Using Information Technology to Improve the Mental Health Education of University Students *

＊ 2014 Henan University Major Funded Education Reform Project

Guoying Wang
The Medical College
Henan University,
Kaifeng, China
Email: medwgy@163.com

Wei Zhou

The Nursing School
Henan University
Kaifeng, China
Email: zhouwei@henu.edu.cn

Yunsheng Zhang, the corresponding author（✉）
Mental Health Education and Counselling Center
Henan University
Kaifeng, China
Email: zhangyunsheng@henu.edu.cn

Abstract: This article discusses how to use the resources of MOOC and Flipped Classroom related to mental health to improve the teaching quality of mental health education courses, how to apply Wechat platform and websites related to mental health to promote publicity of mental health education, and how to utilise online psychological counselling and electronic files of mental health to improve the effectiveness of psychological counselling and crisis intervention. Authors conclude that applying information technology is an effective method to promote university student mental health education.

Keywords: information technology; university students; mental health education

I. Introduction

Mental health education of university students in China was initiated in the 1980s[1]. During the past thirty years, practical experience, exploration and development in this field have played an important role in improving the mental health education of university students, optimising their psychological quality and promoting their comprehensive development as well as their growth. During this time, the fast development and wide application of information technology has been profoundly affecting economic development and our social lives: it challenges and changes how people work, live and study as well as their value systems. In this information age, with the Internet permeating almost every aspect of our society, people find the desired information, sounds and images at any time and in any place, so long as they have Internet access. University students, as young scholars, are most likely to accept new products and to become the main users of various information technological products. Indeed, information technological products have become an indispensable part of the life and education of university students. Therefore, it is worthwhile to investigate how to effectively use information technology to improve the mental health of university students. This article will open the discussion from three aspects: class teaching, publicity education and psychological intervention.

II. Using information technology to improve the teaching quality of mental health courses

The university student mental health education course is a public course dispensing information, providing psychological experience and behaviour training. Class education plays a significant role in the university student mental health education, while using information technology to develop MOOC(massive open online course) related to mental health and flipped classroom related to mental health can effectively improve the teaching quality of classes.

A. MOOC related to mental health

MOOC includes high-quality cataloged videos, data collection and analyses, and a platform of social functions. All of these factors make MOOC courses more efficient and also accessible to many more students[2].

Various characteristics of MOOC make it suitable and effective for mental health education. First of all, MOOC benefits from a large participant base. Thus, it can be expected that application of MOOC in mental health education of university students can effectively ease the

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problem of shortage of mental health education teachers and satisfy the goal "ensure that college students widely receive mental health education courses"[3], which is promoted by the Chinese Ministry of Education. Secondly, MOOC can be accessed online freely so students can choose to study the related courses according to their individual needs and interests when both time and place are convenient. Thirdly, it is also noteworthy that MOOC is usually given by experienced teachers and experts, and the main resources consist of many short videos. If we can invite experts in the field of mental health education to give short lectures, such MOOC courses can assist more people. Fourthly, MOOC can be associated with large data analyses and assessments. That information can inform us of some key points like how students learn, where they may encounter difficulties in comprehension and the qualities essential for successful learners.

B. Flipped classroom related to mental health education

In the "Flipped Classroom", educators transfer the process of knowledge delivery outside the class by providing related video episodes, and that permits students more freedom in learning. In the meantime, students and teachers have more interaction in class and that often leads to a deeper understanding of problems, which helps the internalisation of knowledge that is acquired in class[4].

In Flipped Classroom, mental health education consists of two stages of study. In the first stage, knowledge of mental health education is self-studied. Related videos, electronic books and some other electronic resources are provided for students to study online. Related reading material, images, sounds and videos make the course more interesting and understandable, which helps students comprehend the concepts and theories of mental health. In the second stage, knowledge of mental health education is internalised. In classes, varied teaching activities (like case studies, group discussions, group training and psychological experiences) are applied to create a positive and productive class atmosphere and to help students deepen understanding in a comfortable environment. With the satisfaction from learning new ideas and approaches, students can cultivate skills of self-exploration, psychological adjustment and psychological development. In traditional classes, students receive and memorise information in classes and the internalisation of this information generally happens after class. Once applied to mental health education, the flipped Classroom reverses the traditional teaching process, revolutionises the traditional teaching form, reveals the "student-centred" teaching ideal, highly motivates students to develop their potentials for self-study and makes use of class time more efficiently and effectively.

III. APPLYING INFORMATION TECHNOLOGY TO PROMOTE PUBLIC ATTENTION TO MENTAL HEALTH EDUCATION

Making available mental health education towards all students is an important channel to create a positive atmosphere of mental health education. The effectiveness of publicity can be greatly improved by applying information technology to construct websites related to mental health education and setting up a Wechat platform related to mental health education.

A. websites related to mental health education

In this era when the Internet plays a significant and indispensable role in both the studies and entertainment of university students, a practical website with rich content can provide students with a platform to acquire mental health knowledge and to exchange personal experiences related to mental health. Compared with the traditional advertisement forums such as paper booklets and newspapers, a website enjoys the advantages of being timely and containing information in diverse forms, both of which can better cater to current student needs and promote their interests in further browsing. This will help teachers to publicise mental health information and to help students control psychological distress and improve their mental health.

High-quality mental health websites should be designed to be both functional and practical, containing elements that university students are generally concerned about. Here, we will briefly introduce some possible elements. The "psychology Encyclopaedia" can provide basic psychological concepts, psychology books and related movies. "Psychology news" can report the latest mental health education news happening in both local academic environments as well as at the broader university level. "Psychological yoga" mainly focuses on relaxation techniques but also can contain inspiring stories as well as some entertaining pictures. "Peer assistance" is a platform where students can help their peers and follow each other's growth. "Online course" includes videos of related courses, lectures and interviews. "Communication platform" is a place where teachers and students can communicate freely, while "Website guide" provides links to authority websites in this field.

B. Wechat related to mental health education

Introduced by Tencent, Inc. in 2011, Wechat is an Internet App providing an intelligent terminal with instant messaging service. Just as its advertisement says, it has become "a kind of life style" and changes people's lives unconsciously. Almost all university students use Wechat,

no matter whether it is in the dorm, in the cafeteria, and even in the classroom. Consequently, Wechat must be considered as a new and important tool to support and assist mental health education.

Wechat has the features "live chat", "group chat", "voice chat","moments","official account" and some other functions. Using functions like "group chat" can distribute notifications of mental health lectures, publicise mental health idea and introduce mental health education institutions. By browsing and analysing students' "moments", in which students introduce their daily lives, teachers may notice possible mental health problems and take measures proactively. By researching the popular "official account", teachers can understand where students' interests lie and lessen the gap between students and teachers. In the meantime, universities can set up an "official account" especially related to mental health, sending articles daily or weekly to assist university students' mental growth. After being introduced to the above mentioned features, mental health education teachers, tutors and student leaders should be encouraged to utilize Wechat for information exchange, feedback and exchange, and to provide university students with efficient, convenient, and personal mental health service.

IV. UTILISING INFORMATION TECHNOLOGY TO IMPROVE THE EFFECTIVENESS OF CRISIS INTERVENTION

Psychological intervention, which consists of psychological counselling and crisis intervention, is a crucial measure to assist university students in solving psychological problems and ease psychological crises. Utilising information technology to carry out internet psychological counselling and establishing electronic files of mental health can further improve the level of psychological intervention.

A. Internet psychological counselling

Internet psychological counselling is a new form of psychological counselling. Counsellors apply the theory and methods of psychological counselling, using Internet technology, to solve visitors' mental problems and therefore help them grow. According to the delay time of responding, Internet psychological counselling can be divided into instant and delay counselling. Based on the technology applied it can be divided into email counselling, BBS counselling, QQ counselling, MSN counselling, Wechat counselling, microblog counselling, chatroom counselling, online call counselling and online video counselling. If taking the form of content into consideration, it can be classified as text-interaction counselling, voice-interaction counselling and video-interaction counselling. If considering the number of visitors, it can be described as self-counselling, individual counselling and group

counselling. Among all of these forms, text-interaction counselling and email counselling are the most common forms[5].

Many college students feel hesitant in choosing to take face-to-face psychological counselling. This kind of hesitation may have many causes, such as ideology, personality, concern about privacy, personal attitude towards counselling, embarrassment, physical situation and limitation of time and place. A major advantage of Internet psychological counselling is that it provides a comparatively safe, convenient and time-saving communication method for visitors who cannot or do not wish to interact with counsellors directly, face-to-face. Through the Internet, these visitors can reduce their anxiety, vent their pains or private thoughts from deep in their heart, get help from psychological counsellors, solve their mental problem and improve their future mental development.

B. Electronic files of mental health

Psychological electronic files include three parts: psychological assessment system, archive management system and data analyses system. The psychological assessment system provides online psychological assessment scales related to mental health, personalities, emotion, intelligence, vocations and interpersonal relationships, and provides detailed analyses and reports according to the assessment results. As for the archive management system, it contains basic personal information, demographic survey items, psychological assessment results and reports, online survey results, psychological counselling records, personal growth report and so on. The data analyses system includes project reports of original assessments and background surveys, chosen subjects by an automatic warning system and screening statistics of free combination of multiple dimension and multiple scales. Compared with paper files, electronic files related to mental health are easier to evaluate and management and they make the complex statistics analyses more direct and applicable.

Through the investigation of mental health status of freshman, regular assessments of psychological crises, and the establishment of mental health electronic files of college students, " teachers can master the key factors in initiating students' mental crisis. The system dynamically collects students' original family backgrounds, unfavourable family factors, types of dependent relationships, early psychological traumas, beliefs, social status, personal achievements, personal resources and some other related issues. Based on this information, important standards for evaluating students' mental health crises are expected to be created."[6] Afterwords, teachers will identify students who are potential of having serious mental crises and pay close attention to students who are at risk of committing suicide, who have serious mental problems and who have

experienced unusual life events. This method will provide important data for mental crisis prevention and intervention.

V. CONCLUSION

Benefiting from artificial intelligence, automation, digital science, Internet, quickness and effectiveness, modern information technology provides advanced technology approaches for developing and applying information sources. Utilising information technology in the university student mental health education work, which is conducted through different methods related to mental health education (MOOC, flipped classroom, websites, Wechat platform, internet psychological counselling, and electronic files), can effectively improve the teaching quality of classes, publicity quality and psychological intervention quality. That therefore improves the overall mental health education quality of university students.

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