Heliyon 7 (2021) e06957

Contents lists available at ScienceDirect

Heliyon

journal homepage: www.cell.com/heliyon

Research article

Mental health stigma: the effect of religiosity on the stigma perceptions of students in secondary school in Jordan toward people with mental illnesses



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A R T I C L E I N F O	A B S T R A C T		
<i>Keywords:</i> Stigma Students Mental disorder Religiosity	Aim: Mental health disorders in many countries are regarded as taboo and are often concealed. This study aimed to (a) explore students in secondary school' stigma perceptions of mental disorder; (b) examine whether there is a connection between religiosity and stigma toward people with mental illnesses; and (c) identify stigma correlates for stigma perceptions toward people with mental illnesses based on the religiosity and demographic features of the students. Method: A cross-sectional correlational study was undertaken among 357 students from two high schools. The participants completed a structured research instrument that consisted of (1) a sociodemographic characteristics questionnaire, (2) a religiosity questionnaire and (3) a devaluation-discrimination scale. Results: The regression model was able to forecast a moderate percentage of stigma perception variance (F = 4.74, p = .01). Gender was the only important correlate in the model at p = .05. Conclusion and implications: This study found that among students in secondary school in Jordan there is an association between religiosity and stigma toward mental disorders. This result implies that there is a need to increase policy maker information about the importance of applying religious principles to decrease stigma and enhance a positive non-stigmatizing attitude toward mental disorders. Moreover, improving the curriculum content concerning the problems associated with mental ill health may allow students to gain a more precise understanding of mental disorders more generally.		

1. Introduction

The World Health Organization (WHO, 2017) clearly states that mental health should not be considered merely not presence of any sign and symptom of disease. Nonetheless, mental health disorders are regarded as taboo and are often concealed in many developing countries, including Jordan (WHO, 2016; Ahmad et al., 2018). Hence having a mental health disorder causes the patient to experience stigma. In this context, stigma can be defined as a set of negative attitudes and beliefs, or discrimination, which results in the inappropriate labeling of people with mental illnesses (Shammari et al., 2020). This type of stigma negatively affects patients and can lead to many dangerous impacts such as ignoring treatment (Ciftci et al., 2013). Stigma against people with mental illnesses are widespread and a study by the WHO showed that many people e patients for having mental illnesses, they avoid any health care, and they experience all types of violence (WHO, 2017). This work is important because the literature indicates that the impact of stigma on a mentally ill patient is profound (AlAlazzam and Abuhammad, 2020; Knaak et al., 2017; Crowe et al., 2016). Like other societies, the Jordanian community is reluctant to discuss mental disorder, which may exacerbate feelings of discrimination and shame among people with mental illnesses (Ahmad and Dardas, 2016). For instance, films portray people living with schizophrenia as hazardous, socially undesirable, aggressive, and irrational individuals who should be avoided (Arvaniti et al., 2009).

In Jordan, there is an estimation that more than one fifth of population suffers from a mental health illness and the majority do not seek treatment illness (WHO, 2016). Also, according to another report in Jordan, less than 3% of government spending on health is sending for promotion of mental health, with most funding of the 3% being directed toward treating mental health issues in hospitals. However, ministry of health has checked the policies regarding mental health with the aim of implementing a new, comprehensive approach to mental disorder (Hijiawi et al., 2013). Moreover, public social insurance pays for the treatment of mental issues in Jordan and over 80% of mentally ill people have free access to vital psychiatric drugs (DOS, 2012).

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https://doi.org/10.1016/j.heliyon.2021.e06957

Received 9 December 2020; Received in revised form 7 March 2021; Accepted 26 April 2021



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In Jordan, youth and adolescents make up most of the population (Abuhammad et al., 2018), yet there is a shortage of data on adolescent mental health, particularly in relation to those who attend secondary school. Also, to the researcher's knowledge, there is no sufficient understanding of mental health disorders in these people in Jordan. Hence it is considered that the school system needs to take steps to reinforce information and knowledge about mental disorders. The current study is one of the first studies regarding stigma toward people with mental illnesses among school students. An examination of the stigma perceptions and attitudes held by the secondary school population is important because, some of these students will work in multidisciplinary areas that may include the provision of services to people with mental illnesses (Ivey et al., 2005). Thus, a recognition of students biases prior to their work with many fields related to health that may assist in decreasing stigma in the provision of such services. It is therefore essential for these future professionals to know about their own and others' perceptions about issues related to mental health, not least because attitudinal change is a significant mental health goal of the WHO (Johnson et al., 2001; Ketola and Stein, 2013). It is therefore crucial to examine the stigma perceptions that students in secondary school in Jordan have about individuals with mental disorders and the factors that might affect such perceptions.

Globally, religiosity is considered a dimension of every individual's life (Abuhammad et al., 2020a, Abuhammad et al., 2020b) including children and people with mental illnesses. Religiosity can be described as the degree of individual commitment and the attitudes and behaviours that show respect of higher nonhuman power (Ketola and Stein, 2013). According to Testoni et al. (2018), religion supports psychological health and improves emotional stability against mental disorders. Accordingly, religiosity must take in the consideration in the treatment process for mental illnesses (Freire et al., 2016). A study found that religion significantly affect an individual's beliefs and the stigma attitudes they have toward mental disorders (Bushong, 2018). This type of stigma is experienced among all religions such as Christianity, Judaism, and Islam. Moreover, Lyons et al. (2015) found that religious beliefs have a significant effect on attitude toward people with mental illnesses.

Significantly, the literature on stigma toward people with mental illnesses and its correlation with religiosity is abundant in European countries and USA (Crowe et al., 2016; Laurin et al., 2012). In contrast, there are very few studies about this phenomenon in Jordan. This lack is unfortunate considering that the religious climate in Jordan differs significantly from that of the United States and other Western countries. Indeed, Jordan has been identified as the most religious nation in the world as 96% of Jordanians consider themselves to be religious as compared to 60% of people in developed countries (Melhem et al., 2016).

Religion has a dominant position in the lives of people in Jordan (Abuhammad et al., 2020a). Mosque attendance five times a day for prayer is common and very lively, and the Mosque is often seen as fundamental for the teaching of Islamic ethics to members of society (Melhem et al., 2016). It is therefore not surprising that on several days of the week, devoted worshippers devote a considerable amount of time to the Mosque.

Researchers of Islam have argued that Jordanians are religious people and that religion is fundamental to their very being, which means that they surrender to will of God (Khraisat et al., 2019). Religious activities such as praying, and fasting are also prevalent in academic organizations in Jordan such as schools and universities and take place in special places or any clean area. Also, nearly all Mosque groups in larger society promote the religious activities of faithful students. The use of lecture halls for prayer is prevalent among the student population. Indeed, it is common to see students offering brief, silent prayers before the beginning of lessons and examinations.

It is hoped an impact of this study in the development of an instructional program on how to teach students in secondary school appropriately about mental health issues. Thus far, few research studies have been conducted to try to detect the stigma perceptions that high school students hold in respect of people with mental illnesses or to determine the effect of the sociodemographic characteristics of these students on their attitudes toward mental disorders (Good et al., 2011; Timmins et al., 2011).

Considering the gaps in the literature, this study focused on students in secondary school registered in Northern of Jordan. The goals of the study were to (a) explore students in secondary school' stigma perceptions of mental disorder; (b) examine whether there is a connection between religiosity and stigma toward people with mental illnesses; and (c) identify stigma correlates for stigma perceptions toward people with mental illnesses based on the religiosity and demographic features of the students.

2. Methods

2.1. Design

A survey was implemented in this study to obtain information from a convenience sample of Jordanian high school students.

2.2. Instrument

The structured research questionnaire consisted of three tools: (1) a sociodemographic characteristics questionnaire, (2) Religiosity Questionnaire and (3) Devaluation-Discrimination Scale (DDS).

Sociodemographic characteristics questionnaire: To obtain a sample description, the respondents were asked to provide their characteristics such as religion.

Religiosity Questionnaire: The tool that adapted from El-Menouar (2014) study for obtaining data on the students' degree of religiosity that include many religious dimensions. The Cronbach's alpha values for the five dimensions in the context of Jordan are as follows: religion principles = 0.82, duties of religion = 0.78, experience related to religion = 0.87, knowledge related to religion = 0.86, and orthopraxis = 0.76 (Al-Shatanawi, 2018).

Devaluation-Discrimination Scale (DDS): This scale was used to determine the degree of devaluation toward people with mental illnesses (Link et al., 1989). It is made of items related to devaluation of people with mental illnesses. Responses are evaluated using a five-point Likert scale ranging from not at all (1) to a great deal (5). The higher the score, the more favorable the participant's attitude toward mentally ill people. The internal consistency of the DDS among outpatient respondents has been reported to range from .72 to .88 (Vauth et al., 2007). For the current research context, the translated DDS has a Cronbach's alpha of .73 (Alvidrez et al., 2009).

2.3. Translation process

For this study, the original English-language version of both the Religiosity Questionnaire and the DDS into the Arabic language to validate and adapt it for Arabic culture. For this process, the method of Netemeyer et al. (2003) was adopted. The translation of the Religiosity Questionnaire and DDS was performed in three steps to determine semantic equivalence. First, two bilingual experts converted the two tools into the Arabic language. Second, the tools were backtranslated into the English language by two different bilingual experts. During the translation process, cultural differences were considered to create content equivalence, and any minor discrepancies were discussed until agreement was reached. The researchers verified the wording, response formats, and instructions of the items to improve content validity.

2.4. Sample and setting

Participants were recruited from a Jordan-based secondary school with a body of 2,300 students. Students from 11 nationalities were registered at this secondary school at the time of the study. Only

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The Ministry of Education in Jordan has control over and holds responsibility for supervising education-related issues in Jordan. Furthermore, the Ministry of Education in Jordan provides financial support not only to state schools, but also to some private schools depending on the number of students attending such schools. State schools are distributed across Jordan in cities, towns, and villages. The Jordanian educational system includes kindergarten, primary (first to sixth grades), secondary (seventh grade to diploma), and university undergraduate and higher degrees.

Multiple linear regression analyses were used to calculate the sample size using G. Power software version 3.0 (Faul et al., 2007). The required size for this study was 320 based on an alpha level of .05, a strength of .80, and affect size of .15 with nine correlates. In this research, the actual sample size was 400 students. A total of 357 surveys were returned. The testing of the multiple regression assumptions showed that there were no linearity, normality, or homoscedasticity violations.

2.5. Procedure

To promote recruitment, information brochures were provided to students on noticeboards in classrooms and via the e-mail system. The brochures described the objectives, the advantages, and the hazards of the research to the potential respondents. Additionally, one of the research team members explained the purpose of the study to the students in each class, as well as the benefits and risk, and how the confidentiality and privacy of the students would be maintained. The target group consisted of all Jordanian female and male secondary students in Irbid city in Jordan. The research questionnaire was obtained by eligible students interested in participating in the study. It took about 30 min for the respondents to complete the questionnaire.

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2.6. Ethical consideration

This study was endorsed by IRB of Jordan University of Science and Technology, which is in a city in northern Jordan. Participants who met the requirements were contacted by the research assistants and provided with a comprehensive consent form to be signed if they agreed to participate in the study. Both consent and assent for the children was given in signed format by one of their parents, the researchers will maintain the participating students' privacy data in a secure place. The research complies with the ethical norms recognized in the Helsinki Declaration.

2.7. Data management and analyses

For data entry and evaluation, version 25 of SPSS was used. Initially, the distribution of each variable was evaluated using frequency, mean, and standard deviation. A few missing data were substituted for each participant with the appropriate mean/median.

Results

2.8. Participant characteristics

The actual sample size was 357 participants. Their age ranged between 12 and 19 years (M = 16, SD = 1.34). There were 169 female students (47.4%). None of the students was married. All the students were living in urban area (357, 100%). The scores on the DDS ranged from 12 to 60 and the mean DDS score was 35.4 (SD = 5.4). See Table 1.

2.9. Correlations between stigma and religiosity

Authors were used Pearson correlation coefficient test for examining the correlation between religiosity and stigma toward people with mental illnesses. The findings indicated a connection (r = -0.061, p = 0.002) between stigma toward people with mental illnesses and religiosity. Note that the higher religiosity score is linked to a lower level of stigma toward people with mental illnesses. See Tables 2 and 3 for the item' description for each scale.

2.10. Correlates of stigma toward mental disorders

To determine the predictors of stigma toward people with mental illnesses based on the their characteristics, multiple regressions test was conducted. The model was able to predict a many predictor of stigma toward people with mental illnesses (F = 4.74, p = .01, R2 = .13). Of the nine correlates in the model, only gender was found to be an important predictor, where female participants showed more stigma toward people with mental illnesses (B = 1.58, p = .023). Table 4 presents the outcomes of the regression analysis.

3. Discussion

This study aimed to investigate the stigmatization perception of students in secondary school toward people with mental disorders and to identify the stigma correlates for mental disorder patients based on the students' characteristics. This is the first study in the Middle East that investigates the association between religiosity and stigma toward people with mental illnesses among students in secondary school.

The results of this research showed that students at secondary school held various views about mentally ill people, but that overall, they had adverse perception toward patients with mental health issues. This result is broadly in line with studies on biases against mentally ill people that discovered that stigma is assigned to people with mental illnesses by the public (Crowe et al., 2016; Corrigan and Wassel, 2008; Timmins et al., 2011). On the other hand, in research undertaken among graduate students in Jordan, it was found that the students had some important

favorable attitudes toward people with mental illnesses that can be classified into four categories (Hamaideh and Mudallal, 2009). Moreover, Laurin et al. (2012) stated that stimulating the concept of God in people's mind can cause avoidance to unethical attitudes and improve moral behaviours, one of which is assigning stigma toward people with mental illnesses.

The current study found that the attitude of the students toward people with mental illnesses was moderate. In a rehabilitation center in Turkey, Ciftci (2013) noted a powerful feeling of family shame while working with families with mentally ill children. The level of shame was so extreme in some instances that it led to mentally ill children not able to see public and locked in their houses (Al-Natour et al., 2021). Also, fathers would most often blame mothers for a child with mental illnesses. In this regard, it has been suggested that assistance from others (e.g., religious leaders) is crucial to bring about change in those societies where such attitudes are prevalent (Hijiawi et al., 2013).

Our study focuses on stigma with relation to religion and cultural variations. Similarly, in a research study on mental disorder perceptions and attitudes among medical students as well as Al-Adawi et al. (2002) in Oman discovered that organizations thought that mental illness was caused by ghost and ignore hereditary as a significant factor. In the same research, it was found that both organizations supported prevalent stereotypes about individuals with mental disorder and supported the segregation of psychiatric facilities from society. In contrast, Muslims in USA showed positive attitudes toward patients diagnosed with mental illness (Ciftci et al., 2013). However, Muslim university students in Qatar thought of mental illness as a punishment from Allah was reflected in their attitudes toward and stigmatization of people with mental illness (Zolezzi et al., 2017). These findings emphasize that there is a need to address and prevent stigma toward people with mental illness in different community settings.

In another study among Pakistini in United Kingdom that examined attitudes toward people with mental illnesses, none of the respondents reported that they think of marriage women with mental illnesses, only half demonstrated a desire to socialize with such an individual (Tabassum et al., 2000).

Social stigma remains strong among Muslims. The disclosure of a mental illness is considered 'shameful' due to worries about the effect on the social standing of the family (Aloud and Rathur, 2009; Youssef and Deane, 2006). Similarly, Shibre et al. (2001)among Ethiopian Muslims reported experiencing stigma owing to a relative with a mental illness, while a significant minority reported that other members of society would not be willing to get married to a person in their family if there was someone with a mental disorder in the family (36.5%). Similarly, many Muslim women avoid seeking a counselor's assistance that impact their marriage opportunities or their current marriage (Abu-Ras, 2003).

In a study conducted among female Muslims in Jordan, Abu-Ras (2003) discovered that approximately 70% reported shame, while 67% immigrant females reported experiencing domestic violence and 62% felt embarrassment seeking formal mental health services. Based on research conducted among 459 Muslims in the United States, Khan (2006) disclosed comparable patterns of gender stigma and help-seeking, where 15.7% recorded a need for counseling, while only 11.1% recorded a need for mental health services.

In the current study, the only demographic factor, apart from religiosity, that showed a significant correlation with stigma toward people with mental illnesses was gender. This finding is consistent with the previous literature. Specifically, the results of the current study revealed that male students showed more stigma toward people with mental illnesses. This is not consistent with another study conducted in a school student population that showed that female students exhibited more empathy and caring for people with mental illnesses (Pinfold et al., 2002). In contrast, Abuhammad et al. (2018) found that the lower the socioeconomic level of students, the more adverse their perception toward people with mental illnesses. Additionally, an unexpected finding reported in Abuhammad et al. (2018) was that there was a greater stigma attitude among nursing students who had experience with people with mental illnesses as compared to other students. Such a finding, for a study identifies a need for professional training (Knaak et al., 2017).

3.1. Clinical implications

In the future, some of the students in this study may become nurses and other healthcare professionals who will have the responsibility to care of people with mental illness that highlights the importance of this study. Focusing in the culture when developing the curriculum should be established for students in secondary school to ensure that they develop attitudes that are more accepting of mental disorders and avoid expressing stigma attitudes toward people with mental illnesses. Although religious activities such as praying and fasting are also prevalent in academic organizations in Jordan such as schools and universities', the curriculum needs to focus on religious morality such as empathy and understand feelings of others.

3.2. Limitations

It should be noted that the data used in the study were based on selfreports provided by the study participants, which could therefore be biased and affect the robustness of the findings. Additionally, the cross-

Items	never	rarely	sometimes	often	always
	Row N %	Row N %	Row N %	Row N %	Row N %
1. I would willingly accept a former mental patient as a close friend.	22.1%	24.4%	22.1%	16.2%	15.1%
2. I would believe that a person who has been in a mental hospital is just as intelligent as the average person.	5.3%	16.5%	41.2%	28.3%	7.3%
3. I believe that a former mental patient is just as trustworthy as the average citizen.	2.5%	2.5%	5.6%	13.7%	75.4%
4. I would accept a fully recovered former mental patient as a teacher of young children in a public school.	15.7%	14.0%	20.2%	28.9%	20.7%
5. I believe that entering a mental hospital is a sign of personal failure. (R)	70.3%	16.0%	7.0%	4.5%	2.2%
6. If would not hire a former mental patient to take care of their children, even if he or she had been well for some time. (R)	11.0%	19.5%	26.0%	26.3%	16.4%
7. I think less of a person who has been in a mental hospital. (R)	10.1%	21.4%	34.1%	23.9%	8.7%
8. If I were an employer, I would hire a former mental patient if s/he is qualified for the job.	15.2%	14.1%	16.3%	29.6%	23.7%
9. If I were an employer, I would pass over the applicant of a former mental patient in favor of another applicant. (R)	32.2%	29.4%	22.1%	10.4%	5.3%
10. I would treat a former mental patient just as they would treat anyone.	5.3%	8.4%	17.4%	20.7%	47.9%
11. I would be reluctant to date a man who has been hospitalized for a serious mental disorder	39.8%	24.6%	17.9%	14.3%	3.1%
12. If I knew a person was in a mental hospital, most people will take his or her opinions less seriously. (R)	19.2%	25.0%	27.0%	19.8%	5.2%

Table 2. Items description for stigma toward mental illnesses among children

Table 3. Item's description of religiosity among children.

Items	never	rarely	often	always	
	Row N %	Row N %	Row N %	Row N %	
1. I believe in the existence of Allah	0.3%	0.2%	3.1%	96.1%	
2. I believe in the holy Quran is revealed from Allah	0.3%	0.3%	3.6%	95.2%	
3. I believe in the existence of Angels and Jinn	0.3%	1.4%	4.2%	94.1%	
4. I believe in all the Prophets and messengers of Allah	0.3%	0.0%	2.8%	95.8%	
5. I believe in the sacred texts that were revealed to the prophets	0.6%	1.4%	3.1%	95.0%	
6. I believe in the Day of Judgment	0.3%	0.6%	3.9%	95.2%	
7. I belief in fate and destiny (Predestination)	0.6%	2.0%	5.9%	90.7%	
8. I start all my acts with Basmala (the name of Allah)	1.1%	16.7%	35.9%	44.6%	
9. I make sure to pray extra prayers	10.8%	42.7%	21.7%	23.6%	
10. I perform the prayers in the congregation	8.4%	45.5%	23.3%	20.8%	
11. I fast voluntarily (the Arafa day or Ashura etc)	5.9%	28.5%	25.4%	39.3%	
12. I'm eager to attend Quran Memorization centers	22.8%	37.7%	14.1%	24.2%	
13. I'm eager to attend of religious lessons	13.4%	34.2%	21.6%	29.4%	
14. I feel the presence of Allah	1.7%	3.9%	9.2%	85.2%	
15. I Praise Allah in weal and woe	1.1%	3.1%	15.4%	79.8%	
16. I resorted to Allah in difficulty times	0.8%	2.0%	15.8%	81.1%	
17. I resorted to Allah in prosperity times	1.4%	7.6%	23.8%	66.4%	
18. I Committed to performing the obligatory prayer	2.8%	17.1%	20.8%	58.7%	
19. I perform the obligatory prayers on time	3.1%	23.0%	24.4%	48.9%	
20. I Committed fasting Ramadan	0.8%	3.9%	9.3%	85.6%	
21. I'm eager to the obedience my parents	0.8%	5.4%	29.9%	63.7%	
22. I'm eager to help others	0.8%	9.6%	39.0%	50.3%	
23. I'm eager to perform my duties honestly and conscientiously	1.1%	11.5%	36.2%	50.8%	
24. I'm eager on honesty by my sayings in various situations	2.0%	10.4%	42.0%	45.4%	
25. I'm eager that my deeds are suitable to my words	1.7%	5.0%	41.7%	51.5%	
26. I'm eager to ask others before borrowing their things	2.0%	3.1%	26.8%	67.8%	
27. I keep away from cheating when dealing with others	2.3%	7.3%	25.7%	64.1%	
28. I feel that Allah watches me all time	0.8%	2.2%	11.5%	84.6%	
29. I feel that Allah rewards me for my good deeds	1.1%	4.8%	14.6%	79.3%	
30. I feel that Allah punishes me for my bad deeds	2.5%	9.0%	16.0%	72.5%	

Table 4. Multiple Regression for the factors predicting stigma toward people with mental illnesses.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	38.169	1.841		20.728	.000
	age	.010	.034	.016	.298	.766
	gender	-1.589	.696	155	-2.281	.023
	Level	385	.304	072	-1.267	.206
	Income	177	.230	041	770	.442
	Mother education	137	.341	029	400	.689
	Father education	.621	.339	.137	1.830	.068

sectional approach adopted for this study measured the data at one point of time, thereby limiting the inferences that can be drawn in respect of the existence of causality between religiosity and stigma perceptions toward people with mental illnesses.

4. Conclusion

In summary, this study aimed to determine the association between religious beliefs and stigma perceptions toward people with mental illnesses. The results showed there is a relationship between religiosity and stigma perceptions among students at secondary school. Specifically, as the degree of religiosity increased, the level of stigma toward people with mental illnesses decreased. Moreover, the multiple regression showed that only gender had an impact on the students' stigma perceptions toward people with mental illnesses. Thus, a cultural competency curriculum that includes modules on religiosity and morality should be established for students in secondary school to ensure the inculcation of attitudes of greater acceptance and avoidance of stigma perceptions toward people with mental illnesses.

Declarations

Author contribution statement

Sawsan Abuhammad, Ahlam Al-Natour: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Funding statement

This research received funding from Jordan University of Science and Technology.

Data availability statement

The data that has been used is confidential.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

Acknowledgements

The authors acknowledge Jordanian nurses who participated in this study and the Deanship of Research at Jordan University of Science and Technology for endorsing the study.

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