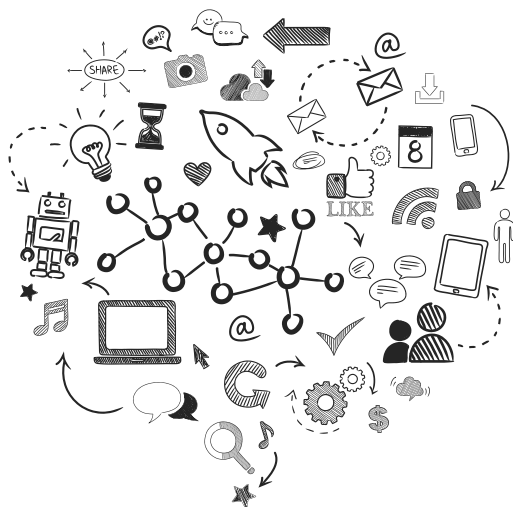

CHEN ZHENG

CHEN ZHENG





The Promotion on University Students' Mental Health Based on the Teaching methods in Buddhism

CHEN ZHENG¹

¹Faculty of Education, Mahamakut Buddhist University , Nakhon Pathom 73170, Thailand

e-mail : Chanyeexiang@126.com

Received : August 3, 2024 Revised : November 11, 2024 Accepted : November 12, 2024

Abstract

The objectives of this study were to: 1) find out the overall state of university students' mental health, and to 2) conduct comprehensive intervention education by integrating Buddhist courses and student education to improve students' mental health, enhancing their psychological well-being, and help them to master certain methods of adjusting their mental state. The samples used in this study were 392 students participated in quantitative research, 17 experts for qualitative research, and 56 students for the intervention.

The research findings were summed up as follows:

1. The quantitative result showed that the independent and dependent variables identified in the research design had a positive correlation.
2. Buddhism Intervention was effective, and students' performance was improved as a result of the successful intervention.

Keywords: University Students' Mental Health; Teaching Methods in Buddhism Mental Health of University Students; Buddhist Teaching Methods

Research background

The study on mental health has gone through a long period of development. It is a product of history and society (Prince et al., 2007: 859-877). The trauma of two world wars have greatly boosted the development of social science, together with the technical and scientific development,

thus have brought the idea of mental health under the spotlight (Orben et al., 2020: 634-640). The rise and development of mental health research reflects the dialectical materialist philosophy of the unity of mind and body. Mental health-education is a newly rising concept that emerged in the 20th century (Nosikov & Gudex, 2003: 123). It is a combination of modern psychology, sociology, physiology, and other multidisciplinary theories with school education practice (Keyes & Lopez, 2009: 89-95). As a modern educational concept and novel educational activity, mental health education has been developed in various countries across the world in theories and practices. The International Educational Work Conference 1995 made it overt that the parallelism of mental health and teaching work is a two-wheel drive that promotes the advancement of modern schools. This shows that mental health education has inevitably become an integral part of modern education system (Cornaglia et al., 2015: 1-12).

Research problems

In contrary to what many people have thought of, college can be very stressful for many students. Apart from coping with academic pressure, some students still have to tackle the anxieties of separation and individuation from their family of origin while some may have to attend to numerous work and family responsibilities. In this context, many college students experience the first onset of mental health or an exacerbation of their symptoms. Given the uniqueness of college students, there is an urgent need to address the issues among this demographic population.

Research objectives

To improve the mental health of students, this study draws on pedagogy, psychology, social medicine, social marketing, health education and health promotion theory, etc. At the same time, methods such as social psychological questionnaire surveys and target population interviews are used to explore



the theories, mechanisms, and methods of promoting students' mental health.

The two objectives of the research are:

1. To find out the general situation of university students' mental health.
2. To carry out comprehensive intervention education combining Buddhist courses and student education to improve students' mental health, enhance their psychological quality, and enable students to master certain methods of adjusting their mental state.

Research scope

(1) Scope of the variables

In the research design, we have determined that the independent variables for this research are physical health, interpersonal relationship, learning stress and emotional regulation. The dependent variable is entirely mental health. The proposed framework is that independent variables of physical health, interpersonal relationship and emotional regulation have possible positive influence on students' mental health, while learning stress would likely affect students' mental health in a negative way. These variables are determined based on previous study in this research field and the research framework will be further verified in the research.

(2) Scope of the content

This thesis takes university students as research object, trying to determine whether there is a positive correlation between Buddhism and students' mental health or not. Based on the result of the Buddhism intervention program that we have will carry out in a Chinese college, we can decide whether students' overall mental health situation will be bettered with the implementation of the Buddhism intervention.

The analysis in this research includes two parts, qualitative research, and quantitative research. Based on the data that we will retrieve at the

end of two research; we will be able to able to make the judgement with certainty whether the Buddhism intervention has reached the expected result or not.

(3) Population and sample size

The research will take place in the Jingling Institute of Technology, it is a college in the city of Nanjing, China. Currently there are around 20,000 students, according to the Taro Yamane formula (Yamamura, K., 1967: 155-157), there should be a number of 392 students in the quantitative research, this would be our sample size.

Research Methodology

Mixed methods research combines qualitative and quantitative research approaches to provide a comprehensive understanding of a phenomenon. While qualitative research offers in-depth exploration through methods like interviews and focus groups, quantitative research provides broader data through surveys and statistical analysis.

Table 1 : Mixed Methods Research Design

Mixed Methods Research Design	
Quantitative Component	Qualitative Component
✓ Mental Health Survey	✓ Interviews
✓ ADHD Symptoms Assessment	✓ Focus Groups
✓ Ego Identity Scale	✓ Thematic Analysis
Data Integration and Analysis	
Outcomes	
Insights into Experiences with Buddhist Meditation	

(1) Qualitative method

This refers to the expert interview, the purpose of this is to portray the grand picture of university students' mental health. In the study, the expert interview was carried out in the form of the Delphi method. This



is a repeated interview process with the experts, till there is a shared opinion made among the experts on certain interview topics (Skulmoski et al., 2007: 1-21).

(2) Quantitative method

Quantitative method is the most-commonly used and widely-accepted research method (Hunter & Caplow, M. 2003: 445-457). Undoubtedly, the basis of the quantitative research is the data that we have collected from the questionnaires. This includes two analysis methods, the Correlation analysis and the multi-regression analysis. Multi-regression analysis is a statistical technique that analyzes the relationship between two or more variables (Imai, 2011: 407-416). Correlation analysis is also a statistical method that is used to measures the strength of association between two variables and the direction of the relationship (Franzese & Iuliano, 2018: 706-721). The purpose of the two statistical methods is to find out the connections between the dependent variables and independent variables.

Apart from this, in order to verify the reliability of the questionnaire, we have conducted the analysis to analyze the Index of Item Objective Congruence, short as IOC. This is a procedure used in test development for evaluating content validity at the item development stage (Turner & Carlson, 2003: 163-171). This step is to have experts' rate on each of the items on the questionnaire, this is to find out to what extent the questionnaires meet the research objective.

(3) Buddhism intervention

In order to determine the actual efficacy and reliability of the findings in the qualitative and quantitative research, we implemented the three-month long intervention program. In the intervention program, the students are divided into controlled group and experimental group, in order to verify the actual efficacy of Buddhism measures in improving students' mental health.

Research validity: In the quantitative analysis, the sampling method adopted is random sampling, also in order to obtain data from different grades of students, the samples were also evenly distributed among students from year one to year four, so that the result of the research could be as widely-representative as possible, while remaining unbiased. The research tools used in this study were multi-regression analysis and Correlation analysis, the significance value are both under 0.05, this further substantiated the validity of the research.

Research result

(1) Qualitative result

According to the opinions of the expert interview, the general situation of students' mental health is not very promising. The negative sentiments that are causing university students' mental instability are anxiety, self-doubt and depression. These negative sentiments emerged due to different sources of pressure, such as family issues, career issues, academic issues and so on. When these negative sentiments arose and have not been dealt with promptly would lead to long-term mental health issues, in some cases, this might even result in physical malfunctioning.

(2) Quantitative result

In measuring IOC, if the index of the IOC is between 0.5 and 1.00, it suggests that the item is acceptable, but if IOC falls below 0.5, it means that the item is not fitting and must be removed or reviewed (Brown & Lee, J. (2011): 812-5).

As we can see in the table, the congruence indices for PH (physical health), IR (interpersonal relationship), ER (emotion regulation) and LS (learning stress), are well above the value of 0.5, therefore they are considered acceptable, and can be concluded that the items definitely defines the objectives.

**Table 2 :** The result of coefficient analysis

Model	Unstandardized		Coefficient		t	sig	Col-linearity	
	coefficients		Coefficients				Statistics	
	B	Std Error	Beta				Tolerance	VIF
(Constants)	.085	.028			3.605	.002		
Physical Health	.131	.023	.267		5.790	.000	.549	1.821
Interpersonal Relations	.039	.127	.365		1.015	.001	.824	1.214
learning Stress	.004	.001	.241		2.978	.003	.953	1.049
Emotion Regulation	4.203	.313	.142		3.466	.000	.514	1.946

The correlation analysis has rendered us to the conclusion that variables of interpersonal relationships, physical health, and emotion management are positively related to students' mental health. Learning stress, on the other hand, has a negative impact on university students' mental performance.

From the coefficient chart in multi-regression analysis, we can see that the factor of interpersonal relationship has the largest influence on students' mental health performance, followed by physical health, and then learning stress, and in comparison, emotion management is the factor that has the least influence on students' mental health condition.

The result of Buddhism intervention suggests that between the control group and intervention group, regarding to the performance of four factors, interpersonal relationship, physical health, emotion management, and learning stress, students in intervention group clearly exceed the students in control group, this leads us to the conclusion that the efficacy of Buddhism intervention is valid.

(3) Buddhism intervention result

Table 3 : Result of Buddhism intervention

		Mean	Std. Deviation	Std.Error Mean
Control Group	Interpersonal relationship	3.0137	.59195	.10061
Intervention Group		3.9855	.38742	.08536
Control Group	Physical health	3.4137	.53742	.11249
Intervention Group		4.0161	.40029	.09043
Control Group	Learning Stress	3.7911	.67791	.65444
Intervention Group		4.4405	.63284	.54989
Control Group	Emotion management	3.134	.31553	.40266
Intervention Group		3.441	.37604	.33998

The result of Buddhism intervention suggests that between the control group and intervention group, regarding to the performance of four factors, interpersonal relationship, physical health, emotion management, and learning stress, students in intervention group clearly exceed the students in control group, this leads us to the conclusion that the efficacy of Buddhism intervention is valid.

Research conclusion

In the research, we have adopted both qualitative method and quantitative method, as well as Buddhism intervention, in order to explore the variables that potentially affect university students either positively



or negatively. Based on the result of the research, we concluded that variables of interpersonal relationships, emotion regulation and physical health have a positive influence on students' mental health, but the variable of learning stress affects students' mental health performance negatively.

Based on this, we have designed a Buddhism intervention program, and the result of the intervention suggested that the intervention program is effective in improving students' mental health, thus gives us the confidence in the research findings.

Reference

- Brown, J. D. & Lee, J. (2011). The transcription factor cyclic amp-responsive element-binding protein h regulates triglyceride metabolism. *Nature Medicine*, 17(7), 812-5.
- Cornaglia, F., Crivellaro, E., & McNally, S. (2015). Mental health and education decisions. *Labour Economics*, 33(c), 1-12.
- Franzese, M., & Iuliano, A. (2018). *Correlation analysis. In Encyclopedia of bioinformatics and computational biology: ABC of bioinformatics*. Elsevier.
- Hunter & Caplow, M. . (2003). The kinesin-related protein mcak is a microtubule depolymerase that forms an atp-hydrolyzing complex at microtubule ends. *Molecular Cell*, 11(2), 445-457.
- Imai, K. (2011). Multivariate regression analysis for the item count technique. *Journal of the american Statistical Association*, 106(494), 407-416.
- Keyes, C. L., & Lopez, S. J. (2009). *Toward a science of mental health*. Oxford University Press.
- Nosikov, A., & Gudex, C. (2003). Development of a common instrument for mental health. *EUROHIS: Developing common instruments for health surveys*, 57(2003), 123.

- Orben, A., Tomova, L., & Blakemore, S.-J. (2020). The effects of social deprivation on adolescent development and mental health. *The Lancet Child & Adolescent Health*, 4(8), 634-640.
- Prince, M., Patel, V., Saxena, S., Maj, M., Maselko, J., Phillips, M. R., & Rahman, A. (2007). *No health without mental health. The Lancet*, 370(9590), 859-877.
- Skulmoski, G. J., Hartman, F. T., & Krahn, J. (2007). The Delphi method for graduate research. *Journal of Information Technology Education: Research*, 6(1), 1-21.
- Turner, R. C., & Carlson, L. (2003). Indexes of item-objective congruence for multidimensional items. *International journal of testing*, 3(2), 163-171.
- Yamamura, K. (1965). Taro yamane, statistics : an introductory analysis. *Aoyama Journal of Economics*, 16(1965), 155-157.

