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Predictors of Help-Seeking: Self-Concept Clarity, Stigma, and Psychological Distress

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والدین اور بہن بھائیوں کے لئے: میں آپ کی حوصلہ افزائی کے لئے شکریہ ادا ک کرتی ہوں. ہم میلوں دور ہے لیکن میں نے ہمیشہ اپ کو اپنے ساتھ پایا ہے. اب اور ہمیشہ کے لئے مجھ پر اعتماد کرنے کا شکریہ۔ یہ مقالہ آپ میں سے ہر ایک کے تعاون کے بغیر ممکن نہیں تھا۔

آپ سب کا شکریہ!

TRANSLATION

For Parents & Siblings: I thank you for your encouragement. We are miles away, but I've always found you besides me. Thank you for trusting me now and forever. This thesis would have not been possible without the support of each one of you.

Thank you all!

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Abstract

Extensive prior research has shown that individuals with a low self-concept clarity (SCC) are more susceptible to mental health problems, e.g., depression and anxiety, than individuals with a high SCC. However, prior research has not focused on help-seeking in conjunction with SCC. Therefore, an online survey was distributed to Hollins University students (N=111) to investigate the potential relationship between SCC and help-seeking behavior. A positive correlation between SCC and help-seeking was found. However, SCC did not predict help-seeking beyond psychological distress and stigma in the multiple regression equation. Stigma was further dissected into perceived public stigma, personal stigma, and perceived peer stigma. Previous research demonstrates that perceived public stigma is usually higher than personal stigma, and that personal stigma independently influences help-seeking behavior, but— despite prominent theories— public stigma does not. The current study altered the perceived stigma reference group (i.e from "public" to "peer group") to investigate if that would change the associations with help-seeking behavior. Consistent with prior research, perceived public stigma continued to remain significantly higher than personal stigma and was not correlated with help-seeking behavior or personal stigma. However, both personal stigma and perceived peer stigma were negatively correlated with help-seeking and positively correlated with each other such that individuals high in personal and peer stigma were less willing to seek help. The results can provide insight for future mental health help-seeking intervention programs and stigma reduction campaigns.

Keywords: self-concept clarity, help-seeking, mental illness stigma, psychological distress, perceived public stigma, perceived peer stigma, personal stigma

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A Correlation Study Between Self-Concept Clarity, Stigma, and Help-Seeking Behavior

Self-Concept and Components of Self-Structure

The broad definition of self-concept is the perception of oneself, which is influenced by the interaction between the environment and subsequent experiences. There are two aspects of self-structure, namely self-concept clarity (SCC) and self-concept differentiation (SCD). Self-concept clarity is defined as the extent to which self-beliefs are clearly and confidently defined, internally consistent, and stable over time (Campbell et al., 1996). For example: if the description of one's personality keeps changing from one day to the other, this would indicate a lower SCC. The results from Campbell et al. (1996) suggest that a lower self-concept clarity is associated with psychological maladjustment, which can be operationally defined as the individual's inability to meet the demands of life that could result in psychological distress. Moreover, respondents with a lower self-concept clarity had lower self-esteem, conscientiousness, agreeableness, and had higher neuroticism.

Self-concept differentiation is the extent to which a person's self-conceptions vary across different roles (general, student, friend, romantic partner, son or daughter, and worker) (Donohue et al., 1993). The results in Donohue et al. (1993) suggest that differentiation across roles results in fragmentation of the self-system which is associated with psychological maladjustment. Hence, respondents with a higher self-concept differentiation were more vulnerable to depression, neuroticism, and lower self-esteem (Donohue et al., 1993).

Self-Concept Clarity and Psychological Distress

Bigler et al. (2001) studied self-concept clarity and self-concept differentiation together and found that both SCC and SCD are independent constructs. Both SCC and SCD predicted psychological maladjustment, but SCC was a better predictor in both samples (college students and inpatient schizophrenia patients).

Moreover, previous research supports that greater self-concept clarity predicts a healthy development of identity (Campbell et al., 1996; Schwartz et al., 2012). Hence, higher SCC predicts higher self-esteem, affect balance, and lower depression and anxiety (Bigler et al., 2001). As a result, people with a lower self-concept clarity tend to be more susceptible to internalizing disorders such as anxiety and depression, which are characteristics of psychological distress. Psychological distress can be operationally defined as a state of emotional suffering that involves symptoms of depression and anxiety (Mirowsky & Ross, 2002).

Longitudinal studies through adolescence also support that lower self-concept clarity is related to internalizing problems (Schwartz et al., 2012; Van Dijk et al., 2014). This could be because a lower self-concept clarity is associated with loneliness (Frijns & Finkenauer, 2009), chronic self-analysis, low internal state awareness, and rumination (Campbell et al., 1996), which are elements of internalizing problems. Lower self-concept clarity is not only associated with internalizing disorders, but also with eating disturbances in a college population (Perry et al., 2008).

Intolerance of Uncertainty model and self-concept clarity have been shown to be good predictors of generalized anxiety disorder (GAD) (Kusec et al., 2016). Intolerance of uncertainty model posits that excessive worry explains the development of GAD because it is a pathological response to modulate the feelings of uncertainty (Dugas et al., 1998). As lower self-concept clarity reflects uncertainty about the self, it is also a salient predictor of GAD (Kusec et al., 2016). In addition, self-concept clarity is also negatively associated with social anxiety disorder (Stopa et al., 2010).

Development of Self-Concept Clarity

Establishing more clarity in one's self-concept is an important developmental task during adolescence. Self-concept is changeable because small increases were observed during

the adolescent period in a longitudinal study (Schwartz et al., 2012). One of the factors that mediate the association between self-concept clarity and psychological maladjustment is emotional regulation (Parise et al., 2019), which is how effectively an individual regulates their affect (Caprara et al., 2008). If adolescents regulate their negative and positive affect relatively well, they are more likely to have a higher self-concept clarity and less likely to develop internalizing and externalizing problems or experience psychological distress (Parise et al., 2019). Hence, efficient emotional regulation is directly associated with self-concept clarity and inversely associated with psychological maladjustment.

Furthermore, parental bonding is another factor that influences self-concept clarity. As parental care and warmth increase, self-concept becomes more clear because parents instill confidence in the child which helps in the exploration of their self-concept (Perry et al., 2008). Also, if the parental-child communication is clear and open, there are chances of higher self-concept clarity than if the child tends to keep secrets (Frijns and Finkenauer, 2009; Van Dijk et al., 2014). Moreover, a longitudinal study found that adolescents with a higher self-concept clarity had a better quality of parent-child relationship in terms of lower negative interaction (Becht et al., 2017).

Help-Seeking

Theory of Planned Behavior (TPB) helps understand human behavior such as help-seeking. According to the theory, there are three types of beliefs: behavioral beliefs (experiences or consequences associated with seeking help), normative beliefs (expectations or behaviors of significant others regarding help-seeking), and control beliefs (factors that increase or decrease help-seeking behavior).

An attitude towards a behavior such as help-seeking behavior is formed by behavioral beliefs associated with mental health help-seeking e.g., prior experience with seeking help for mental health concerns. Normative beliefs tap into perceived social norms and control beliefs

tap into how much power does the person believes they have in seeking help. A positive attitude and perceived social norm coupled with a higher perceived control is associated with a higher intention to seek help (Ajzen, 1991). The widely used Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) was included which consists of three subscales: Psychological Openness, Help-seeking Propensity, and Indifference to Stigma. Each of the subscales has items that tap into all or most of the three components of Ajzen's (1991) Theory of Planned Behavior.

The two important factors that predict help-seeking behavior are psychological distress and mental health stigma (Boerema et al., 2016; Wadman et al., 2019). Mental health stigma is classified into personal and perceived public stigma. Personal stigma is defined as an individual's own stereotypes, prejudices, and behavior. Perceived public stigma is defined as an individual's perception of the extent to which the public holds negative attitudes, stereotypes, and prejudice towards those with mental illness such as "people with mental illnesses are dangerous" (Corrigan, 2004). Several studies show that perceived public stigma is generally higher than personal stigma but positively correlated (Eisenberg et al., 2009; Lally et al., 2013) and personal stigma is higher for Asians than other ethnicities (Eisenberg et al., 2009). In addition, personal stigma is negatively associated with help-seeking, but perceived public stigma is not associated with help-seeking behavior (Boerema et al., 2016; Eisenberg et al., 2009). This indicates that as personal stigma increases, help-seeking behavior is likely to decrease, and perceived public stigma does not influence help-seeking behavior.

A longitudinal study with college students by Golberstein et al., (2009) continued to display that perceived public stigma was not associated with help-seeking behavior. Hence, personal stigma independently influences help-seeking behavior. However, several studies show otherwise that higher public stigma is indeed a barrier to help-seeking (Phelan et al., 2000). Also, as personal attitudes are shaped by public attitudes (Link, 1987) it seems logical

to propose that both personal stigma and perceived public stigma should be related to help-seeking.

Current Study

As the construct self-concept clarity predicts psychological maladjustment better than self-concept differentiation, the current study chose to only include self-concept clarity. The link between low self-concept clarity and psychological maladjustment, and what factors influence the association are well established. However, previous research has not explored whether the individuals who have a low self-concept clarity and are subsequently highly susceptible to psychological maladjustment will be more or less likely to seek help for their problems. Hence, the purpose of the current study is to explore the relationship between self-concept clarity and help-seeking behavior.

The two variables: psychological distress and stigma were included in this study as they have been established as reliable predictors of help-seeking. The inclusion of these predictors will help gauge whether self-concept clarity predicts help-seeking above and beyond the established predictors.

The role of perception about the behavior or attitude of peers towards something is a key predictor of health behavior. This is because the perception creates a perceived social pressure that pushes the individual either to engage or not engage in a particular behavior (Ajzen, 2001) such as help-seeking. Hence, in addition to perceived public stigma and personal stigma, we measured perceived peer group stigma, which gauges the extent to which one thinks their peers hold negative attitudes towards those with mental illnesses. Our hypothesis is that if the peer group holds negative attitudes or negative perceptions towards those with mental illnesses (i.e., “most of my peers feel that receiving mental health treatment is a sign of personal failure”, “my peers would think less of a person who has received mental health treatment”), then the respondent’s personal stigma will also be higher to be concordant with their peers.

Thus, perceived peer stigma and personal stigma would be positively correlated. The current study investigates the impact of different types of stigma (personal, perceived public, and perceived peer group stigma) on help-seeking.

The following hypotheses were formulated in the light of literature: (a) SCC will correlate positively with help-seeking, (b) SCC will correlate negatively with psychological distress, (c) there will be a positive correlation between personal and peer-group stigma (d) As previous research shows, we expected no correlation between perceived public stigma and help-seeking but, a negative correlation between help-seeking behavior and personal stigma as well as, perceived peer stigma. Finally, we will examine any differences in personal stigma and self-concept clarity between psychology majors vs. non-majors and between ethnicities.

Method

Participants

A total of 111 Hollins University students, 23 Freshmen (20.70%), 24 Sophomore (21.60%), 33 Junior (29.70%), and 31 Senior (27.90%) between 18 and 46 years of age (M = 20.69, SD = 3.83) participated in the study. The sample consisted of 71 students who were non-psychology majors and 40 students who were psychology majors. There were 101 females, 9 non-binary, and 1 preferred not to say. The sample was predominantly White/non-Hispanic/ European 61 (55.00%), Black/ African-American 14 (12.60%), Asian 13 (11.70%), Multiracial 8 (7.20%), Asian American 6 (5.40%), Hispanic/Latino 4 (3.60%), American Indian/Alaska Native 2 (1.80%), and one from Native Hawaiian or Pacific Islander and Middle Eastern each (0.90%). Of the 111 students, 95 were U.S. citizens and 16 were international students.

Measures

Self-Concept Clarity (SCC) Scale

The scale was developed by Campbell et al., (1996) which consists of 12 items (α = .86) of which all items are reverse scored except items 6 and 11. The scale uses a 5-point Likert

scale with anchors (*Strongly Disagree to Strongly Agree)* and gauges the beliefs held by the individual about themselves i.e., “Sometimes I think I know other people better than I know myself”. Higher scores indicate higher self-concept clarity that translates into higher self-esteem and consistent self-description whereas, lower scores indicate lower self-concept clarity, so lower self-esteem and increased rumination. The internal reliability for this scale in this sample was good, α = .86. (Appendix A)

Help-Seeking

To measure help-seeking the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) and Mental Help Seeking Intention Scale (MHSIS) were combined. The inventory was developed by Mackenzie et al., (2004) which consists of 24 items (α = .87) and is separated into three factors, each has eight items whose internal consistency is good: *Psychological openness*- an individual's openness to acknowledge their psychological problems (PO) and seek help for those problems, α = .82 (Item 1: “There are certain problems which should not be discussed outside of one's immediate family”), *Help-seeking propensity* (H)- the individual’s belief about their willingness and ability to seek help for their psychological problems, α = .76 (Item 2: “I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems”), and *Indifference to stigma* (S) - an individual's concern about what will significant others think or feel when they find out that they are seeking help for their psychological problems to gauge social norms, α = .79 (Item 3: “I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems”). Participants indicate their level of agreement with each statement using a 5-point Likert type with anchors (*Disagree-Agree*). A higher cumulative score indicates having a more positive attitude toward help-seeking behavior.

The internal reliability for this scale in the current sample was good, α = .84. The subscale Psychological Openness had a questionable internal consistency (α=.66), Help-seeking Propensity (α= .78) and Indifference to Stigma (α = .79) had acceptable internal consistency. (Appendix B)

Mental Health Seeking Intention Scale was developed by Hammer & Spiker (2018) which consisted of three items. Participants indicate their intention to seek help for their mental health concerns using a 7-point Likert type scale with anchors (*Extremely Unlikely-Extremely Likely*). The higher the mean score, the greater is the help-seeking intention should they have a mental health problem. A sample item is, Item 1: "If I had a mental health concern, I would intend to seek help from a mental health professional." The internal reliability for this scale in this sample was excellent, α = .96. (Appendix C)

Perceived Need for Help and Mental Health Services utilization

Perceived Need for help was measured by an item ("In the past 12 months, did you think you needed help for emotional or mental health problems such as feeling sad, blue, anxious or nervous?"). To measure mental health services utilization an item asked participants whether in the past year, they received treatment for mental health problems. If the participant answered yes, they were further asked what type of treatment they received (Psychotropic medication or Therapy/Counseling). These items were taken from the questionnaire used in the Healthcare for Communities Study (Wells et al., 2003)-a national study of mental health care use, and were also utilized by Eisenberg et al, (2009).

An additional item relevant to college students was taken from Eisenberg et al., (2009) that gauged if mental health problems were affecting the respondent's academic performance would they talk to no one or a text option was present to write who the respondent would talk to if applicable. The responses were categorized into four categories, Mental Health Professional (Therapist/Counselor) or Primary Care Physician, Family Member (parents,

siblings, and grandparents), Friend or Partner, and College Faculty (professor, advisor, and dean). (Appendix D)

Kessler Psychological Distress Scale (K-10)

The scale was developed by Kessler et al., (2003) which consists of 10 questions (α = .93). Participants indicate how they have been feeling over the last 30 days i.e, 4 weeks (Item 2: "During the last 30 days, about how often did you feel nervous?" using a 5-point Likert Scale with anchors (*None of the time- All of the time*). The higher the cumulative score the higher the psychological distress and vice versa. The internal reliability for this scale in this sample was excellent, α = .93. (Appendix E)

Adapted Devaluation-Discrimination Scale for Stigma

Perceived Public/ Peer Stigma Scale. The current study used the devaluation-discrimination scale which was adapted by Lally et al., (2013) from the original version by Link (1987). One of the main changes in the adapted version is altering the wording from 'mental patients' to 'people who have received mental health treatment'. The perceived public stigma scale consists of 12 statements (α = .86). A sample item is, Item 7: "Most people think less of a person who has received mental health treatment." The internal reliability for this scale was calculated for this sample which was good, α = .85. (Appendix F)

For the purpose of this study, the perceived public stigma scale adapted by Lally et al., (2013) was adapted to measure perceived peer stigma by changing the wording from 'most people' to 'my peers' (Item 6: "My peers would think less of a person who has received mental health treatment.") The perceived peer stigma also consists of 12 statements and the internal reliability for this scale in this sample was found to be good α = .89. (Appendix G)

The perceived public and peer stigma scales were equally randomized between participants and indicated their level of agreement using a 5-point Likert Scale with anchors (*Strongly Agree- Strongly Disagree*). Question 5, 6, 7, 9, 11, 12 are reverse coded, and the

higher the average score, the higher is the perceived public or peer-group stigma held by the respondent.

Personal Stigma Scale. Lally et al., (2013) adapted four items (α = .78) from the original version by changing the wording from 'most people' to 'I'. The first two statements measure a respondent's behavior ('I would willingly accept a person who has received mental health treatment as a close friend' and 'I would be reluctant to date a man/woman who has received mental health treatment') and the last two statements measure an attitude ('I believe that a person who has received mental health treatment is just as trustworthy as the average citizen' and 'I would think less of a person who has received mental health treatment'). The scale uses a 5-point Likert Scale with anchors (*Strongly Disagree- Strongly Agree*), and items 3 and 4 are reverse coded. The internal reliability for this scale in this sample was poor, α = .52. (Appendix H)

Procedure

After receiving approval from the Human Research Review Committee (HRRC) at Hollins University, an online Qualtrics survey was open for approximately two months for Hollins University students, age 18 and or above. The survey link was distributed through class announcements and email by psychology professors, international departmental emailing list, Facebook posts on various Hollins University pages. The completion time was between 20-25 minutes and the survey began with Informed Consent. If the participants chose to participate they completed a demographics questionnaire (age, major, gender, race/ethnicity) followed by a series of measures. The first measure was the self-concept clarity questionnaire that includes 12 questions (on a 5-point *disagree-agree* Likert scale) and focuses on the beliefs held by the individual about themselves. The second questionnaire was the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) combined with the Mental Help Seeking Intention Scale (MHSIS) both of which have the same instructions (definitions of the terms that will be

used in IASMHS and MHSIS) and 27 items (24 items of IASMHS on a 5-point *disagree-agree* Likert scale and 3 items of MHSIS 7-point *unlikely-likely* Likert scale). The inventory taps into psychological openness, help-seeking propensity, and indifference to stigma whereas, MHSIS focuses specifically on mental health-seeking intention. The third questionnaire was the Kessler Psychological Distress Scale (K-10) that includes 10 questions (on a 5-point scale where *1: none of the time* and *5: all the time*) that taps into how the participant has been feeling over 30 days (4 weeks). The fourth questionnaire was the Personal stigma scale that includes four items (on a 5-point *disagree-agree* Likert scale). This was followed by the fifth questionnaire that gauges the perceived need for help (no-one or other (text)) and mental health utilization via three items with appropriate answer choices. The sixth questionnaire was equally randomized between participants so, it was *either* the Perceived public stigma or Perceived peer-group stigma scale. Both scales have 12 questions (on a 5-point *disagree-agree* Likert scale). In between all the measures each participant answered two Instructed- Response Items that were randomly embedded to check participant attention (Appendix I)

After the completion of the questionnaires, participants read a debriefing statement and were redirected to the extra credit information portion if the participant wished to receive extra credit in one psychology undergraduate-level course.

Results

There were 113 participants of which two participants were removed because they answered all instructed- response items incorrectly, resulting in 111 participants. All results are reported at an alpha level of .05. Internal reliability of all scales was found to be close to the original internal reliability values except the Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) subscale Psychological Openness: questionable internal consistency ($\alpha = .66$) and personal stigma: poor internal consistency ($\alpha = .52$).

Correlations between SCC, Help-Seeking Behavior, and Psychological Distress

The mean for the self-concept clarity (SCC) scale was 31.91 (*S.D* = 9.42). The mean for the first help-seeking scale, Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS) was 86.20 (*S.D* = 13.64) with the subscales having the following means: Psychological Openness (*M* = 27.90, *S.D* = 5.28), Indifference to Stigma (*M* = 29.70, *S.D* = 6.69), Help-seeking Propensity (*M* = 28.58, *S.D* = 6.19). The mean for the second help-seeking scale, Mental Help Seeking Intention Scale (MHSIS) was 4.84 (*S.D* = 1.79).

To test the relationship between self-concept clarity and help-seeking, a Pearson correlation coefficient was calculated between self-concept clarity (SCC) and help-seeking scales (IASHMS and MHSIS). A weak, positive correlation between SCC and IASHMS was found, $r\,(103) = .25$, $p = .005$, indicating a significant relationship between the variables. Hence, participants with a higher self-concept clarity had a more positive attitude towards seeking mental health services.

A significant correlation was not found between SCC and MHSIS, $r\,(108) = .14$, $p = .077$. A ceiling effect was found i.e., respondents clustered around higher scores on the MHSIS, skewness= -.67. After re-coding the data as a dichotomous variable (1 and 0), no significant changes in the results were found.

Next, the correlations between SCC and IASHMS inventory subscales were calculated. There was no significant correlation between SCC and psychological openness. However, a weak, positive correlation between SCC and indifference to stigma was found, $r\,(104) = .252$, $p = .005$, indicating a significant relationship between the variables in the expected direction. Participants with higher self-concept clarity were less concerned about mental health stigma. A weak, positive correlation between SCC and help-seeking propensity was found, $r\,(107) = .21$, $p = .016$, indicating a significant relationship between the variables. Participants with higher self-concept clarity responded as having a greater tendency towards help-seeking. All correlations between self-concept and help-seeking measures can be found in Table 1.

The mean for the Self-concept clarity was 31.91 (S.D = 9.42). The mean for the Kessler was 29.85 (S.D = 9.41) which was in the likely to have a mild disorder range. To test the relationship between self-concept clarity and psychological distress, a Pearson correlation coefficient was calculated between self-concept clarity (SCC) and Kessler Psychological Distress Scale (K-10). A moderate, negative correlation between SCC and K-10 was found, $r(108) = -.584$, $p < .001$, indicating a significant relationship between the variables i.e., participants with a higher self-concept clarity also reported lower psychological distress.

Table 1

Pearson r Correlation Coefficients between SCC and Help-seeking measures

	Measure	*M*	*SD*	1	2	3	4	5	6
1.	Self-Concept Clarity	31.91	9.42	--					
2.	IASHMS	86.20	12.64	.25**	--				
3.	Psychological Openness	27.90	5.28	.08	--				
4.	Indifference to Stigma	29.70	6.69	.25**	--				
5.	Help-seeking Propensity	28.58	6.19	.21*	--				
6.	MHSIS	4.84	1.78	.14	.66**	.23**	.38**	.81**	--
7.	Psychological Distress	29.85	9.41	-.58**	-.28**	-.03	-.32**	-.24**	-2.12*

**. Correlation is significant at the .01 level (2-tailed).

*. Correlation is significant at the .05 level (2-tailed).

Multiple Regression

A multiple linear regression was calculated to predict help-seeking propensity (IASHMS_H) based on self-concept clarity, personal stigma, and psychological distress. The

data was screened for assumptions and outliers, and no outliers were found. All assumptions of linearity, normality, and homoscedasticity were found to be met and multicollinearity was not found however, SCC and Kessler correlation was reaching the cut-off .6-.8 as seen in Table 2.

A significant regression equation was found, F (3, 105) = 5.286, p = .002, with R^2 of .13. Only personal sigma and psychological distress were significant predictors of help-seeking. Participants' predicted help-seeking is equal to 34.864 -3.018 (personal stigma) -0.157 (psychological distress).

Table 2

Multiple Regression to predict help-seeking propensity based on self-concept clarity, personal stigma, and psychological distress.

					Collinearity Statistics	
	B	S.E	t	p	Tolerance	VIF
SCC	.074	.074	1.011	.314	.654	1.530
Personal Stigma	-3.018	1.105	-2.732	.007	.951	1.051
Psychological Distress	-.157	.074	-2.210	.036	.650	1.539

Correlations between Stigma (Personal & Perceived Public/Peer)

Perceived public stigma scale had the highest mean of 2.89 (*S.D* = 0.60), followed by Perceived peer stigma scale of 2.28 (*S.D* = 0.60) and Personal Stigma scale 1.34 (*S.D* = 0.52). A paired samples t-test was calculated to find if the mean difference in the perceived public stigma and personal stigma is significant. Results show that difference in means is significant

such that perceived public stigma is higher than personal stigma, t (54) = 14.11, p < .001, 95% CI [1.455, 2.345].

To test the relationship of personal stigma with perceived public stigma and perceived peer stigma, a Pearson correlation coefficient was calculated. We expected a positive correlation between personal and peer stigma. A moderate, positive correlation between personal stigma and perceived peer stigma was found, r (52) = .34, p = .006, indicating that participants with a lower personal stigma also had a lower perceived peer stigma and vice versa. A significant correlation was not found between personal and perceived public stigma, r (53) = .32, p = .324.

Table 3

Pearson r Correlation Coefficients between Stigma measures (Personal, Peer, and Public Stigma).

Measure	*M*	*SD*	1	2	3
1. Personal Stigma	1.34	0.52	--		
2. Peer Stigma	2.27	0.64	.34**	--	*
3. Public Stigma	2.89	0.60	.06	*	--

**. Correlation is significant at the .01 level (2-tailed).

*. Peer and Public stigma measures were equally randomized between participants; thus this correlation was not computed.

Correlations between Help-seeking propensity (IASHMS_H), MHSIS, and Stigma

To test the relationship between help-seeking measures and stigma scales, a Pearson correlation coefficient was calculated. We expected no correlation between perceived public stigma and help-seeking but, a negative correlation between help-seeking behavior and personal stigma as well as, perceived peer stigma. A weak, negative correlation between help-seeking propensity and Personal Stigma was found, $r\,(108) = -.190$, $p = .024$, indicating that participants with a higher help-seeking propensity had a lower personal stigma. A significant correlation was not found between help-seeking propensity and perceived public stigma scale, $r\,(53) = .033$, $p = .406$

A weak, negative correlation between help-seeking propensity and perceived peer stigma scale was found, $r\,(51) = -.268$, $p = .026$, indicating participants with a higher help-seeking propensity had a lower perceived peer stigma. There were no significant correlations between MHSIS and Stigma (personal stigma: $r\,(108) = -.14$, $p = .132$, perceived public: $r\,(53) = -.124$, $p = .184$, and perceived peer: $r\,(52) = -.150$, $p = .139$). A ceiling effect for MHSIS was observed. However, a moderate, positive correlation between indifference to stigma (IASHMS_S) and MHSIS was found, $r\,(105) = .383$, $p = .001$, indicating that participants who were indifferent to stigma had a higher mental help seeking intention.

Table 4

Pearson r Correlation Coefficients between IASHMS_H (Help-seeking propensity), MHSIS, and Stigma measures (personal, peer, and public stigma).

Measure	*M*	*SD*	1	2	3	4	5
1. Help-seeking propensity	28.58	6.19	--				
2. MHSIS	4.84	1.79	.81**	--			
3. Personal Stigma	1.34	0.52	-.19*	-.14	--		

4. Peer Stigma	2.27	0.64	-.27*	-.15	.34**	--	***
5. Public Stigma	2.89	0.60	.03	-.12	.06	***	--
6. Indifference to Stigma	29.70	6.69	.36**	.38**	--		

***. Peer and Public stigma measures were equally randomized between participants thus, their correlation was not computed.

**. Correlation is significant at the .01 level (2-tailed).

*. Correlation is significant at the .05 level (2-tailed).

Personal Stigma and Majors

Majors were coded into psychology and other majors. Three outliers were detected among psychology majors which were excluded for the t-test. There were no outliers in other majors. After outlier exclusion, there were 37 psychology majors and 71 other major participants.

To test whether there is a difference in stigma between majors, an independent *t* test was calculated to compare the mean scores of psychology and other majors on personal stigma. A significant difference between the means of the groups, $t(106) = 14.91$, $p < .001$, $d = 0.50$, 95% CI [.089, .895] was found. This represents a small to moderate effect size. The mean of other majors was significantly higher ($M = 1.40$, $SD = .57$) than was that of psychology majors ($M = 1.16$, $SD = .30$), indicating a higher personal stigma in other majors than psychology major participants. The graphical representation of this difference can be found in Figure 1.

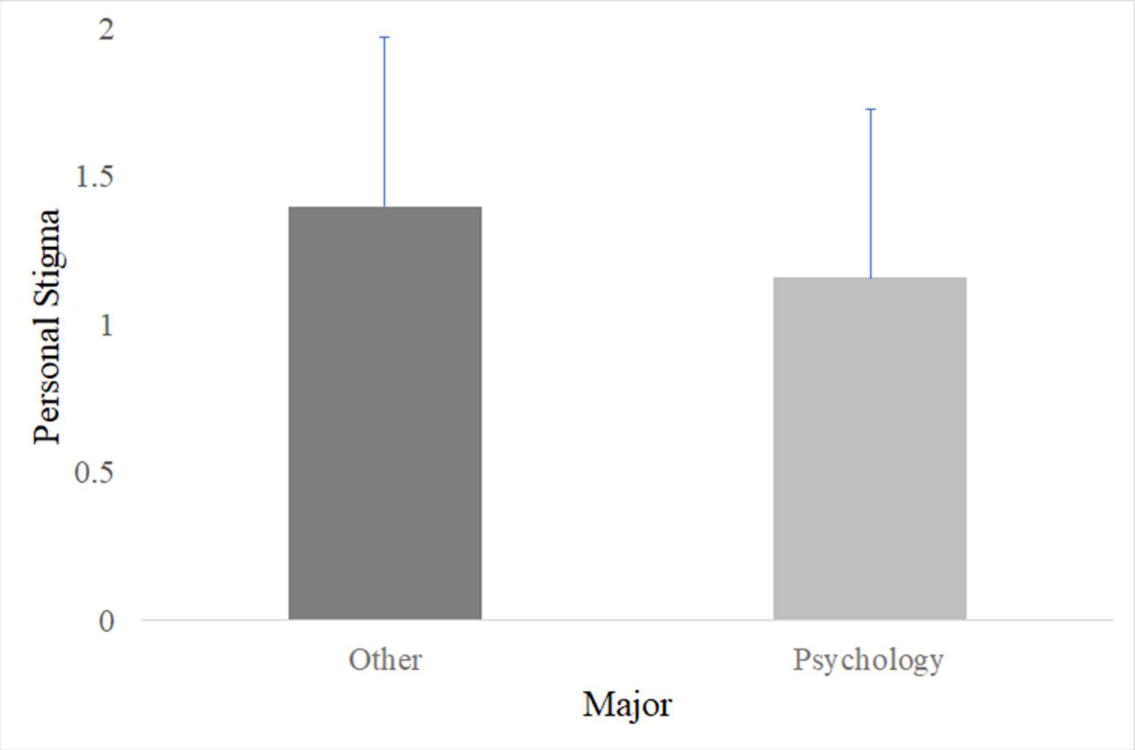

Figure 1

Mean personal stigma for other (non-psychology major) and psychology majors. The mean personal stigma for psychology majors is less than other majors as hypothesized. Vertical lines indicate the standard deviation that is higher for other majors than psychology majors.

Personal Stigma and Ethnicity

To test whether there is a difference in personal stigma between ethnicities, a one-way ANOVA was calculated. Only three groups of ethnicities (Black/ African-American, White/ European/ non-Hispanic, and Asian/Asian American) had sufficient number of participants to run the analysis. A significant difference was found, F (2 ,92) = 3.817, p = .026, η2 = .077. Post hoc Tukey tests found that participants who identified as Asian/Asian American had significantly higher personal stigma (M = 1.65, SD = .69) than those who identified as White/ European/ non-Hispanic (M = 1.28, SD = .44) (p = .026). No significant differences were found for participants who identified as Black/African American (M = 1.41, SD = 0.59).

Self-concept Clarity (SCC) and Major

To test whether there is a difference in self-concept clarity between psychology and other majors, an independent *t* test was performed. A significant difference was not found between the means of psychology and other majors, indicating no difference in self-concept clarity between the two groups, t (106) = 35, $p < .558$, 95% CI [-1.104, 6.305]

Self-concept Clarity (SCC) and Ethnicity

To test whether there is difference in self-concept clarity between three groups of ethnicities (Black/ African American, White/ European/ non-Hispanic, and Asian/Asian American), a one-way ANOVA was performed. A significant difference in self-concept clarity was not found between different ethnicities, F (2 ,91) = 2.172, p = .120.

Need for Help and Mental Health Services Utilization

Only 20 (18%) of participants responded that they would talk to no one if mental health problems were affecting their academic performance. Other participants, 91 (82%) of 111 total respondents indicated they would speak with someone. Most respondents reported they would talk with a Mental Health Professional or Primary Care Physician 44 (39.6%), College Faculty 42 (37.8%), Friend or Partner 36 (32.4%) and Family Member 32 (28.8%). If participants' answers belonged to more than one category, the answer was marked to belong in more than one category.

In the past year, 76 respondents reported they needed help with their mental health problems, 25 selected maybe and 10 selected the option no. In the past year, 50 of the respondents reported having received treatment for mental health problems whereas, 3 refused treatment and 58 reported they did not receive any treatment. From those 50 respondents who did receive mental health treatment, 15(13.5%) received psychotropic medication and 35(31.5%) received therapy/counseling.

Discussion

Summary

The purpose of the study was to explore the relationship between self-concept clarity, stigma, and help-seeking behavior. The first hypothesis (a) predicted a positive correlation between self-concept clarity and help-seeking, which was supported by the results. We correlated self-concept clarity measures with help-seeking measures (Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS), IASMHS sub-scale help-seeking propensity, and Mental Help Seeking Intention Scale (MHSIS)). Results show that individuals who have a higher self-concept clarity have a more positive attitude towards seeking mental health services and are more likely to seek help. However, we did not find a significant correlation between self-concept clarity and the mental help seeking intention scale. Although the internal validity of the three-item mental help seeking intention scale (MHSIS) in our sample was excellent, there was a ceiling effect i.e., all respondents clustered around higher scores on the scale. This ceiling effect further echoed in the results that only 18% of the respondents were not willing to talk to anyone if their mental health problems were affecting their academic performance. Hence, the inability to find a significant correlation between self-concept clarity and MHSIS is unique to the population used by the study. Moreover, another dissertation study shows that the internal validity for MHSIS in their sample was unacceptable (Miller, 2020). They recorded their data as a dichotomous variable (1 and 0), but when the same was done for this study, it made no significant changes in the results. In addition, the MHSIS was developed using volunteers from ResearchMatch, limiting the generalizability of the scale because it has not been validated outside of the original study (Hammer & Spiker, 2018). Hence, the help-seeking propensity subscale of the IASHMS was used for the multiple regression dependent variable.

The second hypothesis (b) predicted a negative correlation between self-concept clarity and psychological distress because according to previous research, self-concept clarity was negatively correlated with affect balance and internalizing/externalizing problems (Bigler et

al., 2001). Results show support for the hypothesis because as self-concept clarity increased, the psychological distress gauged by the Kessler Psychological Distress Scale decreased. Therefore, a lower self-concept clarity was associated with not only lower help-seeking, but also higher psychological distress.

A multiple regression was calculated to predict help-seeking propensity (IASHMS_H) based on self-concept clarity, personal stigma, and psychological distress. SCC was not found to be a predictor of help-seeking propensity, which could be due to the correlation between SCC and help-seeking propensity that was reaching the cutoff of .6-.8 for multicollinearity. Personal stigma and psychological distress continued to be valid predictors of help-seeking as suggested by numerous studies.

The third hypothesis (c) predicted a positive correlation between personal and peer-group stigma, which was supported by the results. This implies that when personal stigma increases, peer-group stigma also increases. Consistent with numerous other studies, perceived public stigma remained higher than personal stigma. No association between personal and perceived public stigma was found contrary to what was found by the Eisenburg et al. (2009) study.

The fourth hypothesis (d) predicted a negative correlation between peer-group stigma and help-seeking behavior. The results supported the hypothesis because a negative correlation was found between peer stigma and help-seeking propensity sub-scale of IASHMS. However, no association was found between mental health seeking intention (MHSIS) and the different types of stigma (personal, public, and peer-group), although Mental health seeking intention (MHSIS) was positively correlated with indifference to the stigma sub-scale of IASHMS. Again, this could be due to the ceiling effect observed for the MHSIS. Consistent with previous studies, personal stigma continued to be associated with help-seeking whereas, perceived public stigma was not associated with help-seeking. Hence, changing the reference group from

perceived “public” stigma to perceived “peer” stigma did help change the association with help-seeking. To summarize, personal stigma and perceived peer stigma were found to influence help-seeking propensity and perceived public stigma had no relationship with help-seeking.

The fifth hypothesis (e) was to determine if there are any differences in personal stigma and self-concept clarity between psychology majors vs. non-majors. Perceived public stigma and perceived peer stigma were randomly assigned between participants so, personal stigma was the only measure that all participants took. Hence, for the stigma difference between psychology majors vs. non-majors, only personal stigma data was used. The results showed personal stigma was higher for non-majors so, psychology majors had a lower personal stigma. There was no difference in self-concept clarity of psychology majors vs. non-majors.

The sixth hypothesis was to determine if there are any differences in personal stigma and self-concept clarity between different ethnicities. Only three groups of ethnicities had sufficient numbers of participants to perform the analysis, Black/ African American, White/ European/ non-Hispanic, and Asian/Asian American. The results show that participants who identified as Asian/Asian American had higher personal stigma than those who identified as White/ European/ non-Hispanic, which is consistent with prior research. There was no difference in self-concept of different ethnicities.

Most participants were willing to speak with someone if mental health services were affecting academic performance. About half of the participants received mental health services, which is reassuring especially because the psychological distress mean score was in the likely to have a mild disorder range.

Limitations

One of major limitations that warrants attention is that the data was collected during a worldwide pandemic, COVID-19. This is evident by the Kessler scale mean score of

psychological distress which was in the 'likely to have a mild disorder' range. The ceiling effect in the Mental Health Services Intention Scale (MHSIS) could also be influenced by the increase in mental health awareness and utilization amid the pandemic.

As a self-report survey, social desirability bias is a key consideration while interpreting results especially for variables such as personal stigma. Moreover, we utilized a convenience sample, undergraduate students from Hollins University, mostly females and White/non-Hispanic/European participants. This greatly limits the generalizability of our results.

Implications and Future Research

This is the first study known to the researchers that explores the concept of self-concept clarity and help-seeking together. It is important to investigate whether the individuals with lower self-concept clarity are more or less likely to seek help. According to the current study, individuals with lower self-concept clarity have shown to be less likely to seek help. There have been numerous studies including longitudinal studies that explore the relationship between self-concept clarity and psychopathology and consistently show that lower self-concept clarity is a possible risk factor. If the individuals with a lower self-concept clarity are not likely to seek help, this is a population that needs to be targeted by the mental health help-seeking intervention programs. Also, in terms of predicting help-seeking, self-concept clarity was not found to be a valid predictor and future studies should aim to replicate the finding to gauge whether this is true across difficult settings.

Moreover, there should be additional research on the relationship of self-concept clarity and help-seeking behavior to investigate if our results are replicable with other populations as well. Other studies can also focus on what are the factors that help shape self-concept such as, family influences have been shown to play a salient role. A longitudinal study over the course from early developmental years until late adolescence could help enhance our knowledge of the developmental trajectory of self-concept clarity.

Stigma continues to be a barrier to seek mental health services. As personal stigma and perceived peer stigma increases, help-seeking behavior decreases. This is the first study to the knowledge of the researchers that investigated perceived peer stigma in addition to personal stigma and perceived public stigma. Hence, there should be additional research to replicate our findings. Furthermore, personal stigma was positively correlated with perceived peer stigma such that as personal stigma increases, perceived peer group stigma increases as well. There needs to be more research on what are the factors that shape personal stigma, which has been shown by several studies to be a key determinant of mental health help-seeking. Asian/Asian-American consistently show increased stigma across several studies and there needs to be more stigma reduction campaigns, as well as research exploring the unique barriers to help-seeking for Asian/Asian-American specifically. Increasing the sample size and random sampling would be beneficial for future studies. These findings hold immense significance for mental health educational programs that aim at reducing stigma and increase our awareness of the different types of stigma that impede help-seeking behavior.

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Appendix A: Self-Concept Clarity

For each question, this scale is displayed with the following options.

1 (*strongly disagree*) 2 (*disagree*) 3 (*neither agree of disagree*) 4 (*agree*) 5 (*strongly agree*)

1. My beliefs about myself often conflict with one another
2. On one day I might have one opinion of myself and on another day I might have a different opinion
3. I spend a lot of time wondering about what kind of person I really am
4. Sometimes I feel that I am not really the person I appear to be
5. When I think about the kind of person I have been in the past , I'm not sure what I was really like
6. I seldom experience conflict between the different aspects of my personality
7. Sometimes I think I know other people better than I know myself
8. My beliefs about myself change very frequently
9. If I were to describe my personality , my description might end up being different from one day to another day
10. Even if I wanted to, I don't think I would tell someone what I'm really like
11. In general, I have a clear sense of who I am and what I am
12. It is often hard for me to make up my mind about things because I don't really know what I want

Appendix B: Inventory of Attitudes Toward Seeking Mental Health Services (IASMHS)

For each question, this scale is displayed with the following options and instructions.

1 (*disagree*) 2 (somewhat *disagree*) 3 (*are undecided*) 4 (somewhat *agree*) 5 (*agree*)

Instructions: The term *professional* refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and family physicians). The term *psychological problems* or *mental health concerns* refer to reasons one might visit a professional ranging from personal difficulties (e.g., loss of a loved one) to mental illnesses (e.g., anxiety, depression). Similar terms include *mental health concerns, emotional problems, mental troubles*, and *personal difficulties*.

1. There are certain problems which should not be discussed outside of one's immediate family
2. I would have a very good idea of what to do and who to talk to if I decided to seek professional help for psychological problems
3. I would not want my significant other (spouse, partner, etc.) to know if I were suffering from psychological problems
4. Keeping one's mind on a job is a good solution for avoiding personal worries and and concerns
5. If good friends asked my advice about a psychological problem, I might recommend that they see a professional
6. Having been mentally ill carries with it a burden of shame
7. It is probably best not to know *everything* about oneself
8. If I were experiencing a serious psychological problem at this point in my life, I would be confident that I could find relief in psychotherapy

9. People should work out their own problems; getting professional help should be a last resort
10. If I were to experience psychological problems, I could get professional help if I wanted to
11. Important people in my life would think less of me if they were to find out that I was experiencing psychological problems
12. Psychological problems, like many things, tend to work out by themselves
13. It would be relatively easy for me to find the time to see a professional for psychological help
14. There are experiences in my life I would not discuss with anyone
15. I would want to get professional help if I were worried or upset for a long period of time
16. I would be uncomfortable seeking professional help for psychological problems because people in my social or business circles might find out about it
17. Having been diagnosed with a mental disorder is a blot on person's life
18. There is something admirable in the attitude of people who are willing to cope with their conflicts and fears *without* resorting to professional help
19. If I believed I were having a mental breakdown, my first inclination would be to get professional attention
20. I would feel uneasy going to professional because of what some people would think
21. People with strong characters can get over psychological problems by themselves and would have little need for professional help

22. I would willingly confide intimate matters to an appropriate person if I thought it might help me or a member of my family
23. Had I received treatment for psychological problems, I would not feel that it ought to be "covered up"
24. I would be embarrassed if my neighbour saw me going into the office of a professional who deals with psychological problem

Appendix C: Mental Help Seeking Intention Scale (MHSIS)

For each question, this scale is displayed with the following options and instructions.

(1) *Extremely unlikely* (2) *Moderately unlikely* (3) *Slightly unlikely*

(4) *Neither likely nor unlikely* (5) *Slightly likely* (6) *Moderately likely* (7) *Extremely likely*

Instructions: The term *professional* refers to individuals who have been trained to deal with mental health problems (e.g., psychologists, psychiatrists, social workers, and family physicians). The term *psychological problems* or *mental health concerns* refer to reasons one might visit a professional ranging from personal difficulties (e.g., loss of a loved one) to mental illnesses (e.g., anxiety, depression). Similar terms include *mental health concerns, emotional problems, mental troubles*, and *personal difficulties*.

1. If I had a mental health concern, I would intend to seek help from a mental health professional
2. If I had a mental health concern, I would try to seek help from mental health professional
3. If I had a mental health concern, I would plan to seek help from mental health professional

Appendix D: Perceived Need for Help and Mental Health Services utilization

1. If mental health problems were affecting your academic performance, who would you talk to?
    - No one
    - Others for example: _____
2. In the past year, did you think you needed help for emotional or mental health problems such as feeling sad, blue, anxious, or nervous?
    - No
    - Maybe
    - Yes
3. In the past year, have you received treatment for mental health problems.
    - No
    - Yes
    - Refused
4. What type of treatment did you receive?
    - Psychotropic medication
    - Therapy or counseling

Appendix E: Kessler Psychological Distress Scale (K-10)

For each question, this scale is displayed with the following options and instructions.

(1) *None of the time* (2) *A little of the time* (3) *Some of the time*

(4) *Most of the time* (5) *All the time*

Instructions: The following questions concern how you have been feeling over the past 30 days (4 weeks). Select the option that best represents how you have been

1. During the last 30 days, about how often did you feel tired out for no good reason?
2. During the last 30 days, about how often did you feel nervous?
3. During the last 30 days, about how often did you feel so nervous that nothing could calm you down?
4. During the last 30 days, about how often did you feel hopeless?
5. During the last 30 days, about how often did you feel restless or fidgety?
6. During the last 30 days, about how often did you feel so restless you could not sit still?
7. During the last 30 days, about how often did you feel depressed?
8. During the last 30 days, about how often did you feel that everything was an effort?
9. During the last 30 days, about how often did you feel so sad that nothing could cheer you up
10. During the last 30 days, about how often did you feel worthless?

Appendix F: Perceived Public Stigma

For each question, this scale is displayed with the following options and instructions.

(1) *Strongly agree* (2) *Agree* (3) *No opinion* (4) *Disagree* (5) *Strongly disagree*

Instructions: Please indicate whether you agree or disagree with the following statements.

1. Most people would willingly accept someone who has received mental health treatment as a close friend.
2. Most people believe that a person who has received mental health treatment is just as intelligent as the average person.
3. Most people believe that someone who has received mental health treatment is just as trustworthy as the average person.
4. Most people would accept someone who has fully recovered from a mental illness as a teacher of young children in a public school.
5. Most people feel that receiving mental health treatment is a sign of personal failure
6. Most people would not hire someone who has received mental health treatment to take care of their children, even if he or she had been well for some time.
7. Most people think less of a person who has received mental health treatment.
8. Most employers will hire someone who has received mental health treatment if he or she is qualified for the job.
9. Most employers will pass over the application of someone who has received mental health treatment in favor of another applicant.
10. Most people in my community would treat someone who has received mental health treatment just as they would treat anyone.
11. Most young adults would be reluctant to date someone who has been hospitalized for a serious mental disorder.

12. Once they know a person has received mental health treatment, most people will take that person's opinions less seriously.

Appendix G: Perceived Peer Stigma

For each question, this scale is displayed with the following options and instructions.

(1) *Strongly agree* (2) *Agree* (3) *No opinion* (4) *Disagree* (5) *Strongly disagree*

Instructions: Please indicate whether you agree or disagree with the following statements.

1. Once they know a person has received mental health treatment, my peers will take that person's opinions less seriously.
2. Most of my young peers would be reluctant to date someone who has been hospitalized for a serious mental disorder.
3. My peers in my community would treat someone who has received mental health treatment just as they would treat anyone.
4. Employers in my community will pass over the application of someone who has received mental health treatment in favor of another applicant.
5. Employers in my community will hire someone who has received mental health treatment if he or she is qualified for the job.
6. My peers would think less of a person who has received mental health treatment
7. My peers would not hire someone who has received mental health treatment to take care of their children, even if he or she had been well for some time.
8. Most of my peers feel that receiving mental health treatment is a sign of personal failure
9. My peers would accept someone who has fully recovered from a mental illness as a teacher of young children in a public school.
10. My peers believe that someone who has received mental health treatment is just as trustworthy as the average person.
11. My peers believe that a person who has received mental health treatment is just as intelligent as the average person.

12. My peers would willingly accept someone who has received mental health treatment as a close friend.

Appendix H: Personal Stigma scale

For each question, this scale is displayed with the following options and instructions.

(1) *Strongly agree* (2) *Agree* (3) *No opinion* (4) *Disagree* (5) *Strongly disagree*

Instructions: Please indicate whether you agree or disagree with the following statements.

1. I would willingly accept a person who has received mental health treatment as a close friend.
2. I believe that a person who has received mental health treatment is just as trustworthy as the average citizen.
3. I would think less of a person who has received mental health treatment.
4. I would be reluctant to date a man/woman who has received mental health treatment.

Appendix I: Instructed-Response Items

1) Please select the first option to assist the researchers of this study in data checking.

2) Please select the last option for data checking purposes.