

## THE INNOVATIVE MANAGEMENT AND PRACTICE OF CURRICULUM REFORM IN CHINESE VOCATIONAL COLLEGES

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### Abstract

**Objective-** The objective of this research is to explore the factors that affect students' mental health and to build an innovative curriculum reform model for improving students' mental health quality through curriculum reform. **Methodology-** The methodology used in this paper included both qualitative and quantitative methods. Qualitative methods are carried out in the form of expert interviews through the Delphi method. Quantitative methods are done through questionnaire survey with the samples. **Findings-** The findings of the research can be summed up as follows: 1. The quantitative study has determined the factors that are influential in the performance of students' mental health. 2. The qualitative study has helped us establish a curriculum reform model. **Practical implications-** The curriculum model presented in the paper can be of referential value for the curriculum designers in vocational colleges. **Originality-** This paper presents a reformed model of curriculum which incorporates the purpose of improving mental health into the teaching practice in Chinese vocational colleges, this is a field that has not been discussed much yet. This study also explored the variables that are significant in the overall performance of students' mental well-being through the quantitative analysis.

**Keywords:** Vocational Education, Mental Health, Curriculum Reform.

### INTRODUCTION

Mental health is the product of history and society. The importance and necessity of mental health has never been highlighted as it is nowadays because of the intensity of modern society (Abuse, 2013). This forces people to look at health and mental health from a new and diversified perspective.

Vocational colleges, also known as trade schools or technical colleges, serve a specific and valuable purpose in the education system. The primary focus of vocational colleges is to provide practical, hands-on training and education in specific trades or professions (Toner, 2010). However, to achieve this, the administrations need to make sure that the candidates are well-functioning individuals, so they can be trained to be useful in the working environment.

In the 21st century, the work field of school mental health educators will be further expanded, which is reflected in three aspects: serving the students at the whole school, serving the older people, and caring for the welfare of the whole society. It is certain that the role connotation of school mental health education professionals has expanded and will continue to expand and will play a more and more important role in the process of achieving school education goals (Gonczi, 2020).

This study explores the quality of mental health of students in vocational colleges in relation to curriculum.

The objectives of the study are:

- 1) To explore the factors that affect students' mental health
- 2) To build an innovative curriculum reform model for improving students' mental health quality through curriculum reform

This research used mixed methods; therefore, the results are both qualitative and quantitative.

## LITERATURE REVIEW

The concept of mental health concerns several different aspects, such as self-adjustment, interpersonal relationship, stress-coping, and so on. An individual's mental well-being is considered to be in an ideal state when these different elements are kept at a balanced level (Rose et al., 2017).

Mental health affects personal life, as well as the society and economy, therefore the study on mental health has strong realistic value. For college students, the transition to college brings about a myriad of changes, including new academic demands, social pressures, and the experience of independence.

For many students, this can be both exhilarating and overwhelming (Oswalt et al., 2020). The academic stress, coupled with the pressure to make decisions about career paths and personal identities, can significantly impact mental health.

Curriculum reform is a transformation in learning methods and teaching methods (Albashiry et al., 2015). It changes the tendency of too much focus on knowledge and emphasizes the formation of a proactive learning attitude, making the process of acquiring knowledge and skills a process of learning to learn and forming correct values (Gouëdard et al., 2020). The primary aim of curriculum reform is to change the function of curriculum, so that the curriculum can meet the realistic requirement in work environment and social environment (Millar, 2019).

The main structure of curriculum reform in education systems worldwide basically focuses on three aspects: updating concepts, transforming methods, and rebuilding the system (Campbell-Phillips, 2020).

Updating concepts refers to the change of teachers' concept of teaching. The teaching environment, and social environment are constantly changing, which means that students need to change their concept as well to keep up with the societal change (Law, 2014).

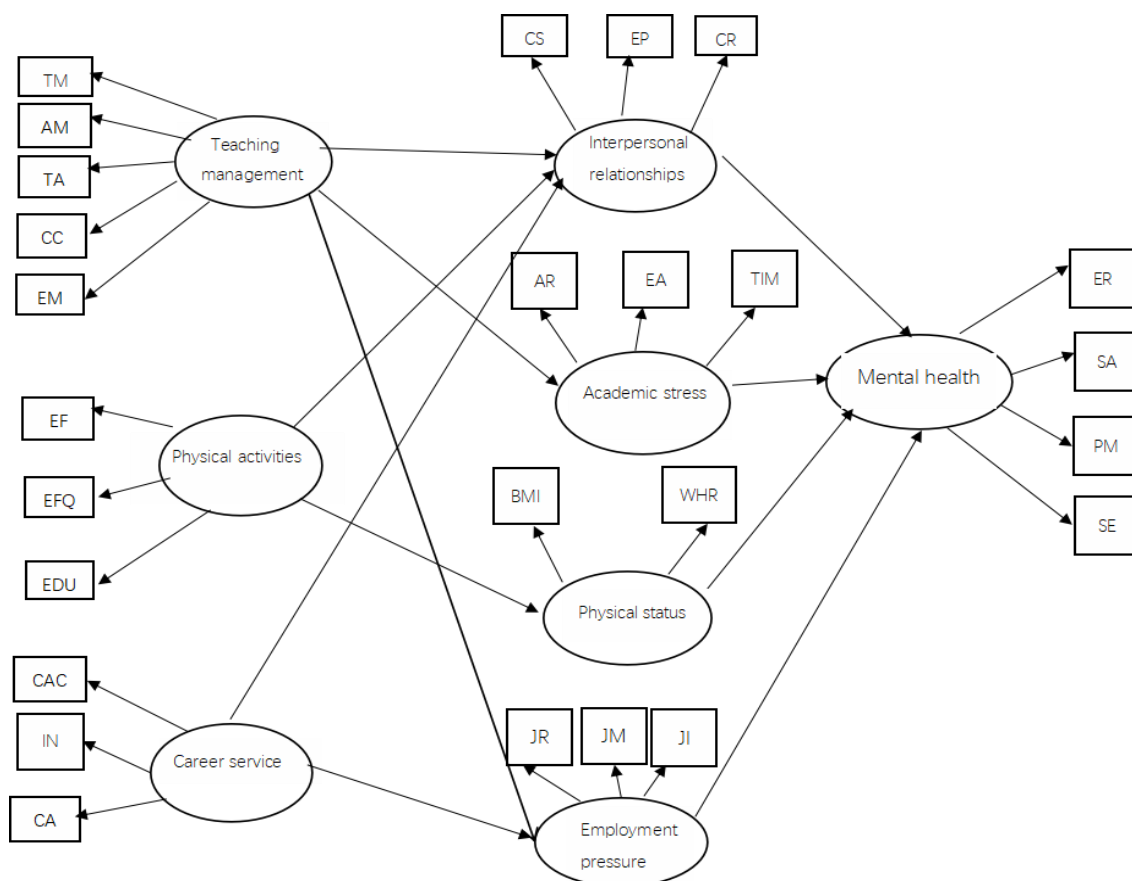
Transforming method means to change the way of teaching activity in traditional classroom, from teacher-centered classroom to students-centered environment. Also, the transformation of methods includes the change of students' learning methods, from passive receiver to active participant (Sivarajah et al., 2019).

Rebuilding system means to rebuild management system and appraisal system. The appraisal system refers to not only the evaluation system of students' academic performance, but also how students evaluate schools, teachers, and administration (Natriello, 2013).

There are some previous theories and studies that are related to the research that we have referred to in the study.

- Cognitive theory believes that psychological disorders occur because the individual's cognition system is malfunctioning )Ibrahim, 2012(.
- The Endorphin Hypothesis is a proposed theory that explains the relationship between physical activity and mental status )Mikkelsen et al., 2017(.
- Constructivism is a learning theory that views learning as an active and social process in which learners actively construct their understanding of the world by engaging with experiences and reflecting on those experiences. It criticizes traditional teaching for decontextualizing learning and advocates situational teaching )Bada & Olusegun, 2015(.

Deducting from the related theories and studies, we concluded the variables in this research.



**Figure 1: Correlations of the variables**

**Table 1: Abbreviations of the variables**

Variables	Abbreviation	
Teaching Management	Teaching Method	TM
	Assignment Method	AM
	Teaching Activity	TA
	Course Content	CC
	Evaluation Method	EM
Career Service	Career Counselling	CAC
	Career Activities	CA
	Internship Network	IN
Physical Activities	Exercise Form	EF
	Exercise Frequency	EFQ
	Exercise Duration	EDU
Interpersonal Relationships	Communication Skills	CS
	Empathy	EP
	Conflict Solution	CR
Employment Pressure	Job Interview	JI
	Job Rejection	JR
	Job Market	JM
Physical Status	Body Mass Index	BMI
	Waist-to-Hip Ratio	WHR
Academic Stress	Academic Performance	AP
	Exam Anxiety	EA
	Time Management	TIM
Mental Health	Emotional Resilience	ER
	Social Adaptability	SA
	Positive Mood	PM
	Self-Efficacy	SE

## METHODOLOGY

As was pointed out, both qualitative and quantitative methods were applied in the research. In the qualitative part, the Delphi method was adopted. The Delphi method is a specific way of conducting expert interview, it is a forecasting process and structured communication framework based on the results of multiple rounds of questionnaires sent to a panel of experts (Skulmoski et al., 2007). After each round of questionnaires, the experts involved would be presented with an aggregated summary of the last round, allowing them to modify their answers according to the group response till the answers from the experts are eventually in accordance. In the process of sampling experts, the population was the 56 registered psychologists in the Changchun Psychological Center, and in order to make sure our experts are selected systematically and widely-representative, we had arranged them alphabetically, starting from the first one, we chose one in every four experts, excluding the two experts who were

not available, we were able to interview 12 experts successfully. The quantitative study took place in the Changchun Vocational and Technical College, the population was the 11496 students attending in this college. To determine the sample size, the writer used the Taro Yamane Formula. The Taro Yamane Formula is a statistical tool that is designed for estimating

$$n = \frac{N}{1+N(e)^2}$$

the sample size in a social study. In the Taro Yamane Formula, where n stands for the sample size, N is the population of the study, and e means the margin error in the calculation (Olonite, 2021). According to this formula, the estimated sample size was 382 students.

## FINDINGS

The results of the research included two parts, the first one was the finding of the factors affecting students' mental health and correlations among the variables by quantitative analysis. The second one was the curriculum reform model that was built through qualitative analysis.

Regarding the data collection in the quantitative part, candidates were invited to take part in the survey, and based on the data that have been retrieved, the writer has conducted statistical analysis on the data. The statistical tool that was conducted in this research was Structural Equation Modelling (SEM). SEM is an analytical technique that is widely used in social science in order to analyze the structural relationships, it can help the researchers to find out the interrelated correlations among dependent variables, independent variables and mediating variables.

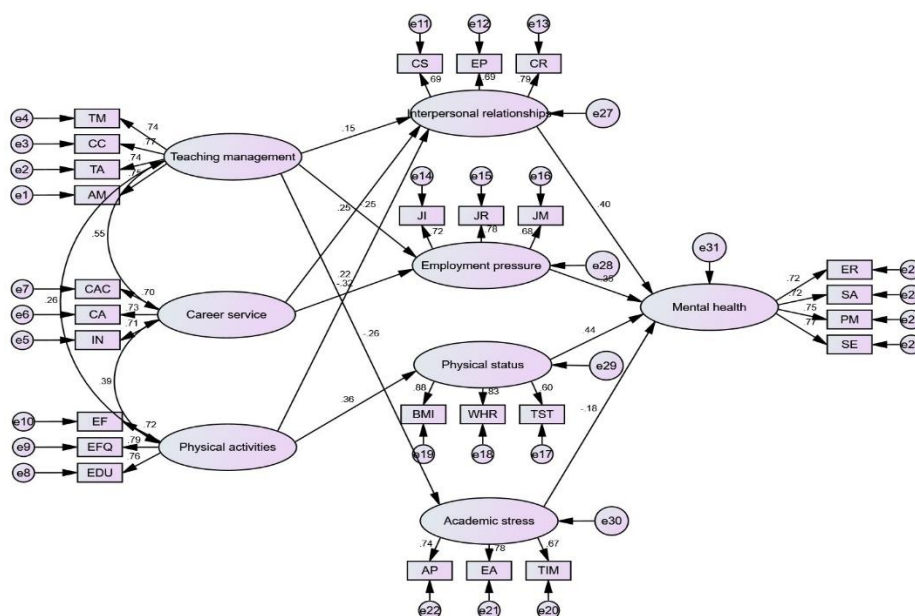


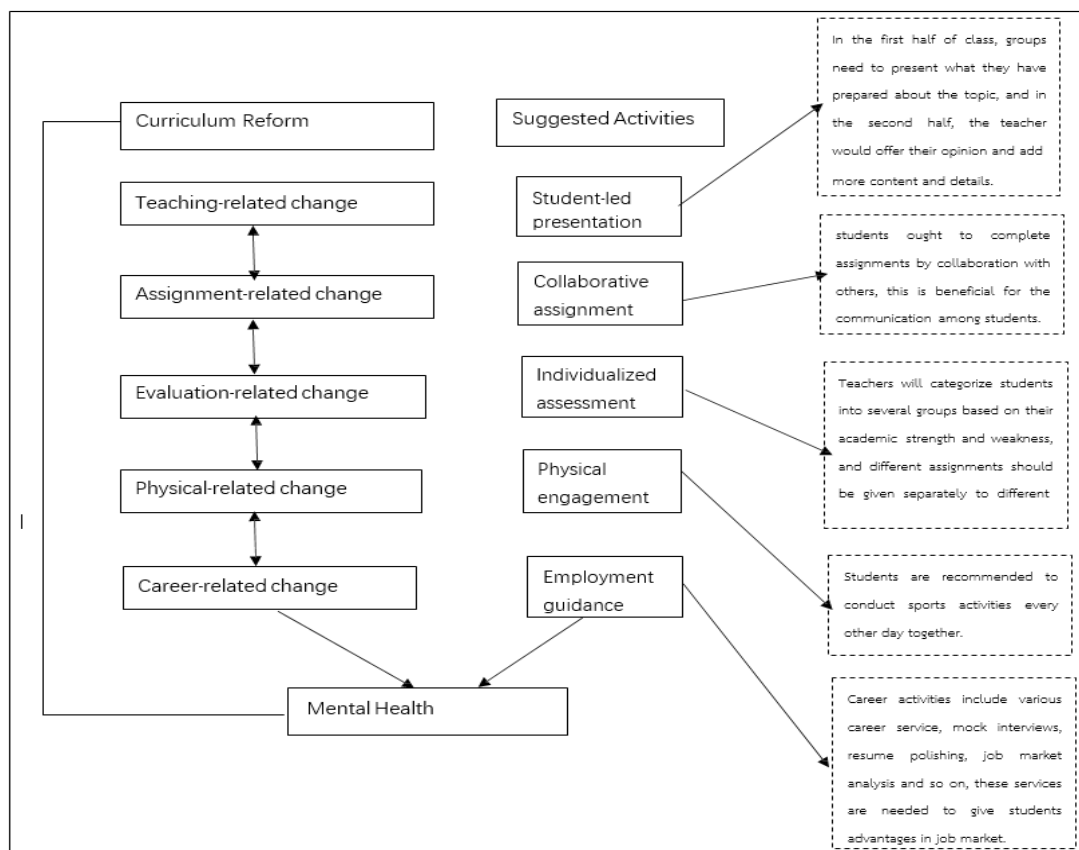
Figure 2: Result of Structural Equation Modelling

From the statistics above, we can see teaching management has a significant positive impact on two variables, interpersonal relationships, and academic stress, but it affects employment pressure in a significantly negative way. The statistics also shows that physical activities have a significant positive impact on interpersonal relationships, along with physical status, which validates the hypothesis that physical activities are instrumental in students' interpersonal relationships and physical status. The variable of career service has a statistically significant positive impact on interpersonal relationships. But the analysis also reports a significantly negative impact that career service has on employment pressure. The results also indicate that interpersonal.

The curriculum reform model above was the result of qualitative and quantitative analysis relationships have a significant positive impact on mental health, and employment pressure has significantly negative contribution to mental health. Apart from these, physical status has been reported as a positive source of impact for mental health, based on the result, but academic stress has a significant negative impact on mental health.

In the qualitative analysis, there were in total four rounds of interviews till there were a shared understanding among the experts in the respect of curriculum reform.

Figure 3 Curriculum reform model



In the qualitative analysis, there were in total four rounds of interviews till there were a shared understanding among the experts in the respect of curriculum reform. Combined. Based on the SEM analysis and the recommendations of the experts, the curriculum reform should center on the following aspects:

*Teaching management:* This is mainly to change the current teaching method and teaching form. In Chinese vocational colleges, teaching method is predominantly teacher-centered lecturing, which is stationery and lack of innovation. According to the experts, this needs to be updated to keep up with the latest needs of vocational education. The experts advised to change the conventional teaching method to students-led presentation. Teachers ought to encourage students to take a more active role in class by giving more presentations, this way students will be able to do more insightful research on the topic.

*Assignment method:* Cooperation with others is considered beneficial for the communication among students, therefore the experts recommended teachers giving collaborative assignments in order to achieve this purpose.

*Assessment method:* Traditional evaluation of students simply depends on the academic grading system, and this is not comprehensive for students in vocational colleges. Based on the view of the experts, assessment methods should be individualized. Teachers could categorize students into different groups according to their academic strength and weakness.

*Physical activity engagement:* Physical health is the fundamental element of mental health. According to the experts, physical exercise should be included in the curriculum. An exercise frequency of three times a week is suggested by the experts.

*Career counselling:* Employment is a big concern for modern students, especially for the senior students who are under this pressure. Therefore, the administration of the vocational colleges needs to provide a more comprehensive career service to the students. During the interviews, the experts emphasized activities such as monthly career webinars, mock exams and so on.

## CONCLUSIONS

A tentative model of curriculum reform for the vocational colleges has been developed and illustrated. Furthermore, independent variables and mediating variables for mental health have been clearly defined, and the correlations among the variables have been researched and built through SEM analysis. This proposed curriculum reform model provides valuable insights into the factors that are significant for creating curriculum system in vocational colleges. The results presented in this research were preliminary, further developments are anticipated. However, this study makes an important first step in helping us understand students' mental health and curriculum system in vocational colleges. Although the curriculum reform model is targeted at vocational education, it is still unclear whether it can be applied to more vocational colleges in general. There are some other parts of this study might be reliable for other vocational colleges or educational institutions; however, this cannot be inferred with any certainty from this study that it would be useful.

## RESEARCH LIMITATIONS

Although the research process has been carefully designed and implemented in order to achieve the research purposes, there are concerns about the research that some interference which we find it difficult to completely rule out in the procedures yet might have an impact on our final analysis result, two of which are particularly pervasive: issues of representativeness and the potential omission of relevant variables.

One issue is the under-representativeness of the samples. The survey location is a vocational college in the northeastern region of China, most of the students at this college are indigenous or come from other cities in the province. Students' thinking patterns and ideologies are inevitably profoundly affected by local culture, leading to the homogeneity of the sample.

The other issue is the omitted variables. While the researcher has gone through thorough procedures in determining the variable in the framework, it is indeed possible that some variables slipped through our attention, due to the uniqueness of research objects, and uncontrollable factors which are beyond our capacity, such as relationships inside each student's family, these might also be related to our research, but it is extremely challenging for us to find out.

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