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Stigma among Saudi youth on secondary and intermediate school adolescent attitudes towards serious mental illness in Makkah Al-Mokarramah2021

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Abstract

Background

The word “stigma”, deriving from the Greek verb *στίζειν*(to sting), was used during the classical period to indicatethe mark made with a spike on the forehead of a slavewhen he was found guilty of an offence, on the arm of aconscript recognized as suitable for serving the military,on the body of criminals and other people identified asconvicts. Stigma is a fundamental barrier to individuals seeking out mental health treatment in the Middle East. According to epidemiological studies conducted in Europe and in the United States, mental illnesses are common characteristics of our urban societies. Their frequency is estimated at almost one fourth of the general population in most countries. **Aim of the study**: This study aims to assessment the dimensions of stigma and social tolerance and examine its correlates in the younger, population of in Makkah Al-Mokarramah city. **Method**: cross sectional study conducted at secondary and intermediate schools at in Makkah Al-Mokarramah city in 2021. Sample population consists the participants were youths aged 12–20 years old residing and studying in Makkah Al-Mokarramah at the time of data collection. Our total participants were (400) .**Results:**is a significant relation between age and Physical danger, Class thinking, Personal space where Respectively (P-value=0.032, 0.000, 0.029) and r Respectively (0.108, 0.183.) while no significant relation between age and Optimistic thinking, Avoid naming (stigma), Social side, Social Responsibility where Respectively (P-value=0.256, 0.000, 0.930, 0.059, 0.213) (less than significant level 0.05)

and r Respectively (0.058, -0.004, 0.096, 0.063) **Conclusion:** We propose the following initiatives to reduce stigma toward mental illness in the KSA: Health education to families to enable them to support their affected relatives, Increase cooperation between psychiatrists and faith healers and Health education programs to the young people in schools to increase their awareness and understanding of mental illnesses and to combat negative stereotypes.

Keywords: Stigma, Saudi, youth, secondary, intermediate, school, adolescent, attitudes, mental, illness, in Makkah Al-Mokarramah

1. Introduction

1.1 Background

Psychological troubles issues for secondary and middle school teenagers allude to the scope of all diagnosable enthusiastic, conduct, and mental issue. They incorporate gloom, nervousness, alteration, lead, dietary issues, and others. Youngsters have mental, enthusiastic, and social issues that are genuine, agonizing, and costly. These problems are a supply of stress for adolescent as well as properly as his family, school, community, and bigger society in the quick and lengthy term.[1] Adolescents experience fast biological, psychological, and social transitions that can be related with intellectual wellness issues. During the secondary school time frame there are additionally extra educational stressors. [2].

The personal satisfaction of individuals with intellectual problems and their family members not just relies upon the seriousness of the illness, however additionally on their capability to face stigma and discrimination associated to the illness ; these reason contrary results regarding deferred or absence of access to mind. Individuals with psychic distress regularly often avoid contacting mental health services administrations to get away from the danger of being marked as intellectually sick or be marginalized or discriminated [3]

As to anticipation and treatment of mental issue, the image of the risky crazy person, the image of the darkish haven or the emotions of loneliness forlornness and estrangement related with the mentally sick, present during hundreds of years in in famous way of life and in art, are nevertheless striking vivid in our minds and they are capable to stimulate our imagination. [4]

These responses originate from prejudgment of an individual dependent on restricted data. Stigma consequences in labeling, preference, generalizing, partition, status misfortune and negative segregation .[5].

In Arab nations the research in this age bunch are restricted, one research carried out in United Arab Emirates gauge that 24% of the kids and teenagers are suffering from emotional and behavioral problems.[6]

Late research's carried out in different social settings demonstrate that the old stigma related with psychological sickness is as yet present existing in the most piece of

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population. Mentally sick individuals are seen as flippant, unable to manipulate themselves, hopeless, irremediably, misplaced for the society, perilous or a subject of benevolence and sympathy. [7,8]

Review of literature:

Shame is normal toward people with mental health issues and can be characterized remain described as a label that sets an individual apart beyond others, connects her or him with bothersome qualities and prompts shirking by others in the community [9]

Shame can lead in imitation separation. Separation might be clear and immediate, for example, anyone offering a negative comment about your psychological sickness or your treatment. Or then again it might be unexpected or inconspicuous, for example, anyone maintaining a strategic distance from you on the grounds that the individual expect you could be temperamental, vicious or perilous because of your psychological sickness. You may even judge yourself.[10]

A evaluation of the epidemiology of kid and adolescent mental issue reports that mental issue can show up early on in lifestyles and contrarily influence affect several aspects of a young person's life existence poor well-being, self-esteem, social relationships in and, confidence, social connections all through school and academic accomplishment .Stigma similarly compounds these troubles via decreasing well-being and appearing as a barrier to assist seeking. [11]Therefore, psychological well-being shame influences youthful grown-ups and young people of tutoring age during a significant period of improvement in their life. [12]

Besides more established older kids had higher appreciation of mental sickness as emotional and psychological disturbances, the assessment recommended that negative perspectives expanded with age in the two kids and adolescents. Studies have likewise demonstrated those adolescents are hesitant to associate intimately with those with psychological illness by showing want for social distance. [13]

Similarly Hansson and others (2016) under a patronage of Swedish national ant stigma campaign conducting a study to examination changes in public stigma during this examination compared to baseline in 2009. They found a significant positive effect on mental health literacy, attitudes, and intentions of social contact with individuals with mental disease.[14]

The more recently of late a cross-sectional research on adolescent attitudes perspectives towards mental sickness and social resilience in a multiethnic populace as Singaporean youth by Pang and his collogues (2017).

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The researches indicated that there is a misguided judgment and negative perspectives towards mental sickness are normal, and demonstrating a clear wants for effective stigma decrease campaigns. [15]

Another researches done in 2007 by Lowder to inspect the connection between age group and attitudes toward mental sickness. It noticed that the older adult sample was expected to show more positive attitudes toward the mentally sickness and less negative attitudes due increased opportunities for contact with mental sickness.[26]

1.2. Rationale

In relation to mental illness in Saudi Arabia indicates the lack of an accurate estimate for the prevalence of such problems among the Saudi population. However, a few studies have been conducted in relation to specific mental disorders or particular populations and age groups. It may be related to stigma of mental illness that interferes with the patient's decision to seek help.

While there is a growing literature on mental illness stigma and strategies for reducing stigma among adults, less is known about how children and adolescents view persons with mental illness in Makkah Al-Mokarramah.

1.3. Aim of the study:

This study aims to assessment the dimensions of stigma and social tolerance and examine its correlates in the younger, population of in Makkah Al-Mokarramah city2012.

1.4. Specific objective

- To determine the relationship between young age and attitude toward serious mental illness among youth at Makkah Al-Mokarramahcity .
- To recognize the relationship between young age and social tolerance toward serious mental illness among youth at Makkah Al-Mokarramahcity.

2. Methodology

2.1 Study setting:

This study has been conducted at secondary and intermediate schools at Makkah Al-Mokarramah city in2021.

Intermediate and secondary education in Saudi Arabia:

Intermediate education in Saudi Arabia lasts three years. According to government data, 40,454 students (19,864 male and 20,590 female) were in intermediate education in 2021 at Makkah Al-Mokarramah. Secondary education in Saudi Arabia lasts three years and this is the final stage of general education. After the intermediate education, students have the opportunity for both general and specialized secondary education. Technical secondary Industrial institute which provide technical and vocational education and training programs lasts three years in the fields of industry, commerce and agriculture. According to government data, 24,976 students (10,106 male and 14,870 female) were in secondary education in 2020 at Makkah Al-Mokarramah.

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2.2. Study Population

The Participants consists of youths aged 12–20 years old residing and studying in Makkah Al-Mokarramah at the time of data collection.

2.3. Study Design

Cross-sectional study, Multi-stage sampling has been adapted.

2.4. Inclusion criteria:

- Willing and able to participate in the study.
- Aged 12-20 years old.

2.5 Exclusion Criteria

- No specific exclusion criteria.

2.6 Sample size:

Based on the ministry of education, General Department of Education in Taif city the population size of 65,430 students in secondary and intermediate schools.

Using EPI info version 7, the study sample size has be determined as follows:

With expected frequency = 50%. Worst acceptable result = 5%. With 95% confidence interval

Accordingly, a sample size (n) has been(382). In order to account for non-response and achieve more generalizable results, the investigator has be increase the sample size up to(400).

2.7 Sampling Technique:

Multi-stage sampling has be adapted.

2.8 Sampling method:

1. STAGE ONE

   Makkah Al-Mokarramahcity has be divided into four sectors (east, west, south, and alhawiyah) and from each sector, two male and two female schools (one intermediate and other secondary schools)has be selected by simple random technique, a total of sixteen schools has be randomly selected.

2. STAGE TWO

   In each randomly selected school, twenty five students has be selected by stratified sampling technique

2.9 Data collection method:

Self-administered questionnaire has been given to all participants.

Questionnaire:

Self- administered questionnaire has be used. The questionnaire has be done by the researcher after reviewing of current, related national and international related literature. It consisted of four sections .

- **The first section** aimed to assess the socio-demographic characteristic of the participants (e.g., sex, age, educational level, nationality). In addition to question related to words that the student think of when he/ she hears the words 'mental illness''.

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- **The second section**:

ATSMI-AV21 Scale (attitude toward serious mental illness- Adolescent version): [24]

The ATSMI-AV Scale is a validated 19-item self-report scale that measures attitudes towards mental illness. Responses to statements are based on a five-point Likert scale where one indicates 'completely disagree' and five indicates 'completely agree'. The scale explores perceptions of violence, social avoidance, and embarrassment if one were diagnosed as having a mental illness and personal invulnerability to mental illness. Previous research identified five factors comprising threat, social control/ concern, wishful thinking and categorical thinking and out of control.

A factor-based scale score ranging from 1 to 5 may be calculated for each factor, with higher scores indicating higher levels of stigma towards mental illness.

The first factor titled threat (eg, 'Mentally ill people scare me') refers to the fear of direct harm to oneself or one's reputation due to contact with mentally ill individuals and consists of four items.

The second factor titled social control/concern (eg, 'I sometimes worry that I may have a mental illness') consists of four items and pertains to concerns about being diagnosed with a mental illness and subsequently labeled by society.

The third factor titled wishful thinking (eg, 'People who are mentally ill could be well if they tried hard enough') refers to unrealistic thoughts towards recovery from mental illness and consists of four items. In contrast,

The fourth factor titled categorical thinking (eg, If you become mentally ill your life is pretty much over') refers to all-or-nothing thought patterns towards the concept of mental illness and consists of four items.

The fifth factor titled out of control (eg, 'mentally ill people tend to be more violent than other people') consists of three items and relates to the association between mental illness and deviant behaviour.

Social Tolerance Scale:

The Social Tolerance Scale measures social tolerance through desire for social distance (seven items) and social responsibility for mental health issues (four items). Items has berated on a five-point scale ranging from 'strongly agree' to 'strongly disagree'. Higher scores indicate higher levels of stigma towards mental illness. According to the scale developers, the Cronbach's alpha for the scale was 0.87. However, a factor analysis was warranted to verify the factors for the Social Tolerance Scale in the present sample.

2.10. Questionnaire validity:

In this paper, we describe the Attitudes Toward Serious Mental Illness The investigator used Scale–Adolescent Version (ATSMI-AV) and our initial examinations of structure of adolescents. distributed the Questionnaire to three consultants of different specialties (family medicine, community medicine, and psychiatrists)who

have enough experience and interest in the subject and some amendments were done, accordingly.

2.11 Data Entry and Analysis

Data has be collected and verified, variables coded and then entered to a MS program with adequate backup. Both categorical variables (i.e., closed-ended questions offered fixed responses), and continuous variables (open ended questions the answers to which require quantities) has be handled. Descriptive statistics, e.g., number, proportions, cumulative proportions, mean and standard deviation, etc.has be displayed, as appropriate. Analytically, parametric techniques, e.g., t-test and ANOVA, has be attempted, as applicable, especially analyzing normally distributed variables. Otherwise, non-parametric alternatives, e.g., Man Whitney U test and ANOVA or χ^2 test of independence , has be used, as necessary. The Statistical Package for Social Sciences (SPSS) software for MS- version-23 has be used for the analysis. All tests has be conducted at level of significance a=0.05; results with p-values<0.05 has be considered "statistically significant."

2.12 Pilot Study

A pilot study has been done on 35 students who meet the study's eligibility criteria. The pilot study has mainly help examine both the instrument's content validity and construct validity issues, alongside with other needed information, as follows: a) test the understanding of the instruments' questions, undergo necessary changes and modifications, accordingly .The results has be excluded from the final research report.

2.13 Ethical Considerations

1. Necessary approval by the Research Ethics Committee of the secondary and intermediate schools at Makkah Al-Mokarramah city, has be obtained prior to the study.
2. A written consent has been obtained both from administrators of the secondary and intermediate schools in Makkah Al-Mokarramah. The aim of the study has been explained to them. Feedback about the results has been sent to these organizations .
3. Consent has been obtained from each participant to voluntarily participate in the study.
4. Data was be treated confidentially and has be used only for the purpose of research

2.15 Budget: Self-funded.

3. Results

Out of(390) student invited to participate in the study, the completed questionnaire with a response rate of(100.0%).

Table 1. Distribution of demographic data(age, gender, Level of education, Nationality) in our study(n=390)

	N	%
Age		

< 15	28	7.2
15-18	236	60.5
>18	126	32.3
Range	13-32.	
Mean+SD	16.923±1.582	
Gender		
Female	165	42.3
Male	225	57.7
Level of education		
Preparatory	42	10.8
Secondary	348	89.2
Nationality		
Saudi	373	95.6
Non-Saudi	17	4.4

The socio-demographic data of the sample is shown in table 1. The Mean+ SD age of the sample was (16.923±1.582). Regarding of age was (13-32) and regarding the gender were 225 (57.7%) participants were male while females was (42.3%). most of the sample is shown secondary education was (89.2%) while preparatory was (10.8%) most of participant were Saudi nationality was(95.6%)

Table 2. Distribution of the Adolescent's impression common words associated with the term 'mental illnesses

	Low		Average		High		Score	
	N	%	N	%	N	%	Range	Mean±SD
Adolescent's impression of mental illness								
Physical danger	142	36.4	173	44.4	75	19.2	4-20.	11.172±3.812
Optimistic thinking	10	2.6	68	17.4	312	80.0	4-20.	16.667±2.958

Class thinking	83	21.3	238	61.0	69	17.7	4-20.	11.767±2.896
Avoid naming (stigma)	103	26.4	168	43.1	119	30.5	3-15.	9.597±2.944
Social side	77	19.7	224	57.4	89	22.8	4-20.	12.095±3.188
A measure of social acceptance towards mental illness								
Personal space	87	22.3	193	49.5	110	28.2	6-25.	16.113±3.891
Social Responsibility	25	6.4	124	31.8	241	61.8	5-25.	19.410±3.996

Table (2) show the majority of the Adolescent's impression of mental illness is the optimistic thinking were increase in high than Average and low, where (80.0%) and the ranged from 4 to 20 by mean+SD (16.667±2.958),followed by Respectively Social side, Class thinking were increase, Physical danger and Avoid naming (stigma) in Average than high and low, where Respectively(57.4%,61.0%,44.4%, 43.1%) and the ranged from (4 to 20 and 3-15) by mean+ SD Respectively(12.095±3.188,11.767±2.896, 11.172±3.812, 9.597±2.944). Regarding the measure of social acceptance towards mental illness show the majority of the Participants answer is Social responsibility were increase in high than Average and low, where (61.8%) and the ranged from (5 to 25) by mean+ SD (19.410±3.996),followed by Personal space where (49.5%) and the ranged from (6 to 25) by mean+ SD (16.113±3.891).

Table 3the Correlations between socio demographic (age) and the ATSMI-AV.

Correlations		
	Age	
	r	**P-value**
Physical danger	0.108	0.032*
Optimistic thinking	0.058	0.256
Class thinking	0.183	0.000*
Avoid naming (stigma)	-0.004	0.930
Social side	0.096	0.059
Personal space	-0.111	0.029*
Social Responsibility	0.063	0.213

Table (3) show that is a significant relation between age and Physical danger, Class thinking, Personal space where Respectively (P-value=0.032, 0.000, 0.029) and r Respectively (0.108, 0.183.) while no significant relation between age and Optimistic thinking, Avoid naming (stigma), Social side, Social Responsibility where Respectively (P-

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value=0.256, 0.000, 0.930, 0.059, 0.213) (less than significant level 0.05) and r Respectively (0.058, -0.004, 0.096, 0.063) .

Table 4 the Correlations between socio demographic (Gender) and the ATSMI-AV.

	Gender		T-test	
	Female	Male		
	Mean ± SD	Mean ± SD	t	P-value
Physical danger	10.473 ± 3.720	11.684 ± 3.806	-3.136	0.002*
Optimistic thinking	17.315 ± 2.554	16.191 ± 3.143	3.771	<0.001*
Class thinking	11.200 ± 2.555	12.182 ± 3.062	-3.353	<0.001*
Avoid naming (stigma)	8.933 ± 3.006	10.084 ± 2.806	-3.883	<0.001*
Social side	12.230 ± 3.015	11.996 ± 3.312	0.718	0.473
Personal space	17.091 ± 4.173	15.396 ± 3.510	4.348	<0.001*
Social Responsibility	20.436 ± 3.514	18.658 ± 4.164	4.447	<0.001*

Table 4 show that is a significant relation between gender and all item of ATSMI-AV where Respectively (P-value=0.002, <0.001, 0.029) respectively (T=-3.136, 3.771, -3.353, -3.883, 4.348, 4.447) while no significant relation between gender and Personal space (P-value=0.473) (less than significant level 0.05) and (T=0.718) male had lower ATSMI-AV towards mental illness compared with females expect social side and Social Responsibility the females had lower to engage in supportive action towards with a mental illness compared with male .

Figure 2 the Correlations between socio demographic (Gender) and the ATSMI-AV.

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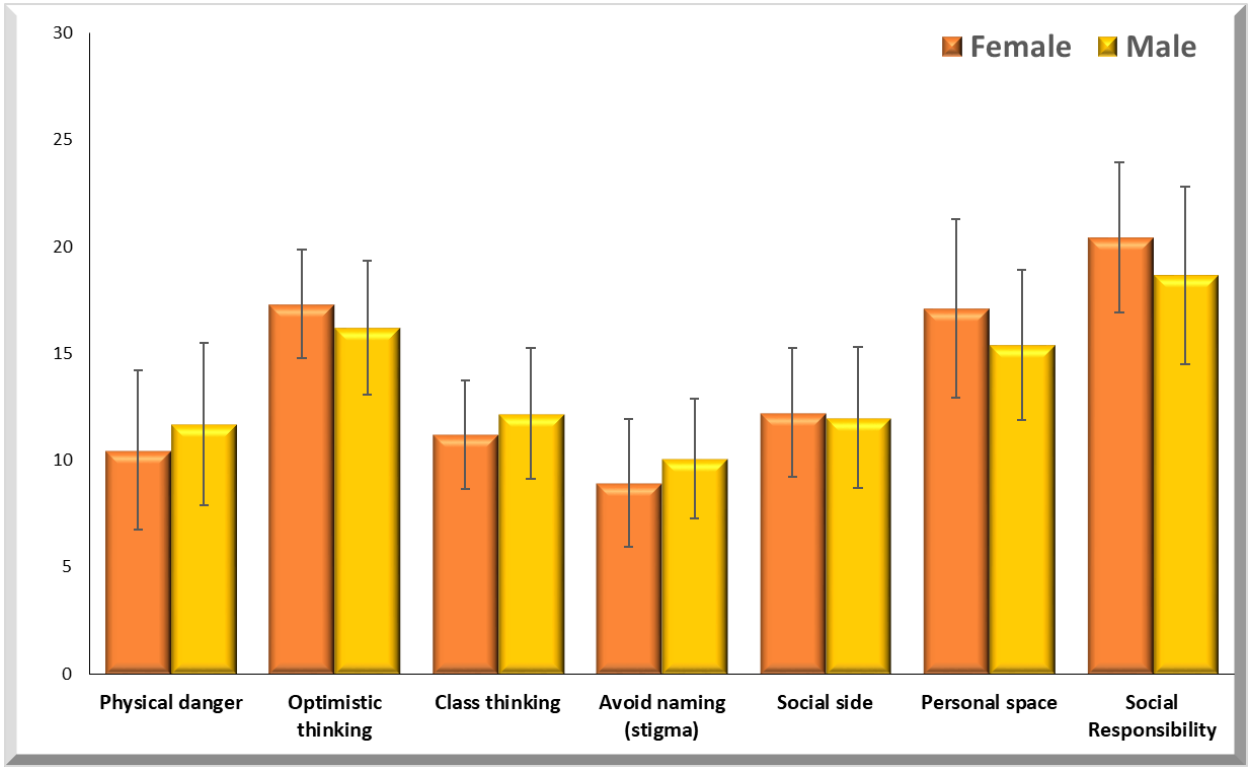

Table 5 the Correlations between socio demographic (Level of education) and the ATSMI-AV.

	Level of education		T-test	
	Preparatory	Secondary		
	Mean ± SD	Mean ± SD	t	P-value
Physical danger	9.452 ± 3.507	11.379 ± 3.800	-3.129	0.002*
Optimistic thinking	16.810 ± 2.805	16.649 ± 2.979	0.331	0.741
Class thinking	10.286 ± 2.442	11.945 ± 2.898	-3.561	<0.001*
Avoid naming (stigma)	8.286 ± 2.916	9.756 ± 2.912	-3.090	0.002*
Social side	11.119 ± 2.276	12.213 ± 3.264	-2.109	0.036*
Personal space	18.571 ± 3.277	15.816 ± 3.858	4.438	<0.001*
Social Responsibility	20.048 ± 3.290	19.333 ± 4.070	1.095	0.274

Table 5 show that is a significant relation between Level of education and Physical danger, Class thinking, Avoid naming (stigma), Personal space where Respectively (P-value=0.002, <0.001, 0.002, 0.036, <0.001) respectively (T=-3.129, -3.561, -3.090, -2.109, 4.348, 4.438) while no significant relation between level of education and Optimistic thinking, Social Responsibility where Respectively (P-value=0.741, 0.274) (less than significant level 0.05)

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and (T=0.331, 1.095) Secondary education had higher ATSMI-AV towards mental illness compared with Preparatory

Figure 3 the Correlations between socio demographic (Level of education) and the ATSMI-AV.

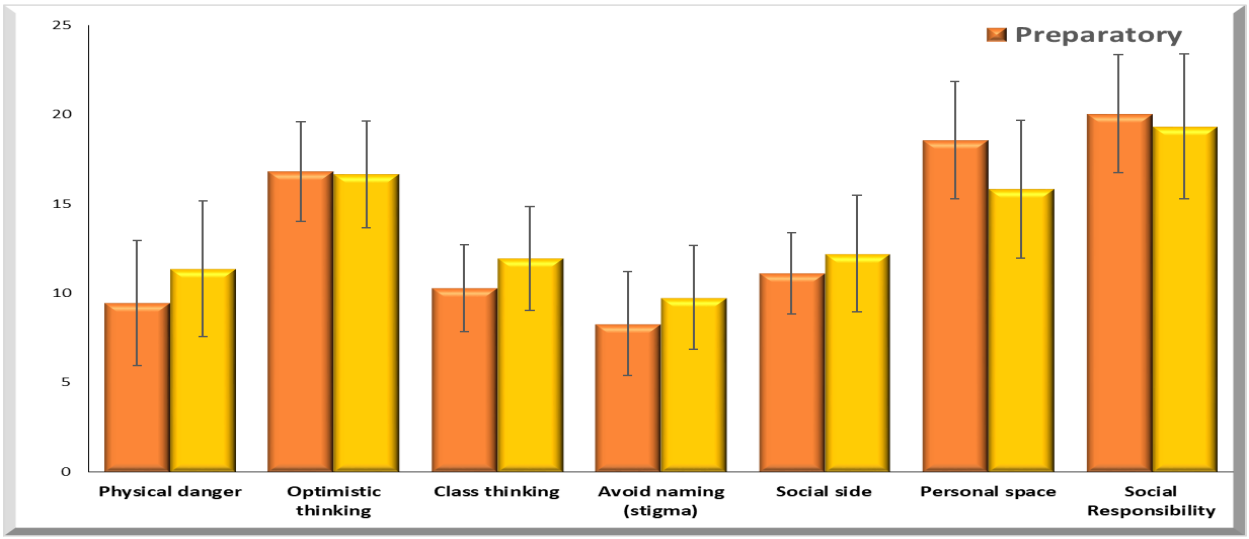

Table 6 the Correlations between socio demographic (Nationality) and the ATSMI-AV.

	Nationality		T-test	
	Saudi	Non-Saudi		
	Mean ± SD	Mean ± SD	t	P-value
Physical danger	11.193 ± 3.737	10.706 ± 5.324	0.515	0.607
Optimistic thinking	16.638 ± 2.980	17.294 ± 2.392	-0.894	0.372
Class thinking	11.780 ± 2.894	11.471 ± 3.002	0.431	0.667
Avoid naming (stigma)	9.558 ± 2.943	10.471 ± 2.918	-1.251	0.212
Social side	12.083 ± 3.157	12.353 ± 3.920	-0.341	0.733
Personal space	16.059 ± 3.877	17.294 ± 4.120	-1.281	0.201
Social Responsibility	19.316 ± 4.000	21.471 ± 3.375	-2.184	0.03*

Table 6 show that is a significant relation between Nationality and Social Responsibility where (P-value=0.03) and (T=-2.184) while no significant relation between Nationality and all items of ATSMI-AV while Non-Saudi students had higher for contact with mentally ill individuals compared with Saudi students.

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Figure 4 theCorrelations between socio demographic (Nationality) and the ATSMI-AV.

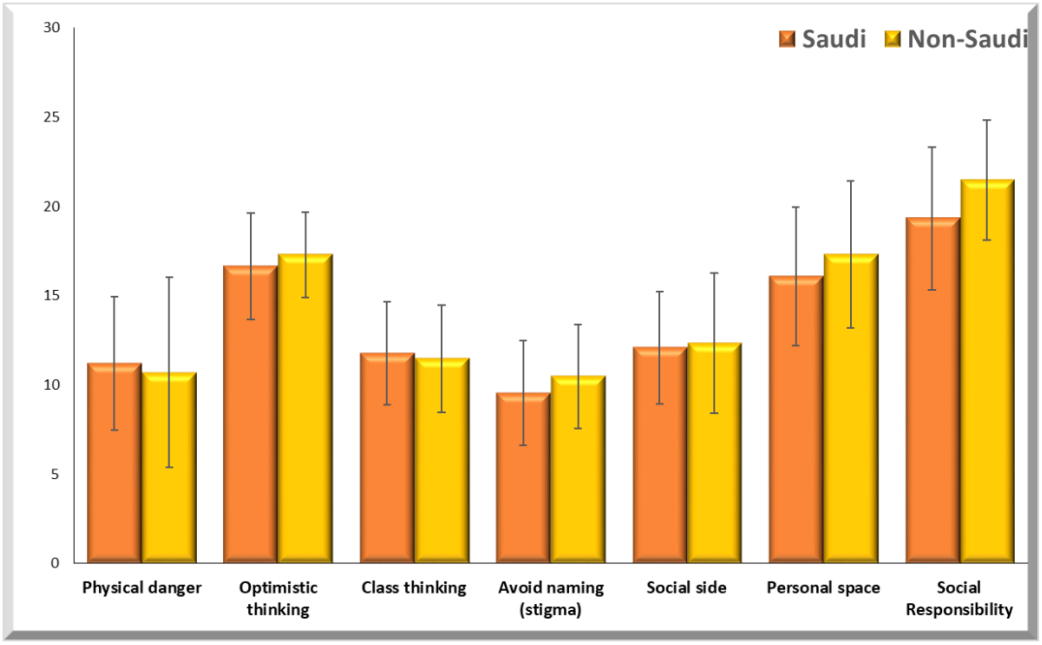

Table 7 the Correlations between personal space , social responsibility and the ATSMI-AV.

Correlations				
	Personal space		Social Responsibility	
	r	P-value	r	P-value
Physical danger	-0.556	<0.001*	-0.164	0.001*
Optimistic thinking	0.053	0.294	0.309	<0.001*
Class thinking	-0.322	<0.001*	-0.010	0.849
Avoid naming (stigma)	-0.474	<0.001*	-0.065	0.199
Social side	-0.336	<0.001*	0.014	0.788

Table 7 show that is a significant relation between Personal space and Respectively Physical danger, Class thinking , Avoid naming (stigma), Social side where Respectively (P-value=0.001) and (r=-0.556, -0.322, -0.474, -0.336) while no significant relation between Personal space and Optimistic thinking where(P-value=0.294) (less than significant level 0.05) and (r=0.053). While show that is a significant relation between Social Responsibility and Respectively Physical danger, Optimistic thinking where Respectively (P-value=0.001, <0.001) and (r=-0.164, -0.309) while no significant relation between Social Responsibility and Class thinking, Avoid naming (stigma), Social side where Respectively (P-value=0.849, 0.199, 0788) (less than significant level 0.05) and Respectively (r=-0.010, -0.065, 0.014).

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4. Discussion

Overall, a large proportion of the participants appear to have misconceptions towards mental illness. The ATSMI-AV yielded five factors, 'physical threat', 'wishful thinking', 'social concern', 'label avoidance' and 'categorical thinking'. the Social Tolerance Scale yielded two factors, 'social distance' and 'social responsibility' though the items in each factor was not exactly the same as that used by Koller et al.[17] Significant associations were found between subscale factors and socio-demographic factors.

This study were identical to those 'Social construction/concern' was also the same except for one item 'I sometimes worry that I may have a mental illness' which did not load onto any factor in the analysis. Two separate factors were related to threat in the sample ('physical threat' and 'label avoidance') though the items fell under a single overarching factor of threat The remaining items in the out of control and categorical thinking factors in the study by [18] were combined into one factor in this sample as 'categorical thinking'. A significant relation between age and Physical danger, Class thinking

This study Similar that suggested by[19]. The Social also produced a slightly different factor structure from the authors suggested seven items for social distance and four for social responsibility. The two factors found in our analysis were similar except for one item ('I would visit a classmate in hospital if they had a mental illness') which loaded onto the 'social responsibility' factor instead of 'social distance', unlike the findings [19]. The gender differences for ATSMI-AV subscales in our sample were different to those found they found that boys scored higher on threat, a finding that was not replicated here. However, female in our sample did endorse more 'categorical thinking' [20] males also scored lower for 'social responsibility' than females, suggesting they were less likely to endorse supportive action towards the mentally ill. Conversely, females showed more 'social concern' and 'wishful thinking' than males. [21] study on Hong Kong secondary school students revealed similar findings with females showing higher benevolence towards the mentally ill and males showing more stereotyping, restrictive, pessimistic and stigmatizing attitudes towards mental illness. Female adults in Singapore also scored lower for stigma in previous nationwide studies.[22]

Some of these findings are similar to those found in the adult population [23] where Indian and Malay participants scored lower on a social distance measure despite having higher personal stigma.[24] found that individuals from minority ethnic groups are less likely to support prejudicial attitudes about mental illness.

5.Conclusion

Overall, a significant proportion of Saudi youth report having little education about mental health which could explain the stigma endorsed by the sample.

There has been remarkable progress in the recognition and treatment of mental health disorders over the past 60 years in Saudi Arabia, especially in the last two decades. The mental health system is making long strides toward addressing the mental health needs of its people. There is still a way to go in extending care to theentire population in developing

training programs in Saudi medical centers and academic institutions particularly fellowship training in psychiatry subspecialties, and in conducting research to guide efforts to modernize the mental health care system.

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