

# **Stigma Awareness as a Predictor for Mental Help-Seeking Intention: The Mediating Role of Stigma Endorsement Among Malaysian Undergraduates**

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## **Abstract**

It is imperative that individuals who experience mental health issues to get help as early as possible so that they are equipped with skills and resources to overcome the problems. However, the presence of public stigma towards people with mental health issues may hinder them from getting the much-needed intervention. Indeed, many past studies have demonstrated that public stigma acted as one of the barriers for help seeking among those with mental health issues. . Hence, ¶ this study aims to explore: (a) the influence of public stigma awareness on help-seeking intention; (b) the role of public stigma endorsement as a mediator between public stigma awareness and help-seeking intention; (c) the difference in stigma awareness, stigma endorsement; and (d) help-seeking intention between gender and between public and private university students. A total of 398 Malaysian undergraduates were recruited for this cross sectional study. Public stigma awareness was measured using Stigma Scale for Receiving Psychological Help, while public stigma endorsement was measured using Attribution Questionnaire. Help-seeking intention was measured using Mental Help Seeking Intention Scale. Results of the study that employed Pearson correlation analyses indicated a significant negative correlation between public stigma awareness and help-seeking intention, as well as between public stigma endorsement and help-seeking intention. Regression linear analysis revealed that public stigma awareness is a significant predictor for help-seeking intention. No significant differences were noted with regard to gender and types of university students. Sobel test showed that public stigma endorsement acts as a significant mediator in the influence of public stigma awareness on help-seeking intention. These findings can be applied in developing strategies to increase mental health services utilization among students, where emphasis should be placed on reducing public stigma endorsement. Further research is needed to investigate the role of public stigma awareness and public stigma endorsement on mental help-seeking behavior.

**Keywords:** Public Stigma, Self-Stigma, Stigma Awareness, Stigma Endorsement, Help-Seeking Intention, Mental Health.

### **Introduction**

Many individuals face mental health concerns during their time at university (Auerbach et al., 2018). This is further exacerbated by the shift to online classes due to Covid-19, where Malaysian undergraduate students experienced increased levels of depression, anxiety and stress (Wan Mohd Yunus et al., 2021). It is imperative for students to seek professional help when they need it, as poor mental health negatively affects one's learning process at university (Pua et al., 2015). Despite this fact, Malaysian undergraduate students are generally not prone to seek professional help for their mental health concerns (Salim, 2010). A common barrier for the utilisation of mental health services is stigma regarding mental health issues and services (Noble, Platt & Leppma, 2021; Ramli, Tilse & Wilson, 2017; Tay, Jaafar & Noor, 2019). This is especially true in the context of university students, where stigma is perceived as "only weak people seek mental health services" thus, leading the students to avoid attending psychological treatment even if they are in need for it (Kosyluk et al., 2021). Basically, these students do not want to be labelled with the negative stereotype that society holds towards those who seek mental health services, which subsequently resulted in a decreased in help-seeking intention.

Stigma towards mental health problems does exist in Malaysia and the general public is aware of it, as demonstrated in the qualitative study by Hassan et al. (2018). Respondents in the study stated that the Malaysian society is more likely to tolerate abnormal behaviour if it is associated with supernatural phenomenon such as a possession by the demon, compared to perceiving the abnormal behaviour as due to a mental disorder. Hence, individuals with mental disorders are usually referred to a religious practitioner, shaman or witch doctor for treatment, instead of a professional mental health practitioner (Roseliza-Murni, 2014). Research participants in Hassan et al's., (2018) study also generally agreed that the local community, especially the Malay ethnicity, often labels mental disorders with terms such as "*gila*" (crazy) or "*sakit jiwa*" (illness of the soul). Anxiety regarding social desirability and negative connotations associated with mental disorders are seen as barriers for patients to reveal their symptoms to mental health professionals. In addition, respondents believed that a typical Malaysian would perceive the potential risk of being shamed by their social network outweighs the benefits of a medical and psychological consultation (Hassan et al., 2018).

Stigma is generally divided into two categories: public stigma and self-stigma. Public stigma refers to the stereotype (cognitive component), prejudice (affective component) and discrimination (behavioural component) by the general public towards individuals who seek mental health services (Corrigan et al., 2003). Some stereotypes about individuals with mental disorders is that they are inherently dangerous (Corrigan & Watson, 2005) and responsible for the onset of their illness (Corrigan et al., 2005). Common prejudice includes fear, annoyance and lack of sympathy (Corrigan, 2004). Furthermore, individuals with mental disorders often face discrimination in employment, housing, healthcare and social interactions (Dickerson, Sommerville & Origoni, 2002). On the other hand, self-stigma reflects the internalisation and application of the said public stigma towards oneself, which may then lead individuals who attend the psychological treatment to feel ashamed and devalued (Fox et al., 2018). Self-stigma has also been shown to correlate negatively with seeking counselling services (Nizam & Nen, 2022) and has also been shown to correlate negatively with mental health and positive affect (Abidin, Subhi, Mohamad & Sarnon, 2017). Even though both types

of stigmas equally deserve further exploration, the present study chooses to focus on public stigma among Malaysian university students regardless of their utilisation of mental health services.

### **Public Stigma: Awareness and Endorsement**

When discussing public stigma, Corrigan and colleagues suggested that awareness of public stigma should be distinguished from the endorsement of it (Corrigan & Calabrese, 2005; Corrigan, Watson & Barr, 2006). For example, one might be aware that most people see individuals who seek mental health services as weak, but may personally disagree with the notion. Boerema et al. (2016) found that public stigma endorsement is a stronger and more significant predictor for help-seeking intention than public stigma awareness. Meanwhile, Bathje and Pryor (2011) found that public stigma endorsement acts as a significant mediator in the relationship between public stigma awareness and help-seeking intention. Thus, it can be said that public stigma awareness and public stigma endorsement are two distinct constructs that play different roles in hindering or assisting a person from seeking help.

Awareness refers to the general information and perception that people possess and exhibit regarding an issue that is personally relevant (Trevethan, 2017). Awareness is subjective and differs from individual to individual. It is a separate and distinct construct from knowledge that is objective and based on scientifically proven facts (Trevethan, 2017). According to Devine (1989), awareness occurs automatically in one's self and is shaped by past experiences. Public stigma awareness then refers to an individual's information and perception about stereotypes, prejudice and discrimination by the general public towards mental disorders (Corrigan, Watson & Barr, 2006). For example: "I realize that most people think individuals with mental disorders are dangerous."

Endorsement refers to one's personal belief that is congruent with the belief held by the general public (Devine, 1989). It exists when an individual accepts societal beliefs as true. According to Devine (1989), the development of endorsement in oneself is a process that occurs actively and is under personal control. Public stigma endorsement then refers to an individual's personal agreement with the stereotypes, prejudice and discrimination by the general public towards mental disorders (Corrigan, Watson & Barr, 2006). For example: "I realize that most people think individuals with mental disorders are dangerous. I personally agree with it and think that this is true."

Although the distinction between awareness and endorsement is emphasized in most social cognition research (Devine, 1989; Fiske, 1998), it is often overlooked in studies about public stigma towards mental disorders. Despite the rich literature on public stigma and help-seeking intention (Hassan et al., 2018; Hong, 2018; Ramli, Tilse & Wilson, 2017), most researchers did not break public stigma into its two components with different contextual meanings: awareness and endorsement. The differentiation between both of these public stigma constructs is important. To increase help-seeking intention, the public stigma construct that is most related to it should be emphasized in an intervention strategy (Nearchou et al., 2018). For example, an intervention that focuses on public stigma awareness might work on improving mental health literacy to overcome societal stereotype, prejudice and discrimination, as conducted in the *Like Minds Like Mine* campaign (Thorncroft et al., 2014). In contrast, an intervention that focuses on public stigma endorsement may introduce participants with individuals who seek mental health services to foster empathy, as conducted in the *This Is My Brave* program (Kosyluk et al., 2018).

**Help-Seeking Intention**

Intention refers to the extent to which an individual is willing to try to perform an action (Ajzen & Fishbein, 1980). According to Ajzen and Fishbein (1980), one's intention to carry out an action directly determines whether it will be executed in the future. The stronger the intention to perform a behaviour, the more likely the behaviour will be performed. Intention is also described as a mental state that represents one's commitment to carry out an action in the future (Bratman, 1987). It involves mental activities such as thinking and planning. Help-seeking intention then refers to a conscious plan to exert effort to communicate about a problem, emotional pain or psychological issue, where that communication is an attempt to obtain perceived support, advice or assistance that will reduce personal distress (White, Clough & Casey, 2018). Findings on help-seeking intention among Malaysian undergraduate students are inconsistent. Hong (2018) found that Malaysian undergraduate students show a positive attitude towards mental health services and are ready to seek professional help if needed. However, earlier study by Salim (2010) revealed that Malaysian undergraduate students' attitudes towards mental health services are generally negative. They are not inclined to meet a counsellor if they experienced high levels of stress, depression and anxiety. Salim (2010) also found a significant difference in attitudes between male and female students. However, the researcher did not explain which gender had a more positive attitude towards mental health services. In terms of ethnicities, there was no significant difference in attitudes between the three major ethnic groups which were the Malays, Chinese and Indians.

**Gender, Public Stigma and Help-Seeking Intention**

Looking into stigma and gender, Heath, Vogel and Al-Darmaki (2016) found that male university students showed a higher level of public stigma awareness than female students. This aligned with Wu et al. (2017) whose study demonstrated that male undergraduate students were significantly more likely to have high public stigma awareness than female students. Both studies showed similar findings although Heath, Vogel and Al-Damarki (2016) involved 407 students from the United Arab Emirates, while Wu et al. (2017) involved 8285 students from the United States. This suggests that the phenomenon where male university students exhibit higher public stigma awareness is consistent across cultures. A handful of research findings also consistently demonstrated that men had a higher level of public stigma endorsement than women, which suggests that the factor of gender plays a significant role in one's endorsement towards public stigma. For instance, Economou et al. (2016) discovered that gender was one of the significant predictors for public stigma endorsement towards depression and psychiatric medication, where men showed a higher level of public stigma endorsement than women. Likewise, Mackenzie et al. (2019) found that men showed a significantly higher level of public stigma endorsement towards depression than women. In terms of age, men in the 18-34 age group showed a higher level of public stigma endorsement than older age groups. Likewise, Oliffe et al. (2016) also found a significant difference in the level of public stigma endorsement between participant gender groups, where the male group had a higher level of public stigma endorsement.

Next, research by Do et al. (2019) demonstrate that gender was one of the significant predictors for help-seeking intention, in which female secondary school students showed a higher level of help-seeking intention than male students. This aligned with Yu et al. (2015) who discovered that being a woman and having a lower level of education were positive

predictors for help-seeking intention. Overall, research findings are generally consistent in showing that women have a higher level of help-seeking intention than men. It also seems to occur in both stages of development, which is adolescence (Do et al., 2019) and adulthood (Yu et al., 2015). This suggests that the factor of gender plays a role in one's help-seeking intention regardless of age.

### **Public Stigma Awareness, Public Stigma Endorsement and Help-Seeking Intention**

Past literature on the relationship between public stigma awareness and help-seeking intention showed inconsistent findings. A qualitative study by Ramli, Tilse and Wilson (2017) demonstrated that public stigma awareness was related to help-seeking intention. The study involved caregivers of senior citizens who suffered from mental health issues. It was revealed that the stigma associated with psychiatric clinics, resulting from society's negative labelling, prevented some patients from obtaining professional help. For example, one of the respondents' mothers who struggled with depression insisted to not be taken to the psychiatric unit as she was not "crazy". Case referrals to the psychiatric department was generally seen as negative, and most patients did not receive help from formal mental health services for several years after the onset of the disorders. In fact, attending the psychiatric clinic was seen as the last resort after realizing that traditional medicine or religious-based treatment yielded no positive outcome.

This finding aligns with Tay, Jaafar and Noor (2019) who found that public stigma awareness and help-seeking attitude had a significant negative relationship. When public stigma awareness increased, help-seeking attitude then became more negative. However, further regression analysis revealed that public stigma awareness was not a significant predictor for help-seeking attitude. This contradicts with Hong (2018) who found the correlation between public stigma awareness and help-seeking attitude to be significantly positive. In this case, when public stigma awareness increased, help-seeking attitude then became more positive. Although both Hong (2018) and Tay, Jaafar and Noor (2019) involved samples of undergraduate students in Malaysia, their findings contradict each other. This may be due to Hong's (2018) sample size of 100 students, which was quite small. The limited sample size might have affected statistical analyses conducted, where the probability for errors to occur increased (VanVoorhis & Morgan, 2007). In comparison, Tay, Jaafar and Noor (2019) had a larger sample size of 327 students. However, they did not thoroughly explain the sampling method used. This arises the possibility of bias in participant selection for the study. In contrast, Hong (2018) clearly explained in detail the sampling method used, which was random sampling where participants were chosen from different faculties.

By contrast, findings regarding public stigma endorsement and help-seeking intention seem to be consistent. Research by Cheetham et al. (2019) showed that individuals with a higher public stigma endorsement exhibited lower help-seeking intention. It was found that public stigma endorsement was a significant negative predictor for help-seeking intention. This aligns with Boerema et al. (2016) who demonstrated that when public stigma endorsement increased, help-seeking intention decreased. Public stigma endorsement was also found to be a significant negative predictor for help-seeking behaviour. Overall, past literature is consistent in showing that public stigma endorsement is a significant negative predictor for help-seeking intention. In addition, this relationship takes place for both the general public without any mental disorder diagnosis (Cheetham et al., 2019) and adults with a mental disorder diagnosis (Boerema et al., 2016).

Finally, past literature on the relationship between public stigma awareness, public stigma endorsement and help-seeking intention show inconsistent findings. Bathje and Pryor (2011) found that public stigma endorsement acts as a significant mediator in the relationship between public stigma awareness and help-seeking intention. When public stigma endorsement was inserted as a mediator, the influence of public stigma awareness on help-seeking intention was no longer significant. However, Nearchou et al. (2018) demonstrated that public stigma awareness was a stronger and more significant predictor for help-seeking intention than public stigma endorsement. It was found that individuals with higher public stigma awareness were less likely to seek mental health services when needed, and that public stigma endorsement was not a significant predictor for help-seeking intention. Both findings contradict each other, which may be due to the factor of age in each research sample. Nearchou et al.'s (2018) sample consisted of secondary school students, while Bathje and Pryor's (2011) sample was university students. This suggests that the aspect of public stigma which is stronger and more significant towards help-seeking intention varies according to age level.

The finding by Bathje and Pryor (2011) also contradicts with Rowe (2014). Rowe (2014) found that public stigma endorsement did not act as a significant mediator on the influence of public stigma awareness towards help-seeking attitude. This may be due also to the different research samples used. Rowe's (2014) research sample was adults in general, while Bathje and Pryor's (2011) research sample was recruited among university students. This may suggest that one's status as a university student plays a unique role in the relationship between public stigma awareness, public stigma endorsement, and help-seeking intention. Overall, research findings regarding public stigma awareness, public stigma endorsement and help-seeking intention are inconsistent. Furthermore, literature on this topic in the context of Malaysian undergraduate students is limited. Past studies also did not consider the probability of difference in public stigma and help-seeking intention between public and private university students (Jaladin, Ngu & Tharbe, 2016). Often times, they are studied separately (Hong, 2018; Chan, Yeoh & Migin, 2016). Hence, this study aims to examine the difference in public stigma awareness, public stigma endorsement and help-seeking intention between male and female undergraduate students, as well as between public and private university students. It also aims to explore the relationship between public stigma awareness, public stigma endorsement and help-seeking intention among Malaysian undergraduate students. More specifically, the possible role of public stigma endorsement as a mediator between public stigma awareness and help-seeking intention.

## **Methodology**

### **Participants and Measures**

The study population is undergraduate students pursuing a Bachelor's Degree at public and private universities in Malaysia. As of 31 December 2018, the number of undergraduate students in Malaysia was 668345 (Ministry of Education Malaysia, 2019). A total of 398 participants were involved in this study, which was sufficient based on Krejcie and Morgan's (1970) suggestion.

The survey consisted of four sections: demographic information, Stigma Scale for Receiving Psychological Help, Attribution Questionnaire, and Mental Help-Seeking Intention Scale. To measure public stigma awareness, the Stigma Scale for Receiving Psychological Help (SSRPH; Komiya, Good & Sherrod, 2000) was used. This inventory contains five items that assess an individual's perceptions on societal stigma towards receiving psychological services. Item

response is recorded using a 4-point Likert scale, with 0 indicating “strongly disagree” and 3 indicating “strongly agree”. Minimum score for SSRPH is 0, while the maximum score is 15, with higher scores indicating higher degree of public stigma. The reported internal consistency was 0.72, and exploratory factor analysis supported a one factor structure (Komiya, Good & Sherrod, 2000). SSRPH is widely used in various studies evaluating public stigma (Nam et al., 2013; Vogel et al., 2005; Vogel et al., 2013). Besides its high reliability, SSRPH was chosen for this study as its development involved cohorts of university students (Komiya, Good & Sherrod, 2000). It is also widely used in various studies involving samples of undergraduate students (Bathje & Pryor, 2011; Vogel et al., 2005).

To measure public stigma endorsement, the Attribution Questionnaire (AQ; Corrigan et al., 2003) was used. This 27-item inventory assesses the endorsement of cognitive, affective and behavioural predilections of public stigma through participant ratings of a vignette describing an individual with a mental disorder. The original vignette in Corrigan et al. (2003) describes an individual with schizophrenia. However, past research has shown that undergraduate students are “closer” and more exposed to depression as compared to other mental disorders (Chen et al., 2013; Sarokhani et al., 2013). Hence, the vignette used in this study was adapted from Link et al. (1999), which describes a university student attending counselling for his depression. Taking into account the cultural and geographical context of the current study participants, the character name “Harry” was changed to “Ali” – a generic name frequently used for storytelling in Malaysia.

AQ contains nine subscales of three items each. The subscales blame and dangerousness assess the cognitive component of public stigma (stereotype). The subscales anger, pity and fear assess the affective component of public stigma (prejudice). Next, the subscales unwillingness to help, avoidance, segregation and coercion assess the behavioural component of public stigma (discrimination). Item response is recorded using a 9-point Likert scale, with scores ranging from 1 to 9. Minimum score for AQ is 27, while the maximum score is 243, with higher scores indicating higher stigma endorsement. The internal consistency for each subscale is between 0.70 and 0.96 (Corrigan et al., 2003). AQ is widely used in various studies that evaluate public stigma endorsement (Bathje & Pryor, 2011; Combie-Knowles, 2020; Rowe, 2014). Besides its high reliability, AQ was chosen for this study as its development involved university students (Corrigan et al., 2003). It is also widely used in various studies involving samples of undergraduate students (Granados-Gómez et al., 2017; Pinto et al., 2020; Werner, Raviv-Turgeman & Corrigan, 2020).

To measure help seeking intention, the Mental Help Seeking Intention Scale (MHSIS; Hammer & Spiker, 2018) was used. This inventory assesses respondents’ intention to seek help from a mental health professional if they experience mental health concerns. Item response is recorded using a 7-point Likert scale, that ranged from 1 to 7 points. MHSIS contains three items with a minimum score of 3, and a maximum score of 21, with higher scores indicating greater intention to seek help. The reported internal consistency was 0.94 and it also exhibited strong predictive validity regarding future help-seeking behaviour in adults, with an accuracy of 70% (Hammer & Spiker, 2018). In addition, MHSIS is more relevant to be used in this study as it clearly measures help-seeking intention relating to mental health concerns. For comparison, the Intentions to Seek Counselling Inventory (Cash et al., 1975) contains three dimensions including one on academic concerns, which is not relevant with the variable to be studied. On the other hand, items in the General Help Seeking Questionnaire include intention to seek help from informal sources such as family and friends (Wilson et al., 2005).

This study focuses solely on mental health services from formal professional sources such as psychiatrists, clinical psychologists etc, as outlined in MHSIS (Hammer & Spiker, 2018).

### **Procedures**

The research survey was uploaded on Google Form, and was shared on various online platforms such as e-mail, WhatsApp and Facebook. Any individuals who met the inclusion criteria (pursuing a Bachelor's degree at a Malaysian university) and had the survey link were invited to participate in this study. Due to privacy protection, lists of undergraduate students at Malaysian universities failed to be obtained, thus hindering certain sampling methods such as random sampling. Hence, convenience sampling was used as it enabled a quick and simple process of participant recruitment. A pilot study involving 30 undergraduate students was conducted. This was to ensure that all items in the research survey were clear and easily understood by respondents. The pilot study showed that all three inventories used have a high and acceptable level of reliability. SSRPH had a Cronbach's alpha value of 0.79, while AQ's was 0.82. Next, the Cronbach's alpha value for MHSIS was 0.90. Data obtained from this pilot study was excluded and not used in data analysis for the real study. The Statistical Package for Social Sciences (SPSS) version 23 was used for all data analysis.

### **Results**

#### **Demographic Profile of Respondents**

A total of 398 Malaysian undergraduate students participated in this study. Mean age was 22.28 (SD=2.34) years old. Majority of respondents was female (80.9%), while male respondents made up 19.1% of the research sample. In terms of ethnicity, descriptive analysis showed that the majority of respondents was Malay (72.4%), followed by Chinese (16.1%), Indian (6.8%) and others (4.8%), which corresponded well to ethnic distribution in Malaysia. Likewise, the number of respondents from public and private universities who were involved in this study seem to be balanced, with 51% of respondents were from public universities and the remaining 49% were from private universities.

#### **Reliability of Measures**

Reliability analysis showed that the Cronbach's alpha value for SSRPH was 0.733. The AQ had a Cronbach's alpha value of 0.896, while for MHSIS the value was 0.922. This showed that all of the three inventories employed in this study had high and acceptable reliabilities in representing each variable under investigation.

#### **Gender Differences**

Table 1 shows independent sample t-test results between gender for each variable. Results demonstrated that there was no significant difference in public stigma awareness, public stigma endorsement and help-seeking intention between male and female students. For public stigma awareness, the mean score difference between male (M=6.41, SD=3.41) and female (M=6.24, SD=3.53) undergraduate students was 0.19. This difference was not significant,  $t(396)=0.38$ ,  $p>0.05$ . For public stigma endorsement, the mean score difference between male (M=91.75, SD=29.68) and female (M=86.50, SD=27.83) undergraduate students was 5.25, with t-test demonstrated no significant difference,  $t(396)=1.46$ ,  $p>0.05$ . Likewise, for help-seeking intention, the mean score difference between male (M=16.58, SD=3.88) and female (M=17.09, SD=3.94) undergraduate students was 0.51, with t-test demonstrating no significant difference between gender,  $t(396)=-1.02$ ,  $p>0.05$ .



TABLE 1:

Independent sample t-test analyses between genders for public stigma awareness, public stigma endorsement and help-seeking intention

	Male N=76		Female N=322		Mean Difference	t-value	p-value
	Mean	S.D.	Mean	S.D.			
Public Stigma Awareness	6.41	3.41	6.24	3.53	0.17	0.38	0.71
Public Stigma Endorsement	91.75	29.68	86.50	27.83	5.25	1.46	0.15
Help-seeking Intention	16.58	3.88	17.09	3.94	-0.51	-1.02	0.31

### Differences Between University Types

Table 2 shows independent sample t-test results between university types for each variable. It was found that there was no significant difference in public stigma awareness, public stigma endorsement and help-seeking intention between students from public and private universities. For public stigma awareness, the mean score difference between public (M=6.33, SD=3.54) and private (M=6.22, SD=3.48) university students was M=0.11. This difference was not statistically significant,  $t(396)=0.31$ ,  $p>0.05$ . For public stigma endorsement, the mean score difference between public (M=86.67, SD=26.80) and private (M=88.36, SD=29.68) university students was M=1.69. T-test analysis further showed that this difference was not significant,  $t(396)=-0.60$ ,  $p>0.05$ . Next, for help-seeking intention, the mean score difference between public (M=17.18, SD=3.85) and private (M=16.79, SD=4.00) university students was M=0.39. T-test analysis revealed no statistical difference between the two university groups,  $t(396)=0.98$ ,  $p>0.05$ .

TABLE 2:

Independent sample t-test analyses between university types for public stigma awareness, public stigma endorsement and help-seeking intention

	Public N=203		Private N=195		Mean Difference	t-value	p-value
	Mean	S.D.	Mean	S.D.			
Public Stigma Awareness	6.33	3.54	6.22	3.48	0.11	0.31	0.76
Public Stigma Endorsement	86.67	26.80	88.36	29.68	-1.69	-0.60	0.55
Help-seeking Intention	17.18	3.85	16.79	4.00	0.39	0.98	0.33

### Public Stigma and Help-Seeking Intention

Pearson correlation analysis was conducted to assess the relationship between public stigma awareness and help-seeking intention. There was a significant weak, negative correlation between the two variables ( $r=-0.106$ ,  $p<0.05$ ). This shows that increases in public stigma awareness were correlated with decreases in help-seeking intention. The analysis was also

performed to evaluate the relationship between public stigma endorsement and help-seeking intention. Result also revealed a significant weak, negative relationship between the two variables ( $r = -0.165$ ,  $p = 0.001$ ). This shows that increases in public stigma endorsement were correlated with decreases in help-seeking intention.

TABLE 3:

Pearson correlation analysis between public stigma awareness, public stigma endorsement and help-seeking intention

	Help-Seeking Intention
Public Stigma Awareness	$r = -0.106^*$
Public Stigma Endorsement	$r = -0.165^{**}$
N	398

\* $p < 0.05$

\*\* $p = 0.001$

Next, simple linear regression analysis found that public stigma awareness significantly influenced help-seeking intention ( $\beta = -0.106$ ,  $t = -2.119$ ,  $p < 0.05$ ). This shows that public stigma awareness indeed acted as a significant predictive factor for help-seeking intention among undergraduate students. Table 5 shows that the variable of public stigma awareness contributed a 1.1% variance in help-seeking intention. Analysis of variance then found that  $F(1, 396) = 4.488$ ,  $p < 0.05$ , indicating that the sample data provides sufficient evidence that the regression model fits the data better than the model with no independent variable. The regression equation obtained was  $Y = 17.736 + (-0.119)X + 3.908$ , where:

Y = Help-seeking intention

X = Public stigma awareness

Constant = 17.736

Error = 3.908

TABLE 4:

Simple linear regression analysis of public stigma awareness towards the dependent variable help-seeking intention

Independent Variable	Unstandardized Coefficients		Standardized Coefficients	T	p-value
	B	Standard Error	$\beta$		
Public Stigma Awareness	-0.119	0.056	-0.106	-2.119	0.035*
Constant	17.736	0.402		44.126	0.000

\* $p < 0.05$

TABLE 5: Model summary

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Standard Error of the Estimate	Change Statistics				
					R <sup>2</sup> Change	F Change	df1	df2	Sig. Change
1	0.106	0.011	0.009	3.908	0.011	4.488	1	396	0.035

Model 1.

Predictor: (Constant), Public stigma awareness

TABLE 6: ANOVA table

	Sum of Squares	df	Mean Square	F	p-value
Regression	68.550	1	68.550	4.488	0.035*
Residual	6048.427	396	15.274		
Total	6116.977	397			

\*  $p < 0.05$ ; Predictor: (Constant), Public stigma awareness

### Public Stigma Endorsement as A Significant Mediator in The Influence of Public Stigma Awareness on Help-Seeking Intention

Table 7 shows the results for multiple linear regression analysis involving independent variables of public stigma awareness and public stigma endorsement towards the dependent variable of help-seeking intention. When public stigma endorsement is inserted into the linear regression analysis, the influence of public stigma awareness on help-seeking intention became insignificant ( $\beta = -0.049$ ,  $t = -0.917$ ,  $p > 0.05$ ). At the same time, public stigma endorsement had a significant influence on help-seeking intention ( $\beta = -0.146$ ,  $t = -2.720$ ,  $p < 0.05$ ). This indicates that public stigma endorsement acts as a mediator in the influence of public stigma awareness on help-seeking intention.

TABLE 7:

Multiple linear regression analysis of public stigma awareness and public stigma endorsement towards the dependent variable help-seeking intention

Independent Variables	Unstandardized Coefficients		Standardized Coefficient	T	p-value
	B	Standard Error	$\beta$		
Public Stigma Awareness	-0.055	0.060	-0.049	-0.917	0.360
Public Stigma Endorsement	-0.020	0.007	-0.146	-2.720	0.007*
Constant	19.118	0.646		29.602	0.000

\* $p < 0.05$

TABLE 8: Simple linear regression analysis of public stigma awareness towards public stigma endorsement

Independent Variable	Unstandardized Coefficients		Standardized Coefficient	T	P-value
	B	Standard Error	$\beta$		
Public Stigma Awareness	3.115	0.373	0.387	8.346	0.000**
Constant	67.965	2.681		25.355	0.000

\*\* $p < 0.001$

To test whether this mediating effect was significant, Sobel test analysis was performed. The analysis found that public stigma endorsement was a significant mediator in the influence of public stigma awareness on help-seeking intention ( $Z = -2.703$ ,  $p < 0.05$ ). This mediating effect could be summarised through the mediation model illustrated in Figure 1.

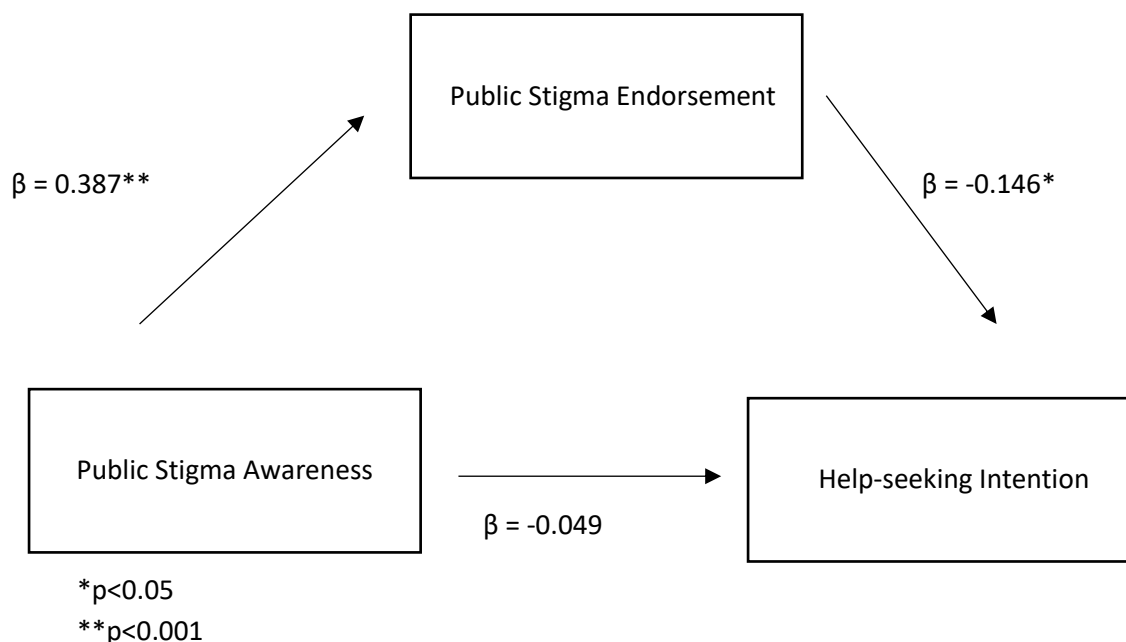


FIGURE 1:

The mediation model of public stigma endorsement in the influence of public stigma awareness on help-seeking intention

### Discussion and Conclusion

The current study examined the relationship between public stigma (stigma awareness and stigma endorsement) and help-seeking intention, as well as possible differences of these variables between gender and university types. Our results showed no significant difference in public stigma awareness, public stigma endorsement and help-seeking intention between male and female undergraduate students, which is inconsistent with past findings (Economou et al., 2016; Efstathiou et al., 2019; Mackenzie et al., 2019; Yu et al., 2015). The difference in results between current study and some past studies may be due to the convenience sampling technique employed in this study, with the possibility that only male students who were interested or informed about mental health participated in this study (Kearns et al., 2015). The current study also did not explicitly exclude individuals with mental health problems from its sample, which was done by past researchers such as Mackenzie et al. (2019). This may have also played a role, as it appears that the phenomenon where women were more likely to seek mental health service than men occurred in groups without mental health problems. In groups consisting of respondents with mental health problems, probability to seek help did not differ significantly by gender (Smith et al., 2013).

There was also no significant difference in public stigma awareness, public stigma endorsement and help-seeking intention between public and private university students. While past research has reported education level to be a predictor of public stigma and help-seeking intention (Aun et al., 2019; Yu et al., 2015), this study further shows that type of university does not play a significant role in the context of Malaysian undergraduate students. Hence, instead of university type, intervention strategies should place more focus on other aspects that have been shown to significantly influence public stigma and help-seeking intention such as social health and mental health literacy (Aun et al., 2019; Yu et al., 2015). Next, it was found that public stigma awareness significantly influenced help-seeking intention, which is consistent with past findings (Noble, Platt & Leppma, 2021; Tay, Jaafar &

Noor, 2019). However, this influence was no longer significant when public stigma endorsement is included into the regression analysis, which indicates a mediation effect. Further analysis then showed that the mediation effect of public stigma endorsement was significant. Thus, public stigma endorsement proves to be a significant mediator in the influence of public stigma awareness on help-seeking intention among Malaysian undergraduate students in this study. This result is consistent with some past studies (e.g., Bathje & Pryor, 2011; Boerema et al., 2016), but contradicts with other studies (e.g., Rowe, 2014). Generally, the finding supports the conceptualization of public stigma awareness and public stigma endorsement as two independent psychological constructs, as suggested by Corrigan and colleagues (Corrigan & Calabrese, 2005; Corrigan, Watson & Barr, 2006). More specifically, public stigma awareness precedes public stigma endorsement.

Since mediation analysis can be used to establish cause-effect relationships (Wu & Zumbo, 2008), it could be said that a higher public stigma endorsement causes lower help-seeking intention. A student might have the awareness about public stigma (e.g., Society views people who seek mental health services as weak), but their help-seeking intention depends on their endorsement of the stigma. If a student endorses public stigma (e.g., Society views people who seek mental health services as weak, and I agree with it), they are predicted to be less likely to seek mental help services. This may be due to the fact that individuals with higher public stigma endorsement tend to handle the problems they face on their own (Jennings et al., 2015). Therefore, they are less likely to seek professional help if they experience mental health concerns. In contrast, if a person does not endorse public stigma (e.g., I personally do not think that individuals who seek mental health services are weak, even though society thinks so), he/she is predicted to be more likely to seek professional help if he/she experiences mental health concerns.

This shows that public stigma endorsement is a more important and significant barrier to mental health services utilisation than public stigma awareness. Hence, approaches and intervention strategies aiming to encourage mental health services utilisation among Malaysian undergraduate students should focus on the reduction of public stigma endorsement. For example, the element of social contact with individuals with mental disorders could be included, as it has been suggested to reduce personal stigma beliefs (Grant, Bruce & Batterham, 2016). In essence, this study has demonstrated that public stigma awareness and public stigma endorsement are two distinct psychological constructs, with awareness preceding endorsement. Hence, future research should take this into account in order to ensure public stigma could be understood more thoroughly and comprehensively. The finding of public stigma endorsement as a more significant predictor of help-seeking intention is also useful in improving mental health services utilisation among Malaysian undergraduate students.

This study has its limitations. Firstly, the majority of respondents is female (80.9%), which is different than the gender ratio of undergraduate students (female 56.62%, male 43.38%) reported by the Ministry of Education Malaysia (2019). Thus, the results of this study are not strong enough to be generalized to the entire population of Malaysian undergraduate students. Each variable in this study was also measured using self-rating questionnaires which brings the risk of social desirability bias (Caputo, 2017). Next, this study measured help-seeking intention, and not actual help-seeking behaviour. Although intention is a good predictor of one's behaviour as described in the Theory of Reasoned Action (Ajzen & Fishbein, 1980), there are many other factors that might influence an individual's decision to seek

professional help when facing mental health concerns. These factors may also be out of a student's control such as financial and time constraints (Low, Lim & Tan, 2016).

To improve upon this study, future research on this topic may use other sampling methods that represent the population under study more accurately such as stratified random sampling by gender. Next, future studies could also measure both help-seeking intention and actual help-seeking behaviour. This could help researchers to better understand the decision-making process of seeking mental health services and other barriers associated with it. Finally, findings of this study could be strengthened by using other research designs such as experimental (Rowe, 2014), longitudinal (Fox, Smith & Vogt, 2018) or interviews (Ramli, Tilse & Wilson, 2017). According to Idris, Akhir and Sarnon (2021), the first step of recovering from mental health issue is breaking the stigma associated with it. Hence, future research needs to also look into interventions that target breaking the stigma, so as to increase mental help seeking behaviour.

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