



Journal Website

Article history:

Received 18 October 2023

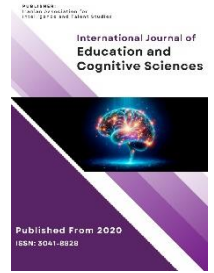
Revised 02 November 2023

Accepted 28 December 2023

Published online 04 April 2024

International Journal of Education and Cognitive Sciences

Volume 5, Issue 1, pp 16-24



E-ISSN: 3041-8828

The Mediating Role of Self-Stigma in Perceived Public Stigma and Attitudes Toward Mental Health Help-Seeking Among Adults in Malaysia

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Article Info

Article type:

Original Research

How to cite this article:

Ching, C. Y., Motevalli, S., Abu Talib, M., & Ishak, Z. (2024). The Mediating Role of Self-Stigma in Perceived Public Stigma and Attitudes Toward Mental Health Help-Seeking Among Adults in Malaysia. *International Journal of Education and Cognitive Sciences*, 5(1), 16-24.

<https://doi.org/10.61838/kman.ijecs.5.1.1>



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ABSTRACT

Purpose: Mental health stigma is one of the major barriers to mental health help-seeking and care. Public stigma gives rise to self-stigma (SS), and both stigma results in negative attitudes toward mental health help-seeking (ATMHHS). Subsequently, ATMHHS is further associated with future help-seeking behaviour. This research aims to study the mediating effect of SS on the relationship between perceived public stigma (PPS) and ATMHHS among Malaysian adults. The significance is to encourage mental health awareness related to mental health stigma as well as to contribute to literature on mental health stigma.

Methodology: This study was a cross-sectional, correlational, and quantitative study, in which data was collected using online survey. 136 participants were selected as a sample of Malaysian adults aged 18-64 years old. Data was collected using Self-Stigma of Seeking Help Scale, Stigma Scale for Receiving Psychological Help, and Attitudes toward Seeking Professional Psychological Help Scale: Short Form.

Findings: The results from Hayes PROCESS macro showed that SS was a significant predictor for ATMHHS, while PPS was not a significant predictor of ATMHHS, and SS fully mediated the relationship between PPS and ATMHHS.

Conclusion: This study has shown that PPS indirectly brings negative impact on ATMHHS, while SS predicts negative ATMHHS, hence it is recommended that more research be conducted on mental health stigma related areas in order to raise awareness in Malaysian society.

Keywords: *Self-Stigma, Perceived Public Stigma, Attitudes Toward Mental Health Help-Seeking.*

1. Introduction

Mental health has become one of the priorities for global development, as indicated in the UN Sustainable Development Goals in September 2015 (Votruba & Thornicroft, 2016). Globally, 10.7% of population suffers from mental health disorder, which is around 792 million of people. However, only 64.5% of people with serious mental illness in US received mental health treatment in 2020. It is believed that there are still challenges to overcome in order to make mental health treatment more widespread (Wainberg et al., 2017). One of the challenges is stigma (Hassan et al., 2018; Sickel et al., 2014). Public stigma can give rise to self-stigma (SS), and both leads to negative attitudes toward mental health help-seeking (Ibrahim et al., 2019; Pedersen & Paves, 2014; Vogel et al., 2013; Vogel et al., 2010; Vogel et al., 2006; Vogel et al., 2007). Subsequently, ATMHHS is further associated with future help-seeking behaviour (Mojtabai et al., 2016). People who have negative attitudes toward mental health help-seeking behaviour are less willing to seek professional help, less comfortable talking to a professional about emotional issues and more embarrassed with seeking professional help (Parcesepe & Cabassa, 2012). Subsequently, they are less likely to exhibit mental health help-seeking behaviour and mental health recovery (Hanafiah & Bortel, 2015; Shirehjini et al., 2022).

In Malaysia, 2.3% of the adult population suffered from depression, which is about half a million of people. However, there are still people who are unaware of the importance of mental health and many are having stigma toward mental health (Hassan et al., 2020). Untreated mental disorders will further affect the person's social relationships, other health conditions, educational performance or employment (Hanafiah & Bortel, 2015; Stirling et al., 2019). This could reduce the quality of mental health of the community, and eventually result in lower functioning and productivity of the society (Gray et al., 2020; Keyes, 2007; Li et al., 2022; Sickel et al., 2014). Modulation of astrocyte activity and improvement of oxidative stress through blockage of NO/NMDAR pathway improve posttraumatic stress disorder (PTSD)-like behavior induced by social isolation stress. *Brain and Behavior*, 12(7), e2620. Mental health greatly affect physical health and daily functioning (Ohrnberger et al., 2017), hence it is vital that people take care of their mental health in order to be able to contribute as a part of the society.

The significance of this study is to promote better awareness, understanding and attitude toward mental health. By doing this, more emphasis can be placed on interventions to tackle mental health stigma and improve society's attitudes toward mental health services. As a result, the community with mental illness can benefit from the increased social support as the society's mental health awareness rises. Increased social support will also lead to better treatment outcome for people with mental illness (Mohd et al., 2019). Another significance is to contribute to literature related to mental health stigma because there is a lack of related research in Malaysia. The result from this study can contribute to knowledge related to this topic and act as reference for future studies.

SS is an individual's negative personal attitudes toward themselves that is internalized from perceived public stigma (Lucksted & Drapalski, 2015). Goffman (1963) said that individual who experienced stigmatization can lead to internalized stigma, in which the stigmatized individual holds beliefs about their identity as the society do. Furthermore, PPS is an individual's perception about others' negative attitudes toward a certain group of people (Nearchou et al., 2018). According to Goffman's theory of social stigma (1963), public stigma is a phenomenon whereby an individual is rejected by the society as a result of having an attribute that is deeply discredited by the society. Moreover, ATMHHS is an individual's evaluation reaction, which includes thoughts, beliefs, feelings and behaviours, toward the act of seeking mental health treatment (Abun et al., 2019; Motevalli et al., 2023).

Some of the theories related to mental health stigma include attribution theory by Heider (1958), social cognitive theory by Bandura (1989), Goffman's theory of stigma (1963) and modified labelling theory by Link and colleagues (1989). The theory used as main reference in this study is modified labelling theory, which said that societal perceptions of devaluation and discrimination toward people with mental illness can result in negative self-esteem, which is also known as SS, under the condition that the people with mental illness are labelled as having mental illness, either by themselves or by others. In other words, the perception of public stigma leads to the development of SS when the individual agreed and applied the stereotypes to themselves (Corrigan & Rao, 2012; Vogel et al., 2013). After that, the individual will have possible negative responses toward the mental health stigma, which include secrecy, withdrawal, and educating others (Link et al., 1989). Some may also develop shame or lowered self-esteem. The negative

outcomes are in turn, some of the major risk factors for the development of psychopathology (Link et al., 1989).

For the first research question, many studies in other countries such as United States (Catalano et al., 2021; Surapaneni et al., 2018) and Turkey (Keller & Owens, 2021; Topkaya, 2014) have found that SS significantly predicted ATMHHS. In the context of Malaysia, some studies also have similar findings (Ibrahim et al., 2019). Some studies said that PPS was not a significant predictor of ATMHHS (Keller & Owens, 2021; Topkaya, 2014) while others said the opposite (Alluhaibi & Awadalla, 2022; Genç & Kara, 2021; Wahto et al., 2016; Xu et al., 2015). Whereas for the third research question, many studies agreed that SS is a mediator between PPS and ATMHHS (Keller & Owens, 2021; Noble et al., 2021; Vally et al., 2018; Vogel et al., 2010; Vogel et al., 2007). Most of these studies also found that PPS significantly predicted SS. However, there is a literature gap for second and third research questions, in which there is not much research done in Malaysian context in this matter.

In overall, this research aims to study the relationship between PPS and ATMHHS, with SS as a mediator, among Malaysian adults. This study is important to promote mental health awareness of the society as well as to contribute to literature related to mental health stigma in Malaysia.

2. Methods and Materials

2.1. Study Design and Participants

This study is a cross-sectional, correlational and quantitative study. The data was collected using online survey through the Internet, hence the location for this study is as far as the coverage of Internet within Malaysia. The population targeted in this study is Malaysian adults, hence the inclusion criteria for the sample are Malaysian aged 18-

64 years old. The sample size of this study is calculated using G*Power 3.1 (Faul et al., 2009). Based on G*Power 3.1, the minimum participants' needed for multiple linear regression is 107. After data collection, the total number of participants included in this study is 136, with age ranging from 18 to 62 years old.

2.2. Measures

The questionnaire is consisted of informed consent, demographic information, Self-Stigma of Seeking Help Scale (Vogel et al., 2006) for measuring SS, Stigma Scale for Receiving Psychological Help (Komiya et al., 2000) for measuring PPS, and Attitudes toward Seeking Professional Psychological Help Scale: Short Form (Fischer & Farina, 1995) for measuring ATMHHS. After obtaining ethical clearance and approval, the online survey was distributed on social media such as Facebook, Messenger, Wechat and Whatsapp.

2.3. Data Analysis

After data collection was completed, the data was analysed using IBM Statistical Package for the Social Sciences (SPSS) version 23.0. Demographic information was reported as descriptive statistics. Then, the data for the three instruments was examined for assumptions for mediation analysis and normality. Hayes PROCESS macro (Hayes, 2018) was used to conduct mediation analysis in order to examine the predictive relationship between SS, PPS and ATMHHS, as well as the mediator role of SS in this study.

3. Findings and Results

Table 1 shows the descriptive statistics of the participants.

Table 1

Demographic Information and Descriptive Statistics

Item	<i>M</i>	<i>SD</i>	<i>n</i>	%
Age	27.94	11.63		
Emerging Adulthood			96	70.6
Early Adulthood			16	11.8
Middle Adulthood			24	17.6
Gender				
Male			53	39.0
Female			82	60.3
Non-Binary			1	0.7
Ethnicity				
Malay			10	7.4

Chinese	118	86.8
Indian	8	5.9

The 5 main assumptions for mediation analysis were met. There was a linear relationship between the predictor variables and outcome variable, the data showed homoscedasticity, the residuals were normally distributed and uncorrelated, and the predictor variables were not highly correlated with each other. Other than that, the data also met the assumptions of normality as all three variables were found to be normally distributed. Screening was done to remove any influential case or outlier before conducting

mediation analysis. The screening result showed that there was no influential case or outlier in the sample data, hence no case was removed. The reliability of the three variables were determined through internal consistency of the variables. The Cronbach's alpha values for SS was $\alpha = .69$, for PPS was $\alpha = .75$, and for ATMHHS was $\alpha = .55$. The three variables had moderate reliability (Hinton et al., 2014). Table 2 shows the means, standard deviation and correlation coefficients of the three variables in this study.

Table 2

Correlation Coefficients (N=136)

Variables	M	SD	Self-Stigma	Perceived Public Stigma	Attitude Toward Mental Health Help-Seeking
Self-Stigma	25.05	5.58	-	.42***	-.58***
Perceived Public Stigma	5.68	3.26		-	-.32***
Attitude Toward Mental Health Help-Seeking	16.94	3.84			-

* $p < .05$; ** $p < .01$; *** $p < .001$

The mediation model showed that there was a statistically significant total effect of PPS on ATMHHS ($\beta = -.32, p < .001$). Subsequently, results indicated that PPS was a significant predictor of SS ($\beta = .42, p < .001$), and that SS was a significant predictor of ATMHHS ($\beta = -.55, p < .001$). These results supported the mediational hypothesis, as well as the first hypothesis of this study, which is SS can predict ATMHHS among Malaysian adults. According to the data analysis' result, PPS was not a significant predictor of ATMHHS after controlling for SS ($\beta = -.09, p = .240$), which indicated full mediation. This means that the second hypothesis of this study is not supported, in which the second hypothesis is that PPS can predict ATMHHS among

Malaysian adults. Other than that, approximately 35% of the variance in ATMMHS was accounted for by the predictors ($R^2 = .35$). The indirect effect was tested using bootstrapping method with 5000 samples. The results indicated that the indirect effect of PPS on ATMHHS via SS was statistically significant because the bootstrap confidence interval did not include zero ($\beta = -.23, 95\% \text{ CI } [-.33, -.13]$). Hence, SS was considered as a mediator for PPS on ATMHHS. This supported the third hypothesis, which is SS can mediate between PPS and ATMHHS among Malaysian adults. Table 3 shows the mediation effects between the three variables while Table 4 shows the model summary of mediation model. Figure 1 shows the mediation model.

Figure 1

Model with Path Coefficient

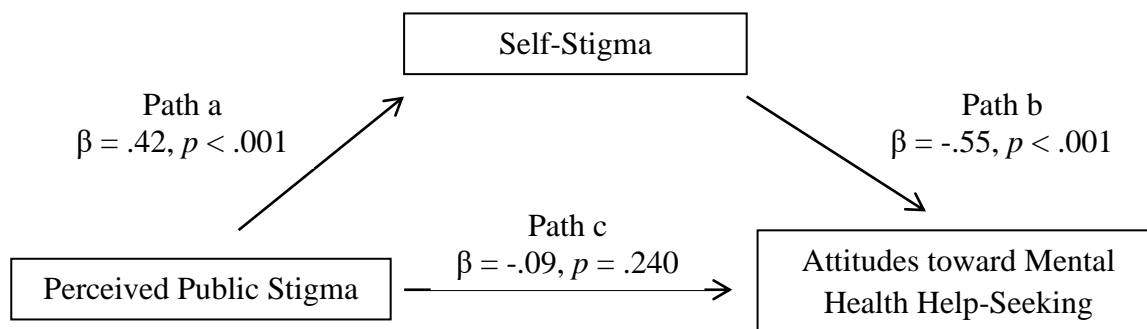


Table 3

Mediation Effects

Variable	Path	β	SE	<i>t</i>	<i>p</i>	LLCI	ULCI
IV on Mediator	a	.42	.13	5.37	.000		
Mediator on DV	b	-.55	.05	-7.06	.000		
Indirect Effect of IV on DV via Mediator		-.23	.05			-.33	-.13
Direct Effect of IV on DV	c	-.09	.09	-1.18	.240		
Total Effect of IV on DV		-.32	.10	-3.92	.000		

Note. IV = Perceived public stigma; Mediator = Self-stigma; DV = Attitude toward mental health help-seeking.

Table 4

Model Summary of Mediation Model

Variable	R	R ²	MSE	F	df1	df2	<i>p</i>
Attitude Toward Mental Health Help-Seeking	.59	.35	9.76	35.37	2	133	.000

4. Discussion and Conclusion

From the results of this study, it was found that SS is a significant predictor of ATMHHS among Malaysian adults. This is in line with the findings from other studies that were conducted in different countries such as United States (Cheng et al., 2018; Surapaneni et al., 2018), and Turkey (Kocabiyik & Bacioğlu, 2021; Topkaya, 2014), as well as Malaysia (Ibrahim et al., 2019). In overall, the finding from this study supports the majority of past studies, which said that SS can predict ATMHHS. Hence, the first hypothesis of this study is supported.

According to Bandura (1989), people tend to learn from others who are similar to themselves. When the identified role models achieve success, people are motivated to do similar courses of behaviour as the role models. On the contrary, if the behaviours taken by the role models result in adverse consequences, then people are discouraged from doing the behaviours. The observed cost and benefits that

happen on the role models influence the motivation and attitude of others toward performing the behaviours. For example, if a person with mental illness who went to seek for mental health treatment got discriminated by others, then others with mental illness are less motivated to seek for mental health treatment. Thus, one of the ways people form SS is through observing and learning from others who have similar characteristics as them, plus the consequences that happen to others also affect their beliefs and attitudes toward certain behaviours, for instance seeking mental health treatment.

When the mental distress or illness is perceived as less severe, people are more inclined toward informal treatment, whereas more formal treatments are associated with more serious mental illness (Parcesepe & Cabassa, 2012). In some countries such as Arab and Malaysia, the general public prefer to seek faith healers or religious approach as the first choice of treatment for mental illness (Hanafiah & Bortel, 2015; Zolezzi et al., 2018). Some of the reasons for not

seeking formal mental health treatment include perception that mental illness harms the family's reputation and feelings of shame associated with mental illness experienced by other family members (Ong et al., 2020). The preference for informal mental help and family's stigmatized perception may explain the more negative ATMHHS when there is higher SS among Malaysian adults. Another explanation can be because of the instrument used in this study focus on formal mental health help-seeking, which is stereotypically associated with more serious mental illness.

In this study, the result showed that PPS was not a significant predictor of ATMHHS among Malaysian adults. This finding supports the prior studies (Keller & Owens, 2021; Topkaya, 2014). However, there are other studies that said the opposite, in which the studies showed that PPS significantly predicts ATMHHS (Alluhaibi & Awadalla, 2022; Genç & Kara, 2021; Wahto et al., 2016; Xu et al., 2015). In overall, there are contradicting findings regarding whether PPS can predict ATMHHS. The second hypothesis of this study is not supported, in which it was found that PPS did not predict ATMHHS among Malaysian adults.

Although mental health stigma negatively affect people with mental illness, there are people who are unaffected by stigmatization from the public because they have other forms of support such as family support or because of their own resilience and flexibility in coping with stigma (Chung et al., 2019). Stigma resistance is a concept used to describe the ability to resist, counteract, or otherwise remain unaffected by mental health stigma (Chung et al., 2019). Family support and stigma resistance are associated with reduced SS and better mental health outcomes (Catalano et al., 2021; Firmin et al., 2016; Korkmaz & Küçük, 2016). The above statements may explain why PPS is not a direct predictor of ATMHHS in this study.

To answer the third hypothesis in this study, mediation analysis showed that SS fully mediated the relationship between PPS and ATMHHS among Malaysian adults. This finding is in line with past literature as well, in which most of the studies supported full mediation (Keller & Owens, 2021; Noble et al., 2021; Vally et al., 2018; Vogel et al., 2010; Vogel et al., 2007). In overall, the finding of this study supported most of the past literature which showed that there is a full mediating effect of SS on the relationship between PPS and ATMHHS. Hence, the third hypothesis of this study is supported.

This finding is in accordance with the modified labelling theory (Link et al., 1989), which stated that PPS can be internalized by an individual to become SS, which in turn

directly predicts ATMHHS. On the other hand, PPS is not a direct predictor of ATMHHS, but it has an indirect effect on ATMHHS. In the process of socialization, an individual learns what it means to be a person with mental illness from the attitude and behaviour of the society toward someone with mental illness (Frieih, 2019). The stereotypical attitude of the public toward people with mental illness is often expressed by viewing them as dangerous, weak, and incompetent. Then, when the individual enters psychological treatment, they are likely to be affected by the impact of stigma if they have internalized a negative conception toward the status of being a person with mental illness. They are also likely to have a generalized expectation of rejection, devaluation and discrimination (Frieih, 2019). Stigmatizing beliefs act as self-fulfilling prophecies, in which people with mental illness tend to comply with the expectations for their lower performance from the society's stigma (Almadi, 2022). The anticipated rejection exerts negative influence on their self-esteem as well as their attitude toward seeking mental health services (Catalano et al., 2021). Modified labelling theory from Link and colleagues (1989) describes the process of how PPS predicts ATMHHS through SS, which is supported by the result of mediation analysis in this study.

This study has shown that PPS indirectly brings negative impact on ATMHHS, while SS predicts negative ATMHHS, hence it is recommended that more research be conducted on mental health stigma related areas in order to raise awareness in Malaysian society. By doing so, more attention and emphasis can be placed on interventions to advocate for mental health awareness, such as education, contact and social media influence. Another recommendation for future research is to conduct qualitative research on mental health related stigma experiences among Malaysian. Qualitative method of data collection such as interview can bring out the subjective and more detailed experience from participants (Creswell & Creswell, 2018). This method can compensate for the limitation in quantitative research design and allow for better understanding about stigma. Moreover, future studies can include children and adolescents as participants.

In conclusion, mental health has become one of the priorities for global development and more efforts have been taken by organisations worldwide to advocate for mental health awareness. However, stigma still remains as one of the major barriers to make mental health treatment more widespread. It is important to take care of mental health as it greatly affects physical health, daily functioning and quality of life. Hence, this cross-sectional, correlational, and

quantitative study aims to examine the predictive relationship between SS, PPS and ATMHHS, as well as mediating effect of SS on PPS and ATMHHS among Malaysian adults through mediation analysis. The results showed that SS significantly predicts ATMHHS while PPS is not a direct predictor of ATMHHS. In addition, this study found that SS fully mediates between PPS and ATMHHS, which is in line with modified labelling theory. By understanding the process of how PPS and SS affect ATMHHS, this study can contribute to the society by contributing to literature, as well as raising the awareness to improve mental health and reduce stigma.

The practical implication of this study is to raise the importance of mental health in Malaysian society. The findings from this study can contribute by guiding policymakers into initiating and funding more mental health programs, so that the awareness of public toward mental health can be raised and subsequently mental health stigma can be reduced. Besides, the theoretical implication of this study is to contribute to existing literature on PPS, SS and ATMHHS because there is a lack of literature related to the topic in Malaysia, plus there were inconsistent findings for the hypothesis of PPS predicting ATMHHS. In that regard, this study found that PPS is not a significant predictor of ATMHHS.

There are several limitations in this study. This research is a quantitative study which involves only questionnaire survey in data collection. The results discuss findings in terms on statistical numbers and form a general summary on the data (Shaughnessy et al., 1991). Therefore, there is a lack of detailed information used to describe individual subjective experiences, which could be obtained from qualitative method such as interview (Creswell, 2010). Furthermore, the questionnaires used are self-report questionnaires. Hence, there might be bias in participants' responses, where people might answer based on social desirability, instead of their honest opinions. Moreover, the participants in this study are only limited to Malaysian adults, hence the findings could not be generalized to children or adolescents (Creswell, 2010).

Authors' Contributions

All authors contributed equally.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

The authors express his gratitude to the Faculty of Social Sciences and Liberal Arts and Centre of Research for Mental Health and Wellbeing, UCSI University for supporting this research. In addition, the researcher especially likes to thank all of the participants who took part in the study.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

In this study, to observe ethical considerations, participants were informed about the goals and importance of the research before the start of the interview and participated in the research with informed consent.

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