

The Development of the Mental Health Education Curriculum based on Kolb's Experiential Learning Theory to Improve Ethnic Preparatory Students' Learning Adaptability

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Abstracts

The learning environment, learning methods, and educational environment of universities are different from those of high school. Quickly transitioning from high school to university, improving learning adaptability has become the primary challenge faced by ethnic preparatory students after enrollment. Conducting mental health education curriculum is an important way to carry out students' mental health education work, and also an important way to enhance their learning adaptability and mental literacy. The mental health education curriculum developed based on Kolb's experiential learning theory can fully integrate the needs and psychological characteristics of ethnic preparatory students, and design targeted teaching content. Experiential curriculum focus on students' subjective status, using rich activities as the carrier of teaching, allowing students to experience and gain insights into knowledge. Compared to teacher centered teaching, experiential teaching is more in line with students' mental characteristics.

The objectives of this research were: 1) to investigate the current situation and effectiveness of the mental health education curriculum and ethnic preparatory students' learning adaptability. 2) to develop the component of mental health education curriculum based on Kolb's experiential learning theory in order to improve ethnic preparatory students' learning adaptability. 3) to assess the efficiency of mental health education curriculum based on Kolb's experiential learning theory through comparing the ethnic preparatory students' learning adaptability before and after the implementation of curriculum.

This study combines Kolb's Experimental Learning Theory with the theory of curriculum development, used quantitative methods to explore the changes in learning adaptability before and after the implementation of mental health education curriculum. Researchers developed the content of mental health education curriculum based on Kolb's experiential learning theory and the five major influencing factors of learning adaptability through in-depth questionnaires and educational experiments. 278 ethnic preparatory students were selected to conduct a survey on the current status of mental health curriculum in Baise University, and 50 students were enrolled in the newly developed mental health education curriculum. The survey found that: firstly, ethnic preparatory students generally have low learning adaptability, with an mean of 3.67, indicating a need to improve their cognitive abilities in learning adaptation; Secondly, ethnic preparatory students have a relatively high demand and attention for mental health education curriculum., that attention to mental health education current is in the Agreement level ($\bar{X}=4.37$), and Students' demand for mental health education current content is in the Agreement level ($\bar{X}=4.37$); Thirdly, adopting mental health education curriculum to conduct

experiments in the experimental class effectively improves the learning adaptability of ethnic preparatory students. There are statistical significant differences in learning adaptability scores between pre test and post test at the 0.01 level, with a t-test score of 4.43 ($p=0.003<0.01$)

Keywords: Mental health education curriculum; Learning Adaptability; Ethnic Preparatory Students; Kolb's Experiential Learning Theory

Introduction

When ethnic preparatory students come to universities, the teaching methods and environment of teachers have undergone significant changes compared to before. At present, a large proportion of ethnic preparatory students still have learning adaptation problems.

Xiao&Guo (2015: 127-128) The learning environment, learning content, learning methods, learning attitude, and learning motivation have an impact on students' learning adaptation ability. Setting up mental health education curriculum can effectively promote the level of mental adaptation. The interrelationship between learning adaptation and mental health has a significant impact on academic performance and also on individuals' future learning adaptability.

The mental health education curriculum is particularly important for ethnic preparatory students, helping them shape good mental qualities, enhance self-regulation ability, and adapt to the current social needs. In this context, this article focuses on developing mental health education curriculum suitable for preparatory students in the preparatory education base of Baise University in Guangxi Province to improve their learning adaptability.

Due to the weak cultural and theoretical foundation, inferiority complex, learning adaptability, and lack of learning motivation of ethnic preparatory students, their learning outcomes are not ideal in traditional teaching classrooms. Therefore, researchers focus on the reform of the concept and methods of mental health curriculum, adopting diversified methods and combining experiential methods such as group counseling, role-playing, and activity practice with Kolb's experiential learning theory to better achieve teaching and student learning goals.

Research Methodology

In "The development of the mental health education curriculum based on Kolb's Experiential Learning Theory to Improve Ethnic Preparatory Students' Learning Adaptability" the researcher has developed the curriculum into 3 steps as follows:

Step 1 The studying about the current situation and effectiveness of the mental health education curriculum and ethnic preparatory students' learning adaptability

Step 2 The development of the mental health education curriculum based on Kolb's Experiential Learning Theory to Improve Ethnic Preparatory Students' Learning Adaptability.

Step 3 The experimental and improvement mental health education curriculum by accessing the efficiency of mental health education curriculum based on Kolb's experiential learning theory and comparing the ethnic preparatory students' learning adaptability before and after the implementation of curriculum.

Population and sample

1,000 ethnic preparatory students in the 2023 class of Baise University, and the preparatory curriculum is only 1 year .The 278 sophomores from ethnic preparatory students in the 2023 class of Baise University, the survey in the semester 1 academic year 2023.50 sophomores from ethnic preparatory students in the 2023 class of Baise University, participated in a teaching experiment during the first semester of the academic year 2023.

The creation of research instruments

1.Questionnaire on the current situation of mental health education curriculum for ethnic preparatory students.which was divided into two parts. The first part is personal basic information, including ethnicity, from where,gender and major, used to understand the basic situation of the research object. The second part is the official question of the questionnaire, which is conducted from two dimensions: students' attention to mental health curriculum and their own demand for curriculum content. Among them, 5-9 items are the survey students' attention to mental health curriculum, and 10-17items are the survey students' demand for curriculum content.

2.Developed a teaching programme and Lesson Plan for the mental health education curriculum based on Kolb's experiential learning theory to improve ethnic preparatory students' learning.The developing mental health education curriculum is as follows, divided into five modules: (1) Learning environmental (2) Learning motivation (3) Learning content(4) Learning methods (5) Learning attitude .

Experiential learning means that learners understand and reflect on knowledge after active perception and experience, and internalize the specific perception of images into abstract knowledge that can be shared and passed on.Divided into four stages: Concrete Experience(CE),Reflective Observation(RO),Abstract Conceptualization(AC)and Active Experimentation(AE),they are the elements of curriculum content.

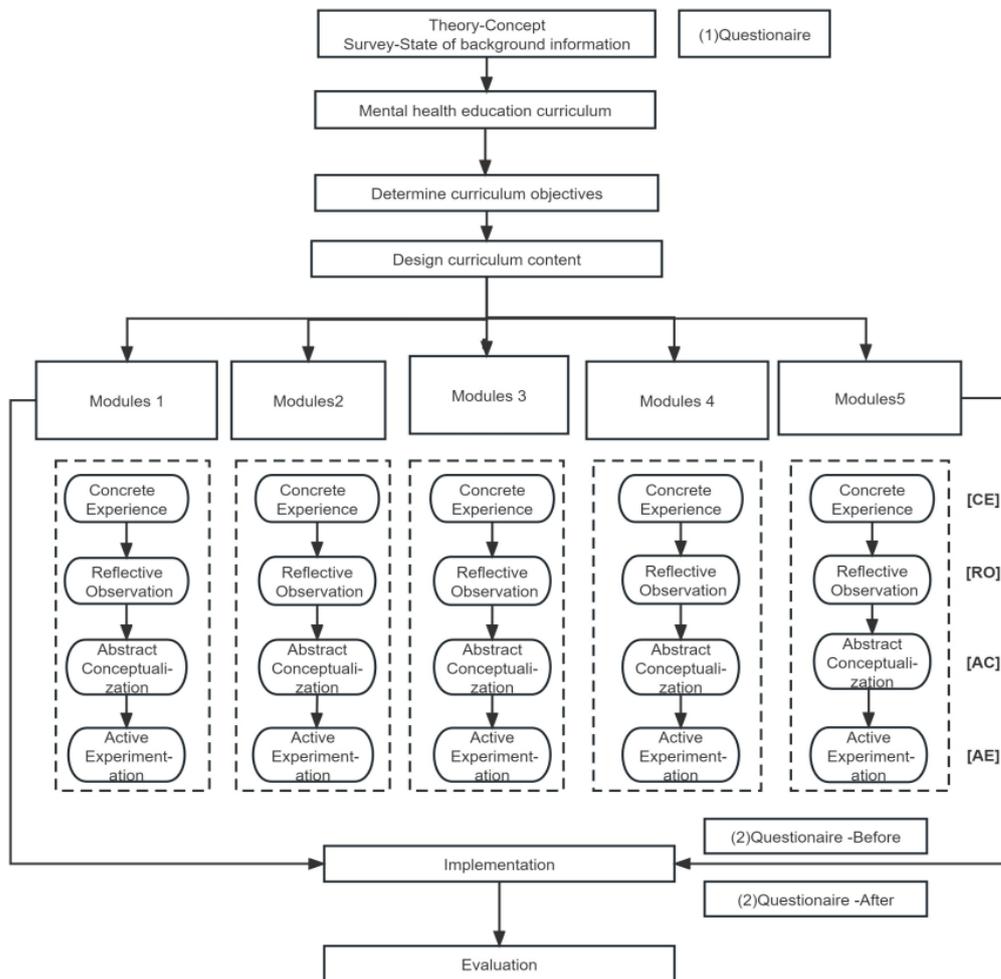


Figure 1 Development Concept of experiential mental health education curriculum

3.Ethnic Preparatory Student Adaptability Scale.

Researchers have divided the factors that affect learning adaptability into five categories: learning motivation, teaching activities, learning attitude, learning ability, and interpersonal communication ability. Based on these five factors, a learning adaptability scale questionnaire for ethnic preparatory students was developed and used for post test. The questionnaire is divided into two parts. The first part is personal basic information, including ethnicity, gender, and where they come from, to understand the basic situation of the research object. The second part is based on learning environment (5-9 items), learning content(10-14 items), learning methods (15-19 items), learning attitude (20-24 items)and learning motivation (25-29 items)5 dimension to investigate.please refer to the following :

Table 1 Questionnaire Learning Adaptability Scale for Ethnic Preparatory Students

Questionnaire Learning Adaptability Scale for Ethnic Preparatory Students		
Dimension	Items	Option
1) learning environment	5, 6, 7, 8, 9	1 means "Very disagree" 2 means "Disagree" 3 means "Uncertain" 4 means "Agree" 5 means "Very agree"
2) learning content	10, 11, 12, 13, 14	
3) learning methods	15, 16, 17, 18, 19	
4) learning attitude	20, 21, 22, 23, 24	
5) learning motivation	25, 26, 27, 28, 29	

Data Collection

A total of 278 ethnic students were selected by random sampling as the survey sample, and the Questionnaire on the current situation of mental health education curriculum for ethnic preparatory students and the Ethnic Preparatory Student Adaptability Scale platform were distributed online to complete the data collection work.

Test the learning adaptability of 50 ethnic preparatory students from Baise University in the experimental class before the curriculum, and collect data using a questionnaire star platform

After the implementation of the curriculum, test the learning adaptability of 50 preparatory students of Baise University in the experimental class and investigate their Learning Adaptability Scale, and collect data using the questionnaire star platform.

Data analysis

For the first step, to investigate the current situation and effectiveness of the mental health education curriculum, Assessment of suitability is compared with the standard criteria of the questionnaire by converting the questionnaire responses from each expert into scores. The scoring criteria are as follows:

- A score of “5” means Very agree.
- A score of “4” means Agree.
- A score of “3” means Uncertain.
- A score of “2” means Disagree.
- A score of “1” means Very disagree.

Then calculate the average of the suitability score from the opinion of experts to be compared with the criteria as follows:

- Mean Score 4.51 - 5.00 means “Very agree”
- Mean Score 3.51 - 4.50 means “Agree”.
- Mean score 2.51 - 3.50 means “Uncertain”.
- Mean Score 1.51 - 2.50 means “Disagree”.
- Mean Score 1.00 - 1.50 means “Very disagree”.

The result of the assessment of the consistency of the curriculum outline components the expert received an IOC equal to 1.00 for every item, (the acceptable value is between 0.50-1.00) which was considered that the assessment form was content-consistent.

For the third step, The experimental and improvement mental health education curriculum by accessing the efficiency of mental health education curriculum based on Kolb's

experiential learning theory and comparing the ethnic preparatory students' learning adaptability before and after the implementation of curriculum, Split into two steps: 1) Score obtained from the test of learners who study using the mental health education curriculum based on Kolb's Experiential Learning Theory to develop the learning adaptability, find the mean (\bar{X}) and standard deviation (S.D.).

2) Compare the differences of mean scores and (S.D.). The learning adaptability both pre-experimental and post-experimental by testing the statistical using statistics (t - test for dependent)

Conclusion

1) Students' Attention to mental health education curriculum is relatively high

We analyze the results from five aspects: necessary for the school to provide special mental health education curriculum, Mental health education curriculum can help students better learning, Interested in the experiential mental health education curriculum, The school offers at least one a week of mental health education curriculum, and Mental health education curriculum is very meaningful for personal development. The survey results show that the average range of students in five aspects is between ($\bar{X}=4.11$ to $\bar{X}=4.51$), indicating that students' attention to mental health education curriculum overall is agree.

Table 2 Mean and Standard of data analysis on Ethnic preparatory Students' Attention to Mental Health Education Curriculum

Students' Attention to mental health education curriculum	(N=278)		
	\bar{X}	S.D.	Level
1. It is necessary for the school to provide special mental health education curriculum for ethnic preparatory students.	4.43	0.61	Agree
2. Mental health education curriculum can help students better learning.	4.51	0.55	Very agree
3. Interested in the experiential mental health education curriculum.	4.33	0.65	Agree
4. The school offers at least one a week of mental health education curriculum.	4.11	0.77	Agree
5. Mental health education curriculum is very meaningful for personal development.	4.47	0.56	Agree
Total	4.37	0.63	Agree

From Table 2, Students' Attention to Mental Health Education Curriculum overall is Agree ($\bar{X}=4.37$; S.D=0.63). Consider into each Students' Attention, "Mental health education curriculum can help students better learning" is highest ($\bar{X}=4.51$; S.D=0.55).. The following level is "It is necessary for the school to provide special mental health education curriculum

for ethnic preparatory students” ($\bar{X}=4.43$; S.D.=0.61).Whereas, “the attitude of school offers at least one a week of mental health education curriculum is the lowest($\bar{X}=4.11$).

2)Students' demand for mental health education curriculum content is high

We will analyze from the following 8 aspects. According to the 8 contents listed by the researchers, students all agree that they should be included in the teaching content of mental health education courses, and they are more concerned with necessary to learn how to deal with changes in the learning environment.Because a person's entire life is a process of constantly accepting change, changing themselves, adapting to change, and making progress. Without the ability to adapt to environmental changes, it will be difficult to survive.

Table 3 Mean and Standard of Data Analysis on Ethnic preparatory Students'Demand for Mental Health Education Curriculum Content

(N=278)

Students' demand for mental health education curriculum content	\bar{X}	S.D.	Level
1. It is necessary to learn about life planning and clear learning goals.	4.52	0.55	Very agree
2. It is necessary to learn how to deal with changes in the learning environment.	4.51	0.55	Very agree
3. Need mental counseling on learning methods .	4.42	0.60	Agree
4. Need mental counseling on learning interest and attitude.	4.45	0.55	Agree
5. Need mental counseling on learning motivation.	4.30	0.65	Agree
6.Need to improve mental comprehensive quality	4.14	0.70	Agree
7.Need mental counseling for emotional and willpower	4.41	0.59	Agree
8.Need mental counseling for learning stress	4.22	0.68	Agree
Total	4.37	0.61	Agree

From Table 3, ethnic preparatory students demand for curriculum content overall is Agree($\bar{X}=4.37$;S.D.=0.61). Consider into each demand contents, “mental health education curriculum content is necessary to learn about life planning and clear learning goals is the highest($\bar{X}=4.52$;S.D.=0.55). The following level is “Necessary to learn how to deal with changes in the learning environment” which the level is Very agree ($\bar{X}= 4.51$; S.D.=0.55). Whereas “Need to improve mental comprehensive quality is the lowest, which the level is Agree ($\bar{X}=4.14$;S.D.=0.70).The 8 contents listed in the mental health curriculum all meet the needs of students.

3) After the implementation of mental health education curriculum, students' ability to adapt to the learning environment has improved

A good learning environment is an important factor that affects the learning adaptability of new students. ethnic preparatory students are easily influenced by the dormitory learning atmosphere, teachers, and classmates. Teachers provide adaptability education to students in the classroom to help answer their questions about learning and life, which can improve their learning environment adaptability.

Table 4 Data Analysis on ethnic preparatory students' learning adaptability in Learning environmental in BaiSe University (N=50)

Learning environmental	Pre-test		Post-test	
	\bar{X}	S.D.	\bar{X}	S.D.
1.The overall management of preparatory students by the school is relatively reasonable	3.72	0.97	4.26	0.44
2.The school schedule is reasonable	4.10	0.97	4.40	0.50
3.The dormitories and facilities around the campus can meet the needs of learning	3.18	1.32	3.32	1.27
4.Adapt to the teaching method of the teacher	3.60	0.95	4.18	0.39
5.Easily form study groups	3.58	0.86	4.24	0.43
Total	3.64	1.01	4.08	0.61

From the table 4, the overall analysis on ethnic preparatory students' Learning adaptability in Learning environmental post-test mean score ($\bar{X}=4.08$;S.D.=0.61) is higher than pre-test mean score ($\bar{X}=3.64$;S.D.=1.01). Considering into each item, all item in post-test show higher mean score than pre-test.

4) The difficulty level of the learning content should be suitable for the learning situation of ethnic ethnic preparatory students

The cultural foundation of ethnic ethnic preparatory students is relatively weak, and the difficulty of the curriculum set can affect their adaptability to learning. It is also important for the teacher's teaching mode to be suitable for students.

Table 5 Data Analysis on ethnic preparatory students' learning adaptability in Learning content in BaiSe University (N=50)

Learning content	Pre-test		Post-test	
	\bar{X}	S.D.	\bar{X}	S.D.
1.Can understand the teacher's explanation	3.70	0.74	4.12	0.33
2.Able to independently and high-quality complete assignments assigned by teachers	3.70	0.76	3.86	0.70
3.Master the knowledge of each course	3.22	0.79	3.60	0.64
4.Understand the key points and difficulties of knowledge	3.54	0.71	3.82	0.52

5. Will ask the teacher questions in the case of independent thinking	3.82	0.66	4.14	0.41
Total	3.60	0.73	3.91	0.52

From the table 5, the overall analysis on ethnic preparatory students' learning adaptability in Learning content post-test mean score ($\bar{X}=3.91$; S.D.=0.52) is higher than pre-test mean score ($\bar{X}=3.60$; S.D.=0.73). Teachers often encourage students in the curriculum, which will increase their confidence in learning.

5) The teaching content on Learning methods has a positive impact on students

The teaching methods of university teachers and the learning methods of students are greatly different from those of high school. When ethnic preparatory students enter university without adjusting their learning methods, actively solving problems can affect their learning. Therefore, mental health curriculum taught students how to adjust their learning methods and how to obtain learning resources to better adapt to new learning. After teaching, students' ability to master learning methods has improved.

Table 6 Data Analysis on ethnic preparatory students' learning adaptability in Learning methods in BaiSe University

Learning methods	Pre-test		Post-test	
	\bar{X}	S.D.	\bar{X}	S.D.
1. Reflect on a day's learning activities	3.52	0.84	3.88	0.48
2. Proactively search for, obtain, and learn related materials	3.92	0.67	4.28	0.45
3. Preview before class and consolidate knowledge after class	3.44	0.73	4.00	0.76
4. Often communicate with classmates and explore learning issues	3.66	0.85	3.92	0.70
5. Listen carefully to the class and sort out the study outline	3.52	0.81	3.80	0.67
Total	3.61	0.78	3.98	0.61

From the table 6, the overall analysis on ethnic preparatory students' Learning adaptability in Learning methods post-test mean score ($\bar{X}=3.98$; S.D.=0.61) is higher than pre-test mean score ($\bar{X}=3.61$; S.D.=0.78).

6) After the implementation of mental health education curriculum, students' learning attitudes have improved, and their learning attitudes are related to their level of confidence in learning

After comparing the pre test and post test data, the mean of all items in the post-test were higher than those in the pre-test. It indicates that ethnic preparatory students have a positive learning attitude and a certain interest in learning. In the survey of the "learning attitude" dimension, whether students have confidence in learning this course determines their attitude towards it. If the curriculum content is difficult and the teacher does not adjust teaching methods in a timely manner to encourage students to learn, they will study this course seriously.

Students may not be active in class and may skip classes or become bored with learning, This has a significant impact on students' learning adaptability.

Table 7 Data Analysis on ethnic preparatory students' learning adaptability in Learning attitude in BaiSe University

Learning attitude	Pre-test		Post-test	
	\bar{X}	S.D.	\bar{X}	S.D.
1. Actively participate in various learning activities	3.66	0.80	4.08	0.57
2. Have confidence in learning various curriculum well	3.76	0.85	4.38	0.49
3. High willingness to learn	3.50	0.81	4.14	0.35
4. Learning is very meaningful	3.82	0.80	4.36	0.49
5. When learning pressure is high, it can regulate pressure	3.66	1.06	4.30	0.46
Total	3.68	0.86	4.25	0.47

From the table 7, the overall analysis on ethnic preparatory students' Learning adaptability in Learning attitude post-test mean score ($\bar{X}=4.25$; S.D.=0.47) is higher than pre-test mean score($\bar{X} = 3.68$; S.D.=0.86).

7) Teaching content on Learning motivation has a positive impact on students

The pre-test and post-test data of students' learning motivation are considered high, as they also need to use their academic performance in preparatory courses to choose their preferred majors.

Table 8 Data Analysis on ethnic preparatory students' learning adaptability in Learning motivation in BaiSe University

Learning motivation	Pre-test		Post-test	
	\bar{X}	S.D.	\bar{X}	S.D.
1. Learning is about choosing a major that interests you after graduation	4.14	0.81	4.36	0.49
2. Having clear learning objectives	3.82	0.75	4.24	0.43
3. Working harder due to insufficient knowledge	3.94	0.82	4.40	0.50
4. Learning in the preparatory stage is a task	3.56	0.89	4.12	0.31
5. Having a clear learning plan and effective learning methods	3.54	0.86	4.32	0.47

Total	3.80	0.82	4.29	0.44
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From the table 8, the overall analysis on ethnic preparatory students' Learning adaptability in Learning motivation post-test mean score ($\bar{X}=4.29$;S.D.=0.44) is higher than pre-test mean score ($\bar{X}=3.80$;S.D.=0.82) .

8) After implementing experiential mental health education curriculum, students' learning adaptability has significantly improved

The mean of all five dimensions of learning adaptability are higher than before the implementation of the curriculum, indicating that after implementing mental health education curriculum for ethnic preparatory students, their learning adaptability has significantly improved.

Table 9 Data Analysis of Respondents in pre-test and post-test on ethnic preparatory students' learning adaptability

Learning Adaptability	Pretest		Posttest		t (sig)	p
	\bar{X}	S.D.	\bar{X}	S.D.		
1.learning environment	3.64	1.01	4.08	0.61	4.65**	0.002
2.learning content	3.60	0.73	3.91	0.52	3.79**	0.003
3.learning methods	3.61	0.78	3.98	0.61	3.79**	0.003
4.learning attitude	3.68	0.86	4.25	0.47	5.42**	0.000
5.Learning motivation	3.80	0.82	4.29	0.44	4.49**	0.008
Total	3.67	0.84	4.10	0.53	4.43**	0.003

** represents statistical significance at .01

From Table 5, there are statistically significant differences in learning adaptability scores between pre-test and post-test at the 0.01 level, with a t-test score of 4.43 ($p=0.003<0.01$), where the mean pre-test score is 3.67 and the mean post test score is 4.10.

Discussion

This study will discuss the conclusions according to the order of research purposes.

Discussion on ethnic preparatory students have a relatively high demand and attention for mental health education curriculum

After research, it was found that the general performance of BaiSe University students' thinking level in the Students'demand for Mental Health Education Curriculum is Agree. Considering each item separately, it is found that Attention to mental health education curriculum is in the Agree level, Students' demand for mental health education curriculum content is in the Agree level.

Perhaps it is because at the national level, the social situation in China has changed, and the call for strengthening students' mental health education is becoming increasingly high. Especially in the past decade, the ethnic of Education has put forward new requirements for students' mental quality. According to the "Implementation Outline of mental Health Education for College Students in Ordinary Higher Education Institutions (Trial)" issued by the Ethnic of Education in April 2002 and the "Basic Construction Standards for Mental Health Education for College Students (Trial)" issued by the Ethnic of Education in February 2011, it is stated that mental health education for college students should be based on the mental characteristics of college students, and targeted teaching of mental health knowledge, counseling or consultation activities should be carried out, Assist college students in establishing mental awareness, optimizing mental quality, enhancing their ability to adjust and adapt to social life, preventing and alleviating mental problems, and promoting comprehensive development of morality, intelligence, physical fitness, and aesthetics. Furthermore, at the student level, without mental health curriculum, related mental problems may worsen. Even without mental problems, mental health curriculum can prevent students from experiencing mental problems, so students are more concerned about mental health.

Consider into each Students' Attention, "Mental health education curriculum can help students better learning" is highest demand contents, "mental health education curriculum content is necessary to learn about life planning and clear learning goals is the highest.

Compared with the research of Wang Zhenzhen and Tang Jinhua(2016), The survey results of these three aspects are consistent with .A survey was conducted on 252 ethnic preparatory students from a university in Xinjiang, and the data was statistically analyzed. Result:(1) 87.3percentage of medical students in Xinjiang hold a positive attitude towards the necessity of mental health education curriculum, while 63.1percentage of participants believe that one curriculum should be offered every week. Compared with the investigation of Wu Xiaoyan and Yu Dongfang (2015: 98-101), The results of this survey are consistent with them. For example, in terms of curriculum content, the demand for career planning, school environment adaptation, interpersonal relationships, learning guidance, and stress management is 67.2 percentage,.83.6 percentage, 95.1 percentage, 63.9 percentage and 55.7 percentage.

The results are consistent with Wang Zhenzhen and Tang Jinhua(2016), Tosati, S. ., Sitthisopasakul, T., and Intarasompun, W. . (2021: 124–137), Wichean Intarasompan, and Jittawisut Wimuttipanya (2021). and Wu Xiaoyan and Yu Dongfang(2015: 98-101). This is because ethnic preparatory students have slightly lower scores in the college entrance examination, they are prone to mental problems such as interpersonal communication barriers, learning difficulties, social difficulties, and emotional confusion after entering ordinary

universities due to factors such as ethnic customs and value conflicts. Therefore, they believe that mental health is important and can help them learn better. Having clear learning goals and life plans at the same time is beneficial for guiding their learning actions, enhancing their learning motivation, and being able to overcome difficulties.

Discussion on developed the mental health education curriculum based on Kolb's experiential learning theory

Based on Kolb's experiential learning theory ,the experiential mental health education curriculum is an experiential learning curriculum, where students participate in activities firsthand, experience, observe, reflect, abstract summarize, and apply actions. Throughout the process, students are the central thread, and teachers play the role of organizers and guides. In interactive activities, each learner will have their own unique experience, and the amount they gain depends on their level of investment. Only by experiencing, reflecting, and internalizing can they truly improve their mental quality. The design of experiential mental health education curriculum should be based on the concept of "learning through games" and "learning through situations", with a particular emphasis on "learning through experience", so that the design of each interactive link is based on activities that can be experienced firsthand.

The developing mental health education curriculum is as follows, divided into five modules: (1) Learning environmental (2) Learning motivation (3) Learning content(4) Learning methods (5) Learning attitude .

Zhao Weiwei (2020)pointed out at the China Education Development Annual Conference that as a mental health educator, one should carefully design "experiences" before carrying out teaching activities; Guide students to experience in teaching activities; After the end of teaching activities, think and internalize the "experience" to guide behavior, cultivate abilities, and ultimately achieve the goal of solving life problems in the classroom. The mental health education curriculum of experiential learning is warmly welcomed by students.

Du Yujia and Wang Jirong(2023) research on the importance of experiential learning in the reform of college students' mental health education curriculum, and the application of experiential learning in college students' mental health education needs to be combined with specific curriculum design and experiential learning integration strategies. In curriculum design, teachers can use methods such as scenario setting, case analysis, and group discussion to encourage students to participate and interact more actively.

Therefore, this study focuses on the characteristics of ethnic ethinc preparatory students and develops mental health curriculum through warm-up exercises, scenario setting, group collaboration, case analysis, and other methods to enhance students' participation and enhance their learning outcomes.developed the mental health education curriculum based on Kolb's experiential learning theory was fully affirmed by experts because of its advanced design concept, clear operation stages and reasonable evaluation method, and three external audit experts unanimously passed the IOC's recognition.

Discussion on the effectiveness developed the mental health education curriculum based on Kolb's experiential learning theory

After research, it was found that there are statistic significant differences in learning adaptability scores between pre-test and post-test at the 0.01 level, with a t-test score of 4.43 ($p=0.003<0.01$), where the mean pre-test score is 3.67 and the mean post test score is 4.10.The mean of all five dimensions of learning adaptability are higher than before the implementation of the curriculum, indicating that after implementing mental health education curriculum for

ethnic preparatory students, their learning adaptability has significantly improved. This also indicates that targeted development of mental health education curriculum for ethnic preparatory students can improve their learning adaptability. Mental health education curriculum is also one of the means of intervention. Zhang Jing (2020: 27-27) survey and research pointed out that through multiple links such as intervention demand analysis, intervention goal setting, intervention strategy proposal, intervention theme design, intervention principle determination, and intervention material design, the learning adaptability intervention activities for ethnic preparatory students have been systematically and reasonably designed. After intervention experiments, the data analysis of the Learning Adaptability Scale for Ethnic Preparatory Students shows that intervention has played a significant role in improving the changes in their learning adaptability. The results of this study are similar to those of the Zhang Jing (2020: 27-27) experiment, and after intervention, students' learning adaptability have significantly improved. May be due to their ability to master adaptability through learning, correct their learning attitude, change their learning from passive to active, exert their subjective initiative, strive to find suitable learning methods, do well in self-management, formulate learning plans, and continuously stimulate their internal driving force for learning. Because learning adaptability is an ability that can be improved through group mental counseling, training, and other forms, as well as the use of appropriate methods. After certain training, one's ability can be improved.

According to the results of pre-test and post-tests, learning motivation has the greatest impact on learning adaptability, followed by learning attitude. According to the results of pre-test and post-tests, learning motivation mean score are highest ($\bar{X} = 3.80$ to 4.29), has the greatest impact on learning adaptability, followed by learning attitude. Because learning motivation is a mental state that can stimulate an individual's motivation to learn, maintain learning activities for a long time, and achieve learning goals. Learning motivation can help students maintain their learning state for a long time and further explore learning methods. When encountering difficulties and having high internal learning motivation, students will continuously adapt and solve them. A learning attitude is a relatively stable state that students have developed through long-term learning practice. If students hold a good learning attitude, they can fully immerse themselves in the classroom and after class learning, and adapt to the changing learning content. This is similar to the survey results of Ren Zhongxia (2021) and Intarasompun, W., Muangnual, P., and Puchatree, N. (2022: 108–118) on the factors that affect students' learning adaptability, and also consistent with the research results of Zuo Xueling (2014) and Dong Tiange (2021) on the factors that affect the learning adaptation of ethnic preparatory students.

Recommendation

Applicability of the results

The mental health education curriculum developed based on Kolb's experiential learning theory aims to improve the learning adaptability and mental quality of ethnic ethnic preparatory students. The development of this curriculum is the result of years of teaching research and practice by mental health researchers and educators, in line with the current trend of university education and the personalized learning needs of students. Through teaching experiments, it has been proven that this curriculum has a significant effect on improving students' learning adaptability. The design of curriculum content needs to be further adjusted and improved in future practice according to different situations. Through repeated practice and modification,

the teaching plan of experiential mental health education curriculum has been continuously matured, ultimately forming standards or norms specifically for experiential mental health education curriculum for ethnic preparatory students, and promoting them on a larger scale. In order to better apply this curriculum, the following are specific suggestions from teachers and university managers to maximize its effectiveness.

1) For teachers, during the teaching process, there are 50 students in a class, and during experiential teaching, they may find that the number of students is too large. Many teachers are unable to cater to each student, and due to the large number of students, it is easy to become a mere formality when sharing after experiencing, resulting in a lack of true understanding. In future research, an assistant can be arranged, and the number of class members can be appropriately reduced to ensure the positive effect of experimental intervention; Factors such as the professional level, teaching experience, and popularity of the teaching staff can also have an impact on the intervention effect. In the future, teachers conducting research can first receive professional ability training to accumulate certain teaching experience, and also need to understand and be close to students.

2) For university administrators, the teaching plan and content design of experiential mental health education are based on Kolb's experiential learning theory. Teaching emphasizes experience and sharing, and teacher-student communication and student-student communication promote students' self-reflection and develop new coping methods. Universities organize relevant teachers to form teams to conduct in-depth research on the curriculum, collectively prepare lessons, and design content and teaching plans. The teaching content should highlight rationality Targeted and teaching processes should ensure high student participation. Learning adaptation is an important aspect of individual learning behavior, and universities strive to cultivate their learning adaptation ability and mental healthy quality, increase learning adaptability education, and focus on home school Kolbation to provide them with a comfortable learning and living environment, strengthening cultural construction, and striving to cultivate their belongings and happiness for ethnic preparatory students.

Future Research

1) Further evaluate the effectiveness of the mental health education curriculum developed based on Kolb's experiential learning theory.

Through further research, we can evaluate the effectiveness of mental health education curriculum in universities with different student grades and types. Due to a thorough understanding of the impact of this curriculum on the learning adaptability of different types of students, it can cover a wider group of students.

2) Explore the relationship between Kolb's experiential learning theory and mental health education, as well as learning adaptability.

Further explore the correlation between experiential learning theory and mental health education, as well as learning adaptability. By conducting experiments or case studies, researchers can discuss how to better develop curriculum related to mental health education based on Kolb's experiential learning theory according to students' needs and characteristics, in order to more effectively improve students' learning adaptability.

3) Research on teachers' training and support.

By providing training to teachers who develop mental health curriculum based on Kolb's experiential learning theory, conducting collective lesson preparation and evaluation, continuously modifying curriculum design based on student feedback, and providing funding

support for in-depth research, we can investigate teachers' training needs, difficulties in developing curriculum, and technical requirements.

References

- Dong, Y.F., & Xiao, W.Y. (2015). A Survey and Reflection on the Teaching Needs of Psychological Health Education Courses for College Students, *Introduction to Ideological and Theoretical Education*, 4(9): 98-101.
- G, C.C., & Xiao, L.G. (2015). Research on Learning Adaptability of Ethnic Students, *School Health in China*, 3 (4), 127-128.
- Jing, Z. (2020). Exploring the Learning Adaptability of Ethnic Minority College Students, *Higher Education Research*, 11 (7), 27-27.
- Intarasompun, W., Muangnual, P., and Puchatree, N. (2022). Active Learning Management and Using E-Portfolio as Authentic Assessment for Teacher Students. *Journal of Yanasangvorn Research Institute Mahamakut Buddhist University*, 13(2), 108–118. Retrieved from <https://so04.tci-thaijo.org/index.php/yri/article/view/262856>.
- Tosati, S. ., Sitthisopasakul, T., and Intarasompun, W. (2021). Enhancing Learning Process by Integrating Contemplative Education Coaching System and Research Base Learning (Ccr) to Strengthen Teacher's Competencies in Educational Measurement Evaluation and Research Program, Faculty of Education, Bansomdejchaopraya Rajabhat University. *Journal of Modern Learning Development*, 7(1), 124–137.