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Can reading too much make me run mad? Exploring students' assumptions and academic performance

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Abstract

Objectives: To determine the prevalence of the assumption that 'reading too much' could cause madness (i.e., severe mental illness) among medical, nursing, and community health students, and also explore the relationship between these students' status on this assumption and their academic performance. Methods: This study was a cross-sectional study conducted among a convenient sample of medical, nursing, and community health students (n = 122) studying within the Usmanu Danfodiyo University Teaching Hospital campus, Sokoto, Nigeria. Study tool was a paper questionnaire, which obtained information on the demographic profile, awareness of 'madness', assumption that 'reading too much' is a cause of madness, and self-rating of the participants' academic performance in their current course of study. Data collected was analysed using the SPSS version 20 software. Test of associations between variables were done using Chi square test. Results: The mean age of the 122 respondents was 27.3 years, majority (61.5%) of them were males, and 53.3% were medical students. More than half of the surveyed nursing students (54.2%) and community health students (55.6%), unlike the surveyed medical students (24.6%), had the assumption that reading too much could make them run mad. There was no statistically significant relationship between the assumption that 'reading too much' is a cause of mental illness and academic performance of the respondents. Conclusion: Assumption that reading too much could cause madness is a fairly common phenomenon among the surveyed tertiary school students, irrespective of their level of academic performance. There exists the need to disabuse the minds of tertiary school students from the assumption that reading too much could make one run mad.

Keywords

Mental illness, belief, assumption, opinion, students, academic performance, health, school, education, Nigeria

INTRODUCTION

Madness, in simple terms, can be defined as a state of severe mental illness (Merriam-Webster 2017). Mental illness, according to the American Psychiatric Association, can be described as a health condition involving changes in thinking, emotion or behaviour (or a combination of these) (American Psychiatric Association 2017).

The etiological/risk factors of mental illness are diverse (Cirulli et al 2009). However, the major factors include developmental stress, substance abuse, and nutritional factors (Dube et al., 2003, Cirulli et al., 2009). Interestingly, there are some superstitious beliefs on the etiological/risk factors of mental

illness among lay people, as it is commonly believed among them that mental illness could be caused by God, air pollution, loss of semen/vaginal secretion, planet, and stars (Kishore et al., 2011).

Furthermore, there is an assumption that reading too much could make one to develop severe mental illness (Kanmodi & Almu 2019). In fact, this assumption was reported, in a Nigerian study, to be popular among some medical students (Kanmodi & Almu 2019). It was also reported in the study that those students who had such an assumption were found to have poorer academic performance, compared to those with no such assumption; this suggests that this assumption has associated negative effects on the academic performance of students.

However, in the study, the assumptions of students in other academic disciplines were not explored; this was a limitation of the study, which generated research questions that need to be answered. One of these research questions was: *Do students in other health science disciplines assume that 'reading too much' could cause of mental illness?*

Based on the above, this study aims to compare the prevalence of the assumption that 'reading too much' is a cause of mental illness among medical, nursing, and community health science students. This study also aims to explore the relationship between this assumption, among these students, and academic performance. This study is of significance as it provides evidence-based data on the prevalence of this assumption among students in the health science disciplines.

METHODS

Nature of the study

This study was a descriptive cross-sectional study. Also, this study was an expanded work of an academic research project conducted in 2017 by Kanmodi and Almu (Kanmodi & Almu, 2019).

Study Population

This study was conducted among some groups of health science students studying within the Usmanu Danfodiyo University Teaching Hospital, Sokoto (UDUTHS), Nigeria. UDUTHS is a campus having medical, nursing, midwifery, medical laboratory science, health information management, and community health students in her community. Out of a total of five schools situated within the UDUTHS community, only three schools were used for the study. These selected schools were: Usmanu Danfodiyo University (UDU); School of Nursing (SON), and the Community Health Officers' Training Programme (CHOTP) school. UDU runs a six-year academic program in Medicine (all the medical students in UDUTHS campus are either in their 4th, 5th, or 6th year, while those in their 1st to 3rd year are situated in another campus). SON runs a three-year program in General Nursing. CHOTP runs a two-year program in Community Health.

Study tool

The study tool used in this present study was a questionnaire used in a similar study conducted by Kanmodi & Almu (2019). The questionnaire had three sections (A, B, and C). Section A obtained information on the demographic profile

of the participants. In section B, the participants were first informed about the meaning of 'madness' and 'mental illness' prior to being asked questions obtaining information on their awareness on 'madness', and sources of information on madness. The term 'madness' was defined to the participants as '*a state of severe mental illness (Merriam-Webster Dictionary)*', while mental illness was defined to them in simple terms as '*any of the broad range of medical conditions (such as major depression, schizophrenia, obsessive compulsive disorder, or panic disorder) that are marked primarily by sufficient disorganization of personality, mind, or emotions to impair normal psychological functioning and cause marked distress or disability and that are typically associated with a disruption in normal thinking, feeling, mood, behavior, interpersonal interactions, or daily functioning (Merriam-Webster Dictionary)*'. Section C obtained information on: [1] the participants' assumption on 'reading too much' as a cause of severe mental illness (madness), using a 5-point Likert scale (strongly agree [SA], agree [A], undecided [U], disagree [D], strongly disagree [SD]); [2] the self-rating of the participants' academic performance in their current course of study, using a 5-point Likert scale (poor, average, good, very good, excellent); [3] and the number of times the participants sat for the exams (O'level exam and current school entrance exam) that qualified them to getting admitted into their current course of study.

Sampling

A convenient sample size of 120 students was used as the minimum sample size for the study. Simple random sampling technique was adopted in the selection of the participating schools. Selection of the study participants was based on convenience.

Data collection and management

The students were approached at their lecture hall and dormitories. They were informed about the aims and objectives of the study; they were also informed that their participation is strictly voluntary and confidential. Only those (n = 135) that gave verbal informed consent to participate in the study were given an anonymous questionnaire to fill and return. Data for this study was collected from October to November, 2017.

Only 130 participants returned their filled questionnaires to the investigators. Eight questionnaires were discarded because many questions were not answered in these. After the data cleaning process, only the data from 122 filled questionnaires were entered into the SPSS version 20 software for analysis. Frequency distributions of all the variables were determined;

Table 1. Socio-demographic characteristics of the respondents (n = 122)

Characteristics	Frequency (%)
Sex	
Male	75 (61.5)
Female	47 (38.5)
Age in years	
Mean (±SD)	27.3 (±5.6)
Tribe	
Yoruba	20 (16.4)
Hausa	76 (62.3)
Igbo	7 (5.7)
Others	18 (14.8)
Not specified	1 (0.8)
Marital status	
Single	77 (63.1)
Married	40 (32.8)
Separated	3 (2.5)
Not specified	2 (1.6)
Religion	
Christianity	24 (19.7)
Islam	96 (78.7)
Others	1 (0.8)
Not specified	1 (0.8)
School	
UDUS	65 (53.3)
CHOTP	9 (7.4)
SON	48 (39.3)
Level	
1 st year	32 (26.2)
2 nd year	19 (15.6)
3 rd year	6 (4.9)
4 th year	3 (2.5)
5 th year	2 (1.6)
6 th year	60 (49.2)
Course of study	
Medicine	65 (53.3)
Community Health	9 (7.4)
General Nursing	48 (39.3)

UDUS – Usmanu Danfodiyo University, Sokoto, CHOTP – Community Health Officers' Training Programme, SONM – School of Nursing

Chi-square test was used to test for associations between qualitative variables with a p-value of <0.05 set to be the level of statistical significance. The results obtained from the analysis were presented using tables and charts.

RESULTS

The mean age of the 122 respondents was 27.3 years, majority (61.5%) of them were males, 62.3% were Hausas, 63.1% were single, 78.7% were Muslims, 53.3% were medical students, and

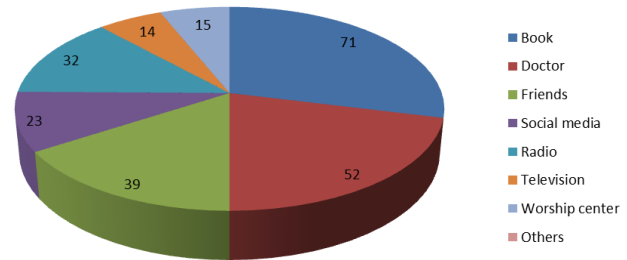


Figure 1. Sources of information on madness among those respondents that claimed awareness of madness (i.e., a state of severe mental illness) (n = 116)

26.2% were in the first year of their current course of study (Table 1).

The majority (95.1% [116/122]) of the respondents had heard of the term 'madness' prior to their participation in the study, only 1 (0.8%) reported that they were not sure if they had ever heard of the term, and 5 (4.1%) reported that they had never heard of it. The two most popular sources of information on madness among those respondents who claimed awareness of madness were 'book' (61.2% [71/116]) and 'doctor' (44.8% [52/116]) (Figure 1).

More than half of the respondents who were from the SON (54.2%) and CHOTP (55.6%) assumed that reading too much could make them run mad (Table 2).

Also, test of associations between variables, using Chi square test, showed that: [1] a higher proportion of those respondents that were not of the assumption that reading too much could make them run mad (i.e., those that chose SD and D in the Likert scale) sat for their O'level examination in one to two attempts before passing all the 5 compulsory subjects they needed to secure an admission into their current course of study, compared to those that were with such an assumption (i.e., those that chose SA and A in the Likert scale) (55/65 [84.6%] versus 30/47 [63.8%]); a higher proportion of those respondents that were not of the assumption that reading too much could make them run mad (i.e., those that chose SD and D in the Likert scale) sat for the entrance examination of their current school before securing admission into their current course of study in one to two attempts, compared to those respondents that were of such assumption (i.e., those that chose SA and A in the Likert scale) (59/65 [90.8%] versus 39/47 [83%]); and a lower proportion of those respondents that were not of the assumption that reading too much could make them run mad (i.e., those that chose SD and D in the Likert scale) had very good to excellent academic performance in their current course of study, compared to those that were of such an

Table 2. Grouping of Likert-scaled responses (into yes/neutral/no) of respondents, with respect to schools, to the variable: 'Reading too much can make me run mad'

School	Reading too much can make me run mad			
	No [SD + D] (%)	Neutral [U] (%)	Yes [SA + A] (%)	No response (%)
UDUS [N=65]	42 [64.6]	6 [9.2]	16 [24.6]	1 [1.5]
CHOTP [N = 9]	3 [33.3]	1 [11.1]	5 [55.6]	0 [0.0]
SON [N = 48]	20 [41.7]	2 [4.2]	26 [54.2]	0 [0.0]

SD – Strongly disagree, D – Disagree, U – Undecided, SA – Strongly agree, A – Agree, UDUS – Usmanu Danfodiyo University, Sokoto, CHOTP – Community Health Officers' Training Programme, SON – School of Nursing

Table 3. Association between respondents' academic record and their perception of 'reading too much' as a cause of mental illness

Variable	Response	Reading too much can make me run mad					p-value (df)
		SD	D	U	A	SA	
How many times did you sit for your O'level examination before you passed all the 5 compulsory subjects you needed to secure an admission into your current course of study?	Once	16	22	4	17	4	0.220 (20)
	Twice	10	7	4	7	2	
	Three times	3	0	1	7	1	
	Four times	1	1	0	3	2	
	Five times	0	3	0	1	0	
	More than five times	2	0	0	1	0	
How many times did you sit for the entrance examination of your school before securing admission into your current course of study?	Once	22	21	8	21	8	0.267 (16)
	Twice	6	10	1	10	0	
	Three times	3	0	0	7	1	
	Four times	1	0	0	0	0	
	Five times	0	1	0	0	0	
So far in your current academic program, what is the rating of your academic performance?	Poor	0	0	0	1	0	0.397 (16)
	Average	7	7	2	3	2	
	Good	10	13	7	17	3	
	Very good	12	7	0	9	2	
	Excellent	3	6	0	8	2	

SD – Strongly disagree, D – Disagree, U – Undecided, SA – Strongly agree, A – Agree

assumption (i.e., those that chose SA and A in the Likert scale) (28/65 [43.1%] versus 21/47 [44.7%]) (Tables 2 & 3).

DISCUSSION

According to the World Health Organization (WHO) report, the risk factors for mental illness among school-age individuals are adverse learning environment, difficulties at school, and lack of educational opportunities (WHO, 2012). Interestingly, excessive reading was not listed as a risk factor in the report. However, there has been a fairly popular assumption in our environment that excessive reading can make one to develop mental illness. Based on our observation in our society, we found this assumption to cut across school-age adolescents and young adults, and even middle-aged adults and the elderly (Kanmodi & Almu 2019).

This present study had strengthened previous report, by Kanmodi & Almu (2019), that the prevalence of the assumption that 'reading too much' is a risk factor of mental illness is significant among Nigerian students. In this study, we observed that roughly four-tenth (42% [47/112]) of our respondents were of the assumption that excessive reading could make them develop mental illness; this prevalence is higher than that reported by Kanmodi & Almu in a similar study (21.7% [13/60]). Also, in this present study, we observed that this assumption is much more predominant among students of nursing science and community health, unlike among the medical students (Kanmodi & Almu 2019).

The prevalence rate of the assumption that 'reading too much' could cause mental illness is lowest among the surveyed medical students, when compared to that observed among

the nursing and community health students surveyed in this study. However, the reason for this disparity is not far-fetched: medical students are supposed to have more in-depth knowledge of the pathogenesis of mental illness compared to these other surveyed students, based on the depth of their training in medical sciences.

It is also noteworthy that no significant relationship was observed between academic performance of the respondents and their assumption status on this phenomenon. A similar finding was also reported in the study conducted by Kanmodi & Almu (2019). However, we found in our present study that a higher proportion of those respondents that had this assumption had to sit for their O'level exams and their school entrance examination for three times or more before they could secure admission to their current course of study. Based on this finding, we could suggest that many of the respondents could not put in their best, perhaps due to the fear of developing mental illness from studious academic exercise. Similar finding on this was also reported by Kanmodi & Almu (2019) in their study.

Interestingly, our findings show that, unlike that reported by Kanmodi & Almu (2019) in their study, a lower proportion of those respondents who had no assumption that had reading too much could make them develop mental illness had very good to excellent academic performance in their current course of the study. Based on this finding, we could conclude that the presence of fear of developing mental illness from excessive reading among students does not necessarily imply that they will have poor academic performance. Rather, there are other factors that could also determine their level of academic performance. Some of these factors are student's level of dedication to academic pursuit, availability of academic resources (e.g., books, lecture notes, etc.), timely and regular examination preparation, and availability of motivated teachers (Sibanda et al., 2015).

However, this study has its limitations. This study adopted the use of convenience sampling technique in the recruitment of the sampling units; hence, each sampling unit did not have

equal chance of being selected to participate in the study. Also, this study did not explore in details other factors that could have influenced the academic performance of the study participants, as this was not within the scope of the study. Also, this study is a quantitative study; this study might not have been able to dig into the reasons why the participants had the belief that reading too much could cause mental illness.

CONCLUSION

Assumption that reading too much could cause madness is a fairly common phenomenon among the surveyed tertiary school students, irrespective of their level of academic performance. There exists the need to disabuse the minds of tertiary school students from the assumption that reading too much could make one run mad. Disabusing the mind of students on this assumption could help them have better outcomes in their academic pursuits and achievement, as extensive reading goes a very long way in building students' knowledge base.

DECLARATION OF ETHICS

This study was conducted under strict compliance with the guidelines of the Helsinki Declaration of 1964.

DECLARATION OF INFORMED CONSENT

All the participants were informed about the purpose of the study, prior to their participation. Verbal informed consent was obtained from all participants. Study participation was completely voluntary, and the identities of all the participants were kept with strict confidentiality.

CONFLICT OF INTEREST

Authors have no conflict of interest to declare.

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