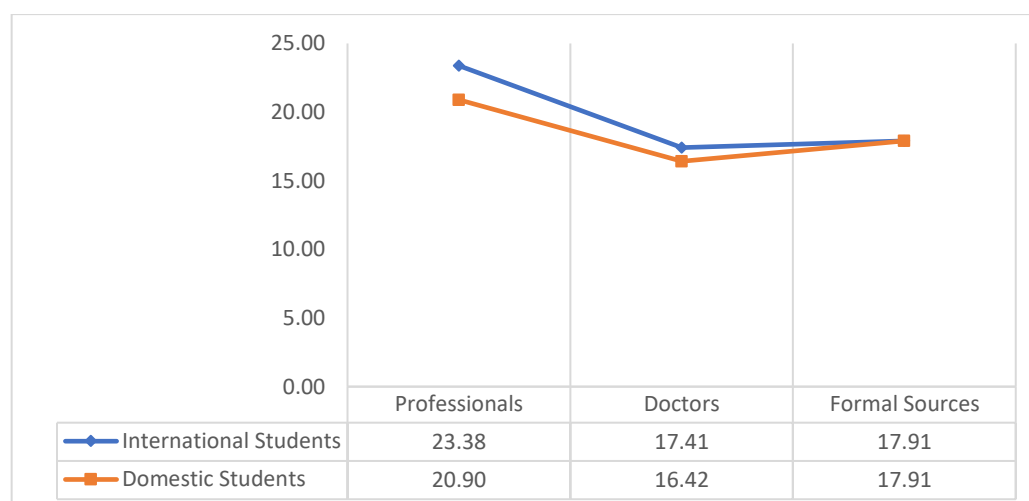
Figure 1. Prevalence of help-seeking from formal sources.

	Partner	Friend	Parents	Relatives	Religion leaders	Informal sources
International Students	53.23	44.28	46.27	24.38	7.46	34.83
Domestic Students	56.72	58.21	65.67	25.37	5.97	43.28
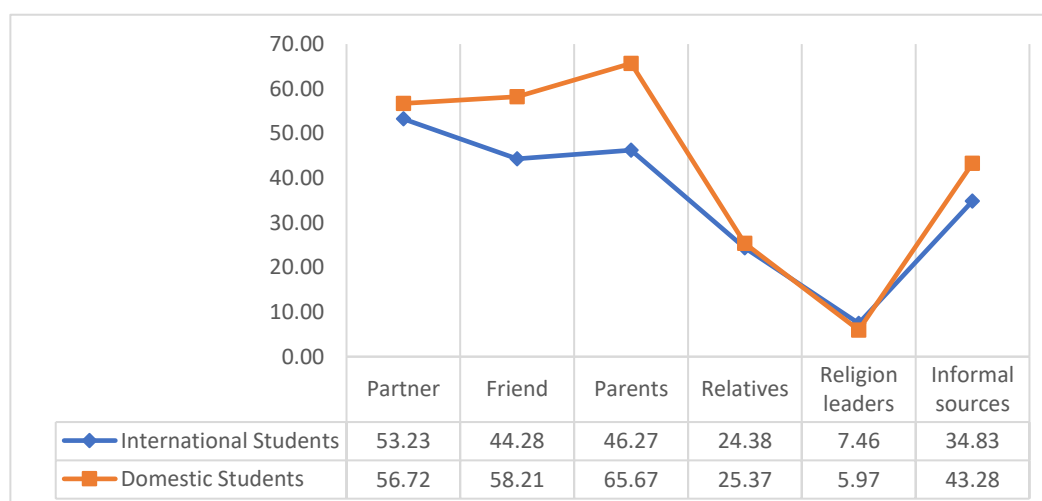
Figure 2. Prevalence of help-seeking from informal sources.

Miscellaneous help-seeking sources. International students (9.45%) were more willing to seek help from miscellaneous sources than domestic students (4.48%). Within the miscellaneous sources, dealing with emotional problems alone and looking for help on the Internet were the two most prevalent options in both international and domestic students (see Figure 3). The number of international students dealing with emotional problem alone, seeking help from the internet and other sources were greater than that of domestic students (27.36% > 14.93%, 17.41% > 14.93%, and 9.45% > 2.99% respectively). In particular, it was found that international and domestic students showed a significant difference in dealing with emotional problems alone (*p*-value < 0.05). On the other hand, international students were less likely to seek help from phone helpline than domestic students (10.45% < 13.43%).
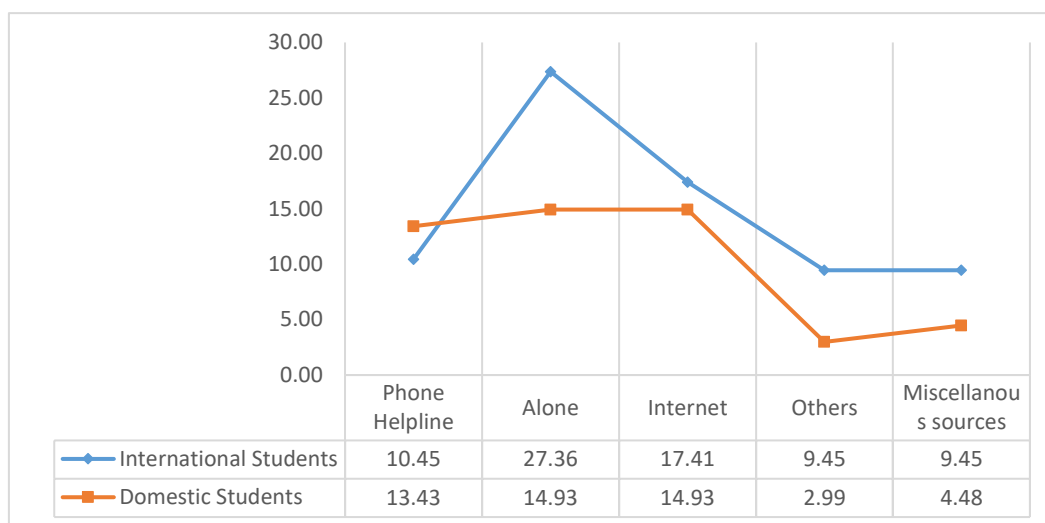
Figure 3. Prevalence of help-seeking from miscellaneous sources.

In general, informal sources were the most prevalent sources of help-seeking behaviors among both international and domestic students. International and domestic students appeared not to have any difference in seeking help from formal sources, but international students were more likely to find help from miscellaneous sources, excluding phone helpline, than domestic students.

3.2. Predictors of Help-Seeking Behaviors

A Pearson correlation test was conducted among independent variables in international and domestic student samples. The highest correlations' coefficients in international and domestic student samples were acculturative stress-social connectedness and length of stay-age respectively. All coefficients of correlations among domestic and international student samples were still in range from −0.7 to 0.7, so there was no multicollinearity [71,72].

The normality of all dependent variables in international and domestic student samples was tested using Skewness and Kurtosis normality test. In international student samples, four dependent variables ("*partner*", "*friend*", "*parent*", and "*informal*") were nonnormally distributed, while the Skewness and Kurtosis of six dependent variables in domestic student samples ("*formal*", "*professional*", "*partner*", "*friend*", "*relative*", and "*informal*") also did not indicate normal distribution. Therefore, all nonnormally distributed dependent variables were log-transformed to ensure the normality. Dependent variables being log-transformed were added "*log-*". For instance, "*log-partner*", "*log-friend*", and "*log-parent*". Transformed variables would be used in the rest of the analysis.

Formal help-seeking sources. The linear regression analysis on dependent variables of formal help-seeking sources was displayed in Table 5. Acculturative stress was a significant predictor of willingness to seek formal help among international students ($\beta = 0.017$, $R^2 = 0.09$, and p-value < 0.01), whereas there was no significant predictor of formal help-seeking behavior in domestic students. Among international students, acculturative stress was also predictive of seeking help from mental health professionals ($\beta = 0.02$, $R^2 = 0.1$, and p-value < 0.01) and doctors ($\beta = 0.014$, $R^2 = 0.06$, and p-value < 0.05) for emotional problems. In other words, international students with high acculturative stress were more willing to find help from formal sources, such as psychologist, counsellor, doctor, or general practitioner, during the stage of emotional difficulty.

Informal help-seeking sources. Table 6 shows the results of linear regression analysis on dependent variables of informal help-seeking sources in both international and domestic student samples. It was found that while depression level ($\beta = -0.023$, $R^2 = 0.12$, and p-value < 0.01) and acculturative stress ($\beta = 0.005$, $R^2 = 0.12$, and p-value < 0.01) may predict the informal help-seeking behavior among international students, level of social connectedness ($\beta = 0.024$, $R^2 = 0.22$, and p-value < 0.001)

and acculturative stress ($\beta = 0.007$, $R^2 = 0.22$, and p-value < 0.01) may predict domestic student's behavior of seeking informal help. In finer scale, international students with higher depression level would be less likely to seek help from parents ($\beta = -0.028$, $R^2 = 0.1$, and p-value < 0.05) and family relatives ($\beta = -0.066$, $R^2 = 0.09$, and p-value < 0.05), and international students possessing high level of acculturative stress might have more intention to seek help from parents ($\beta = 0.005$, $R^2 = 0.1$, and p-value < 0.05) and family relatives ($\beta = 0.018$, $R^2 = 0.09$, and p-value < 0.05). On the other hand, domestic students feeling more connected to surroundings were more likely to find help from their intimate partner ($\beta = 0.042$, $R^2 = 0.39$, and p-value < 0.001), friends ($\beta = 0.033$, $R^2 = 0.25$, and p-value < 0.001), and parents ($\beta = 0.085$, $R^2 = 0.18$, and p-value < 0.05), and high acculturative stress perceived domestic students might seek help from their intimate partner ($\beta = 0.011$, $R^2 = 0.39$, and p-value < 0.05).

Table 5. Predictors of formal help-seeking intentions among international university students.

International Students	Formal	*Formal* $= 0.017 \times$ ***AccStress*** **
	Professionals Doctors	*Pro* $= 0.02 \times$ ***AccStress*** ** *Doctor* $= 0.014 \times$ ***AccStress*** *
Domestic Students	Formal	*No significant results*
	Professionals Doctors	*No significant results* *No significant results*

*, **, *** are statistically significant at 0.05, 0.01, and 0.001, respectively.

Table 6. Predictors of informal help-seeking intentions among international university students.

International Students	Informal	$log - informal = -0.023 \times$ ***Depression*** ** $+ 0.005 \times$ ***AccStress*** **
	Intimate partner	$log - partner = \quad 0.169 \times$ ***English*** * $+0.376 \times$ ***Inpartner*** **
	Friends	$log - friend = 0.142 \times$ ***English*** *
	Parents	$log - parent = \quad -0.028 \times$ ***Depression*** * $+0.005 \times$ ***AccStress*** *
	Family relatives	*Relative* $= -0.066 \quad \times$ ***Depression*** * $+0.039 \times$ ***SoConnect*** * $+0.018 \times$ ***AccStress*** *
Domestic Students	Informal	$log - informal = 0.024 \times$ ***SoConnect*** *** $+ 0.007 \times$ ***AccStress*** **
	Intimate partner	$log - partner = \quad 0.228 \times$ ***English*** * $+0.395 \times$ ***Inpartner*** * $+0.042 \times$ ***SoConnect*** *** $+0.011 \times$ ***AccStress*** *
	Friends	$log - friend = \quad -0.116 \times$ ***Age*** ** $+0.033 \times$ ***SoConnect*** ***
	Parents	*parent* $= 1.158 \times$ ***Gender*** * $+ 0.085 \times$ ***SoConnect*** *
	Family relatives	$log - relative = -0.166 \times$ ***Age*** *

*, **, *** are statistically significant at 0.05, 0.01, and 0.001, respectively.

Even though English proficiency was not a significant predictor variable of informal help-seeking source in general, it could predict the behavior of seeking emotional help from friends ($\beta = 0.142$, $R^2 = 0.06$, and p-value < 0.05) and intimate partner ($\beta = 0.169$, $R^2 = 0.13$, and p-value < 0.05) in international students and from intimate partner ($\beta = 0.228$, $R^2 = 0.39$, and p-value < 0.05) in domestic students. International and domestic students reporting to have intimate partner were more likely to seek help from their intimate partner ($\beta = 0.376$, $R^2 = 0.13$, and p-value < 0.001 and $\beta = 0.395$, $R^2 = 0.39$, and p-value < 0.05 respectively). Age was also a significant predictor of behaviors of seeking help from friends and family relatives among domestic students. More specifically, older students tended not to find help from their friends ($\beta = -0.116$, $R^2 = 0.25$, and p-value < 0.01) and family relatives ($\beta = -0.016$, $R^2 = 0.14$, and p-value < 0.05) for emotional difficulties. Besides age, gender was also predictive of

seeking help from parents among domestic students. Male students were less likely to seek emotional help from their parents than female students ($\beta = 1.158$, $R^2 = 0.18$, and *p*-value < 0.05).

Miscellaneous help-seeking sources. In term of miscellaneous help-seeking behavior, depression ($\beta = 0.039$, $R^2 = 0.19$, and *p*-value < 0.05) and acculturative stress ($\beta = 0.014$, $R^2 = 0.19$, and *p*-value < 0.001) were positively correlated with willingness to seek help in international students, whereas there was no significant variable found among domestic students (see Table 7). Different from informal help-seeking behavior, depressed international students were more probable to find emotional help from miscellaneous source, especially sources that were not listed in the questionnaire ($\beta = 0.066$, $R^2 = 0.13$, and *p*-value < 0.05). Among international students, acculturative stress was a significant predictor of variety of miscellaneous help-seeking sources which were phone helpline ($\beta = 0.015$, $R^2 = 0.05$, and *p*-value < 0.01), Internet ($\beta = 0.019$, $R^2 = 0.1$, and *p*-value < 0.01), and others ($\beta = 0.013$, $R^2 = 0.13$, and *p*-value < 0.05).

Social connectedness was also an important predictor for several miscellaneous help-seeking behaviors in both international and domestic students. International students with high perceived social connectedness were expected not to try to overcome emotional difficulties alone ($\beta = -0.063$, $R^2 = 0.23$, and *p*-value < 0.01). Similarly, domestic students with high perceived social connectedness were also less likely to deal with emotional problems alone ($\beta = -0.091$, $R^2 = 0.41$, and *p*-value < 0.01) and seek help from the Internet ($\beta = -0.071$, $R^2 = 0.23$, and *p*-value < 0.05). Besides social connectedness, age was also a potential predictor of international and domestic student's intention to overcome emotional difficulties alone. Younger international students were more probable to overcome emotional difficulties alone ($\beta = -0.095$, $R^2 = 0.23$, and *p*-value < 0.05). On the contrary, the older domestic students were, the more they wanted to deal with the emotional problems alone ($\beta = 0.367$, $R^2 = 0.41$, and *p*-value < 0.01). Also, some other sources of help-seeking among domestic students not listed in the questionnaire was predicted by Japanese proficiency ($\beta = 0.533$, $R^2 = 0.25$, and *p*-value < 0.05).

Table 7. Predictors of miscellaneous help-seeking intentions among international university students.

	Miscellaneous	$Miscell = 0.039 \times \textbf{\textit{Depression}}^* + 0.014 \times \textbf{\textit{AccStress}}^{***}$
International Students	Phone helpline	$Phone = 0.015 \times \textbf{\textit{AccStress}}^{**}$
	Internet	$Internet = 0.019 \times \textbf{\textit{AccStress}}^{**}$
	Alone	$Alone = -0.095 \quad \times \textbf{\textit{Age}}^* \\ -0.063 \times \textbf{\textit{SoConnect}}^{**}$
	Others	$Other = 0.066 \times \quad \textbf{\textit{Depression}}^* \\ +0.013 \times \textbf{\textit{AccStress}}^*$
Domestic Students	Miscellaneous	*No significant variable*
	Phone helpline	*No significant variable*
	Internet	$Internet = -0.071 \times \textbf{\textit{SoConnect}}^*$
	Alone	$Alone = 0.367 \times \quad \textbf{\textit{Age}}^{**} \\ -0.091 \times \textbf{\textit{SoConnect}}^{**}$
	Others	$Other = 0.533 \times \textbf{\textit{Japanese}}^*$

*, **, *** are statistically significant at 0.05, 0.01, and 0.001, respectively

In general, the level of depression and acculturative stress were found to be important predictors of formal, informal, and miscellaneous help-seeking behavior among international students, while the feeling of being socially connected and the level of acculturative stress were predictive of informal help-seeking behavior among domestic students.

4. Discussion

By conducting a survey at an international university in Japan, this study is a primary study on the prevalence of help-seeking behaviors and predictors of help-seeking behaviors of students in a multicultural environment. The findings indicate greater prevalence of informal help-seeking behaviors than other types of help-seeking behavior in both international and domestic students.

Moreover, the results also show that depression and acculturative stress are important predictors of help-seeking behaviors among international students, while social connectedness and acculturative stress are predictive of informal help-seeking behaviors among domestic students. Based on the results, the study gives some suggestions for policy implication and improvement.

4.1. Help-Seeking Behaviors

According to this study, seeking help from informal sources was the most prevalent in both international and domestic students at 34.83% and 43.28% respectively, while the percentage of students seeking professional help (psychologist, social worker, or counsellor) was not high, at lower than 18%. The current result confirms the finding of Lindsey et al. that adolescents most often share emotional problems with their family [73]. In addition, the high proportions of international and domestic students seeking help from informal sources show consistency with another study on Japanese college students. Yeh et al. reported that 60% and 40% of students participating in their surveys were more likely to seek help from friends and siblings, respectively [25]. These findings support the *Network Episode Model*, which emphasizes the essentiality of informal sources, such as parents and friends for information, advices, expressive or emotional support, and so on, during times of emotional difficulty [26,74]. Another explanation for the different percentage between seeking help from informal and formal sources is that behaviors are shaped and influence by cultural roots [75]. Most of the participants in this study were from East and South East Asia, where professional mental help was under-developed, mental health was less taken care of, and mental illness treatment sometimes looked down as shameful activities [76]. Thus, Asian students are more willing to seek help from their interpersonal network rather than professional helps [16].

Another finding of this study is that domestic students were more likely to seek help from informal sources than international students, whereas solutions that did not need much interactions with other people, such as finding help from the Internet and dealing with the problem alone, were more preferable among international students than domestic students. It is more challenging for international students to find advices or emotional support from parents or friends [77], as they are studying abroad and many of their family and friends—those from high school, for example—are far away. Moreover, living in a different cultural environment also restrains the ability to make new friends of international students. Assuming support from friends and parents to be a type of mental health support, domestic students would be having more access to help-seeking service than international students. As a result, international students are less likely to seek help from parents and friends and more likely to self-help and seek help from the Internet than domestic students [16,26].

4.2. Predictors of Help-Seeking Behaviors

International students suffering more from acculturative stress are more willing to seek help from all sources: formal, informal, and even miscellaneous. However, among domestic students, the only statistically significant correlation was between acculturative stress and informal help-seeking behavior, especially seeking help from intimate partner (see Tables 5–7). The findings are consistent with other studies in that acculturation is a strong predictor of help-seeking from professional sources among international students [33,34]. Additionally, the current result not only supports the *Andersen Behavioral Model* that help-seeking behavior is influenced by social and structural matters [31], but also points out the importance of interpersonal network in mental health help-seeking [26].

The difference between international and domestic students might result from a lower awareness of acculturative stress among domestic students than international students. This result hints at the overlooked impacts of acculturation on domestic students in a multicultural environment. Besides the benefits of internationalization of education, the renunciation of cultural instinct among domestic students might be inevitable [78]. Internationalization creates a multicultural environment that students in host country can immerse in new cultures and benefit from them. Similar to students from overseas, they also experience an acculturation process [4,79]. During this process, domestic students

need to choose whether to integrate new values into their core values [75], reject contradicted values, or keep it in a compromising zone [80]. If the process does not occur smoothly, when it becomes violent, domestic students might face the risk of acculturative stress, or even depression. It is noteworthy that the risk from acculturation for international students has been widely discussed [7,81–84], but the impact of acculturation on students from host countries seems to be missing in the literature. In fact, globalization—namely, the increasing concentration of international students on campus—might have led to acculturation among domestic students without the need for said domestic students to leave home. This increases the risk of acculturative stress and related mental health issues, especially for domestic students who are unprepared in the face of changes and new types of peer pressure. The phenomenon is fairly new and has not been addressed in the extant literature, considering the fact that the framework laid by Berry [8,9] only treats acculturation for individuals travelling abroad. This eventually suggests the necessity for education policy-planners, when designing help-seeking facilities, guidance and counseling practices, to take into account this finding and reach out more to the domestic students.

The finding in this study also indicates the effect of being depressed on informal help-seeking behaviors among international students. Students reporting higher levels of depression were less willing to seek help from informal sources, especially parents and family relatives. This might have been a result of the fact that most of the participants came from developing countries in Asia, where stigma associated with mental health illness or depression is very severe [85–87]. Students might avoid sharing it with other people as they are afraid of the stigma and shame around having a mental health illness [88]. Another possible cause for this behavioral tendency is that international students might not want to make their family and relatives worry, in other words, students studying abroad are often seen as the pride of their parents or even their whole family, which might make it harder for them to share with people back home.

As expected, social connectedness was predictive of help-seeking behaviors in both international and domestic students. To elaborate, students with high social connectedness were more willing to seek help from informal sources and less willing to overcome emotional difficulties alone. This result confirms the assumption of Lee and Robbins that help-seeking behaviors might be influenced by social connectedness [66]. Moreover, students feeling more socially connected are less likely to deal with emotional difficulties alone, because they could receive support from parents and friends [89].

The impact of socio-demographic factors on help-seeking behaviors was also examined in this study. English proficiency, having an intimate partner, gender, and age were significant predictors of several informal and miscellaneous sources of help-seeking. English proficiency was found to have positive effect on intention to seek help from friends and intimate partner, since it helps students to communicate more coherently and effectively with their friends and intimate partner. Male domestic students were less likely to seek help from parents. Japanese males do not want to express their emotions [90] and are expected to act according to traditional constructs of masculinity [91], so whenever facing emotional difficulties Japanese males are less likely to seek help from their family, specially their parents.

Age was also a significant predictor of help-seeking behaviors in this research, but it showed the opposite effects on international and domestic student samples. Older international students were less willing to deal with emotional problems alone, while older domestic students were more preferable to overcome emotional difficulties alone and less likely to seek help from friends. The correlation between age and willingness for self-help among international students might be hard to explain due to the dynamic of cultural difference, but that among domestic students, it can be explained by Japanese culture. In Japan, a study has found the pressure of "growing up" makes teenagers want to stay alone and isolated and spend more time with their *keitai* (phone) [92]. This might explain the positive association between age and willingness to deal with emotional problems alone and the negative association between age and likeliness to seek help from friends, among domestic Japanese students.

5. Limitations and Recommendations

This study has several limitations. The sampling method of this study is not random sampling; thus, it cannot provide an equal selection chance for everyone, which might potentially lead to bias. Moreover, the mental health conditions were self-reported.

The results of this research should be used as a recommendation and should not be generalized for the following reasons: (1) the difference between the proportion of international and domestic students is large; (2) there are more males than females in the sample; (3) most of the surveyed international students originate from Asian countries. This, in turn, suggests a meta-analysis should be done later for confirmation and generalization such as the following work [93].

Except for depression and acculturative stress, other mental health conditions have not been included in the scope of this study. Further studies could take other types of mental health problems into account, such as anxiety, panic disorder, eating disorder, e.g., [94].

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