

ORIGINAL ARTICLES

The validity of the mental health literacy assessment questionnaire on anxiety disorders and depression among students in Hanoi, Viet Nam

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ABSTRACT

Objective: The study aimed at assessing the content validity and structure validity of the mental health literacy of anxiety disorders and depression questionnaire for undergraduate students.

Methods: Implemented on December, 2018, the study involved students from the two Faculties of Sociology, University of Social Sciences and Humanity and Academy of Journalism and Communication, Ha Noi. The depression vignette instrument was adapted from Jorm et.al., translated to Vietnamese and back translated to English. Content and structure validity were done through 02 focus group discussions with 20 respondents (10 from each university) and 02 indepth interviews were carried out with 2 mental health experts.

Results: The depression vignette was revised shorter and exactly described depressive symptoms. The anxiety disorder one was newly developed. Some answering items were added. Along with that, some inappropriate answering items were also deleted, and 5 choices of the question were adjusted to 4 choices as well.

Conclusion: The instrument included 43 questions, among which were 32 questions on the mental health literacy of anxiety disorder and depression was confirmed the validity and could be used in the future studies on undergraduate students.

Keywords: Anxiety disorder, depression, mental health literacy.

INTRODUCTION

The World Health Organization (WHO) confirmed that mental disorders accounts for 13% of the global burden of diseases and has become more common (1). In Vietnam, report of the burden of diseases and healthy age (2019) showed that: mental disorders account for 4.93% of the total burden of diseases (2). Also in the same report, more than 1/3 of the total burden of diseases among males from 14 years old was due to mental illness, and it was

the same for females. WHO has emphasized the interventions to improve mental health for young people as they are the group with a high risk of developing these problems (3).

Studies on mental health issues in the world have shown that the prevalence of mental health issues among young people was about 25-75% (4-8). In Vietnam, the percentage of young people (including students) having various symptoms of mental health issues was around 25-60% (9, 10). Early recognition of mental health issues and suitable help-



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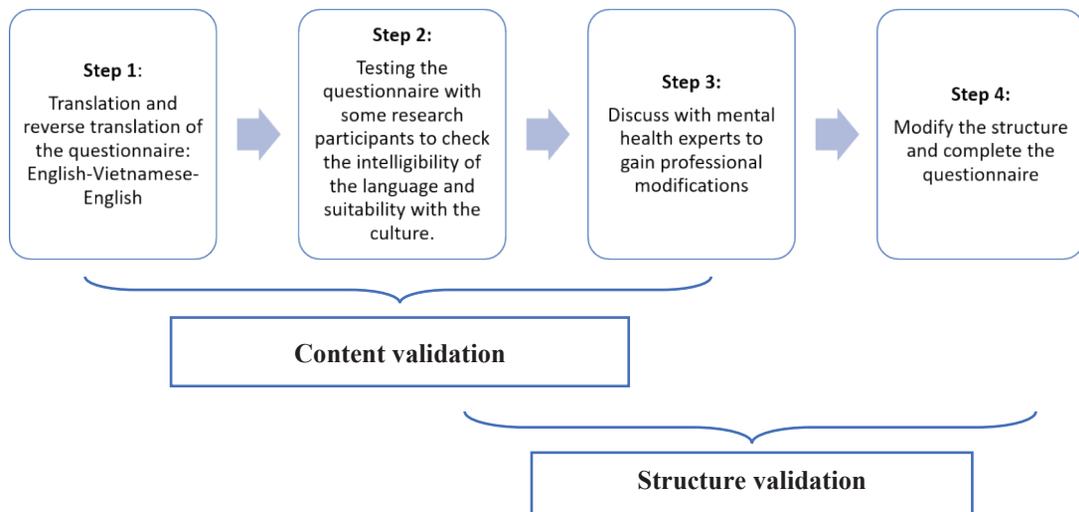
seeking behaviours will only be attainable when young people have adequate mental health literacy (11, 12).

In 1997, the concept of “mental health literacy” was first mentioned in studies on mental health. The term was defined as “*knowledge and beliefs about mental disorders which aid their recognition, management or prevention*” (13). This definition emphasized the knowledge of individuals on mental health issues in the timely diagnosis of problems and finding prevention. The planned solutions to solve mental health issues (what should be done to support them) depended largely on that person’s mental health literacy. Currently, several questionnaires have been used to assess mental health literacy among different groups of subjects. In that context, in 2018, our study chose the questionnaire developed by Jorm et. al. (17). This instrument included all the factors mentioned in the concept of mental health literacy and was commonly used in several studies on mental health literacy (18-23). Jorm’s questionnaire was designed to describe vignettes and each questionnaire only described one specific mental health issue. Jorm had developed questionnaires for 2 groups of subjects: 1/ Group 1: The general community (from 15 years old) and 2/ Group 2: Adolescents (15-25 years old). Generally, before applying any

questionnaires in a study, the researcher would need to evaluate the questionnaires to ensure their validity and reliability. *The validity* of a scale would help answer the question of whether the questionnaire could assess the correct construct or not. *The reliability* is used to evaluate the consistency of the scale through the development of combinatorial variables. However, the mental health literacy assessment questionnaire developed by Jorm et. al. doesn’t assess mental health literacy through the use of scale/combinatorial variables. Hence, this article focuses on assessing the validity (content and structure) of the instrument.

METHODS

Jorm’s questionnaire was designed a vignette, accompanied by questions regarding symptoms recognition, risk factors, and support for people who had mental health issues (supporter, early methods of support, supporting medicines), as well as prevention methods. The process of evaluating the validity (content and structure) of the questionnaire used in this study is described in Figure 1 (24). Participants in the study included Sociology students at the University of Sociology and Humanity and the Academy of Journalism and Communication, Hanoi.



Step 1. Translation and reverse translation of the questionnaire (English to Vietnamese then Vietnamese to English)

The original instrument was translated into Vietnamese and then translated back into English to ensure that the translation was close to the original. We changed the name of the characters in the situations into Hung to be more suitable for Vietnamese and modified the age to suit the subject of university students. Based on the depression questionnaire, we developed a questionnaire for anxiety disorder using the International Classification of Diseases (ICD-10) to develop the vignette anxiety disorder (25) together with questions and answer options from the depression questionnaire.

Linh - a 20 years old female student - always feels anxious about everything that happens around her. It has begun for 1-2 weeks. At times, she wouldn't dare to go outside fearing something could happen to her. While everyone would feel OK, she would be worried about everything.

Step 2. Testing the questionnaire with the participants

Step 2 was implemented to ensure that the questionnaire was easy to understand and

suitable for Vietnamese culture, as well as the age of students nowadays. We used group discussions with 20 participants (10 from each university) to carry out this step. We gathered the participants in a classroom and gave each of them the questionnaire. The participants would take time to read and answer the questionnaire. Questions/ answering options that were hard to understand, or not suitable for the research subjects would be noted down. After finished answering the questionnaire and the notes, we discussed with the research subjects and summarized the points that needed to be modified in the questionnaire. The time for the participants to read and answer the questionnaire was 45 minutes. Group discussions lasted 45 minutes.

Step 3. Discussion with mental health experts

Step 3 was carried out to ensure that the questions and answering options in the questionnaire were professionally correct (specifically the description of the signs of anxiety disorder and depression). We selected

a psychologist working at the National Mental Health Institute, Bach Mai Hospital, and a psychiatrist, formerly a lecturer at the Faculty of Psychiatry, Hanoi Medical University. In-depth interviews were used for this step. Each in-depth interview lasted about 30-45 minutes, and the comments were noted down for the modification of the questionnaire.

Step 4. Modifying the construct and completing the questionnaire

After analyzing the information from group discussions with the research subject and in-depth interviews with mental health experts, we reviewed and modified the content and structure of the questionnaire using the recommendations of the experts.

From that basis, the questionnaire was completed.

RESULT

The result of testing the questionnaire with the research subjects and mental health experts has provided several modifications regarding the contents and wordings to be more suitable for the subject of university students and Vietnamese culture.

The situations describing signs of anxiety disorder and depression were modified to be shorter and described more accurately the signs of these two mental health issues. The results of the modification are described in detail in Table 1.

Table 1. Result of testing the vignettes of anxiety-disorder and depression with experts

| | Before testing with experts | After testing with experts |
|-------------------------|---|--|
| Anxiety disorder | Linh - a 20 years old female student - always feels anxious about everything that happens around her. It has begun for 1-2 weeks. At times, she wouldn't dare to go outside fearing something could happen to her. While everyone would feel ok, she would be worried about everything. | Linh is a 20 years old female student. In the recent 5-6 months, she has always felt worried regarding unnecessary matters and was unable to control this situation. At times, she would feel restless, insecure, and hard to focus. It greatly affected her study. |
| Depression | Hung is a 15 years old boy. In recent weeks, he constantly felt abnormally sad and miserable. Hung is always tired and unable to sleep at night. He doesn't want to eat and has lost some weight. He cannot focus on his study and received bad marks. Hung doesn't want to decide anything and even daily activities would become a burden to him. Hung's parents and friends are extremely worried about his state. | Hung is a 20 years old male student. In recent months, he constantly feels sad and loses interest in things he previously found joy in. He always felt tired, less active, lost appetite, and lost weight. This greatly affected his study to the point the school had to contact his family to discuss his situation. |

The completed questionnaire includes 02 parts on 02 issues of anxiety disorders and depression and a part regarding the

information of the research participant. The introduction to the questions was kept the same, without any recommendation

for modification. Regarding the answering options, both the research participants and experts provided recommendations to add to the answering options; moreover, some additional options were to be added to suit the subjects of students and Vietnamese culture. The details are as follows:

- Regarding the symptoms recognition of mental health issues described in the vignette: Added the options of “autism”, “heart-broken”;
- Regarding the question of people who can provide support for anxiety disorders and depression: Added the options of “priest, monk”;
- Regarding the question of helping themselves get out of anxiety disorders and depression: Removed the two options relating to “marijuana”;
- Regarding the question of anxiety disorders and depression prevention: Removed the answer “not using marijuana”;
- Regarding the question on the *personal view of the participant* on anxiety disorder and depression-related issues and the question on the *personal view of the participant regarding surrounding people’s thoughts* on anxiety disorder and depression-related issues: 9 opinions were given. All of the research participants and experts suggested removing the opinion “I would not vote for the politician who has the same mental health issues as Hung/Linh” since it was not suitable for Vietnam’s social context.

In the original questionnaire, there were questions regarding depression medicine. However, during the process of modifying the questionnaires with the research participants and the two experts, all opinions were focused on whether the question regarding medicine should be kept in the questionnaires. In the

opinion of the research participants, the options regarding supporting medicine were hard to answer for students, since they didn’t know about these medicines. During the process of testing the questionnaire with the research participants using group discussion, the students also raised some opinions as follows:

“I think you should not ask about the medicine, since we also don’t know anything. Take me as an example, when I read about the supporting medicines, I just picked randomly, as I didn’t know what it was.” (Female, USSH, 1st year).

There were research participants asked about buying medicines themselves. This was quite similar to the Vietnamese’s culture of people trying to treat themselves, buying medicine of their own will.

“Just hearing about medicine scares me. Are there even medicines for depression? Can we buy them to take like vitamins?” (Female, AJC, 2nd year).

When testing with mental health experts, the experts also raised their concerns with the questions regarding medicine and its suitability in the context of Vietnam.

“In my opinion, you should remove these questions [regarding medicine]. Putting it here is like suggesting people go and buy those medicines. Of course, medicines for depression could not be purchased easily. However, sedatives or sleeping pills are quite easy to find. You just need to tell the pharmacies that you couldn’t sleep and they will give you some. Drug abuse is extremely dangerous.” (Expert 1).

Regarding the answer options of knowledge questions: In the original questionnaire, the options were divided into 5 levels: Helpful, Harmful, Neither, Depends, Don’t know. All of the research participants and the

two experts were concerned about the two options “Neither” and “Depends”. All of them thought that both options showed the uncertainty of the respondents toward the questions. Therefore, all the experts and research participants suggested removing one option among them. After testing, the answer options were modified into 4 options: Helpful, Harmful, Neither, and Don’t know.

After assessing the validity of the content and structure, we had completed the questionnaires with 43 questions, divided into 2 situations: 1/ The situation on anxiety disorder with the 20 years old female character named Linh, who was a student with anxiety disorder; 2/ The situation on depression describing the 20 years old male character name Hung, who was a student with depression. There were similar 32 questions relating to anxiety disorder and depression, 11 questions on the need for further information on anxiety disorder and depression, and the general information of the research participants.

DISCUSSION

As mentioned in the Introduction, WHO has emphasized the role of intervention to improve the mental health literacy of young people, since this is the group with a high risk of developing mental health issues (3). About half of the people with mental health issues mentioned that their problems started before age 18 (26). In 1997, the concept of mental health literacy was first mentioned by Anthony F. Jorm, defined and used in numerous studies to evaluate the ability to recognize the signs of various mental health issues, evaluate the knowledge of research participants regarding supporters, supporting, preventive methods for mental health issues (13). The ability to recognize symptoms of mental health issues is considered an important factor since the inability to be “sensitive” to the supposed

symptoms of mental health issues could lead to a delay in seeking proper help (27).

We contacted Jorm, and the author sent us the original questionnaires of the 2001 survey for reference and allowed them to be used for the study in Vietnam. These questionnaires included all of the factors of mental health literacy mentioned in the definition and the questions were focused on a specific mental health issue (31). Some authors thought that the limitation of Jorm’s instrument was that it was only able to evaluate mental health issues specifically, individually, and cannot go into different mental health issues in the same questionnaire (14, 32). However, the advantage of this questionnaire was that it could specifically any mental health issues using the provided definition. From the studies using this questionnaire, Jorm et. al. didn’t give a general conclusion on the mental health literacy of the research participants but described the mental health literacy using the contents of the questionnaire, to describe the knowledge of research participants on each aspect. In his conclusion, Jorm specifically emphasized the importance of recognizing accurately the signs of mental health issues.

The validity of the questionnaire describing mental health literacy on anxiety disorder and depression

The original questionnaire of Jorm et. al. doesn’t assess mental health issues using scales/combinatorial variables. Each question includes different variables, with the content of each specific variable describing a specific issue, and these issues are recognized as necessary factors when speaking about mental health literacy. The original questionnaire was translated into Vietnamese, then translated back into English to ensure the translated version was close to the original. The translation process also followed medical principles (33, 34). We encountered some

difficulties during the process of translating the questionnaire into Vietnamese since several terms related to medicines used in treatment (for example: St John's wort). We had to keep some terms in English and explained them for the participants during the testing of the questionnaire.

The content validity means whether the elements of the scales and subsections include all of the aspects that need to be assessed or not. In this study, we didn't develop a completely new instrument; however, applied an available questionnaire and then adapted, and modified it to suit the context of Vietnam. All of the studies applying others' questionnaires with adaptation are required to carry out content validity before the official survey (24, 35, 36). We conducted the validation of content by collecting comments from the research subjects themselves and two mental health experts. The process of collecting experts' comments helped make necessary modifications to the answers to better suit mental health professional matters in Vietnam. During the process of content validity, we also ensured to respect Jorm's original questionnaire. The research group had discussed with Jorm through email the changes to the original questionnaire and received the author's endorsement. Therefore, with the result of the validation of the content of Jorm's questionnaire, following studies on mental health literacy regarding anxiety disorder and depression could refer to the content of this study's questionnaire.

The structure validity is the confirmation that the scale could assess accurately the concept is meant to assess (24, 34, 35). During the process of validating the content, we also validate the structure. In the original questionnaire, after the situation describing depression, there were 17 questions given to ask about mental health literacy regarding depression. After the testing with the research participants and

mental health experts, the question regarding supporting medicine was removed. During the testing, the research participants found it hard to answer the question regarding supporting medicine, while the mental health experts were concerned about the risk that it might suggest the research participants buy the medicine to take themselves (Vietnamese habit of self-treatment). In the question regarding the attitude toward anxiety disorder and depression, 9 opinions were provided, and after the testing with the research participants and mental health experts, 8 of them were kept. The opinion relating to voting for the politician with anxiety disorder and depression was removed due to being unsuitable for Vietnam's context. With such modifications to the structure of the questionnaire, we asked Jorm for comments through email and received his endorsement regarding those changes. Jorm affirmed that those omissions wouldn't change the validity of the structure, since each question describe an independent knowledge of the participant regarding an aspect.

As such, after the validation of the questionnaire on mental health literacy which we referred from Jorm et al, this questionnaire has been proven to be valid to be used in follow-up studies. However, combining two issues anxiety disorder and depression into the same questionnaire has made it too long, the questions repeating themselves leading to the feeling of boredom and discouraging toward the end of the questionnaire.

CONCLUSION

After being translated following medical principles, and the validation of the content and structure with the research participants and experts, the original questionnaire was modified into 32 questions evaluating mental health literacy on anxiety disorder

and depression, and 11 questions on the epidemiology information of the research participant. This questionnaire could be used for studies in Vietnam among the subject of university and/or college students. For other groups of research subjects, it should be validated again, or at least tested with the research subjects before data collection.

REFERENCES

1. WHO. Make a difference in the lives of people with mental disorders 2012. Accessed on 13/5/2014 at: http://www.who.int/mental_health/mental_health_flyer_2012.pdf?ua=1.
2. Lương Ngọc Khuê, Nguyễn Thanh Hương. Gánh nặng bệnh tật và tuổi thọ khỏe mạnh: Khái niệm, phương pháp và kết quả của Việt Nam giai đoạn 2008-2017. 2019.
3. WHO. 10 facts on mental health 2013. Accessed on 13/5/2014 at: http://www.who.int/features/factfiles/mental_health/mental_health_facts/en/.
4. Tabassum Alvi, Fatima Assad, Mussarat Ramzan, Khan. FA. Depression, Anxiety and Their Associated Factors Among Medical Students. Journal of the College of Physicians and Surgeons Pakistan. 2010;20(2):5.
5. Ayat R. Abdallah, Gab. HM. Depression, anxiety, and stress among first year medical students in an Egyptian public university. International Research Journal of Medicine and Medical Sciences. 2014;2(1):9.
6. Grohol JM. Mental Disorders Common in Young Adults 2008. Accessed on 30/11/2014 at: <http://psychcentral.com/blog/archives/2008/12/02/mental-disorders-common-in-young-adults/>.
7. Pennsylvania State University. Prevalence of Mental Health Issues among College Students: How Do Advisers Equip Themselves? 2014. Accessed on 14/9/2015 at: <http://dus.psu.edu/mentor/2013/08/mental-health-college-students/>.
8. Khan MS, Mahmood S, Badshah A, Ali SU, Jamal Y. Prevalence of Depression, Anxiety and their associated factors among medical students in Karachi, Pakistan. J Pak Med Assoc. 2006;56(12):4.
9. Lê Thu Huyền, Huỳnh Hồ Ngọc Quỳnh. Tình trạng stress của sinh viên Y tế công cộng Đại học Y Dược thành phố Hồ Chí Minh và một số yếu tố liên quan năm 2010. Tạp chí Y học TP Hồ Chí Minh. 2011;15(1):6.
10. Trần Ngọc Đăng, Đỗ Văn Dũng, Huỳnh Hồ Ngọc Quỳnh. Tỷ lệ rối nhiễu tâm trí và các yếu tố liên quan của sinh viên khoa Y tế công cộng Đại học Y Dược TP. Hồ Chí Minh năm 2010. Tạp chí Y học TP Hồ Chí Minh. 2011;15(1):6.
11. Rickwood D, Deane FP, Wilson CJ, Ciarrochi JV. Young people's help-seeking for mental health problems. Australian e-Journal for the Advancement of Mental Health. 2005;4(3):36.
12. Kelly CM, Jorm AF, Wright A. Improving mental health literacy as a strategy to facilitate early intervention for mental disorders. Medical Journal of Australia. 2007;187(7).
13. Jorm AF. Mental health literacy: Public knowledge and beliefs about mental disorders. The British Journal of Psychiatry. 2000;177:5.
14. O'Connor M, Casey L, Clough B. Measuring mental health literacy – a review of scale-based measures. Journal of Mental Health. 2014;23(4):197-204.
15. ANU College of Health and Medicine. Depression Literacy Questionnaire (D-Lit) N/A. Accessed on 8/10/2019 at: <https://rsph.anu.edu.au/research/tools-resources/depression-literacy-questionnaire-d-lit>.
16. ANU College of Health and Medicine. Anxiety Literacy Questionnaire (A-Lit) N/A. Accessed on 8/10/2019 at: <https://rsph.anu.edu.au/research/tools-resources/anxiety-literacy-questionnaire-lit>.
17. Jorm AF. National Survey of Mental Health Literacy and Stigma. Commonwealth of Australia: University of Melbourne; 2011.
18. Reavley NJ, Jorm AF. Young people's recognition of mental disorders and beliefs about treatment and outcome: findings from an Australian national survey. The Australian and New Zealand journal of psychiatry. 2011;45(10):890-8.
19. Reavley NJ, McCann TV, Jorm AF. Mental health literacy among higher education students. Early Intervention in Psychiatry. 2012;6:8.
20. Campos L, Dias P, Palha F. Finding Space to Mental Health - Promoting mental health in adolescents: Pilot study. Education and Health. 2014;32(1):7.
21. Lam LT. Mental health literacy and mental health status in adolescents: A population-based survey. Child & Adolescent Psychiatry & Mental Health. 2014;8(26):9.
22. Reavley N, Too T, Zhao M. National Surveys of Mental Health Literacy and Stigma and

- National Survey of Discrimination and Positive Treatment: A report for the Mental Health Commission of NSW. Mental Health Commission of NSW, Sydney; 2015.
23. Dey M, Marti L, Jorm A. The Swiss Youth Mental Health Literacy and Stigma Survey: Study methodology, survey questions/vignettes, and lessons learned. *The European Journal of Psychiatry*. 2019.
 24. Tran DA. Job satisfaction of preventive medicine workers in northern Vietnam: a multi-method approach. Queensland University of Technology: Queensland University of Technology; 2015.
 25. WHO. The ICD-10 classification of mental and behaviour disorders: diagnostic criteria for research. Switzerland: World Health Organization; 1993.
 26. Kelly CM, Mithen JM, Julie AFischer, Kitchener BA, Jorm AF, AdrianLowe, et al. Youth mental health first aid: a description of the program and an initial evaluation. *International Journal of Mental Health Systems* 2011;5(4):9.
 27. Jorm AF. Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist*. 2011.
 28. Yap MBH, Jorm AF. Young people's mental health first aid intentions and beliefs prospectively predict their actions: Findings from an Australian National Survey of Youth. *Psychiatry Research*. 2012;196:5.
 29. Loureiro LM, Jorm AF, Mendes AC, Santos JC, Ferreira RO, Pedreiro AT. Mental health literacy about depression: a survey of Portuguese youth. *BMC Psychiatry*. 2013;13(1):129.
 30. Yoshioka K, Reavley NJ, Rossetto A, Jorm AF. Beliefs about first aid for mental disorders: Results from a mental health literacy survey of Japanese high school students. *International Journal of Culture and Mental Health*. 2014.
 31. Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P. "Mental health literacy": A survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. *The Medical journal of Australia*. 1997;166(4):182-6.
 32. Ganasen KA, Parker S, Hugo C, Stein D, Emsley RA, Seedat S. Mental health literacy: Focus on developing countries. *African journal of psychiatry*. 2008;11:23-8.
 33. Brislin RW. Back-Translation for Cross-Cultural Research. *Journal of Cross-Cultural Psychology*. 1970;1(3):185-216.
 34. Sperber AD. Translation and validation of study instruments for cross-cultural research. *Gastroenterology*. 2004;126:S124-S8.
 35. Nguyễn Thanh Hương, Lê Thị Hải Hà, Nguyễn Trang Nhung, Nguyễn Thái Quỳnh Chi. Bước đầu đánh giá tính giá trị và độ tin cậy của bộ công cụ đo lường chất lượng cuộc sống người cao tuổi ở Việt Nam. *Tạp chí Y học thực hành*. 2009;9/2009:7.
 36. Kimberlin CL, Winterstein AG. Validity and reliability of measurement of instruments used in research. *Am J Health-Syst Pharm*. 2008;65.