

THE EFFECTS OF BOREDOM TENDENCY ON ACADEMIC BURNOUT OF PRIVATE HIGH SCHOOL STUDENTS IN HENAN PROVINCE, CHINA: THE MEDIATING ROLE OF TIME MANAGEMENT DISPOSITION

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Abstract: This study mainly explored the effects of boredom tendency on academic burnout of private high school students in Henan province focusing the mediating role of time management disposition. A total of 573 private high school students in Henan Province were taken as samples by convenient sampling with a questionnaire. Descriptive statistics, independent samples t-test, one-way ANOVA and regression analysis were applied in the process, and the results showed that: 1) In the private high school students in Henan Province, the overall levels of their boredom tendency and academic burnout were at the lower middle level, and their time management disposition was at the upper middle level. There were differences in each dimension. 2) Boredom tendency, time management disposition and academic burnout were all affected by the demographic factors of private high school students. 3) Boredom tendency and its dimensions had a significant positive impact on academic burnout, of which the external stimulus dimension has the greatest impact on aggravating academic burnout. 4) Time management disposition played a partial mediating role in the positive impact of boredom tendency on academic burnout. Boredom tendency can reduce the degree of academic burnout by increasing internal stimulation and improving the ability of individuals to manage time. The researcher concluded discussed each finding and put forward recommendations for private high schools in Henan Province.

Keywords: Private High School Students, Boredom Tendency, Academic Burnout, Time Management Disposition

Introduction

With the development of information technology and Internet technology, a new wave of educational reform has been set off worldwide. Countries all over the world have paid more attention to education than ever before. The renewal and iteration of educational concepts, the continuous improvement of educational measures, and the reform and innovation of educational systems are all preparing for the popularization, lifelong development, and modernization of education. Students, as

the object of education, are particularly important in shaping their learning quality, cultivating their learning habits, and achieving their learning results. But in the process of learning behavior, when students' own learning needs exceed their own learning load range, they will show academic burnout phenomena such as learning inactivity, lack of interest, and unstable learning mood (Schaufeli, 2002). Scholars have done a lot of research and demonstration on the academic burnout phenomenon of students at various stages and the impact of academic burnout, relevant research results are relatively rich.

In China, the phenomenon of academic burnout exists to varying degrees in all ages and school categories of students. Hu & Dai (2007) believed that learning burnout was a common fact, which was caused by the interaction of individual, environment and behavior in the learning process of students. This has also become a common concern of schools, teachers, and parents. Especially for students studying in private high schools, if there is academic burnout, and then academic performance declines or fails to meet parents' expectations, it will bring great work pressure to teachers and schools. Chinese parents are more utilitarian in choosing private high schools, mainly in the following three aspects: first, for personalized education services, second, to improve students' academic performance, and third, for specific goals of entering a higher school, students can perform better in the examination of high school to university. If private high schools cannot solve the problem of students' academic burnout well, it may have a great impact on the development and survival of schools, and on the development of private education.

There are many reasons for students' academic burnout, including external environmental factors, individual internal factors, demographic perspective, etc., which will lead to students' academic burnout to varying degrees. Private high schools are basically closed management, which is very strict. Students need to stay at school, have little contact with the outside world, and have very tight schedules. Although these are the norm of private schools in China, it is precisely because of the neglect of students' emotional education and their spiritual needs in the growth process that it is easy to cause students to feel monotonous in school life, unable to find interest in learning, unable to reasonably arrange learning plans, low sense of learning achievement and other phenomena, which further increases the probability of academic burnout.

At present, private schools have a large base in China. According to the National Statistical Bulletin on the Development of Education in 2021 released by the Ministry of Education, there are 4008 private ordinary high schools, an increase of 314 over the previous year, accounting for 27.48% of the total number of ordinary high schools in China. There were 4.5034 million students in school, an increase of 490500 over the previous year, accounting for 17.29% of the total number of students in regular high schools nationwide. In the daily education and teaching management, how to improve the learning interest of this part of students, cultivate good learning quality, and avoid students' academic

burnout has become a problem that basic education managers should focus on. Since China's reform and opening, private education has indeed flourished under the growing diversified education needs of the people. Its flexible system and beneficial supplement to public schools have stimulated the vitality of education, promoted education consumption, and made positive contributions to promoting China's education modernization process and economic and social development. However, it cannot be ignored that if private schools want to continue to develop in high quality, they must pay attention to how to make students develop in high quality. In this context, it was particularly necessary to study the phenomenon of academic burnout of private high school students.

Research Objectives

- (1) To identify the level of boredom tendency perceived by private high school students.
- (2) To identify the level of time management disposition perceived by private high school students.
- (3) To identify the level of academic burnout perceived by private high school students.
- (4) To determine the significant differences in boredom tendency of private high school students, under different demographic factors.
- (5) To determine the significant differences in time management disposition of private high school students, under different demographic factors.
- (6) To determine the significant differences in academic burnout of private high school students, under different demographic factors.
- (7) To explore the relationships between boredom tendency, time management disposition and academic burnout.

Literature Review

Research on Boredom Tendency

With the deepening of research, many researchers have given a broader definition. Zuckerman (1979) and Jennifer (2012) defined boredom as an unhappy emotion, which is caused by the fact that individuals are tired of monotonous, boring, repetitive things in life or the surrounding environment and are difficult to get rid of. Pekrun et al. (2002) summarized the classification criteria of achievement emotion in the research. In related content, boredom is defined as an unpleasant negative emotion with low physiological arousal (Eastwood et al, 2012).

To be specific, a person feels bored because he/she thinks that he/she is unable to complete what he/she should do, and he/she is disgusted and disappointed with himself/herself. Some foreign researchers believe that boredom is a unique emotional experience and is different from other negative emotions such as anxiety and depression. For example, Fahlman et al. (2003) mentioned when an

individual is bored, he will feel that time passes slowly, and his attention cannot be focused. Similarly, boredom is defined as an emotion. Huang (2011) believed that boredom is a complex emotional state of helplessness, loneliness, depression, indifference, and other unpleasant feelings when individuals cannot meet their needs for internal and external stimuli, accompanied by lack of motivation, lack of concentration, and reduced interest. Chinese Domestic scholars have also made some achievements in the study of boredom and made structural decomposition of boredom tendency. Based on the structural classification of many scholars and the two-dimensional division of Huang (2011), this study subdivided boredom tendency into two dimensions, as follows: 1) External stimulus dimension. It reflected the individual's low perception of environmental stimuli. In addition to the oppression of the external environment on the individual can cause the individual's boredom, interpersonal relationships often become a factor of individual boredom. 2) Internal stimulus dimension. It reflected the ability of individuals to create interesting activities by themselves. Lack of creativity, innovation, lack of concentration, lack of hobbies, etc. will make individuals feel bored.

Research on Academic Burnout

The study of academic burnout was first carried out by foreign scholars and derived from the study of workplace burnout. Bradley (1969) put forward the concept of "burn out" when he studied the relevant theories of juvenile crime intervention. This is the earliest time when the word "burn out" appeared. Unfortunately, it did not cause widespread concern in the academic community at that time. Until 1974, Freudenberg (1974), an American clinical psychologist, used the word "burn out" to summarize the phenomenon that mental patients were physically and mentally exhausted due to long hours of work. In the follow-up study, Freudenberg (1980) believed that burnout was a feeling of fatigue, depression, and frustration when individuals did not receive the corresponding treatment and were not recognized by colleagues or groups when they were engaged in high-intensity work. As a result, the academic community has a basic understanding of burnout, and it is generally believed that Freudenberg is the first person to study burnout. Later, some foreign researchers expanded the study of job burnout to student groups, which attracted widespread attention from scholars. Pines (1981) pointed out in his research that students' academic burnout and enterprise employees' job burnout are essentially the same, but the causes and circumstances are different. Pines (1981) put forward for the first-time student burnout, that is, academic burnout later, that is, students' burnout in the learning process. Capri (2012) also agreed with this conclusion in the subsequent research, believing that students can be regarded as a "career" when they complete homework, pass exams, and obtain degrees. When they complete these tasks, they will have corresponding academic burnout.

In terms of the external environment, Bai et al. (2006) pointed out in their research that the level of the school's teaching hardware facilities, such as the quality of family relations, teacher-student relations, and student relations, such as parents' expectations of "success", teachers' expectations of

"outstanding teachers and outstanding students", often bring huge learning pressure to middle school students. When the external environment is not stable enough, middle school students' teaching level is not high. If parents have poor parenting style, parents and teachers have high expectations, and individuals cannot meet their expectations, they may lose confidence in learning, be bored with learning, give up, and then produce learning burnout. In terms of the internal aspects of individuals, Shi and He (2021) believed in the research that improving students' internal control and allowing students to actively choose effective and realistic coping styles can promote students' ability to solve academic difficulties, make students have a sense of gain in learning, improve their sense of academic efficacy, and stop avoiding learning, thus breaking the negative cycle of academic burnout.

Research on Time Management Disposition

Most scholars first conducted relevant research in the field of management. Since then, time management has gradually been concerned and valued by psychologists, and its theoretical research has developed in depth. Britt & Glynn (1989) found that people's time management is like the use of computers to process information and data and proposed a theoretical model of time management from the perspective of information processing. Macan (1990) also proposed a theoretical model in his research, which was named the three-factor time model. Relevant tests showed that time management training was effective, providing a theoretical framework for the time management propensity model. As for the relationship between individuals and time management, Ferrari (2000) discussed the impact of individual traits on time management in his research and pointed out that individuals with procrastination tend to spend less time searching for information and completing tasks, while non procrastinating individuals do the opposite.

Chinese scholars started the research on time management late. After entering the 21st century, the research on time management in China began to deepen gradually. Huang & Zhang (2001) also believe that time management disposition is a kind of ability. Shen (2017) believed that time management disposition refers to the overall division of time by individuals, aiming to achieve the most task goals within the effective time range. In terms of research on the influencing factors of time management, Huang & Zhang (2001) took freshmen as the research object, focusing on whether there is a relationship between time management disposition and subjective well-being of freshmen. The research results indicate that there is a significant positive correlation between the dimensions of time management disposition and positive emotions, and a significant negative correlation between the dimensions of time management disposition and negative emotions. In terms of demography, Ruan et al. (2004) pointed out in their research that middle school students of different grades and learning levels showed obvious differences in the total score and three-dimensional degree of time management disposition, and students with good scores were generally higher than those with poor scores. Some scholars also conducted research from other perspectives. Zheng et al. (2008) showed that a good

parenting style would help individuals form reasonable time management tendencies. It can be seen from many Chinese literature that Chinese scholars focus on student groups when doing time management research.

Research on the Relationships between Boredom Tendency, Time Management Disposition, and Academic Burnout

Many scholars believed that boredom had a negative impact on students' academic achievements as pointed out by Goetz et al (2003). The degree of boredom can predict students' academic performance, that is, the higher the boredom level of students, the greater the impact on their academic performance. This conclusion is also suitable for college students. Pekrun (2009) found that college students' boredom is negatively related to their average GPA in the research on the relationship between boredom and academic performance of college students, and boredom generated in the classroom has a negative predictive effect on their final course performance.

Chinese experts and scholars have made some achievements in studying the mechanism of boredom tendency on academic burnout. Zhao (2016) added that emotion regulation played a mediating role between boredom tendency and academic burnout, and high boredom individuals tended to use less effective emotion regulation strategies, which led them to be more prone to learning burnout. Some scholars also believe that monotony has an important impact on the level of boredom tendency.

Yang (2012) pointed out in his research that high school students' learning burnout was significantly negatively correlated with their time management disposition. The higher their time management disposition, the lower their learning burnout. On the contrary, the lower the time management disposition of high school students, the higher the degree of learning burnout. Fang et al. (2021) proposed that time management disposition had a negative predictive effect on learning burnout, which was consistent with Yang's research results.

Scholars generally believed that there was a certain relationship between boredom tendency and time management disposition. Danckert (2005) pointed out in his research that there was a certain relationship between individual boredom experience and time cognition. Huang et al. (2013) found in their research on learning adaptation of vocational college freshmen that boredom tendency was negatively related to time management disposition, and boredom tendency played a partial mediating role between time management disposition and learning adaptation. Boredom tendency and time management disposition were the embodiment of individual personality traits on time perception and time management, which coincided with some views of Danckert (2005).

Methodology

This research took the students at private middle schools in Henan Province as the research object. There were 403 private high schools with 601400 students in Henan Province. According to

different regions and urban economic development levels, five cities, Zhengzhou, Kaifeng, Jiaozuo, Xuchang and Luohe, are selected by convenient sampling, and one private high school is selected from each city according to the college entrance examination rate ranking and the annual commendation list of local education authorities. After contacting five private middle schools in Henan Province and obtaining the consent of the school authorities, a total of 573 from the 13628 high school students were surveyed by this study.

The study selected the mature scale developed by previous researchers, adopted Huang's (2010) students' boredom tendency scale, Huang & Zhang's (2001) time management disposition, and Hu & Dai's (2002) Academic Burnout Scale. All these scales had Cronbach α coefficient over 0.76, the KMO value was 0.77, thus, the reliability and validity were at a good level.

Results

Demographic Analysis of Questionnaire Participants

In this questionnaire survey, there were 573 samples of high school students, 292 boys and 281 girls, with a relatively balanced proportion of male and female students. Among them, there were 205 students in the first grade of senior high school, 235 students in the second grade of senior high school, 133 students in the third grade of senior high school. The urban household registration accounted for 40.49%, and the township household registration accounted for 59.51%. Among these high school students, only 32.46% thought their academic performance was excellent and good, 27.75% thought their academic performance was average, and 14.49% of them thought their achievement was not good. In terms of campus life, 185, 190 and 216 students who served as class cadres or school level and grade cadres, participated in school associations, and believed that they had artistic and sports expertise to show, accounting for more than 30% respectively.

Descriptive Statistics on the Levels of Boredom Tendency, Time Management Disposition and Academic Burnout

1) The boredom tendency of private high school students in Henan Province was at the lower middle level ($M=2.78$). In each dimension of boredom tendency, the internal stimulus ($M=3.25$) scores higher, and the external stimulus ($M=2.55$) did not exceed the average value of 3 points, indicating a lower level, as Table 1 shows.

Table 1: Descriptive Statistical Analysis of the Boredom Tendency Level (N=573)

Boredom Tendency	Mean	SD
External Stimulus	2.55	0.68
Internal Stimulus	3.25	0.74
Overall	2.78	0.47

2) The overall mean score of time management disposition is 3.31, which indicated that the

time management disposition of private high school students in Henan Province was generally at the upper middle level, as shown in Table 2.

Table 2: Descriptive Statistical Analysis of Time Management Disposition Level (N=573)

Time Management Disposition	Mean	SD
Time Value	3.43	0.61
Time Monitoring	3.22	0.63
Time Efficiency	3.41	0.59
Overall	3.31	0.58

3) The academic burnout (M=2.58), emotional exhaustion (M=2.34), alienation between teachers and students (M=2.09), and physical exhaustion (M=2.57) of the private high school students in Henan Province were all at the lower middle level, but the learning inefficiency (M=3.30) was at the upper middle level, as shown in Table 3.

Table 3: Descriptive Statistical Analysis of the Academic Burnout Level (N=573)

Academic Burnout	Mean	SD
Emotional Exhaustion	2.34	0.75
Physical Exhaustion	2.57	0.98
Alienation Between Teachers and Students	2.09	0.84
Learning Inefficient	3.30	0.87
Overall	2.58	0.50

Differences Analysis on the Levels of Boredom, Time Management and Academic Burnout Compared with Demographic Factors

There were some significant differences in demographic factors of bored tendency, time management disposition and academic burnout among private high school students in Henan Province. Among them, the boredom tendency and academic burnout showed significant differences in grade and performance level, the time management disposition showed significant differences in performance level and whether to participate in clubs, and the four demographic factors of gender, household registration, whether to be a student cadre, and specialty showed no significant differences in the non-chat tendency, time management disposition, and academic burnout.

Correlation Analysis among Three Main Variables

In this study, the Person correlation coefficient is used to analyze whether there is correlation between the three main variables. it was found that there was a positive correlation between boredom tendency and academic burnout, a negative correlation between boredom tendency and time management disposition, and a negative correlation between time management disposition and academic burnout. The overall relevant situation was shown in Table 4.

Table 4: Summary of Correlation Analysis of Variables

	Correlation	Time Management Disposition	Academic Burnout
Boredom Tendency	Correlation Coefficient	-0.187**	0.432**
	<i>P value</i>	0.000	0.000

Regression Analysis among Three Main Variables

On the relationship between boredom tendency and academic burnout, the researcher tried to introduce the mediating variable time management disposition to analyze its mediating role. The analysis results in Table 5 showed that the adjusted R-squared value was 0.226, and the ANOVA results showed that the F-value was 84.603, with a significance of less than 0.01, reaching the level of significance. The model fitting effect was good, and the regression results were significantly effective.

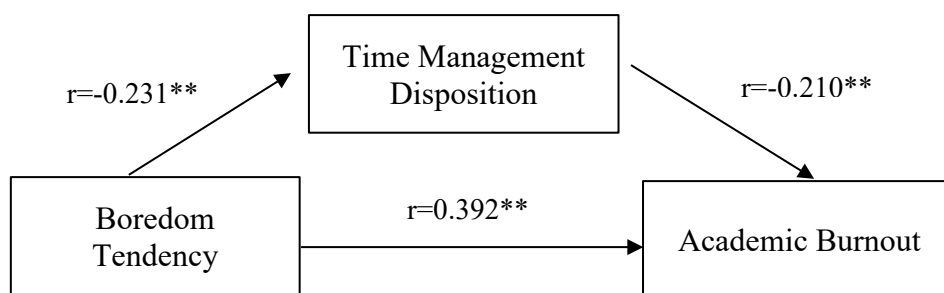
The standard regression coefficient of the mediating variable time management disposition was -0.210, and the significance was less than 0.01, reaching a significant level, indicating that time management disposition had a significant negative impact on academic burnout.

To sum up, the independent variable boredom tendency had a significant negative impact on the intermediary variable time management disposition, and time management disposition also had a significant negative impact on academic burnout, indicating that time management disposition had a significant intermediary role between boredom tendency and academic burnout. After adding the intermediary variable time management disposition, boredom disposition also had a significant impact on academic burnout, and the standardized regression coefficient was 0.392. Therefore, time management disposition played a significant part in mediating the relationship between boredom tendency and academic burnout.

Figure 1 presented the schematic diagram of regression analysis results based on the regression and mediating function among these three main variables.

Table 5: Mediation Analysis Results (N=573)

	Academic Burnout				
	<i>B</i>	Standard error	<i>t</i>	<i>p</i>	<i>β</i>
Constant	2.004**	0.171	11.688	0.000	-
Boredom Tendency	0.425**	0.041	10.482	0.000	0.392
Time Management Disposition	-0.184**	0.033	-5.610	0.000	-0.210
<i>R</i> ²	0.229				
Adjust R ²	0.226				
<i>F value</i>	<i>F</i> (2,570) =84.603, <i>p</i> =0.000				
Dependent variable: Academic Burnout					
Note* <i>p</i> <0.05 ** <i>p</i> <0.01					



Picture 1: Schematic Diagram of Regression Analysis Results

Discussion

About Basic Status of Boredom, Time Management and Academic Burnout

The mean score of boredom tendency was 2.78, the mean score of time management disposition was 3.31 points, and the mean score of academic burnouts was 2.58 points. In general, the boredom tendency and academic burnout of private high school students in Henan Province were at the lower middle level, and the time management disposition was at the upper middle level.

About the Differences of Boredom Tendency, Time Management Disposition and Academic Burnout Under Different Demographic Factors

There were some significant differences in demographic factors of bored tendency, time management disposition and academic burnout among private high school students in Henan Province. Among them, the boredom tendency and academic burnout showed significant differences in grade and performance level, the time management disposition showed significant differences in performance level and whether to participate in clubs, and the four demographic factors of gender, household registration, whether to be a student cadre, and specialty showed no significant differences in the non-chat tendency, time management disposition, and academic burnout. These findings were consistent with the research results of Song (2011), Zhang & Liu (2012), Liu (2010) and Zhang (2015), Shen (2017), Zhao (2017), and Yang (2015).

About Relationship among Boredom Tendency, Time Management Disposition and Academic Burnout

In the correlation between boredom tendency and time management disposition, there was a significant positive correlation between internal stimulus and time management disposition, and a significant negative correlation between time monitoring and boredom tendency. This is consistent with the research results of Lou, Zhang (2012), and Zhao (2017).

In the correlation between boredom tendency and academic burnout, external stimulus and academic burnout, physical exhaustion and boredom tendency showed a high level of positive correlation. This is consistent with the research results of Huang (2018).

In the correlation between time management disposition and academic burnout, there was a significant negative correlation between time monitoring view and academic burnout, emotional exhaustion, and time management disposition. This was consistent with the research results of Zhao (2020).

In addition, boredom tendency had a significant positive impact on academic burnout, that is, students with a high level of boredom tendency had a high level of academic burnout. Time management disposition had a significant negative impact on academic burnout, that is, the lower the level of time management disposition, the higher the level of academic burnout. Time management disposition played a significant part in mediating boredom tendencies and academic burnout. The mediating role of time management disposition may be reflected in the fact that after the education and guidance of the school, students have confidence in their ability and effect to manage time, improve their adaptability to the external environment, and improve their attention. Their boredom tendency level was reduced, and their learning was more passionate. It was also more dynamic, which had been verified in the correlation analysis of boredom tendency and time management disposition ($r=-0.187$). Such a change can naturally be praised and affirmed by teachers, parents, and students around, which strengthened the full mood of learning, improves the relationship between teachers and students, and then improves the situation of academic burnout. The negative correlation between time management disposition and academic burnout also verified this connection ($r=-0.283$). Therefore, when the level of students' time management disposition was improved, the level of boredom tendency and academic burnout may also be reduced to a certain extent.

Conclusion

1) In the private high school students in Henan Province, the overall levels of their boredom tendency and academic burnout were at the lower middle level, and their time management disposition was at the upper middle level.

2) There were some significant differences in demographic factors of bored tendency, time management disposition and academic burnout among private high school students in Henan Province. Among them, the boredom tendency and academic burnout showed significant differences in grade and performance level, the time management disposition showed significant differences in performance level and whether to participate in clubs, and the four demographic factors of gender, household registration, whether to be a student cadre, and specialty showed no significant differences in the non-chat tendency, time management disposition, and academic burnout.

3) There was a positive correlation between boredom tendency and academic burnout, a negative correlation between boredom tendency and time management disposition, and a negative correlation between time management disposition and academic burnout. Boredom tendency had a

significant positive impact on academic burnout, time management disposition had a significant negative impact on academic burnout, and boredom tendency has a significant negative impact on time management disposition. In other words, the higher the bored tendency level of private high school students in Henan Province, the lower the time management disposition level, and the higher their academic burnout level. Time management disposition played a partial mediating role between boredom disposition and academic burnout, that is, in the relationship between boredom disposition and academic burnout, boredom disposition not only has a positive impact on academic burnout, but also has a negative impact on academic burnout through time management disposition.

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A STUDY ON THE RELATIONSHIP BETWEEN TEACHING INTERACTION AND LEARNING OUTCOMES AMONG COLLEGE STUDENTS IN YUNNAN, CHINA

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Abstract: The purpose of this study was to explore the current situation and relationship between teaching interaction and students' learning outcomes in blended learning, as well as to analyze their significant differences under students' demographic factors. According to the results, it was found that different demographic variables significantly influenced teaching interaction and learning outcomes. And different dimensions of teaching interaction showed positive correlations with students' learning outcomes. Finally, recommendations were provided for educational providers, including creating a good learning interactive space for students; focusing on cognitive and emotional learning outcomes, and adopt a variety of teaching strategies to tailor teaching to aptitude and cultivating students' independent learning ability and change from passive to active.

Keywords: Blended Learning, Teaching Interaction in Blended Learning, Learning Outcomes of College Students

Introduction

The main idea of blended teaching is to integrate traditional teaching and online teaching models to improve teaching effectiveness (Li & Zhao, 2004). However, there are obvious differences in teaching interaction between traditional teaching and online teaching mode, which can greatly influence students' learning outcomes. In traditional classroom teaching, teaching efficiency is low, students are mostly in the situation of passive learning, classroom teaching is teacher-centered, students passively accept knowledge, and there is a lack of efficient interaction and feedback between teachers and students. However, the face-to-face interaction in traditional teaching is direct and explicit, and students can get feedback and correction at once. While in online teaching, interaction encompasses not only language exchange in student – student interaction and student – student interaction but also interaction with learning resources. In online teaching, due to the spatial separation between teachers and students, emotional communication is hindered, immediate feedback is not readily available, and

students may experience feelings of isolation, leading to decreased motivation and potentially affecting learning outcomes.

Significance of Study

In the research on the impact of learning outcomes among college students, there is a relative lack of studies focusing on the influence of teaching interaction in blended learning. This study aims to investigate the impact of teaching interaction on learning outcomes in a blended learning environment among undergraduate students in Yunnan Province. It has positive implications for enhancing the effectiveness of blended learning, improving teaching interaction methods, and exploring strategies to continuously improve learning outcomes for college students.

The learning outcomes of students not only relate to their learning efficacy but also have implications for the continuous reform and development of teaching in educational institutions. Conducting research on the impact of teaching interaction in blended learning on learning outcomes can benefit teachers in improving their teaching methods and interaction approaches, as well as enriching teaching techniques and resources. Additionally, studying learning outcomes provides targeted recommendations for enhancing students' learning efficacy.

Research Objectives

- (1) To know about the overall level of teaching interaction in a blended learning context.
- (2) To understand the overall level of learning outcomes among college students in a blended learning context.
- (3) To investigate whether there are significant differences in teaching interaction across different demographic variables in a blended learning context.
- (4) To examine whether there are significant differences in learning outcomes among college students across different demographic variables in a blended learning context.
- (5) To explore whether teaching interaction has a significant positive impact on learning outcomes among college students in a blended learning context.

Literature Review

Teaching interaction affected the efficiency and quality of teaching and learning, and it was the level and quality of the teaching interaction that plays a key role (Lu, 2021). Kuo et al. (2014) compiled a questionnaire covering 15 questions in student interaction and teacher-student interaction. The results showed that student interaction and teacher-student interaction had a profound impact on students' learning satisfaction. Wu and Ma (2021) studied the teaching interaction mode and interaction quality of Ningxia Medical University, and concluded that continuous and high-quality teaching interaction was the soul of "online teaching". In addition, cooperative learning and interactive teaching also proved

the promoting role of teacher-student interaction, student-student interaction and human-computer interaction on students' cognitive development and educational reform (Fan & Zhang, 2003).

Research in China regarding learning outcomes primarily focused on the assessment of learning satisfaction and influencing factors. Yin (2015) conducted a study using questionnaires to assess student learning outcomes among university students and investigated their perceptions of their own learning outcomes and the effectiveness of school work, providing data and theoretical support for improving the quality of teaching at schools. Wang (2011), in studying the influencing factors of learning outcomes, analyzed the learning outcomes of students in online learning and developed a model that included teaching interaction and learning platforms, learning resources, and online courseware as factors affecting learning outcomes. Shen (2020) used structural equation modeling to examine the effects and pathways of knowledge construction, teacher-student interaction, and information processing on the learning outcomes of college students in online learning.

Regarding the nature of learning outcomes, some scholars believed that learning outcomes could be measured as the difference between student input and actual achievement, with smaller differences indicating better learning outcomes (Domer, 1983). In terms of measuring learning outcomes, Betz et al. (1970) assessed the learning satisfaction of university students from six aspects: physical environment of the school, teaching management, teacher qualifications, teaching methods, learning outcomes, and peer relationships. Research on the influencing factors of learning outcomes has shown that the teaching process, teaching methods, interaction, and teacher qualifications all had an impact on students' learning outcomes.

Many studies focused on the impact of blended learning on academic performance, self-confidence, learning engagement, and satisfaction. Piccoli (2001) found that students' learning motivation, technological adaptability, and attitudes were closely related to learning outcomes, which were also influenced by teachers' instructional style and course quality. Additionally, individual factors such as teachers' instructional style and course quality had a significant impact on students' learning outcomes. Hong (2002) found that factors such as interaction between teachers and students, course design, and duration of learning were closely related to students' learning achievements. In blended learning, teachers played not only the role of knowledge providers but also guides and facilitators who inspired students' interest and enthusiasm for learning. Furthermore, teachers flexibly adjusted teaching methods and resources based on students' different learning styles and needs to improve their learning outcomes and satisfaction.

Methodology

This study primarily employed quantitative research to explore the impact of teaching interaction on college students' learning outcomes in blended learning. College students from Yunnan

Province were used as the overall population of the study, and a convenience sampling method was used to sample 324 undergraduates from the top 3 universities according to the Best Chinese Universities Ranking.

A questionnaire with 27 items developed by Hu (2022) was used to measure teaching interaction in blended learning. For the learning outcomes in blended learning scale, a questionnaire developed by Chen (2022) was used, with 18 items. In this study, the 5-Likert rating scale was employed. The overall Cronbach's alpha coefficients for teaching interaction and learning outcomes in blended learning were more significant than 0.9, and the KMO value for two variables were more than 0.8. A total of 324 questionnaires were distributed in this study, and 300 valid responses were collected, resulting in a valid response rate of 92.6%.

After the formal questionnaires were collected, data analysis and statistical processing were performed using SPSS. The relationship and existing issues between teaching interaction and learning outcomes were identified.

In this study, the existing questionnaire of previous scholars were used. The questionnaire was distributed directly to 324 participants. According to Table 1, Cronbach's alpha for all dimensions were above 0.9, indicating that the reliability of the selected questionnaire was acceptable.

Table 1: Reliability Analysis

Item-Total Statistics			
		Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Teaching interaction	Student-interface interaction	.838	.976
	Student-Content interaction	.893	.973
	Student-teacher interaction	.896	.973
	Student-student interaction	.930	.971
	Student-self interaction	.884	.974
Learning outcomes	Cognition	.905	.973
	Skill	.897	.973
	Emotion	.998	.968

As shown in Table 2, the KMO value of the final survey questionnaire was 0.974, which exceeded 0.7. The Bartlett's test resulted in a chi-square value of 18600.902, with a corresponding p-value (0.000) less than 0.05. Therefore, the overall validity of the questionnaire was deemed acceptable.

Table 2: Validity Analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.974
Bartlett's Test of Sphericity	Approx. Chi-Square	18600.902
	df	990
	Sig.	.000

Results

According to Table 3, the average scores for all five dimensions of teaching interaction ranged from 3.97 to 4.07, and overall Mean was high ($M = 3.98$). This indicated that the student-self interaction dimension of respondents is at high level, and the deviation between different respondents is small. Student-student interaction is second, and also at high level; the mean score of student-content interaction is minimal.

Table 3: Descriptive Statistical Analysis of the Teaching Interaction

Dimension	Mean	SD	Interpretation
Student-interface interaction	3.92	0.80	Moderate
Student-content interaction	3.87	0.85	Moderate
Student-teacher interaction	3.97	0.83	Moderate
Student-student interaction	4.05	0.73	High
Student-self interaction	4.07	0.71	High
Overall	3.98	0.79	

It is clear from Table 4 that all Means are above 4, meaning that respondents are generally somewhere between a neutral view of learning outcomes and a slightly more positive view. The mean of the overall was 4.53, which was at a high level, and its standard deviation was 0.73, which showed that the college students in this survey had good learning outcomes and there was little difference in perception between different college students. Among the three dimensions, the Mean values from largest to smallest were: skill ($M = 4.10$, $SD = 0.72$), cognition ($M = 4.04$, $SD = 0.74$), and emotion ($M = 4.02$, $SD = 0.71$).

Table 4: Descriptive Statistical Analysis of the Learning Outcomes

Dimension	Mean	SD	Interpretation
Cognition	4.04	0.74	High
Skill	4.10	0.72	High
Emotion	4.02	0.71	High
Overall	4.53	0.73	

Difference Analysis

The study employed independent samples t-test and one-way ANOVA, using background variables, to examine whether there were significant differences in teaching interaction. According to Table 5, the background variables included gender, grade, major, GPA, and proficiency in using the internet, and the P-values for these variables were 0.001, 0.046, 0.001, 0.001, and 0.000 respectively. These P-values were all smaller than 0.05, which proved that background variables made significance on teaching interaction.

Table 5: Differences in Teaching Interaction in Blended Learning Based on Background Variables

	Group	N	Mean	SD	T	P
Gender	Male	109	4.11	0.79	10.321	.001
	Female	191	3.94	0.69		
Grade	Freshman	71	4.14	0.64	2.424	.046
	Sophomore	116	3.88	0.77		
	Junior	27	3.91	0.80		
	Senior	86	4.09	0.70		
Major	Humanities and social sciences	83	3.78	0.72	4.784	.001
	Science class	49	4.34	0.63		
	Engineering	37	4.02	0.78		
	Arts	36	3.98	0.64		
	Other majors	95	4.03	0.74		
GPA	Below: 2.0	17	4.08	0.77	4.689	.001
	2.0-2.5	46	3.98	0.80		
	2.6-3.0	93	3.77	0.67		
	3.1-3.5	94	4.10	0.68		
	3.6-4.0	50	4.26	0.72		

Table 6: Differences in Learning Outcomes in Blended Learning Based on Background Variables

	Group	N	Mean	SD	T	P
Gender	Male	109	4.16	0.75	5.506	.020
	Female	191	3.96	0.68		
Grade	Freshman	71	4.17	0.64	2.645	.049
	Sophomore	116	3.90	0.76		
	Junior	27	4.04	0.65		
	Senior	86	4.11	0.71		
Major	Humanities and social sciences	83	3.83	0.71	3.721	.006
	Science class	49	4.32	0.69		
	Engineering	37	4.05	0.74		
	Arts	36	4.06	0.67		
	Other majors	95	4.05	0.70		
GPA	Below: 2.0	17	4.12	0.79	4.120	.003
	2.0-2.5	46	4.05	0.75		
	2.6-3.0	93	3.82	0.68		
	3.1-3.5	94	4.10	0.69		
	3.6-4.0	50	4.29	0.69		
Proficiency in using the internet	Very inexperienced	9	3.91	0.85	8.788	.000
	Inexperienced	10	4.20	0.71		
	Average	141	3.85	0.67		
	Skilled	96	4.07	0.70		
	Very skilled	45	4.53	0.63		

The study employed independent samples t-test and one-way ANOVA, using background variables, to examine whether there were significant differences in learning outcomes among university students. The background variables included gender, grade, major, GPA, and proficiency in using the

internet, According to Table 6, the P-values for these variables were 0.020, 0.049, 0.006, 0.003, and 0.000 respectively. These P-values were all smaller than 0.05, which proved that background variables made significance on learning outcomes in blended learning.

Correlation Analysis

According to Table 7, there was a significant correlation between the teaching interaction in blended learning and various dimensions of college students' learning outcomes. Among them, the Pearson correlation coefficient between student-student interaction and college students' learning outcomes in blended learning was the highest (0.948), while the student-content interaction dimension (0.941), student-teacher interaction dimension (0.935), student-interface interaction dimension (0.905) and student-self interaction dimension (0.862) showed that there was a significant positive correlation between teaching interaction and college students' learning outcomes in blended learning.

Table 7: Pearson Correlation Analysis of Teaching Interaction and Learning Outcomes in Blended Learning

Dimension	Cognition	Skill	Emotion	Learning Outcomes
Student-interface interaction	.734**	.734**	.837**	.905**
Student-content interaction	.781**	.784**	.906**	.941**
Student-teacher interaction	.801**	.792**	.922**	.935**
Student-student interaction	.850**	.837**	.951**	.948**
Student-self interaction	.870**	.848**	.922**	.862**
Teaching Interaction in Blended Learning	.871**	.862**	.986**	.927**

*P< 0.05, ** p<0.01, *** p<0.001

Regression Analysis

Table 8: Regression Analysis of Teaching Interaction and Learning Outcomes in Blended Learning

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.251	.084		3.007	.003
Student-interface interaction	.051	.038	.057	1.363	.014
Student-content interaction	.147	.042	.175	3.516	.001
Student-teacher interaction	.152	.040	.176	3.836	.000
Student-student interaction	.139	.057	.141	2.435	.015
Student-self interaction	.450	.042	.461	10.623	.000
Dependent Variable: Learning Outcomes					

As shown in Table 8, the last two columns represented the t-values and p-values, where $p < 0.05$ indicated statistically significant coefficients, otherwise they were considered statistically insignificant. After the comparison of blended learning and college students' learning outcomes, the p-

values of student-interface interaction, student-content interaction, student-teacher interaction, student-student interaction, and student-self interaction were all less than 0.05, indicating that the above five dimensions had a significant relationship with the learning outcomes of college students.

Discussion

Based on the statistical results, further discussions can be made. First, from the respondents' answers regarding teaching interaction, student-self interaction was considered the most important aspect in blended learning, followed by student-student interaction. This suggested that student-self interaction and interactions among students played a positive role in learning outcomes. Second, as for different dimensions of learning outcomes, skills had the highest average, followed by cognition, while emotion had the lowest average. This may indicate that students' learning outcomes in terms of skills were relatively better in blended learning, while there was room for improvement in cognition and emotion. This result aligned with the findings of Deng et al. (2020). All dimensions of learning outcomes had means above 4, indicating that college students generally felt satisfied and believed they had achieved certain learning outcomes in the blended learning environment. This finding aligned with the study by Yang et al. (2020). However, further research could explore differences in learning outcomes among different groups, courses, and disciplinary domains to comprehensively assess the effectiveness of blended learning. Through comparisons, significant differences were found in teaching interaction in blended learning and learning outcomes among university students with different background variables.

Pearson correlation analysis revealed positive correlations between teaching interactions in blended learning and learning outcomes across all dimensions. Among them, the student-student interaction dimension had the highest Pearson correlation coefficient with learning outcomes. These results indicate a significant positive correlation between teaching interactions in blended learning and learning outcomes among university students. These findings are consistent with previous studies by Hew & Cheung (2014) and Cao et al. (2022). Through regression analysis comparing blended learning and learning outcomes among university students, the p-values for all five dimensions of teaching interactions were found to be less than 0.05. This indicated a significant relationship between each dimension and learning outcomes among university students. These findings are consistent with Li et al.'s (2016) research. All dimensions of teaching interactions in blended learning show significant positive correlations with learning outcomes.

Conclusion

In conjunction with the purpose of this study, 324 questionnaires were collected from college students in Yunnan Province using a convenience sampling method. After data analysis, the study found

significant relationships between the dimensions of teaching interaction in blended learning and the learning outcomes of university students.

First, through comparisons, it was found that different background variables of university students had a significant impact on teaching interaction in blended learning and learning outcomes. The finding emphasized the need to consider students' background characteristics when designing blended learning and provide appropriate teaching interaction strategies for different groups to improve learning outcomes.

Second, according to correlation statistics, there was a positive correlation between teaching interactions in blended learning and the various dimensions of university students' learning outcomes. And student-student interaction had the highest correlation with learning outcomes.

Third, according to the regression analysis, there was a significant relationship between the five dimensions of teaching interaction in blended learning and university students' learning outcomes. This was determined through regression analysis, with p-values for each dimension being less than 0.05, indicating a significant impact on the students' learning outcomes.

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RESEARCH ON SATISFACTION STATUS AND INFLUENCING FACTORS OF ONLINE LEARNING OF PUBLIC PHYSICAL EDUCATION COURSES IN UNIVERSITIES IN ZHEJIANG PROVINCE

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Abstract: During the pandemic, the demand for online learning requires not only schools to pay more attention to online courses, but also to not overlook the satisfaction of online learning. This study aims to investigate the current status of satisfaction with online learning of public physical education courses in colleges and universities in Zhejiang Province, and to analyze the factors influencing the satisfaction with online learning of public physical education courses in colleges and universities in Zhejiang Province. The research results show that college students in Zhejiang Province are generally satisfied with the online learning of public physical education courses, while some problems exist. Through correlation analysis, it is found that there are varying degrees of correlation between teacher factors, student factors, environmental factors, academic assessment, and online learning satisfaction. Based on this, the paper puts forward corresponding suggestions.

Keywords: Public Physical Education Courses, Online Learning Satisfaction

Introduction

In recent years, with the development of internet technology and education, the innovation and application of information technology in the education industry have brought about a teaching reform, and online education has ushered in a period of vigorous development. The demand for online learning during the epidemic not only requires schools to strengthen their focus on online courses, but also cannot neglect the satisfaction of online learning. Based on an analysis of the current state of satisfaction, this study empirically investigates the factors that affect satisfaction and timely identifies and solves problems, playing an important role in further improving the level of online teaching and cultivating applied talents. Therefore, this study aims to investigate and analyze the current satisfaction of online learning in public physical education courses at universities in Zhejiang Province, deeply explore the factors that affect satisfaction with online learning, and explore the problems that currently exist in online learning among university students, in order to propose targeted solutions and contribute to the

improvement of satisfaction with online learning for other courses.

Research Objectives

- 1) To understand the current satisfaction level of online learning of public physical education courses in universities of Zhejiang Province.
- 2) To explore the differences in the factors influencing satisfaction with online learning of public physical education courses in Zhejiang Province universities based on different demographic variables.
- 3) To analyze the relationship between satisfaction with online learning of public physical education courses and its influencing factors in universities of Zhejiang Province.
- 4) To investigate the effect size of the influencing factors on satisfaction with online learning of public physical education courses in universities of Zhejiang Province.

Literature Review

1. Research on Online Learning Satisfaction

Foreign experts and scholars began researching learning satisfaction earlier, and as time has progressed, the research content has constantly expanded, and the research level has deepened. Firstly, Johan (2013) built a model of students' satisfaction with their school, identified the main predictive indicators, and made predictions from the perspectives of service quality, gender differences, and school differences. Heather (2019) conducted both qualitative and quantitative research on the online learning of graduate students majoring in sports management, and evaluated online education through students' assessment data. Li Xian (2019) investigated the satisfaction of college students' English learning in 9 universities in Hainan Province from environmental, teacher, and student perspectives. Zheng Xin (2018) examined the impact of online teaching satisfaction on teachers' self-efficacy from the perspective of teachers, thereby measuring the quality of online teaching. Ma Liping (2020) started from the perspective of students, arguing that the satisfaction of online teaching is related to students' expectations for classroom interaction and their autonomy in learning.

2. Research on the Measurement of Online Learning Satisfaction

After literature search and sorting, it has been found that many scholars have conducted relevant research on the measurement of teaching quality in colleges and universities. Yin (2015) found through research results that various aspects of teacher factors would affect satisfaction, especially the teacher's emotional intelligence. Kun analyzed the relationships between demographics, self-regulation learning strategy usage, perceived learning, and satisfaction among 4503 MOOC learners using structural equation modeling. Liu Weitong (2019) started from the perspective of learners and built a model of the influencing factors of blended learning satisfaction. Xu Siming (2015) studied the factors

influencing the satisfaction of classroom teaching in colleges and universities by constructing a satisfaction evaluation model. Li Yingying (2020) constructed a theoretical model of college students' online learning satisfaction and obtained basic data by distributing questionnaires.

3. Research on Factors Affecting Online Learning Satisfaction

Ray (2018) studied the factors influencing teaching satisfaction, summarizing the factors as students, teachers, courses, design, technology, and environment based on research results. Eom (2016) explored the critical factors influencing online course learning satisfaction. Research results indicated that teacher-student dialogue, student-student dialogue, instructional guidance, and course design significantly affected student learning satisfaction and perceived learning outcomes. Li Xian (2019) focused primarily on the factors influencing teaching satisfaction and summarized the influencing factors as teachers, students, interaction, and support. Liu Xi (2021) believed that teacher factors, student factors, and environmental factors affect online teaching satisfaction. Zhu Yongqiang (2021) found through research that factors affecting online learning satisfaction include teachers, learning platforms, examination evaluation, and learning gains. Shen Zhonghua and Wu Daguang (2020) evaluated students' satisfaction from the perspectives of knowledge construction, teacher-student interaction, information processing, and learning effectiveness, using 45 indicators across four dimensions.

4. Research on Strategies for Promoting Online Learning

Han Meng (2019) proposed that to enhance online learning satisfaction, adjustments can be made to the online learning platform, teacher-student interaction, and teaching resources based on online teaching interaction. Lu Zhengzhi et al. (2011) suggested that teachers and schools should take measures from multiple aspects to improve teaching satisfaction and implement them through repeated reflection and practice. Fu Weidong (2020) proposed that teachers and students should engage in perspective-taking to help teachers think about the focal points of online learning from the students' perspective, and to improve the teacher's online teaching ability. Zhao Dongxu and Li Shenglian (2020) suggested that when designing curriculum, teachers must pay attention to gender, grade, academic major, and institution characteristics in order to enhance course satisfaction.

Methodology

This study focused on college students in Zhejiang province, which has a total of 61 universities. The study chose 15 of the top-ranked universities based on comprehensive rankings. Convenience sampling was used to select 60 students from each of the 15 universities, totaling 900 students, and an electronic questionnaire was distributed to them. The questionnaire was distributed and collected through the Questionnaire Star platform via the internet. A total of 900 questionnaires were distributed, 889 questionnaires were returned, and the valid response rate was 98.7%.

To meet the research needs, the thesis referred to literature materials on satisfaction questionnaires formulated by domestic researchers such as Liu Xi, Xie Yuan, and Zhu Yongqiang (Cronbach's α coefficient of the questionnaire is greater than 0.8), and based on the analysis of the factors affecting college students' satisfaction with online learning, the study constructed a measurement index for the satisfaction questionnaire, including teacher factors, student factors, environmental factors, graduation assessment, satisfaction, and other aspects.

Reliability and Validity

As shown in Table 1, the questionnaire includes a total of five variables: teacher factors, student factors, teaching environment, academic assessment, and satisfaction with online learning. The corresponding Cronbach's alpha coefficients for the variables are 0.948, 0.845, 0.887, 0.743, and 0.733, respectively. All coefficients are greater than 0.7, indicating high data reliability of the questionnaire, which could be used for subsequent analysis.

Table 1: Cronbach's Alpha Reliability Analysis

Factor	Number of items	Cronbach's alpha coefficient
Teacher factors	17	0.948
Student factors	6	0.845
Teaching environment	9	0.887
Academic assessment	3	0.743
Satisfaction with online learning	3	0.733

Validity data analysis of the questionnaire is shown in Table 2. The table shows that the KMO values of the questionnaire are 0.980, and the Bartlett's sphericity test value is 18488.459.

Table 2: KMO and Bartlett's Test

KMO value		0.980
Bartlett's sphericity test	Approx. Chi-Square	18488.459
	df	666
	p-value	0.000

Results

The basic characteristics of college students surveyed in Zhejiang Province were mainly analyzed from gender, grade, and online teaching methods. The specific statistical information is presented in Table 3.

Out of the 889 students surveyed, the proportion of female students was slightly higher than that of male students, accounting for 67.2% and 32.8%, respectively. Among the surveyed students, sophomores had the highest proportion, accounting for 54.94%, followed by freshmen with a proportion of 35.19%, and juniors with a proportion of 7.38%. Regarding the online teaching mode of

physical education teachers, the main methods adopted were live broadcasting, recorded lecture, and self-paced learning, each with its advantages and disadvantages. Among them, live broadcast had the largest proportion, accounting for 49.9%, indicating that most physical education teachers were able to conduct live teaching. Self-paced learning had a proportion of 22.3%, and recorded lecture had a proportion of 21.5%.

Table 3: Basic Characteristics of College Students in Public Physical Education Courses in Zhejiang Province

Category	Option	Number	Percentage
Gender	Male	290	32.6
	Female	599	67.4
Grade	Freshman	311	35.0
	Sophomore	491	55.2
	Junior	65	7.3
	Senior	22	2.5
Age	Under 18 years old	10	1.1
	18~20 years old	773	87.0
	21~23 years old	104	11.7
	24~26 years old	2	0.2
Online teaching mode	Live broadcast	444	49.9
	Recorded lecture	191	21.5
	Self-paced learning	198	22.3
	Others	56	6.3

For each factor and the current level of satisfaction, a descriptive statistical analysis was conducted based on the survey results:

The questionnaire scores for each dimension of the teacher factor are shown in Table 4. The mean scores for each dimension are above 4 points, indicating a slightly above average level. The highest scoring dimension is the teacher's professionalism, with a variable mean of 4.66, indicating that the professional abilities of most physical education teachers are recognized by students. The lowest scoring dimension is teacher-student interaction, with a variable mean of 4.59, and the lowest measured indicator in this dimension is 0.453.

Table 4: Statistics of Teacher Factor

Category	Dimension	Measured Indicator	Mean	Standard Deviation	Variance
Teacher Factor	Teaching Attitude	T5-T7	4.608	0.629	0.396
	Professionalism	T8-T11	4.659	0.579	0.335
	Teaching Content	T12-T14	4.617	0.605	0.366
	Teaching Organization	T15-T17	4.611	0.598	0.358
	Teacher-Student Interaction	T18-T20	4.594	0.630	0.397

The student factor in this study involves two dimensions, as shown in Table 5. Among the respondents, the measured mean for learning attitude is 4.53, and the measured mean for platform operation ability is 4.55, both indicating a slightly above average level. It is worth noting that the score for platform operation ability is slightly higher than that for learning attitude, indicating that students also recognize their own platform operation skills.

Table 5: Statistics of Student Factor

Category	Dimension	Measured Indicator	Mean	Standard Deviation	Variance
Student Factor	Learning Attitude	T21-T24	4.529	0.664	0.441
	Platform Operation Ability	T25-T26	4.551	0.656	0.430

The measured results of each dimension of the environmental factor are shown in Table 6. According to the measurement results in the table, the highest dimension is T32-T33, with a mean of 4.501, which measures the technical environment. The measured mean values of the resource environment and physical environment are relatively consistent and are above average. The lowest measured mean is for the emotional environment, which measures emotional communication between students, teachers, and other peers during online learning.

Table 6: Statistics of Environmental Factor

Category	Dimension	Measured Indicator	Mean	Standard Deviation	Variance
Environmental Factor	Physical Environment	T27-T28	4.439	0.793	0.630
	Resource Environment	T29-T31	4.451	0.753	0.567
	Technical Environment	T32-T33	4.501	0.695	0.483
	Emotional Environment	T34-T35	4.473	0.737	0.544

The scores for the measurement indicators of the exam evaluation are shown in Table 7. According to the measurement results in the table, the highest measured mean is for daily attendance, with a score of 4.52. Next is video assessment, with a score of 4.50. The lowest measured mean is for exercise app check-in assessment, with a score of 4.42.

Table 7: Exam Evaluation Measurement Scores

Category	Dimension	Measured Indicator	Mean	Standard Deviation	Variance
Exam Evaluation	Daily Attendance	T36	4.523	0.692	0.479
	Video Assessment	T37	4.504	0.710	0.504
	Exercise App Check-in Assessment	T38	4.421	0.794	0.630

The satisfaction dimension of learning includes three measured indicators, and their scores are

shown in Table 8. From the data above, it can be seen that the highest measured score is for actively participating in teaching activities, followed by being very satisfied with online learning. The lowest score is for wanting to continue online learning.

Table 8: Statistics of Online Learning Satisfaction

Category	Dimension	Measured Indicator	Mean	Standard Deviation	Variance
Satisfaction	Active Participation in Teaching Activities	T39	4.529	0.684	0.468
	Satisfaction with Online Learning	T40	4.491	0.709	0.502
	Willingness to Continue Online Learning	T41	4.244	0.931	0.867

Difference Analysis

The survey results indicate that there are overall differences in the factors contributing to online learning satisfaction among different genders.

Table 9: Analysis of Differences in Dimensions of Teacher Factors among University Students of Different Genders

Dimension	Gender	N	M	t	p
Teacher Factors	Male	252	3.99	-4.514	.000***
	Female	629	4.21		

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

From Table 9, it can be seen that the t-test results for the teacher factors are all significant ($p < 0.05$), and the scores of female students are significantly higher than those of male students.

Table 10: Analysis of Differences in Student Factors Dimensions by Gender

Dimension	Gender	N	M	SD	t	p
Student Factors	Male	252	3.97	0.69	-3.799	.000***
	Female	629	4.15	0.57		

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

From Table 10, it can be observed that the t-test results for student factors are significant ($p < 0.05$), indicating significant differences in student factors and their corresponding dimensions across different genders. Furthermore, female students exhibit significantly higher levels of student attitudes and platform operational abilities compared to male students.

From Table 11, it is evident that the t-test results for environmental factors are significant ($p < 0.05$), indicating significant differences in environmental factors and their respective dimensions among different genders. Specifically, female students obtained significantly higher scores compared to male students, suggesting that female students have a more positive evaluation and perception of

the environment, including its aspects of adequacy and inclusiveness.

Table 11: Analysis of Differences in Environmental Factor Dimensions by Gender

Dimension	Gender	N	M	SD	t	p
Teaching Environment	Male	252	3.94	0.70	-3.153	.002**
	Female	629	4.09	0.57		

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 12: Analysis of Differences in Academic Assessment Dimensions by Gender

Dimension	Gender	N	M	SD	T	P
Academic Assessment	Male	252	3.91	0.80	-3.273	.001***
	Female	629	4.09	0.63		

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

From Table 12, it is evident that the t-test results for academic assessment factors are significant ($p < 0.05$), indicating significant differences in the perception and evaluation of daily attendance, video assessment, and exercise app check-ins among different genders in university students.

Correlation Analysis

According to Table 13, there is a significant positive correlation between all variables and online learning satisfaction, as evidenced by the following findings: teacher factors ($p < 0.05$, $r = 0.676$), student factors ($p < 0.05$, $r = 0.673$), environmental factors ($p < 0.05$, $r = 0.717$), and academic assessment ($p < 0.05$, $r = 0.764$).

Table 13: Correlation Analysis Results

	Satisfaction	Teacher Factors	Student Factors	Teaching Environment	Academic Assessment
Satisfaction	1				
Teacher Factors	.676**	1			
Student Factors	.673**	.722**	1		
Teaching Environment	.717**	.742**	.768**	1	
Academic Assessment	.764**	.712**	.699**	.782**	1

Regression Analysis

According to Table 14, all four variables - teacher factors, student factors, environmental factors, and academic assessment - significantly and positively influence online learning satisfaction, as evidenced by the following findings: teacher factors ($p < 0.05$, $\beta = 0.145$), student factors ($p < 0.05$, $\beta = 0.138$), environmental factors ($p < 0.05$, $\beta = 0.16$), and academic assessment ($p < 0.05$, $\beta = 0.44$).

Table 14: Regression Analysis of Variables on Online Learning Satisfaction

	Unstandardized Coefficients		Standardized Coefficients	T	Significance
	B	Standard Error	Beta		
(Constant)	0.522	0.093		5.597	0.000
Teacher Factors	0.141	0.032	0.145	4.348	0.000
Student Factors	0.143	0.035	0.138	4.055	0.000
Environmental Factors	0.165	0.04	0.16	4.129	0.000
Academic Assessment	0.404	0.032	0.44	12.713	0.000
R ²	0.642				
Adjusted R ²	0.640				
F	F=392.731***				

Discussion

Based on the survey analysis, it can be concluded that currently, college students in Zhejiang province have a generally positive attitude towards online learning in public physical education courses. In terms of the measured scores, the highest score is for active student participation in teaching activities, followed by overall satisfaction with online learning, and the lowest score is for the desire to continue online learning.

Looking at the measured scores for each influencing factor, the average scores for the dimensions of teacher factors exceed 4, indicating an above-average level. However, the scores for each dimension differ. The highest score is for the dimension of teacher competence, with a mean value of 4.66, indicating that the professional abilities of most physical education teachers have been recognized by students. This finding is consistent with the research results of scholars such as Zhu Yongqiang (2021) and Liu Xi (2021).

In the analysis of the relationship between teacher factors, student factors, environmental factors, academic assessment, and satisfaction, the correlation coefficient between teacher factors and satisfaction is 0.676, between student factors and satisfaction it is 0.673, between environmental factors and satisfaction it is 0.717, and between academic assessment and satisfaction it is 0.764. This indicates that academic assessment has the highest correlation with satisfaction, followed by environmental factors and teacher factors, while student factors show the weakest correlation.

Conclusion

Currently, college students in Zhejiang province are generally satisfied with online learning in public physical education courses. Based on the data, the highest measured score is for students' active participation in teaching activities, followed by overall satisfaction with online learning, while the lowest score is for the desire to continue online learning. By applying independent sample t-tests and one-way ANOVA for difference analysis, significant differences were found in teacher factors, student factors, environmental factors, and academic assessment on demographic variables. This corresponds

with the research results of Xu Shujing (2021). Correlation analysis showed that there were correlations among teacher factors, student factors, environmental factors, academic assessment, and satisfaction in online learning, with academic assessment having the highest correlation with satisfaction, followed by environmental factors and teacher factors, while student factors showed the lowest correlation. Regression analysis revealed that all four variables of teacher factors, student factors, environmental factors, and academic assessment have significant positive effects on online learning satisfaction.

Recommendations

1. Improve the Information Technology Literacy of Physical Education Teachers.

Online teaching mainly relies on Internet technology, which requires higher information technology literacy of teachers, especially physical education teachers. Teachers should strengthen their own information technology capabilities and be able to use online teaching tools proficiently. They should proactively improve online learning resources.

2. Emphasize Interaction between Teachers and Students.

Interaction between teachers and students is particularly important in online teaching. Online learning causes spatial isolation between teachers and students, and the interaction becomes the key factor. Teachers should actively participate in communication and interactions with students and even build platforms to provide students with bi-directional communication.

3. Improve Assessment and Management.

For public physical education courses, the composition of student final scores should be diversified. The final examination can adopt a combination of theory and technical skill testing. Specifically, the theoretical exam includes testing students' knowledge of physical education and skills testing is done through video presentations.

4. Strengthen Environmental Support.

Student satisfaction with online learning in public physical education courses is influenced by environmental factors, including physical environment, resource environment, technical environment, and emotional environment. Therefore, special attention should be paid to the resource environment and technical environment.

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A STUDY ON THE RELATIONSHIP BETWEEN STUDENTS' SELF-EFFICACY AND EMPLOYABILITY IN SCHOOL OF CHINESE LANGUAGE AND LITERATURE OF CENTRAL CHINA NORMAL UNIVERSITY IN HUBEI PROVINCE, CHINA

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Abstract: This study took the School of Chinese Language and Literature, Central China Normal University, Wuhan City, Hubei Province of China as a case. Based on the sample selection of the Morgan table, the method of convenience sampling was adopted to randomly select 200 third-year students from 418 third-year students in the School of Chinese Language and Literature as a sample to conduct a questionnaire survey. By analyzing the questionnaire results under different background variables, and using the independent-sample T-test, the self-efficacy of college students under different backgrounds was obtained. And there were significant differences in the self-efficacy of college students under different backgrounds ($P < 0.05$). At the same time, with the help of SPSS 22.0 analysis software, this study analyzed that there was a positive correlation between college students' self-efficacy and employ ability, that is, the better the self-efficacy, the more obvious the improvement of employ ability. Finally, this study discussed and reflected on the research results, and gave some suggestions on how to improve a good sense of self-efficacy and then improve the employ ability of college students.

Keywords: Self-Efficacy, Employability, College Students

Introduction

Self-efficacy mainly referred to the belief and self-judgment of an individual's ability and level to successfully solve the problem or perform a certain behavior when faced with a problem or perform a certain behavior (Gao, 2000). Faced with the realistic employment pressure, college students could not fail to reflect on their own employ ability that suited the needs of their jobs. So how to improve the employ ability of college students, the researchers needed to explore the factors that affect the employ ability, and analyzed the role of each factor in affecting the employ ability. Scholars in the past had also discussed factors that affected employ ability, such as the gender of college students, the type of student

sources, award-winning experience, career planning and funding, work experience and time of students in office, and types of majors studied, etc. (Wang & Lv, 2021), and these factors could be classified as objective knowledge or skills. Therefore, focusing on the influence of subjective factors on employability was an inevitable choice for realistic research, and the researchers chose self-efficacy among many subjective factors, and focused on the relationship between college students' self-efficacy and their own employability. As mentioned above, the self-cognition and judgment emphasized by self-efficacy were consistent with the meaning of employability.

Self-efficacy was the self-confidence and subjective judgment of the subject in his own ability, which belonged to the subjective factor. Paying attention to the influence of subjective factors on employability was an inevitable and valuable choice provided by realistic research. The discussion on the influence of self-efficacy on employability was to allow college students to reflect on their own psychological state, evaluate and judge their own ability level, and provide suggestions for better improving college students' employability. Central China Normal University was also a national key normal university. Many students of Grade Three were facing the employment environment for educational positions. In addition, the Chinese major in the School of Chinese Language and Literature was a national first-class undergraduate key construction. Therefore, the researchers took the third-year students of the School of Chinese Language and Literature of Central China Normal University as the research object, which was valuable for analyzing the relationship between college students' self-efficacy and employability.

Research Objectives

According to the above research questions, the research objectives of this study mainly include:

1. To understand the current situation of self-efficacy of third-year students in the School of Chinese Language and Literature of Central China Normal University.
2. To understand the current situation of the employability of third-year students of the School of Chinese Language and Literature of Central China Normal University.
3. To analyze the significant differences in self-efficacy of third-year students in the School of Chinese Language and Literature of Central China Normal University under different background variables (gender, place of origin, whether the only child).
4. To analyze the significant differences in employability of third-year students in the School of Chinese Language and Literature of Central China Normal University under different background variables (gender, place of origin, whether the only child).
5. To explore the relationship between self-efficacy and employability of third-year students in the School of Chinese Language and Literature of Central China Normal University.

Literature Review

Definition of Self-Efficacy

Self-efficacy was a concept proposed by the famous American psychologist Bandura in 1977 based on the research theory of cognitive psychology, and was an important part of his social cognitive theory. Self-efficacy was a new behaviorist system formed in order to adapt to and integrate the emerging influence of cognitive psychology and respond to the crisis of classical behaviorism. Self-efficacy mainly emphasized the core factors that determined the development of individual abilities, and also emphasized the importance of human acquired experience learning (Yi, 2017). The basic content of self-efficacy was the belief and self-judgment that an individual had in the face of a problem or a certain behavior about his ability and level to successfully solve the problem or perform the behavior, in short, the individual's own awareness of self-ability.

The Current Status of Research on Self-Efficacy

Through a comprehensive examination of the literature, the existing research focused on the relationship between self-efficacy and the gender, grade, school, subject, academic performance, living environment, family economic conditions, social practice experience, graduation trend, and pathological Internet use of college students. In terms of the relationship between gender and self-efficacy of college students, Chen (2004) had shown that male college students' overall self-efficacy and graduate school self-efficacy were significantly better than female students, while the gender difference in employment self-efficacy was not significant. The general self-efficacy was consistent with the findings of Lu (2009), Ma & Lin (2006), Wang & Liu (2000), and Han & Fu (2009). The results of the Da (2006) study showed that girls were significantly better than boys. In addition, there were also many scholars who paid attention to the study of learners' self-efficacy, focusing on the research of writing self-efficacy, self-learning and self-efficacy in the context of various news media, and the number of studies was roughly the same. Among them, the study of writing self-efficacy was one of the key research areas of learners' self-efficacy research.

Definition of Employability

Employability was first proposed by Beveridge and most researchers saw it as "Helping individuals obtain and maintain employment opportunities and the competencies needed in the workplace." In the definition of employability, Western scholars and domestic scholars had different aspects. At present, Western scholars had not made a clear theoretical definition of the concept of employability and systematically elaborated its core composition and characteristics. The more common views were those of the International Labor Organization and members of the Canadian Conference.

The Current Status of Research on Employability

Employability research was developed in a special historical and social context, all to solve the

employment problems existing in social practice. This was true both domestically and abroad. However, there were marked differences in domestic and international research on employability. In foreign countries, the research on employability developed very early, and most of them were based on practitioners, whether they were the first ordinary practitioners, or the later socially disadvantaged groups and unemployed groups and other marginalized people, and even the company employees in the 21st century, the core of the research was still the main social practitioners. In contrast, domestic research on employability developed late, and mainly focused on college students (Wu, 2014).

In contrast, in China in the 90s of the 20th centuries, with the popularization of higher education, the number of college graduates increased rapidly, employment contradictions were gradually revealed, and the difficulties faced by employment became a more common social problem, so the research on the employability of college students gradually began.

Related Studies on the Relationship between Self-Efficacy and Employability

Regarding the research on the relationship between self-efficacy and employability, foreign research mainly focused on the impact of self-efficacy on employability, employment opportunities and employment effects of different groups of people. For example, Moynihan, Roehling, LePine & Boswell (2003) explored the relationship between job search self-effectiveness, job interviews, and employment outcome. Hergenrather, Turner, Rhodes & Barlow (2008) discussed the relationship between disability and employment by analyzing the application of self-efficacy in job skills; Ross, Perkins & Bodey (2013) analyzed information literacy self-efficacy at work and learning.

As far as domestic research was concerned, scholars mostly focused on the role of college students' self-efficacy in improving employability, that is, how to better enhance and serve college students' employability by cultivating a good sense of self-efficacy. For example, Chen (2008) believed that under the background of the increasingly severe employment situation of college students, applying self-efficacy theory to the career development plan of female college students, and actively exploring the close relationship between self-efficacy and female college students' career planning, could help female college students reduce blind obedience in job search experience, improve career planning, and promote them to make correct career decisions and successfully find employment and choose a career. Wu (2012) believed that it was necessary to cultivate college students' self-efficacy in education and teaching practice activities by creating a favorable environment, guiding students to learn positive self-reinforcement, and carrying out practical activities to improve self-efficacy, so as to improve college students' employability.

In summary, based on previous research, this study analyzed the relationship between college students' self-efficacy and employability, and obtained effective methods for cultivating self-efficacy and improving college students' employability, so as to provide a methodological reference for the research on the relationship between self-efficacy and employability.

Methodology

Based on the overall control of the research questions and objectives, this study analyzed the relationship between self-efficacy and employability of college students, formulated a questionnaire, analyzed the data using SPSS 22.0 software after obtaining the survey data, drew relevant conclusions, and tried to give certain suggestions. This study took third-year students in the School of Chinese Language and Literature as the research subjects, referred to background variables such as gender, place of origin, and whether they were only children, and drew on the Chinese version of the General Self-Efficacy Scale (GSES) compiled by Professor Schwarzer and the contents of the “College Student Employability Measurement Questionnaire” compiled by Zheng (2011) to form the research questionnaire of this paper. The questionnaire did not involve private information such as students’ names and student numbers, so that respondents could fill in the questionnaire truthfully and confidently, ensuring the authenticity and validity of the questionnaire results. In the pretest stage, according to the Morgan table (Krejcie & Morgan, 1970), a random sampling method was adopted, and when 45 third-year students in the School of Chinese Language and Literature were selected as the research subject, 40 of them were selected as samples and paper questionnaires were distributed, and the recovery rate was 100%, and after testing the reliability and validity of the pretest data, it entered the formal stage. The formal questionnaire was produced through the questionnaire star platform, and the researchers adopted a combination of online and offline methods when distributing the questionnaire, and the online was distributed to the class groups of each grade in the form of electronic QR codes, so that students could complete the questionnaire online; Offline, researchers randomly select third-year students in the School of Chinese Language and Literature, inform them of the purpose of the questionnaire, and let the students scan the code on the spot to complete the questionnaire. Because the total number of third-year students in the School of Chinese Language and Literature was 418, according to the Morgan table, 200 of them were selected as samples and sent questionnaires, and finally the researchers collected a total of 200 questionnaires, screened invalid questionnaires, and used SPSS 22.0 software to describe the data results in detail. In order to ensure the reliability of the questionnaire results, the researchers tested the reliability and validity of the questionnaire respectively. And reliability and validity of the questionnaire are suitable and good. In addition, in this study, after obtaining the questionnaire data, the data were initially sorted out in Excel tables, and then imported into SPSS 22.0 software for more detailed data analysis. Combined with the entry point and purpose of this study, the researchers adopted several data analysis methods, including reliability analysis, T-test and Pearson’s correlation.

Results

Demographic Analysis of the Respondents

It could be seen from Table 1 that among the background variables, there were 128 questionnaires with “gender” as men, accounting for 64%, and 72 questionnaires with “gender” as women, accounting for 36%, indicating that the number of male students in the questionnaire survey of third-year students in the School of Chinese Language and Literature of Central China Normal University was the majority. There were 142 questionnaires in which the “place of origin” was rural, accounting for 71%, and 58 questionnaires (29%) in the “place of origin” in the city, indicating that rural students accounted for the majority of the survey subjects. Only 44 questionnaires, accounting for 22%, were “only child”, while 156 questionnaires were “not only children”, accounting for 78%, which was the majority. The different number of questionnaires under different background variables reflected the basic situation of different respondents, and provided a basic premise for the following analysis of the relationship between self-efficacy and employability.

Table 1: Basic Information of Respondents (N=200)

Background Variables	Classification	Number of People	Percentage
Gender	Male	128	64%
	Female	72	36%
Place of Origin	Rural	142	71%
	City	58	29%
Whether One Only Child	Yes	44	22%
	No	156	78%

Differences in Self-Efficacy of Third-Year Students of Different Genders

Using the independent sample T-test, overall, there was a significant difference in self-efficacy among third-year students of different genders ($P < 0.05$), indicating that the self-efficacy of male third-year students was higher than that of female college students. Specific analysis showed that in the dimension of “individual’s own success or failure experience”, the self-efficacy of third-year students of different genders showed significant differences, and the specific comparison difference could be obtained, the average value of men (3.79) was significantly higher than the average of women (3.30), indicating that in terms of the individual’s own success or failure experience, the self-efficacy of male third-year students was higher than that of female college students, which further indicated that male college students had more successful experiences than female college students; The self-efficacy of third-year students of different genders showed significant differences ($t = 2.959$, $p = 0.005$), and the specific comparison difference showed that the male average (3.61) was significantly higher than the female average (3.09), indicating that in terms of emotional arousal, the self-efficacy of male third-year students was higher than that of female college students, which further indicated that the positive emotions of male third-year students in the face of difficulties were stronger than those of female third-year students. This was shown in Table 2:

Table 2: Differences in Self-Efficacy of Third-Year Students of Different Genders

Dimensions	Groups	N	M	SD	t	p
Individual's own success or failure experience	Male	128	3.79	.78	2.679	.009**
	Female	72	3.30	.70		
Alternative experience	Male	128	4.09	.83	-1.387	.169
	Female	72	4.35	.57		
Verbal persuasion	Male	128	3.66	.97	1.807	.074
	Female	72	3.26	.81		
Emotional awakening	Male	128	3.61	.78	2.959	.005**
	Female	72	3.09	.73		
Overall	Male	128	3.72	.88	1.456	.02*
	Female	72	3.51	.77		

*P<.05, **P<.01

Differences in Self-Efficacy of Third-Year Students from Different Places of Origin

Using the independent sample T-test, overall, whether the respondents were rural or urban, all showed significant differences in self-efficacy ($P<0.05$), and the urban average (3.90) was significantly higher than the rural average (3.61), indicating that the self-efficacy of urban third-year students was higher than that of rural third-year students. This was shown in Table 3:

Table 3: Differences in Self-Efficacy of Third-Year Students in Different Places of Origin

Dimensions	Groups	N	M	SD	t	p
Individual's own success or failure experience	Rural	142	3.77	.91	-1.709	.001**
	City	58	4.14	.79		
Alternative experience	Rural	142	3.44	1.00	-1.722	.008**
	City	58	3.86	.91		
Verbal persuasion	Rural	142	3.48	.92	-1.847	.006**
	City	58	3.90	1.00		
Emotional awakening	Rural	142	3.42	.76	-1.777	.009**
	City	58	3.76	.89		
Overall	Rural	142	3.61	.86	-0.706	.024*
	City	58	3.90	.86		

*P<.05, **P<.01

Differences in Self-Efficacy of Third-Year Students Who Are Only Children or Not

Using the independent sample T-test, in general, whether the survey subjects were only children, the self-efficacy of third-year students showed a significant difference ($P<0.01$), indicating that the self-efficacy of non-only children third-year students was higher than that of third-year students who were only children. Specific analysis showed that in the dimension of "emotional awakening", the average value of the only child (3.22) was lower than the average of the non-only child (3.55), which indicated that in terms of emotional awakening, the self-efficacy of third-year students who were not

only children was higher than that of third-year students who were only children, which further showed that third-year students who were not only children had stronger positive emotions in the face of difficulties than third-year students who were only children. As shown in Table 4:

Table 4: Differences in Self-Efficacy of Third-Year Students Who Are Only Children or Not

Dimensions	Groups	N	M	SD	t	p
Individual's own success or failure experience	Yes	44	3.72	.89	-.669	.505
	No	156	3.88	.89		
Alternative experience	Yes	44	4.11	.76	-.231	.817
	No	156	4.16	.79		
Verbal persuasion	Yes	44	3.44	.98	-.620	.537
	No	156	3.60	.94		
Emotional awakening	Yes	44	3.22	.65	-1.842	.005**
	No	156	3.55	.82		
Overall	Yes	44	3.62	.82	-.841	.004**
	No	156	3.80	.86		

*P<.05, **P<.01

Differences in Employability of Third-Year Students of Different Genders

Table 5: Differences in Employability of Third-Year Students of Different Genders

Dimensions	Groups	N	M	SD	t	p
Knowledge integration ability	Male	128	3.70	.90	1.243	.007**
	Female	72	3.43	.90		
Dimensions	Groups	N	M	SD	t	p
Practical ability	Male	128	3.74	.82	1.980	.003**
	Female	72	3.43	.59		
Social and interpersonal skills	Male	128	4.06	.85	-1.214	.008**
	Female	72	4.30	.76		
Application ability	Male	128	3.81	.80	.360	.002**
	Female	72	3.74	.69		
Teamwork ability	Male	128	3.86	.81	1.531	.009**
	Female	72	3.57	.79		
Overall	Male	128	3.83	.84	1.266	.006**
	Female	72	3.69	.75		

*P<.05, **P<.01

Using the independent sample T-test, on the whole, the employability of both male and female respondents showed a significant difference ($P < 0.01$). Specific analysis showed that in the dimension of “knowledge integration ability”, the average male (3.70) was significantly higher than the female average (3.43), indicating that the knowledge integration ability of male third-year students was stronger than that of female third-year students; in the dimension of “practical ability”, the average

value of men (3.74) was significantly higher than the female average (3.43), indicating that the practical ability of male third-year students was stronger than that of female third-year students; in the dimension of “social and interpersonal skills”, The average male (4.06) was lower than the female average (4.30), indicating that the social and interpersonal skills of female third-year students were stronger than that of male third-year students; in the dimension of “application ability”, the average of men (3.81) was higher than that of female third-year students (3.74), indicating that the recruitment ability of male third-year students was stronger than that of female third-year students; The male average (3.86) was higher than the female average (3.57), indicating that the teamwork ability of male third-year students was stronger than that of female third-year students. This was shown in Table 5.

Differences in Employability of Third-Year Students of Different Places of Origin

Using the independent sample T test, on the whole, the employability of third-year students in different places of origin showed a significant difference ($P < 0.05$), indicating that the employability of urban third-year students was generally stronger than that of rural third-year students. Specific analysis showed that in the dimension of “knowledge integration ability”, the rural average (3.51) was significantly lower than the urban average (4.14), indicating that the knowledge integration ability of rural third-year students was weaker than that of urban third-year students; in the dimension of “practical ability”, the rural average (3.68) was significantly lower than the urban average (4.14), indicating that the practical ability of rural third-year students was weaker than that of urban third-year students; The rural average (3.66) was significantly lower than the urban average (4.05), indicating that the social and interpersonal skills of rural third-year students were weaker than those of urban third-year students, and in the dimension of “teamwork ability”, the rural average (3.70) was significantly lower than the urban average (4.14), indicating that the teamwork ability of rural third-year students was weaker than that of urban third-year students. This was shown in Table 6.

Table 6: Differences in Employability of Third-Year Students of Different Places of Origin

Dimensions	Groups	N	M	SD	t	p
Knowledge integration ability	Rural	142	3.52	.88	-2.977	.004**
	City	58	4.14	.85		
Practical ability	Rural	142	3.68	.74	-2.482	.015*
	City	58	4.14	.79		
Social and interpersonal skills	Rural	142	3.66	.75	-2.015	.047*
	City	58	4.05	.92		
Application ability	Rural	142	3.75	.71	-1.089	.279
	City	58	3.95	.97		
Teamwork ability	Rural	142	3.70	.77	-2.301	.024*
	City	58	4.14	.85		
Overall	Rural	142	3.66	.77	-2.172	.038*
	City	58	4.08	.88		

* $P < .05$, ** $P < .01$

Differences in Employability of Third-Year Students Who Are Only Children or Not

Using the independent sample T test, on the whole, whether the third-year students who are only children or not the only child showed internal consistency ($P > 0.05$ or 0.01) in the five dimensions of “knowledge integration ability”, “practical ability”, “social and interpersonal skills”, “application ability” and “teamwork ability”, and did not show significant differences, which showed that whether they are only children did not affect the employability and strength of college students. As shown in Table 7:

Table 7: Differences in Employability of Third-Year Students Who Are Only Children or Not

Dimensions	Groups	N	M	SD	t	p
Knowledge integration ability	Yes	44	3.78	.81	.299	.765
	No	156	3.71	.92		
Practical ability	Yes	44	3.78	.65	-.013	.989
	No	156	3.78	.80		
Social and interpersonal skills	Yes	44	4.17	.71	.261	.794
	No	156	4.11	.86		
Application ability	Yes	44	3.67	.77	-.749	.455
	No	156	3.82	.77		
Teamwork ability	Yes	44	3.67	.69	-.714	.477
	No	156	3.82	.83		
Overall	Yes	44	3.81	.73	-.407	.696
	No	156	3.80	.84		

* $P < .05$, ** $P < .01$

Correlation Analysis between Self-Efficacy and Employability of Third-Year Students

Table 8: Correlation Analysis between Self-Efficacy and Employability of Third-Year Students

	Knowledge integration ability	Practical ability	Social and interpersonal skills	Application ability	Teamwork ability	Overall
Individual's own success or failure experience	.691**	.780**	.676**	.649**	.698**	.699**
Alternative experience	.624**	.573**	.523**	.552**	.507**	.556**
Verbal persuasion	.633**	.680**	.614**	.630**	.581**	.628**
Emotional awakening	.705**	.695**	.684**	.617**	.690**	.678**
Overall	.663**	.682**	.624**	.612**	.619**	.640**

* $P < .05$, ** $P < .01$

From Table 8, it could be seen that the relationship between self-efficacy and employability of

third-year students in the School of Chinese Language and Literature of Central China Normal University was analyzed by Pearson correlation analysis method, and on the whole, there was a positive correlation between self-efficacy and employability of third-year students, with a correlation coefficient value of 0.640, of which the correlation between self-efficacy and practical ability was the highest, with a correlation coefficient value of 0.682; the correlation between employability and the individual's own success or failure experience was the highest, with a correlation coefficient value of 0.699; and other dimensions also showed different degrees of positive correlation.

Discussion

There were significant differences in self-efficacy and employability among third-year students under different background variables. On the whole, under the three background variables of “gender”, “place of origin” and “whether they are only children”, the self-efficacy and employability of third-year students in the School of Chinese Language and Literature of Central China Normal University showed different differences in different dimensions.

Specifically, self-efficacy included the individual's own experience of success or failure, vicarious experience, verbal persuasion and emotional awakening. Among them, in the dimensions of “individual's own success or failure experience” and “emotional awakening”, the self-efficacy of male third-year students was stronger than that of female third-year students, while in the dimensions of “alternative experience” and “verbal persuasion”, the self-efficacy of male third-year students was not significantly different from that of female college students, and there was internal consistency. These comparisons showed that male third-year students either had rich success experience or could gain more from past successes and failures, making male third-year students had a stronger sense of self-efficacy, while female third-year students either had less success experience or did not benefit more from past success or failure experience, resulting in weaker self-efficacy of female third-year students. At the same time, in the dimension of “emotional awakening”, the self-efficacy of male third-year students was also stronger than that of female third-year students, indicating that male third-year students had high positive emotions in the face of difficulties and dared to face difficulties and solve problems, while female third-year students had fewer positive emotions in the face of difficulties.

There was a positive correlation between self-efficacy and employability of third-year students at Central China Normal University. Specifically, the better the self-efficacy, the more obvious the degree of employability; The more negative the self-efficacy, the less employability improved. According to the results of Pearson's correlation analysis, there was a positive correlation between the four dimensions of self-efficacy and employability, including the ability to integrate knowledge, practice, social and interpersonal skills, apply for employment and teamwork.

Specifically, the more successful experiences college students had gained in their past

experiences, the stronger their knowledge integration ability, practical ability, social and interpersonal skills, application ability and teamwork ability. When college students could indirectly and effectively obtain the successful experience of others, or draw nutrition from the successful experience of others, the stronger the college students' knowledge integration ability, practical ability, social and interpersonal skills, application ability and teamwork ability; When college students did not care too much about the opinions of others, but the stronger the firmness of their own views and attitudes, the stronger the college students' knowledge integration ability, practical ability, social and interpersonal skills, application ability and teamwork ability; When college students faced difficulties, they did not choose to retreat passively, but could actively respond, face problems and solve problems, so as to obtain more positive emotions, the stronger the college students' knowledge integration ability, practical ability, social and interpersonal skills, application ability and teamwork ability. Therefore, how to better and more effectively improve the self-employability of college students to cope with the current complex and severe employment situation, it was necessary to actively cultivate and enhance the self-efficacy related to employability.

Conclusions

1. Among the different background variables, the majority of survey respondents were males, rural residents, and non-only children, and the self-efficacy and employability of third-year students under different background variables showed different degrees of difference, and the differences were significant.
2. Self-efficacy included the individual's own experience of success or failure, vicarious experience, verbal persuasion and emotional awakening.
3. There was a positive correlation between college students' self-efficacy and employability, that is, the better the self-efficacy, the stronger the self-employability and the greater the degree of improvement.
4. There was the greatest correlation between the dimension of "individual's own success or failure experience" in self-efficacy and the dimension of "practical ability" in employability, which was also the key direction of targeted and effective improvement of employability.

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中国广东省珠江学院教师职业倦怠与离职倾向的关系研究**A STUDY ON THE RELATIONSHIP BETWEEN TEACHERS' JOB
BURNOUT AND TURNOVER INTENTION AT ZHUJIANG COLLEGE IN
GUANGDONG PROVINCE, CHINA**卢建松^{1*}, 杨雅男²Jiansong Lu^{1*}, Dr. Yanan Yang²¹ 泰国斯坦福国际大学, ² 泰国斯坦福国际大学, 教育管理专业讲师¹ Stamford International University, Thailand² Lecturer, PG program in Educational Administration, Stamford International University, Thailand

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摘要: 本研究主要关注教师职业倦怠与离职倾向的现状, 探讨教师职业倦怠与离职倾向的相关性。采用定量研究, 通过问卷调查法, 对广东省珠江学院专职教师按照样本量发放问卷200份, 收集到有效问卷159份。数据分析方法是描述性统计分析, 独立样本T检验, 单因素方差分析, 与Pearson相关分析法。分析结果表明, 珠江学院教师职业倦怠与离职倾向的程度都处于中等的水平, 珠江学院教师的职业倦怠与离职倾向呈显著正相关关系。不同的背景变量下, 处于31-40岁年龄的教师, 职业倦怠程度的水平是最高的; 4-9年教龄教师有较高级别的职业倦怠与离职倾向。基于研究结果, 针对不同年龄段和教龄段的教师, 提出可以采取营造良好的工作氛围、促进教师的职业发展等方法, 以缓解高校教师的职业倦怠与离职倾向。

关键词: 高校教师, 职业倦怠, 离职倾向。

Abstract: This study focused on the analysis of the current situation of teachers' job burnout and turnover intention and explored the correlation between teachers' job burnout and turnover intention at Zhujiang College in Guangdong province, China. Through quantitative research method and questionnaire survey, 200 questionnaires were distributed to full-time teachers at Zhujiang College in Guangdong province, China, finally, a total of 159 valid questionnaires were collected. The researcher used descriptive statistical analysis, independent samples t-test, one-way ANOVA and Pearson correlation analysis in the data analysis process. The analysis results showed that: 1) The current level of job burnout and turnover intention of teachers in Zhujiang College was at a medium level. 2) There was a significant positive correlation between job burnout and turnover intention of teachers in Zhujiang

College. 3) Under different demographic variables, teachers aged 31-40 have the highest level of job burnout; Teachers with 4-9 years of teaching experience have a high degree of job burnout and turnover tendency. Based on the research results, aiming at teachers of different ages and teaching ages, this study put forward some methods such as creating a good working atmosphere and promoting teachers' professional development, to alleviate college teachers' job burnout and turnover intention.

Keywords: University Teachers, Job Burnout, Turnover Intention

引言

高校教师是高等教育发展的最重要资源，高校教师队伍的建设，是教育强国的基础，是影响高校人才培养与科研工作质量的关键因素（丁滨，2018）。中国高等教育的毛入学率在2021年已达57.8%，实现了高等教育的普及化。随着高等教育综合改革的不断推进，受到高校之间激烈竞争、职称晋升压力、学生期望值等因素影响，高校教师已成为一个特殊的群体，既是高荣誉感职业也是高压力的职业，容易出现一些负面的生理、心理和行为反应（徐萍，2020）。许多优秀教师因教学与科研压力、人际关系、薪资待遇等问题，产生了离职倾向，导致高校教师群体的减员，影响了高校的可持续发展（Bruno，1983）。

珠江学院所在的广东省，民办高等教育发展很快，全省拥有民办高校50所，在校生68万余人。然而，在民办高等教育高速发展的同时，民办高校教师普遍存在职业倦怠现象。吴婉仪（2016）以广东省高校教师作为调查对象，结果显示，在工作热情不高、成就感缺乏、工作条件不满意的条件下，大部分教师会考虑寻找其他工作机会，离开学校。对民办高校教师职业倦怠和离职倾向的关系进行实证研究，可以了解教师职业倦怠与离职倾向的现状，为解决教师队伍稳定性的问题，提供一些思路。

研究目的

本研究采用定量研究，通过问卷调查法，可以真实了解珠江学院教师职业倦怠、离职倾向的现状，确定珠江学院教师职业倦怠与离职倾向的相关性，为解决教师队伍稳定性的问题，提供一些思路。具体研究目的如下：了解教师职业倦怠的现状；了解教师离职倾向的现状；分析不同背景变量下，教师职业倦怠的差异性如何；分析不同背景变量下，教师离职倾向的差异性如何；确定教师职业倦怠与离职倾向的相关性。基于以上研究目标，本研究提出以下假设：H1：不同背景变量下，教师职业倦怠存在显著差异；H2：不同背景变量下，教师离职倾向存在显著差异；H3：教师职业倦怠与离职倾向显著正相关。

文献综述

高校教师离职行为与教师的职业发展、学校的发展息息相关，在研究高校教师的需求时，应该更加聚焦在他们的职业发展和教育教学工作。本研究将从教师职业倦怠的相关研究；教师离职倾向的相关研究；教师职业倦怠与离职倾向的关系研究三个方面进行文献梳理。

1. 教师职业倦怠的定义及其相关研究

1.1 教师职业倦怠的定义

美国心理学家Freudenberger（1974）最早提出“职业倦怠”一词，用来描述当个体的工作不被他人或组织认可，并且无法得到相应回报时，个体所产生的身体、心理和情绪的疲惫状态。随后，Maslach和Jackson（1981）发现公共服务行业从业者经常使用“职业倦怠”一词，并指出，职业倦怠是在服务行业中个体出现的一种综合症状，包括个体的情感耗竭、人格解体和个人成就感降低等。

李超平和时勘（2003）以工作压力为出发点，认为职业倦怠是个体在面对工作上的各种压力时，不能主动、积极、有效应对，从而产生情绪耗竭、玩世不恭和低自我成就感，是一种持久性的心理和生理负面反应。在研究教师组织认同的过程中，申继亮（2009）指出，职业倦怠是指在以人为服务对象的职业领域中，个体的一种情感耗竭、人格解体和个人成就感降低的状态。以高校教师为研究对象，胡玥（2021）指出，教师职业倦怠是教师在工作过程中因工作压力大、缺少对学生必要的同理心，没有与学生进行有效的沟通，所带来的生理、情绪情感及行为等方面的耗竭状态。

综合以往的研究，职业倦怠特征表现为：工作上没有活力，感到身心疲劳；对待他人冷漠，与人产生距离；对待工作没有热情，完成工作后成就感低。

1.2 教师职业倦怠的维度和测量

研究人员对职业倦怠有不同的定义，对职业倦怠的维度也有不同的划分。Maslach和Jackson（1981）提出了职业倦怠三维理论模型，用来描述服务性行业中个体的职业倦怠表现。该模型认为职业倦怠包括情绪衰竭、去人性化 and 低成就感三个维度，情绪衰竭，指的是个体感到自己在工作中处于一种非常疲劳的状态，失去工作活力，缺少工作热情，是职业倦怠的核心维度，也是职业倦怠的最重要表现形式；去人性化，是指个体对工作、对他人冷漠、消极、产生距离感的排斥态度；低成就感，指的是个体对自己工作结果的负面评价，对工作缺乏成就感，认为自己无法胜任现有工作。在Maslach研究的理论基础上，Schaufeli（1993）提出了适用于更多行业的职业倦怠三维模型，分别是情绪衰竭、玩世不恭和低成就感三个维度。另外，也有学者提出单因素理论，Pines（1981）将职业倦怠分为三种不同程度的耗竭，分别是身体耗竭、情绪耗竭和心理耗竭，可以应用于工作环境及其他的研究领域和个体关系中。

本研究采用 Maslach (2001) 修订的“教师职业倦怠量表”(MBI-ES)作为教师职业倦怠问卷,这份问卷从情绪衰竭、去人性化 and 低成就感三个维度出发去考量教师的职业倦怠问题,共包含22个题项。教师职业倦怠量表采用李克特5点计分方式,从“完全不符合、不符合、中立、符合、完全符合”分别记1分至5分,其中的低成就感维度中的所有项目,如“我能很容易地了解学生和同事的感受”,采用反向计分的策略。

2. 教师离职倾向的定义及其相关研究

2.1 教师离职倾向的定义

关于离职倾向, March和Simon (1958)给出了最早的概念,指出个体离开当前组织和工作,寻找其他工作机会的想法为离职倾向。Mobley (1978)研究认为,离职倾向是一个过程,包括了对工作的不满意、离职意愿、寻找工作的可能性等。因而,离职倾向是个体一系列离开组织的认知,是寻找其它工作机会和可能性的最重要一步,可以很好的预测个体离职行为的发生(Tett & Meyer, 1993)。关于教师的离职倾向,杜婧和刘鑫桥 (2019)研究指出,离职倾向是指员工对组织失去了信心和归属感,想要离开当前组织,高校师资流失有一个复杂过程,开始的时候教师表现为无法专心工作、缺乏工作动力、考虑离开的内心想法,最终演变为脱离劳动关系、离开工作岗位和学校的外显形式。李紫菲 (2021)在研究高校新入职教师时观察到,他们面临着工作环境和社会身份的转变,如果不能适应教师工作的职业要求,无法获得足够的外力支持,没有体会到工作成就感,就会对教师工作存在诸多不满,从而产生离职倾向。

2.2 教师离职倾向的过程和测量

教师的离职倾向受到很多因素的影响。Mobley (1977)发现,员工从产生离职意愿,到正式离职的行为,有一个不同方面、程度的心理和行动的过程,包括员工评估现有工作、寻找其他工作机会与想法、找到其他工作的可能性等,然后再考虑是离开还是暂时留在当前组织。Maertz和Griffeth (2004)提出,组织因素、经济因素、社会因素、个人心理因素等都有可能影响员工的离职倾向,员工的离职倾向是一个综合考量、不断变化的过程。此外,付瑛 (2004)通过对高校教师离职倾向的分析,把高校教师离职的影响因素总结为内在因素和外在因素,内在因素和教师自身相关,如个人专业水平、人际交往能力等,外在因素和高校这个组织相关,如教师的考核制度、学校的工作环境等。李立国 (2020)也指出学校温馨的工作环境、和谐的工作氛围可以提高教师在学校工作的积极性和主动性,学校也应该创造良好的学术声誉、有效的激励制度、积极乐观的学术环境,以帮助教师开展教育教学、专业发展和学术研究工作,降低教师的离职倾向。

本研究离职倾向量表采用Farh (1998)提出的离职倾向量表,以离职倾向单一维度测

量，共5个题项，其中第五题项，“我打算在现在的岗位上做长期的职业发展规划”，采用反向计分的策略。离职倾向量表采用李克特5点计分方式，从“完全不符合、不符合、中立、符合、完全符合”分别记1分至5分，分值越高代表教师离职倾向越强烈。

3. 教师职业倦怠与离职倾向关系的相关研究

Maslach (2001) 指出，在组织中，如果个体的职业倦怠不断发展，他对待工作就没有积极性，就会产生离职倾向，有离开组织的想法，职业倦怠的产生会有诸多的负面影响，对于组织来说，个体的离职行为是这些影响中的最后一个结果。从员工工作绩效和离职率的角度，Lee 和 Ashforth (1996) 的研究发现，员工出现职业倦怠、情感衰竭的主要原因是实际工作任务的过重和工作角色冲突，而职业倦怠的产生，容易导致员工组织认同感和归属感降低、工作绩效的下降、离职倾向的增高，职业倦怠能够直接导致员工离职行为的发生。对于高校教师，傅端香 (2015) 研究认为职业压力通过职业倦怠对离职倾向具有显著影响。郑伟和刘玉林 (2020) 研究高校教师队伍职业倦怠问题时发现，由于社会经济的高速发展，在高校相对稳定的工作环境下，教师情感上的负面反应与自身职业发展的困境，容易产生离职倾向或者离职行为。陶建刚 (2021) 调查高校辅助人员发现，高校辅助人员职业倦怠检出率较高，离职倾向与职业倦怠呈显著正相关，组织支持与职业倦怠、离职倾向呈显著负相关，职业倦怠在组织支持和离职倾向之间起不完全中介作用。综上所述，以往的研究表明，教师的职业倦怠与离职倾向之间存在显著正相关关系。

研究方法

1. 研究设计

本研究对珠江学院专职教师进行了问卷调查，采用定量研究方法，使用SPSS 26.0软件进行数据分析，了解教师职业倦怠、离职倾向在人口统计学上的差异，检验珠江学院教师职业倦怠与离职倾向的相关性。本研究中，自变量是教师职业倦怠，因变量是教师离职倾向，量表使用Maslach (2001) 的教师职业倦怠量表和Farh (1998) 的离职倾向量表。

2. 研究对象总体与样本

本研究以珠江学院专职教师为研究对象，主要研究教师职业倦怠与离职倾向的相关性。截至2022年8月31日，珠江学院有专职教师382人，根据Krejcie和Morgan (1970) 量表的要求，200名样本教师通过简单随机抽样的方式来参加此项问卷活动，将382位教师从1到382编号，再用抽签的方法抽出200个号码组成样本，保证每个教师被抽到的几率是均等的。在2022年9月1日到9月15日，通过学校的微信群，向样本教师发放电子问卷的方式进行，发放问卷200份，收集问卷182份，在剔除无效问卷后，保留有效问卷159份。问卷的第一部分主要收集教师

的基本个人信息，包括被调查教师的性别、年龄、学历、职称、教龄五个方面。

3. 信效度检验

本研究对收集的159份有效问卷进行了信度检验，情绪衰竭、去人性化 and 低成就感三个维度的Cronbach's α 系数分别为0.893、0.867、0.901，职业倦怠量表的整体Cronbach's α 系数为0.935，可以看出，本研究采用的教师职业倦怠量表有非常好的可信度；离职倾向量表的Cronbach's α 系数为0.781，可以看出，本研究采用的教师离职倾向量表有比较好的可信度。

表 1: 问卷的信度分析

职业倦怠量表	情绪衰竭	去人性化	低成就感	总量表
题目数量	9	5	8	22
Cronbach's α	0.893	0.867	0.901	0.935
离职倾向量表	离职倾向			总量表
题目数量	5			5
Cronbach's α	0.781			0.781

本研究采用因子分析对收集的159份有效问卷进行了效度检验。检验结果如表2所示，可以看出，KMO值均大于0.7，表明本研究问卷中的量表比较适合因子分析。同时，显著性水平都小于0.05，累积方差解释率也都大于50%，说明本研究的问卷调查具有良好的结构效度。

表 2: 问卷的 KMO 和巴特利特检验

职业倦怠量表		
KMO 取样適切性量数		0.917
巴特利特球形度检验	近似卡方	2106.571
	自由度	231
	显著性	0.000
离职倾向量表		
KMO 取样適切性量数		0.760
巴特利特球形度检验	近似卡方	241.241
	自由度	10
	显著性	0.000

研究结果

1. 调查对象的人口统计分析

问卷的第一部分主要关于教师的基本个人信息，可以观察被调查教师在性别、年龄、学历、教龄、职称等方面的分布情况。参与此次问卷调查的教师中，女性教师占比为65.41%，男性教师占比为34.59%；在年龄上，由于51岁及以上组别的教师只有6人，不符合统计的要求，因而与41-50岁组别的教师合并，重新设计为41岁及以上教师组别。16.53%的教师

是30岁及以下，46.54%的教师是31岁到40岁之间，37.11%的教师是41岁及以上；从学历背景看，由于博士学历的教师只有9人，不符合统计要求，因而与硕士学历的教师合并，重新设计为硕士及以上学历教师组别。122位教师是硕士及以上学历，占比为76.73%，而本科及以下学历教师的占比为23.27%；在教龄上，109位教师是10年及以上，占比为68.55%，而1-3年和4-9年教龄的教师占比分别为17.61%、13.84%；从职称上看，助教或者初级职称教师的占比为23.27%，讲师或者中级职称教师的占比为61.01%，副教授或者副高及以上职称教师的占比为15.72%。

表 3: 教师的背景统计表 (N=159)

背景变量	分组	频数	百分比 (%)
性别	女性 (1)	104	65.41
	男性 (2)	55	34.59
年龄	30 岁及以下 (1)	26	16.35
	31-40 岁 (2)	74	46.54
	41 岁以上 (3)	59	37.11
学历	本科及以下 (1)	37	23.27
	硕士及以上 (2)	122	76.73
教龄	1-3 年 (1)	28	17.61
	4-9 年 (2)	22	13.84
	10 年及以上 (3)	109	68.55
职称	助教/初级 (1)	37	23.27
	讲师/中级 (2)	97	61.01
	副教授/副高及以上 (3)	25	15.72

2. 样本描述性统计

利用SPSS 26.0软件，进行描述性统计，根据表4，观察平均值和标准差。从总体上看，珠江学院教师职业倦怠、离职倾向的程度都处于中等的水平。职业倦怠的三个维度中，情绪衰竭维度的平均值相对较高，低成就感维度居中，而去人性化维度处于比较低的水平。

表 4: 教师职业倦怠、离职倾向的描述统计 (N=159)

	M	SD	分析
职业倦怠	2.69	0.580	中等
情绪衰竭	2.96	0.676	中等
去人性化	2.39	0.741	比较低
低成就感	2.72	0.621	中等
离职倾向	2.78	0.664	中等

3. 不同性别教师职业倦怠、离职倾向的差异性比较

以独立样本T检验分析结果如表5所示,结果发现，不同性别教师在职业倦怠上没有显著

性差异, $t=-0.978$, $P=0.329$, 女性教师职业倦怠 ($M=2.66$, $SD=0.608$) 与男性教师职业倦怠 ($M=2.75$, $SD=0.523$) 没有显著性差异; 不同性别教师在情绪衰竭维度、去人性化维度、低成就感维度上也都没有显著性差异。

不同性别教师在离职倾向上没有显著性差异, $t=-0.538$, $P=0.591$, 女性教师离职倾向 ($M=2.75$, $SD=0.671$) 与男性教师离职倾向 ($M=2.81$, $SD=0.656$) 没有显著性差异。

表 5: 不同性别教师职业倦怠、离职倾向的差异性比较(N=159)

维度/变量	女(N=104)		男(N=55)		T	Sig
	M	SD	M	SD		
情绪衰竭	2.93	0.689	3.01	0.653	-0.631	.529
去人性化	2.35	0.763	2.46	0.699	-0.873	.384
低成就感	2.68	0.643	2.79	0.576	-1.012	.313
职业倦怠	2.66	0.608	2.75	0.523	-0.978	.329
离职倾向	2.75	0.671	2.81	0.656	-0.538	.591

4. 不同学历教师职业倦怠、离职倾向的差异性比较

以独立样本T检验分析结果如表6所示, 结果发现, 不同学历教师在职业倦怠上没有显著性差异, $t=-1.228$, $P=0.221$, 本科及以上学历教师职业倦怠 ($M=2.59$, $SD=0.562$) 与硕士及以上学历教师职业倦怠 ($M=2.72$, $SD=0.584$) 没有显著性差异; 不同学历教师在情绪衰竭维度、去人性化维度、低成就感维度上也都没有显著性差异。

不同学历教师在离职倾向上没有显著性差异, $t=-0.477$, $P=0.634$, 本科及以上学历教师离职倾向 ($M=2.73$, $SD=0.582$) 与硕士及以上学历教师离职倾向 ($M=2.79$, $SD=0.689$) 没有显著性差异。

表 6: 不同学历教师职业倦怠、离职倾向的差异性比较(N=159)

维度/变量	本科及以下(N=37)		硕士及以上(N=122)		T	Sig
	M	SD	M	SD		
情绪衰竭	2.94	0.585	2.97	0.703	-0.201	.841
去人性化	2.26	0.780	2.43	0.727	-1.237	.218
低成就感	2.56	0.637	2.77	0.611	-1.755	.081
职业倦怠	2.59	0.562	2.72	0.584	-1.228	.221
离职倾向	2.73	0.582	2.79	0.689	-0.477	.634

5. 不同职称教师职业倦怠、离职倾向的差异性比较

以单因子方差分析结果如表7所示, 结果发现, 在比较不同职称教师的职业倦怠、离职倾向的过程中, 由于P值都大于0.05的标准, 可以得出, 不同职称教师在职业倦怠和离职倾向

上都没有显著性差异。

经过LSD多重比较分析，还可以发现，在职业倦怠的低成就感维度上，讲师或者中级职称教师显著大于助教或者初级职称的教师，中级职称教师在低成就感维度上的平均值最高，说明在珠江学院，中级职称教师所获得的个人成就感远远不如较低职称的教师。

表 7: 不同职称教师职业倦怠、离职倾向的差异性比较(N=159)

维度/变量	①助教/初级		②讲师/中级		③副教授/副高		F	Sig	LSD
	M	SD	M	SD	M	SD			
情绪衰竭	2.82	.573	3.04	.652	2.85	.864	1.809	.167	
去人性化	2.26	.673	2.45	.753	2.36	.790	0.906	.406	
低成就感	2.54	.609	2.79	.594	2.71	.708	2.164	.118	①<②
职业倦怠	2.54	.533	2.76	.564	2.64	.679	2.054	.132	
离职倾向	2.68	.572	2.86	.697	2.60	.632	1.995	.139	

6. 不同年龄教师职业倦怠、离职倾向的差异性比较

以单因子方差分析结果如表8所示，结果发现，在比较不同年龄教师的情绪衰竭维度、低成就感维度、离职倾向的过程中，由于P值都大于0.05的标准，可以得出，不同年龄教师在情绪衰竭维度、低成就感维度、离职倾向上都没有显著性差异。在比较不同年龄教师的职业倦怠、去人性化维度的过程中，由于P值都小于0.05的标准，可以得出，不同年龄教师在职业倦怠、去人性化维度上存在显著性差异。经过LSD多重比较分析，还可以发现，在教师的职业倦怠上，31-40岁的教师显著大于30岁及以下的教师；在情绪衰竭维度上，31-40岁的教师显著大于30岁及以下的教师；在去人性化维度上，31-40岁的教师显著大于30岁及以下的教师，31-40岁的教师显著大于41岁及以上的教师；在低成就感维度上，31-40岁的教师显著大于30岁及以下的教师；在教师的离职倾向上，31-40岁的教师显著大于30岁及以下的教师。

表 8: 不同年龄教师职业倦怠、离职倾向的差异性比较(N=159)

维度/变量	①30岁及以下 (N=26)		②31-40岁 (N=74)		③41岁及以上 (N=59)		F	Sig	LSD
	M	SD	M	SD	M	SD			
情绪衰竭	2.72	.642	3.06	.682	2.93	.663	2.600	.078	①<②
去人性化	2.15	.750	2.57	.721	2.28	.721	4.387	.014	①<②
低成就感	2.54	.633	2.82	.619	2.67	.604	2.391	.095	①<②
职业倦怠	2.47	.617	2.82	.564	2.63	.553	4.234	.016	①<②
离职倾向	2.58	.655	2.89	.578	2.71	.748	2.555	.081	①<②

7. 不同教龄教师职业倦怠、离职倾向的差异性比较

以单因子方差分析结果如表9所示，在比较不同教龄教师的职业倦怠、情绪衰竭维度、

低成就感维度、离职倾向的过程中，由于P值都小于0.05的标准，可以得出，不同教龄教师在职业倦怠、情绪衰竭维度、低成就感维度、离职倾向上都存在显著性差异。

经过LSD多重比较分析，在教师的职业倦怠上，4-9年教龄的教师显著大于1-3年教龄的教师，10年及以上教龄的教师显著大于1-3年教龄的教师；在情绪衰竭维度上，4-9年教龄的教师显著大于1-3年教龄的教师，10年及以上教龄的教师显著大于1-3年教龄的教师；在低成就感维度上，4-9年教龄的教师显著大于1-3年教龄的教师，10年及以上教龄的教师显著大于1-3年教龄的教师，4-9年教龄的教师显著大于10年及以上教龄的教师；在教师的离职倾向上，4-9年教龄的教师显著大于1-3年教龄的教师，4-9年教龄的教师显著大于10年及以上教龄的教师。

表 9: 不同教龄教师职业倦怠、离职倾向的差异性比较(N=159)

维度/变量	①1-3 年 (N=28)		②4-9 年 (N=22)		③10 年及以上 (N=109)		F	Sig	LSD
	M	SD	M	SD	M	SD			
情绪衰竭	2.68	.574	3.09	.574	3.00	.704	3.086	.048	①<②
去人性化	2.17	.670	2.53	.732	2.42	.755	1.701	.186	
低成就感	2.41	.577	3.08	.528	2.73	.612	7.903	.001	①<②
职业倦怠	2.42	.525	2.90	.549	2.72	.580	4.808	.009	①<②
离职倾向	2.54	.579	3.09	.512	2.77	.690	4.493	.013	①<②

8. 教师职业倦怠与离职倾向的相关性

本研究结果表明，教师职业倦怠与离职倾向显著正相关，研究假设H3成立。从皮尔逊相关系数上看，教师职业倦怠和离职倾向之间的系数值为0.740， $P < 0.001$ ，表明教师职业倦怠与离职倾向之间有显著的正相关关系。这也与学者以往的研究结果相符合，以服务人员为研究对象，员工的职业倦怠与离职倾向显著正相关（Maslach, 2001；陶建刚，2021）。

表 10: 教师职业倦怠与离职倾向的相关矩阵(N=159)

	1	2	3	4	5
1. 情绪衰竭	—				
2. 去人性化	.625***	—			
3. 低成就感	.590***	.560***	—		
4. 职业倦怠	.865***	.869***	.824***	—	
5. 离职倾向	.646***	.625***	.626***	.740***	—

* $P < 0.05$ 、** $P < 0.01$ 、*** $P < 0.001$

总结

本文研究了珠江学院教师职业倦怠与离职倾向的现状，确定了不同背景变量下教师职

业倦怠、离职倾向的差异性，以及教师职业倦怠与离职倾向之间的相关性。具体研究发现包括以下三个方面：

首先，整体上看，珠江学院教师职业倦怠、离职倾向的程度都处于中等的水平。职业倦怠的三个维度中，情绪衰竭维度的平均值相对较高，低成就感维度居中，而去人性化维度处于比较低的水平。

其次，从不同背景变量下教师职业倦怠、离职倾向的差异性来看，需要特别关注以下几类教师：讲师或者中级职称教师有较低的成就感；处于31-40岁组别的教师，职业倦怠程度的水平是最高的；在教师的职业倦怠、情绪衰竭维度、低成就感维度、离职倾向上，4-9年教龄教师的平均值都是最高的，也就是说，4-9年教龄教师有较高程度的职业倦怠和离职倾向。

第三，本研究发现，教师职业倦怠与离职倾向呈显著的正相关关系。因此，在学校的教师队伍建设工作中，可以通过降低教师职业倦怠的程度，从而降低教师的离职倾向，以建立稳定的高质量教师队伍。

讨论

本文的研究发现，珠江学院教师职业倦怠与离职倾向之间有显著的相关性，教师的情绪衰竭相对比较的严重。为了降低教师的离职倾向，减少教师离职行为的发生，必须要降低教师的职业倦怠程度。基于本文的研究结果，开展以下讨论：

第一，营造良好育人氛围。本研究的结果显示，珠江学院教师的职业倦怠与离职倾向程度处于中等的水平，教师在去人性化维度上的得分相对较低，表明教师在学校拥有较好的人际关系。珠江学院是一所民办高校，与公办高校相比，在教师队伍建设方面，存在着一些天然的缺陷，比如没有编制、社保不完善、职称申报困难、社会美誉度较低等。因而，学校更应该为教师提供自由、积极、乐观、公平的组织工作氛围，鼓励教师与学校各类人员积极沟通、协作，努力满足教师尊重与自我实现的需要，以持续降低教师的职业倦怠与离职倾向程度。

第二，关注教师的职业发展。根据本研究的发现，珠江学院教师职业倦怠与离职倾向的程度都会随着时间的增长而不断发展，到达一定阶段后，又会缓慢下降，比如，处于31-40岁年龄的教师，职业倦怠程度的水平是最高的；4-9年教龄教师有较高程度的职业倦怠和离职倾向。因此，学校应该重点关注教师入职后的工作压力和职业发展，特别是对于上述年龄段和教龄段的教师，鼓励他们提出工作的意见和建议，将教师个人的需求和学校的发展结合起来，增强教师的自我认可，促进教师的职业发展，以有效预防教师职业倦怠和离职倾向的产生。

第三，在今后的研究中，可以在更大的范围进行问卷数据的收集，以提高研究结果的有效性和可靠性。比如，可以选取不同地区的几所民办高校的教师，或者是选取几所相似办学

层次的公办与民办高校的教师，进行调查问卷的设计以及问卷数据的对比分析，可以更全面、准确的了解高校教师的职业倦怠与离职倾向问题。

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新课改下合作学习对学困生的转化

THE TRANSFORMATION OF COOPERATIVE LEARNING TO STUDENTS WITH LEARNING DIFFICULTIES ENDER THE NEW CURRICULUM REFORM

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摘要: 近年来, 中国在施行新课标的同时, 基础教育课程改革也在大力倡导 “自主、合作、探究” 的学习方式的转变, 它突破了教师与学生原有的学习方式, 合作学习的方式备受推崇。在合作学习的课堂中, 学校中的学困生会逐渐转变学习方式并得到全面的发展。在教学实践过程中, 通过开展小组合作学习活动, 拉近教师与学困生的距离, 让学困生找到学习的乐趣, 从而转变学困生的学习态度。

关键词: 新课改, 合作学习, 学困生。

Abstract: In recent years, while China implements the new curriculum standards, the curriculum reform of basic education is also vigorously advocating the transformation of the learning mode of "autonomy, cooperation and inquiry", which breaks through the original learning mode of teachers and students, and the way of cooperative learning is highly respected. In the classroom of cooperative learning, the students with learning difficulties in the school will gradually change their learning methods and get comprehensive development. In the process of teaching practice, through group cooperative learning activities, shorten the distance between teachers and students with learning difficulties, so that students with learning difficulties can find the fun of learning, so as to change the learning attitude of students with learning difficulties.

Keywords: New Curriculum Reform, Cooperative Learning, Students with Learning Difficulties

引言

随着新课标的推进, 固有课堂模式的改革成为当今教育关注点。在课堂教学中, 教师

除了关注所教授的知识外，更多的开始注重学生个人能力的提高。那些因自身素质差异性而成为学困生的学生，更需要教师的关注。合作学习则为这一改变提供了良好的实践渠道，教师基于合作学习的平台，为学生搭建互助学习环境来带动学困生学习。本文主要针对课堂实践教学中心合作学习对学困生的转化展开分析，希望通过阐述能为教师的教学实践带来一些启示。

1 新课改下合作学习的概念界定及理论基础

1.1 合作学习的概念

在我国，目前对于合作学习尚无统一的确切的概念，但学者们对合作学习的理解有一个共同的认定，即合作学习含义至少应涵盖以下几点：合作学习是一种以小组活动为主体的教学活动；是同伴之间的互助合作活动；是以目标为导向的活动；以及各小组合作学习目标的实现。目前，对于合作学习的定义采用最多的是学者王坦的理论，王坦(2007)认为“合作学习从根本上来说是一系列的教学策略促使学生在各种质量的群体中共同努力，实现相同的学习目标，并将整个小组中的积分总数作为奖励。”因此，本研究将合作学习定义为以建设小组为基本学习形式，将小组合作交流作为主要教学形式，在小组共同目标的引领下，学生形成一定的合作模式，设立合作学习评估制度，评价小组合作成绩，通过小组间的人际交流，促进学生合作学习知识、培养良好的心理素质及发展自身能力的教学策略。

1.2 合作学习的理论基础

合作学习与上世纪60年代走入大众视野，并在70年代后，逐步成为了一种具有实质性意义的教学理论。美国琼斯霍普金斯大学的罗伯特·斯莱文提出了学生小组学习的概念，并指出其主要特点是使小组奖励、个人责任和成功概率均衡。之后将此概念命名为合作学习。学者斯莱文(1990)提出：通过合作学习的教学方法，有利于教师因材施教，教师的精力可以更多的放在学困生身上。同时，合作学习也可以培养学生的合作意识和团队精神，通过激发小组间的竞争意识促进团队合作行为的行程，提升小组合作能力和班级凝聚力。本世纪对于合作学习的研究偏向于合作共同体的建设。日本佐藤学的研究注重合作学习时间过程的结果反思，在多元化的环境中，基于学生的实际经验讨论解决问题的方式。在合作学习中，关注学生间的相处模式，学生间是否能够顺利沟通，在哪个教学环节可设计学生小组讨论，学生能否产生认知跳跃以及在谈讨论过程中是否能转变学生的学习态度、学习方式。在合作学习理论的不断改革发展过程中，研究者都十分认同学生主体性功能的发挥。在中国新课程改革的理论中也提及，课堂教学应从以教育者为中心转变为以学习者为中心(胡继祯, 2014)。这一理念的提出，让教育者意识到课堂的合作学习应建立在了解学生实际学习情况的基础上展开并且在合作学习过程中应实时了解学生学习程度。

1.3 合作学习的要素

1.3.1 积极互动

积极互动要求学生在合作学习过程中，不仅关注自身对知识的理解，还要与小组成员交流彼此意见，反馈彼此的学习结果。通过了解群体动力学理论可知，群体互动过程中产生的内部动力能够改变小组成员间相互依赖的关系。成员间互相影响，像连锁反应般一个成员的状态变化会引起其他成员的改变。不同成员间的个人情况不同，交流方式、思维结构和能力水平存在差异性，在合作学习中，成员互相沟通交流想法，互相学习，感受不同思维方式，形成新的观念认识，使成员共同成长，万晨学习任（Johnson, D. W., Johnson, R. T. & Holubec, E. J, 1993）。“互动”是合作学习的主要思想，学生们积极地相互依赖，为了共同的目标，他们一起努力，只有集体成功，个人才能成功。因此，群体合作是一种成员之间相互影响、相互依赖的积极活动。

1.3.2 面对面的促进性相互作用

合作学习使同一小组的同学可以开展面对面交流活动，互相促进学习，帮助小组成员理解知识并完成作业。在面对面的交流学习过程中，汲取他人思想观念，完善自身知识体系，构建知识框架，滤清学习思路。建构主义学习理论强调教师只是建构学习意义的“帮助者”，并非一味的将知识灌输给学生（吴庆麟, 2003）。教师应关注课堂动态，合理设置课堂情境，注意合作学习过程中，学生之间的沟通交流，在课堂中营造良好的合作氛围，促进小组间的互助作用。

1.3.3 个人和小组责任

在合作学习中，每位小组成员应分工明确，每个学生都要有自己的学习任务，能够理解与掌握所安排的任务，并为自己的任务完成情况承担责任。个人分工意味着每个成员可以成功地完成不同的任务。小组奖励是指团队中的每个人在完成任务后都可以得到奖励。个人责任的产生会促使小组内的每位同学各司其职，小组成员努力完成个人任务的同时，还会关注组内其他成员的任务进展，帮助小组开展相互教育。团队的成功取决于每位成员的个人学习，这可以确保小组中的每个成员在没有其他人帮助的情况下为考试或参与其他形式的评估活动做好充分准备（Kenneth, A. K, 2000）。当一个小组有了统一的合作目标时，小组责任感会激励成员完成任务，不耍小组后腿，无形之中强化个人责任，促使成员进步。

2 合作学习在课堂教学中的应用

2.1 合理安排学困生的分组

在合作学习的课堂中，分组不应该是一成不变的，应当根据学习情况合理调整。当某

一小组的合作学习效果一直得不到提升，就会导致该小组的成员产生倦怠情绪，打消他们的学习积极性(马兰, 盛群力, 2013)。学困生得不到成员及组织的认可，感受不到付出努力后学习效果的正反馈，反而会增加自身的厌学感。

因此，在适当的时间周期内，调整合作学习的分组情况，既能使学生多熟悉班级同学，也能更好的促进班级整体的团结。对于学困生而言，在合理调整分组的过程中，逐步感受新环境的变化，衰减自身对新事物的抵触情绪，在融入的过程中，培养对小组成员及整体的信赖感，从而提升学困生对学习的主动(张冬梅, 2004)。合理安排学困生是保证小组合作学习顺利进行的开始。想要更好地关注到学困生，必须要从合理分组开始。

2.2 组长成为学困生的领跑者

2.2.1 组长带领学困生动起来

在合作学习中设立小组组长，其实是课堂责任的一种分配。小组组长作为教师与小组同学的中间人，将教师设定的学习任务进行上传下达，在任务的传递过程中，即能弱化学生对学习任务的抵触情绪，又能衰减学生面对困难的退缩想法。

作为小组组长，职位所带来的责任感会促使小组组长关注组内的每位成员。在合作学习过程中，小组组长跟进小组成员的学习进度，面对难题时，老师会让小组长先来讲讲思路，小组内的其他成员就会解决心中的疑惑。同样面对学习有困难的成员，自傲组组长也会身体力行的引导。这样，在组组长的带领下，学困生会额外收到关照，能够感受到在组组长的帮助下，学习思路逐渐清晰，学习困难得以解决，慢慢走上学习的正轨。

2.2.2 给学困生发声的机会

在正常的课堂教学中，教师提出学习的任务后，小组内的合作交流便开始了。组长会根据学习任务安排组内成员依次发言。在这个过程中，由于组内成员都是学生身份，所以不会有身份阶级带来的局促感，每位成员都可以畅所欲言；并且由于是小组内的合作学习，交流范围会相对缩小，在人数上不会有群体带来的压迫感。在这种相对轻松的环境下，学困生更容易有机会去表达(钱在森, 1996)。通过小组组长牵头，组内每位成员都有平等的机会去交流，当学困生面临困难不知如何去表达时，也可组内成员帮忙或换为相对简单的问题去作答。在这样一个平等轻松的交流环境中，帮助学困生逐渐树立信心，敢于表达、愿意去表达。

3. 有序的合作课堂为学困生助力

3.1 自主学习空间让学困生学会思考

当教师分配好各学习小组的学习任务后，基于学生充分的独立思考时间，让学生对学习内容形成自身的见解。对与学困生，他们在日常的学习过程中多为填鸭式教学，教师教授什

么知识，学困生被动接受什么知识，缺乏独立思考与自我理解。最终导致各方面比其他学生落后，逐渐失去学习兴趣，机械式的上课、听课。因此，在课堂教学中要留出充足的时间交给学生自由思考，对新知识的疑问、理解程度或新、旧知识之间的联系等，让学困生逐渐有自己的想法(Greifenhagen, C, 2012)。这样，在合作学习中，学困生也不会因为没有想法而一味的被动接受，不敢开口交流。作为教师，在提出课堂学习目标后，要随时掌握学生的学习动态，了解学情，特别关注学困生的学习状况，适当对学困生进行针对性指导。如果这时不对学困生进行引导，在接下来的学习过程中他们依旧无所适从，不愿说或是听不懂。根据学困生情况不懂可开展逐一指导或集中这部分学生做统一的教授，让学困生先理解学习材料内容，找到学习重点，针对重点进行思考，经过一段时间的训练后，使学困生逐渐培养理解内容、思考内容的学习习惯。

3.2 “切块拼接法” 巩固学困生自信

“切块拼接法”是1978年美国合作学习专业Elliot Aronson及其同事设计成型的，该方法是将学生六人为一组，组建成基本组来学习事先划分为模块的学习材料，基本组内的每位成员各自负责材料的某个模块。接着由各小组中负责相同学习内容的成员合并为一组，共同研究该学习材料直至完全掌握。在正常的课堂教学中，学生通过合作学习后会发现小组间也会存在竞争，并且竞争程度并不轻松。切块拼接法是一种成功的相互协作学习方式，把将要学习的任务分配到小组成员每个人的身上，让每个成员最大的发挥他们的职责。这个时候适当开展“切块拼接法”进行学习，将负责相同学习内容的同学组织起来，形成不同小组间的交互学习，给学生提供深入学习、相互交流表达、讲授以及倾听的机会，大大的改善了竞争的局面。切块拼接法使得学生最大程度与其他学生相互交互，交互的程度明显提高。

3.3 评价机制激励学困生变革

对于学困生的评价要做到合理、公平及多方位。评价机制的设立应多维度进行，仅关注课堂问题回答情况是不行的。教师在课堂教学中要为学困生创造机会及时表扬和发现学困生的点滴进步，引导学困生在合作的过程中更好地合作、交流、配合、完成合作任务，促进学生在思维提升、语言表达、合作交流、同伴互助等方面的发展。遇到困难的时候先给予情感的支持再找到解决的方法，让学生知道从哪个方面去做，从何处入手去改才能得到更好的锻炼和发展。作为教师，在教学实践中对学生的学习行为和学习结果都要进行一定的激励评价。在不同的历史时期和不同的社会文化条件下，人们的评价理念和评价方法是不一样的。如何有效的对学生进行评价，这有待我们在日后的实践中探索、研究。但目前我们所知的评价不是为了给学生定性，分成三六九等，而是要充分发挥评价的激励作用，促进学生的全面和谐健康的发展。

4 合作学习对学困生的转化

4.1 合作学习对学困生的转化原则

4.1.1 组内成员相互依赖促进学困生长

合作学习小组的建立，使小组成员需要合作面对班级内的其他小组，这时合作小组间的竞争关系会促进各小组内形成成员相互依赖，积极面对小组迎接的挑战；当学习小组需要完成某项学习任务时，成员需要将各自的资源联合在一起，形成组内的资源相互依赖；在奖惩机制下，学生会意识到自身获得的奖励与合作小组的整体表现息息相关，而小组的表现又与每位成员的努力是分不开的，那么组内就会形成更积极的奖惩相互依赖。

因此，当合作小组的成员间产生相互依赖时，组内信任感、荣誉感都会得到相应提升。学困生在这样的小组分为内学习，不仅能增加学习兴趣，还会为了小组共同的小组目标前进。实现学习心态的转变。

4.1.2 教师为学困生搭建交流桥梁

合作式学习的第一步就是教，教会组内每位成员学习方法。在小组合作讨论时，教师要深入到各小组中，尤其是要关注学困生思考、发言，引导、帮助学困生理解和掌握新知识，倾听学困生对知识的理解和想法。在小组合作学习的过程中给学生创造机会，让每位学生都能有发言的机会，而不仅是几位学生在交流。

作为合作学习的第一步，需要教会学生在合作学习中要表达什么内容。很多学困生的产生，并非是他们自身学不会知识，而是不会表达导致的没机会学。作为教师，在学生合作学习过程中，要先引导学困生开口表达，教会学生如何诉说自身疑问点，其次为学困生创造发声机会。使每位学生都能有发言的机会，而不仅是几位学生在交流(Slavin. R. E, 1990)。课堂上百分之九十的纪律问题，是因为学生说的话别人没有机会倾听，或者是别人不愿意倾听引起的，好的秩序的形成是因为其他人愿意听你说话，并回应说：“你说的真不错。”“你说的是正确的。”当出现不同的观点或者意见时，别人能够礼貌提出：“我还有不同的理解和想法。”在此基础上还能愿意说：“你的主意真不错，我会按照你说的改进。”“你说的挺有道理。”在这样的课堂上，每个人心中怀有谦虚之意，学困生在这样的融洽氛围内和其他成员的关系会越来越融洽。

当班级学生意识到合作技能的必要性后，在小组内交流讨论时会更加有礼貌，能够仔细倾听其他成员发言，能够提出新的观点，尊重他人，对于不同的意见会礼貌回应，学困生在这样的合作氛围中学习会变得越来越轻松，极大的改善了和原来组内成员剑拔弩张的局面，形成了一种和谐的人际关系。

4.1.3 明确个人责任激发学困生自主学习

合作学习之前，明确好小组内每位成员的任务，组内成员可以有记录员、消音员、时间控制员等等负责人，并明确每种人员的责任。组长根据组内成员的特点，安排好并告知每人应该做的事情。教师在课下对每位分管人员进行课下指导，上课时不断训练，形成技能。这样每位成员都有事干，增加每位成员的责任感。特别对于学困生来说，感到了被需要。

学生们在一起合作的之前，学困生必须要有个人责任的意思。学困生需要明确表达，他是会怎么对本组做出贡献的以及他能怎么样去帮助别人的。还得明确如果没有做好准备，不提前思考，没有设定个人的进步目标会产生的负面影响，需要接受相应的惩罚，这就是所说的承担个人的责任。课上老师提出的问题需要每位成员的主动思考：我需要做什么才能使自己成为本组的贡献者？我需要怎么样做才能保证准备工作及时完成？如果是合作完成每一项研究，对于这些研究的某一个特定的部分每位成员都要负责完成。真正合作的时候，每一位小组内的成员还得思考自己参与的内容会对本次的讨论产生怎样的学术贡献？运用哪种技能才能让本小组的合作更加高效？我用什么样的方法才能从其他成员身上学习到更多？不管是优等生和学困生，每位成员都要明确个人责任，责任确定后每位成员都能积极的贡献自己的能量和最合适的人际交往技巧，这样的学习小组会成为一个高水平的小组。

要使合作学习的效果更加明显，小组的目标和个人的责任必须要紧密相连。学生在一起为了解决同一个问题或者是完成同一份作业单，在所用的方法中学优生很少能够拿出自己的时间去教授学困生或者是询问他们的观点。当他们之间的任务是做某事而不是去学某些知识的话，学困生的活动就是在给他们造成干扰。当学习目标确定为学会某个知识的话，学优生一定会付出自己最大的努力去帮助他们，在这个过程中施教者和受教者可以说是得到最大发展的人。小组目标的确立会直接决定着这种解释会不会主动进行。在合作学习的过程中优等生和学困生都得到了相同的锻炼。

4.1.4 评价机制是转化学困生的保证

合作交流前、合作交流时、合作交流后对于学生的评价一定要及时还要多样，不能仅仅局限在评价学习结果，还要包括表达、倾听、合作、创新等等合作过程中的内容，及时肯定，进步较大的学困生进行表扬。其次评价的主体要多元化，除了教师的评价，同学间的评价和学困生的自我评价同样重要，全方位的评价让学困生能够更加客观地评价自己，发现优势和不足，激发学困生积极向上的动力。

正确评价对学困生来说有了明确的方向同时能提升他的积极性。要尊重学生不同个体的差异，充分肯定学困生参与合作学习的精神，珍惜小组成员的创新思想。只有这样，才能给学困生正确的指导，提高他们不断学习合作学习的能力，保持他们对合作学习的热情不断提高，合作学习的效果越来越明显。

综上所述，合作学习的实践对于学困生的转化效果比较明显，这几年来，国内很多学者对合作学习如何转化学困生做了相关研究，这些研究表明合作学习能够促进学困生的全面发展，但研究的内容短小，不够深入。因此，本研究借鉴前人的成功经验，以J市B小学某班的语文学困生为研究对象开展研究，发现问题，寻找原因，结合自身实践探索出一套比较完整的适合学困生发展的模式，能真正帮助学困生进步，同时给一线教师一些启迪。

4.2 合作学习对学困生的转化效果

4.2.1 学困生乐意自由表达

合作学习的方式激发了学困生对学习的热情，在更和谐的氛围中学习的学生会更加自信。它不仅对课堂教授的知识更有用，而且对学生内部驱动力及该合作小组的贡献更大，使学困生改变其原始学习方法并变得更加主动。

4.2.2 “坐庄法”合作策略让学困生获得友谊

小组讨论过程中，每个组内的成员都要对刚才的讨论进行整理、总结每个成员的意见，争取在集体讨论环节能够表现优秀。

集体讨论时每个组选出一个代表来交流小组内讨论的意见，合作学习刚开始进行时，小组选代表的时候都是选取组内最优秀的学生，长期以往就容易形成一人独言，其他学生就觉得这件事情与他们没有关系了，就会无所事事，不认真听讲。可以采用老师选取代表的方式，在讨论之前就告诉学生，一会起来发言的学生不一定是本组的哪一位成员，每个成员都要做好准备，每人都要会说，这种情况我大多数都会采用“坐庄法”这样的一种合作学习策略，会极大的调动学困生的积极性和主动性，也能在整个小组交流的过程中促进组长的合作、交流、沟通能力。

4.2.3 被组长接纳的学困生

每组的学困生是最令人头疼的学生，它是学习力最弱，表达能力最差，各个方面都不够优秀的孩子，有的稍强一些还可以给组内加分，有一些弱一些不仅不能加分还会减分。这些组的组长经常会来找研究者要求换组员，其实他们的想法我完全可以理解，这时我采用了不同加分机制，稍微弱一些的在加分时稍多一些，可以让组长更有动力。

4.2.4 学困生积极主动进取

学困生的特点十分明显，越到高年级对于自己的要求可能就越低，有时可能有进取心可是学习的内容不会的太多了，慢慢地就会放弃自己。参与到合作的课堂中，学困生由开始的不会说、不会听，开始学习掌握合作的方法和技巧，也能从同伴的身上汲取到力量，在这样的一个过程中，他们在弥补原来学习的缺陷，也会开始提出自己的想法和抛出问题。由原来的游离于课堂之外，开始参与到课堂中去，为什么会有学生不听讲，只是因为他没有事情可干。所

有的学生参与到目标任务驱使下的合作交流中，思维的火花就会有碰撞，学生的积极性和主动性就会被调动起来，学困生的发言率就大大提高了。

“人人为我，我为人人”在合作中强化了学生之间的合作互助，在合作情境中，学生之间是相互支持信赖的。小组内学生掌握了良好的合作技能，小组成员具有相互的信任感，他们之间能够进行有效的沟通，学会用共同的活动方式去完成任务。在合作学习的过程中，优等生快速的掌握了合作的技能能够有效的帮助学困生，学困生因为小组需要捆绑评价，他们也会尽其所能大胆表现，有时也会将学习之外的优势教给优等生形成一种互补，这样对别人提供了帮助同时也满足了自己影响别人的需要。

4.2.5 小组评价使学困生学会反思

合理运用小组评价让学困生改变了课堂上的表现，他们活跃度大大提高，参与面加大。在评价过程中也出现过一些问题，比如有学生质疑加分的问题，因此在课堂上的积极性减弱，研究者时刻提醒他们课上多学习他人身上的长处，不要仅仅关注缺点，多去赞美他人，而不是总挑毛病。也不是每次提问都会是你回答，遵守课堂纪律，叫到你认真回答叫不到你仔细听别人说这是礼貌。

组间之间的评价是必不可少的，这样的评价让本组内的成员可以和其他组的成员进行横向比较，发现自身问题、其他组的优秀表现，更加激励本组成员的进步。班级积分表的使用，把每个小组一周内的积分都呈现出来，一目了然。

结语

现在的课堂老师习惯于依赖于以往的教学经验去上课，特别不愿意改变传统的教学模式，总认为合作的课堂打破了舒适区，不想去尝试，可是在这样的学习环境中学生越来越不会学习，老师在讲台上侃侃而谈，学生坐在课桌前昏昏欲睡，只有那几个思维敏捷的学生去回答老师的问题，他们回答问题还不一定是因为本身对知识的热爱。看到这样的课堂，这样的学习氛围的确触动了我的内心，学习真的是需要变革了，只有不断学习新的教育方法和教育理念，才能更好地促进学生的发展，只有在对合作式教学方式不断地深入学习、研究过程中，才能逐渐地改变教育中出现的各种问题。

合作式教学只是实现教育理想的一种方式，不是对于一种模式的照搬，合作式学习的理论一定要和自身的实践相结合，因为教育本身就是一个不断批判、反思、重新建构的过程。通过合作式学习，愿更多的学生都能全方面发展，更多的老师能够变得越来越轻松，在课堂上成为真正的引导者。

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A STUDY ON THE RELATIONSHIP BETWEEN LEARNING SELF-EFFICACY AND LEARNING ENGAGEMENT OF COLLEGE STUDENTS IN ONLINE LEARNING ENVIRONMENT IN HENAN PROVINCE, CHINA

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Abstract: This study aimed to explore the current of learning self-efficacy and engagement of college students in an online learning environment and the correlation between the two, differences in online learning self-efficacy of college students, and learning engagement under different background variables.

The research results showed that undergraduate students in Henan Province have relatively good perceptions of online learning self-efficacy and learning engagement, and their online learning self-efficacy and online learning engagement were at the upper-middle level. Regarding variable demographic characteristics, college students' online learning self-efficacy and engagement with different demographic variables generally reached statistically significant differences. Still, there was no significant difference in online learning self-efficacy regarding student cadres' experiences or research intentions. There was no significant difference between online learning engagement in grade and student cadre. A positive correlation exists between students' online learning self-efficacy and online learning engagement. There was a significant positive impact between all dimensions. Online learning self-efficacy can have a positive predictive effect on online learning engagement.

Keywords: College Student, Online Learning Self-Efficacy, Online Learning Engagement

Introduction

Research Background

The large-scale online teaching brought about by the COVID-19 epidemic accelerated the process of integrating higher education with information technology, which had a profound impact on higher education. And while the rapid development of online learning had provided many conveniences for learners also inevitably revealed some disadvantages. Compared to traditional classroom teaching, online education was much less binding. Therefore, it was difficult for some learners to invest in online learning due to poor self-awareness and ability to learn independently, making the quality of online

learning far lower than offline learning. Therefore, how to enhance the online learning quality and effectiveness of students had received unprecedented attention from educators in the new era (Li & Li, 2021).

In summary, the COVID-19 pandemic had dramatically accelerated the deep integration of the Internet and education, and studying online learning for college students was of great practical significance. In line with the development of the times, starting from the actual situation of colleges in Henan Province, China. This study studied the mechanism by which online learning self-efficacy of college students affected their online learning engagement, explored some new methods and methods that could be used in online classroom teaching in colleges in the new era, and puts forward opinions and suggestions on how to increase the level of college students' online learning engagement.

Research Problems

- (1) What was the current college students' learning self-efficacy in the online learning environment?
- (2) What was the current college students' learning engagement in the online learning environment?
- (3) What was the difference in the online learning self-efficacy of college students based on different background variables?
- (4) What was the difference in the college students' online learning engagement based on different background variables?
- (5) What was the relationship between the college students' learning self-efficacy and the online learning engagement environment?

Objective of the Study

- (1) To understand the current online learning self-efficacy of college students.
- (2) To understand the current online learning engagement of college students in the online learning environment.
- (3) To analyze the significant differences between different background variables on online learning self-efficacy of college students.
- (4) To analyze the significant differences between different background variables in college students' online learning engagement.
- (5) To determine the relationship between learning self-efficacy and learning engagement of college students in an online learning environment.

Scope of the Study

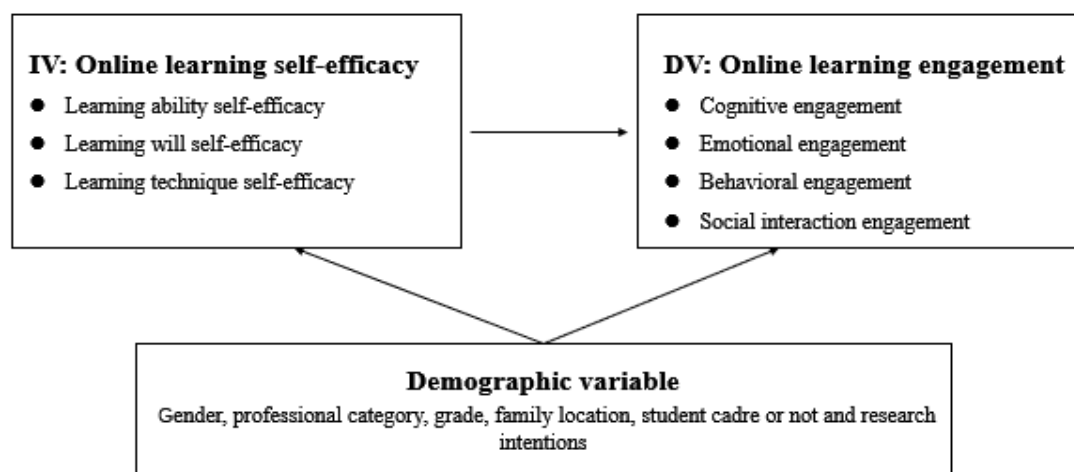
The research subjects of this study were undergraduate college students in Henan Province, China. There were 57 undergraduate universities in Henan Province, China. The study used a convenient sampling method to conduct a scale survey of undergraduate students enrolled in the top 10

universities in Henan Province, China, according to the “2022 Soft Science Chinese University Rankings” published by the higher education professional evaluation agency Soft Science. The scale was prepared in the form of an electronic questionnaire and distributed via WeChat in the form of a link to a website. A total of 614 questionnaires were distributed. Using a convenient sampling method, this study surveyed undergraduate college students from the top 10 universities in Henan Province, China. A WeChat link distributed an online questionnaire to 614 college students from 10 colleges from March to May 2023. After the screening, 501 copies of the valid scale were collected, with a questionnaire efficiency rate of 81.6%.

Research Significance

This study aligned with the current trend of deep integration and development of the Internet and higher education. The COVID-19 outbreak at the beginning of 2020 blocked traditional offline teaching methods. Major schools, schools, and teaching institutions have replaced traditional offline classrooms by using the Internet for online teaching, greatly accelerating the deep integration of the Internet with education and teaching (Fan, 2020). Therefore, in an environment where online education and teaching were being carried out on a large scale around the world, how enhancing the effectiveness of online learning for college students so that college students can achieve the same learning results as offline learning had become the focus of the current education community's attention.

Theoretical Framework



IV: Online Learning self-efficacy were an independent variable, including 3 dimensions: learning ability self-efficacy, learning will self-efficacy, and learning technique self-efficacy. This scale adopted the Self-efficacy Scale of Online Learning for College Students compiled by Zhou & Lou (2021).

DV: Online Learning Engagement was a dependent variable, including 4 dimensions: cognitive engagement, emotional engagement, behavioral engagement, and social engagement. This scale used the “College Students' Online Learning Engagement Measurement Scale” compiled by Li & Wang

(2022).

Hypotheses

Hypothesis 1: There were significant differences in online learning self-efficacy among college students with different background variables.

Hypothesis 2: There were significant differences in online learning engagement among college students with different background variables.

Hypothesis 3: The college students' online learning self-efficacy can predict learning engagement in the online learning environment.

Literatures Review

Online learning engagement was an important indicator for measuring the quality of online education. It was also an important factor in improving the effectiveness and performance of online learning (Kuang et al., 2019), and a key factor affecting students' success. Therefore, increasing students' online learning engagement was currently a concern in the online education academic community (Yan, 2021).

Based on the theory of contextualization of knowledge, Zhao & Yao. (2023) proposed strategies such as disclosure of learning results, early public feedback, and peer evaluation of learning. Starting from concrete cognitive theory, Guo et al. (2021) proposed three strategies for cultivating the concept of online learning, using big data intelligence to carry out personalized learning, and using artificial intelligence technology to carry out contextual learning. Meanwhile, Xu & Jin (2022) designed strategies for teaching directions, such as curriculum design, resource classification, and learning feedback. Additionally, Zhu & Yang (2021) proposed strategies such as group cooperative learning, full-process multi-dimensional evaluation, public work feedback, and empathy development.

To increase online learners' learning engagement, the study must focus on cultivating and shaping proactive personality qualities while enhancing learners' motivation to learn independently (Li & Yu., 2015). At the same time, Wang (2021) discovered through research that the five factors of college students' learning engagement have different levels of influence on learning gain. In their research, Xu et al. (2022) proposed four strategies for increasing online learning engagement: establishing a learning environment where fiction and reality coexist, building an intelligent learning community, strengthening teachers' competency in information-based teaching, and enhancing students' self-directed learning ability.

The review of current academic research results in the previous article showed that researchers at home and abroad hold quite different views on the relationship between online learning self-efficacy and engagement. Research on the correlation between learners' sense of learning self-efficacy and learning online learning engagement environments was weak. There were few research results, mainly

focusing on conceptual definition, measurement, and influencing factors. Learning about self-efficacy could be thought of as a cognitive and emotional experience, and since two of the dimensions of learning engagement were emotion and cognition, it was very meaningful to study the connection between the two. Therefore, where online learning was booming in society, studying the current state of learners' learning self-efficacy and engagement in the online learning environment and finding corresponding strategies had great practical application value. Therefore, this study selected undergraduate students as empirical research subjects, and selected the correlation between their online learning self-efficacy and online learning engagement as the research content. The aim was to clarify the related effects of the two, analyze the influence effects of the two from a statistical perspective, and then proposed good policies to improve the learning quality of college students effectively.

Research Methodology

This scale adopted the Self-efficacy Scale of Online Learning for College Students compiled by Zhou & Lou (2021). The scale was divided into 3 dimensions: learning ability self-efficacy, learning will self-efficacy, and learning technique self-efficacy.

This scale used the "College Students' Online Learning Engagement Measurement Scale" compiled by Li & Wang (2022). The scale was divided into 4 dimensions, with a total of 19 questions: cognitive engagement, emotional engagement, behavioral engagement, and social engagement.

Depending on the data's content, the chosen method was as follows:

(1) Using descriptive statistics to analyze the online learning self-efficacy of college students and the overall level and current status of college students' online learning engagement in various dimensions. (2) Using independent sample t-test and one-way ANOVA to conduct difference analysis to measure online learning self-efficacy and online learning engagement of college students with different background variables (gender, professional category, grade, family location, student cadre or not, research intention). (3) Through the Pearson correlation analysis, the study can understand the correlation between the various dimensions of online learning self-efficacy of college students, the various dimensions of college students' online learning engagement, and the overall correlation between the learning self-efficacy and learning engagement of college students. (4) Analysis of regression analysis was used to investigate the impact of online learning self-efficacy of college students on online learning engagement, and the specific form of the correlation between the two.

Findings and Conclusions

The scope of distribution of this research questionnaire was for undergraduate college students from the top 10 universities in Henan Province, China. A total of 501 valid questionnaires were collected.

As shown in Table 1, the average self-efficacy score for online learning was 3.75, which was above the middle level. In all dimensions, the learning will self-efficacy scored the highest ($M=3.82$), followed by learning ability self-efficacy ($M=3.75$), and finally, self-efficacy in learning technology ($M=3.70$). It showed that the overall level of online learning self-efficacy of students was high in Henan Province in China.

Table 1: Descriptive Statistical of Online Learning Self-Efficacy

	Min	Max	M	SD
Learning ability self-efficacy	1.14	5.00	3.75	0.82
Learning will self-efficacy	1.14	5.00	3.82	0.75
Learning technique self-efficacy	1.00	5.00	3.70	0.82
Online learning self-efficacy	1.65	4.96	3.75	0.65

As shown in Table 2, the average total score of online learning engagement was at the upper-middle level. Across all dimensions, emotional engagement scored the highest ($M=3.77$), followed by cognitive engagement ($M=3.65$) and social engagement ($M=3.60$), and finally, behavioral engagement ($M=3.57$). It showed that the overall level of online learning engagement of students was high in Henan Province in China.

Table 2: Descriptive Statistics of Online Learning Engagement

	Min	Max	M	SD
Cognitive engagement	1.00	5.00	3.65	0.79
Emotional engagement	1.00	5.00	3.77	0.81
Behavioral engagement	1.00	5.00	3.57	0.82
Social engagement	1.00	5.00	3.60	0.85
Online learning engagement	1.53	5.00	3.65	0.63

Table 3: Summary of T-Test of Online Learning Self-Efficacy of Students by Different Genders

	Gender	N	M	SD	T	P
Learning ability self-efficacy	Female	214	3.45	0.68	-7.637***	0.000
	Male	287	3.97	0.84		
Learning will self-efficacy	Female	214	3.58	0.68	-6.153***	0.000
	Male	287	3.99	0.76		
Learning technique self-efficacy	Female	214	3.69	0.69	-0.263	0.793
	Male	287	3.70	0.90		
Online learning self-efficacy	Female	214	3.58	0.59	-5.006***	0.000
	Male	287	3.87	0.67		

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

As shown in Table 3, there were significant gender differences in the online learning self-efficacy of students, learning ability self-efficacy, and dimensions of the learning will self-efficacy ($P < 0.001$), and male scores were significantly higher than female. However, there was no significant

gender difference in the self-efficacy dimension of learning technology. It showed that the degree of online learning self-efficacy of college students was very obvious in terms of gender. Male online learning self-efficacy was significantly higher than that of female students, but the technical level of online learning was the same for males and females.

As shown in Table 4, there were significant gender differences in online learning engagement and dimensions ($P < 0.01$). Among them, males (online learning engagement $M = 3.78$, cognitive engagement $M = 3.80$, emotional engagement $M = 3.91$, behavioral engagement $M = 3.68$, social engagement $M = 3.70$) scored significantly higher than females. It showed gender difference in online learning engagement. Males were more in online learning engagement than females.

Table 4: Summary of T-Test Online Learning Engagement for Students by Different Genders

	Gender	N	M	SD	T	P
Cognitive engagement	Female	214	3.46	0.72	-4.934***	0.000
	Male	287	3.80	0.80		
Emotional engagement	Female	214	3.58	0.74	-4.608***	0.000
	Male	287	3.91	0.83		
Behavioral engagement	Female	214	3.41	0.77	-3.629***	0.000
	Male	287	3.68	0.85		
Social engagement	Female	214	3.45	0.78	-3.353**	0.001
	Male	287	3.70	0.89		
Online learning engagement	Female	214	3.48	0.62	-5.556***	0.000
	Male	287	3.78	0.60		

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 5 showed a significant positive correlation between online learning self-efficacy and learning engagement of students ($r = 0.744$, $P < 0.001$). Among them, the learning ability of online learning self-efficacy had the highest degree of correlation with the online self-efficacy and learning engagement ($r = 0.661$), while the emotional engagement of online learning engagement correlates with the highest degree of correlation with online learning engagement ($r = 0.661$).

Table 5: Matrix Analysis of Online Learning Self-Efficacy and Online Learning Engagement

	Cognitive Engagement	Emotional Engagement	Behavioral Engagement	Social Engagement	Online Learning Engagement
Learning Ability Self-Efficacy	0.512***	0.542***	0.503***	0.466***	0.661***
Learning Will Self-Efficacy	0.515***	0.518***	0.432***	0.392***	0.613***
Learning Technique Self-Efficacy	0.444***	0.455***	0.416***	0.412***	0.565***
Online Learning Self-Efficacy	0.593***	0.611***	0.547***	0.517***	0.744***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

The regression analysis of online learning self-efficacy and online learning engagement showed that $R=0.744$, $R^2=0.553$, $\text{Adj.}R^2=0.552$, $F=617.266$, $P=0.000$, significance less than 0.05, reaching a significant level. The model fitting effect was good, and the regression results were significantly effective. The standard regression coefficient for self-efficacy in independent online learning was 0.744, and the significance was less than 0.05, reaching a significant level, indicating that online learning self-efficacy can positively predict the overall average of online learning engagement.

Discussion

(1) To discuss the basic of learning self-efficacy and learning engagement of college students in an online learning environment. It showed that learning platforms were updated and iterated too fast in the information age, and there were still quite a few college students who were not proficient enough in mastering learning techniques. Students could increase their study time, made a reasonable plan before beginning their studies, and strengthen self-management.

(2) To discuss the differences in students' online learning self-efficacy and online learning engagement under different background variables. The results showed that college learners' level of online learning self-efficacy will be influenced to a certain extent by gender, indicating that male college students were more engaged in online learning than female students. Online learning self-efficacy gradually increased with the growth of grades. College students in different professional category categories were very foreign to their professional category, teaching concepts, learning methods, etc., so the effectiveness in online learning was not the same. College students whose families were located in cities invest more in online learning. The level of self-efficacy of college students studying online and the level of online learning engagement was not affected by college students' experience as student cadres. The college students who had no research intentions have a higher level of engagement in their studies than those with research intentions.

(3) To discuss the relationship showed that the higher the online learning self-efficacy of college students, they had more participate and learn effectively, and the higher their level of learning engagement. Confidence in online learning abilities and methods can promote online learning engagement

Conclusions

(1) The average total score of online learning self-efficacy was 3.75 points, while the average total score of online learning engagement was 3.65 points, both of which were above the average level.

(2) There were significant differences in demographic variables in online learning self-efficacy and online learning engagement of college students in Henan Province. Among them, there were significant differences in online learning self-efficacy in four aspects: gender, professional category,

grade, and family location, except for the student cadre experience and research intentions. There were significant differences in online learning engagement in four aspects except for grade and student cadre or not.

(3) There was a positive correlation between online learning self-efficacy and online learning engagement, and there was a significant positive impact across all dimensions. The overall mean of online learning self-efficacy could positively predict a 55.2% change in the overall mean of online learning engagement. The more obvious the online learning self-efficacy perception of college students in Henan Province, the stronger their online learning engagement.

Recommendations

To Enhance the Online Learning Self-efficacy of College Students: To create a good online learning environment. A good online learning environment could help students better and faster adapt to the new teaching method, reduced setbacks in the online learning process, and played an important role in improving students' online learning self-efficacy. The second was to guide students to make correct attribution. The attribution style played an important role in the generation, maintenance, enhancement or weakening, and disappearance of students' online learning self-efficacy. The third was to improve the online learning technology of students. The various online learning tools for learning was the prerequisite for students to carry out online learning.

To Enhance the Online Learning Engagement of College Students: To stimulate students' interest in studying and making detailed plans. Before beginning online learning, students should combine their schedule with their teacher's teaching schedule, clarify their learning goals, formulate appropriate short-term study plans, and plan long-term study tasks. The second was to improve the Internet environment. A good Internet environment and study environment could help college students achieve better study results. Therefore, society must work together to create an excellent online learning environment. The fourth was to strengthen cooperation between students.

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A STUDY ON THE RELATIONSHIP BETWEEN TEACHERS' PERCEPTION OF PRINCIPALS' MORAL LEADERSHIP AND JOB SATISFACTION IN MIDDLE SCHOOLS IN SHANDONG PROVINCE, CHINA

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Abstract: In this study, 300 teachers from 5 middle schools in five cities in Shandong Province were selected as the research objects to conduct a questionnaire survey. To analyze the relationship between teachers' perception of principals' moral leadership and job satisfaction. Through the analysis, the following research conclusions were drawn. Middle school teachers' perception of the principal's moral leadership was above the medium level, and teachers' job satisfaction was at the medium level. The scores of the dimensions of the principal's moral leadership from high to low were moral trait, professionalism and ability, moral incentive, raise moral awareness and people oriented. The scores of the dimensions of teacher's job satisfaction from high to low were external job satisfaction, internal job satisfaction and general job satisfaction. In terms of different tests, the demographics variables of gender, age, educational background, teaching age, school type, and school location had different impacts on different dimensions of teachers' perception of principals' moral leadership, and had a significant impact on teachers' perception of principals' moral leadership in general. There were significant differences in teacher job satisfaction. Teachers' perception of principals' moral leadership was positively related to teachers' job satisfaction.

Keywords: Moral Leadership, Teachers' Perception of Principals' Moral Leadership, Teacher Job Satisfaction

Introduction

Research Background

With the country's wide attention to education issues, teachers as a professional group, have come into the public's view at a broader and more far-reaching level. Teachers' views and satisfaction with their work affected teachers' teaching behavior and teaching quality. The National Program for Medium - and Long-term Education Reform and Development (2010-2020) also clearly states that "the status of teachers should be raised, their treatment should be improved, and teachers should be made a respected profession". However, the concrete implementation of measures often faced great difficulties. The principal was the builder and guide of the healthy and sustainable development of a school. The

principal's leadership was very important to guide the development of teachers. Most of the problems facing teachers stem from dissatisfaction with their jobs. The research studied that the principal's leadership was no longer suitable for the development of current schools. To solve these problems, teachers and schools need more dynamic, cultural and ethical leadership.

Research Problems

- (1) What was the current teachers' perception of principals' moral leadership?
- (2) What was the current teachers' job satisfaction?
- (3) What were the differences in teachers' perception of principals' moral leadership and job satisfaction under demographic variables (gender, age, education background, teaching age, school type, and school location)?
- (4) What was the relationship between teachers' perception of principals' moral leadership and job satisfaction?

Objective of the Study

The purposes of this study were as follows:

- (1) To investigate the current teachers' perception of principals' moral leadership.
- (2) To investigate the current teachers' job satisfaction.
- (3) To explore the differences in teachers' perception of principals' moral leadership and job satisfaction under demographic variables (gender, age, education background, teaching age, school type, and school location).
- (4) To understand the relationship between teachers' perception of principals' moral leadership and job satisfaction.

Scope of the Study

This study selected 300 teachers from 5 middle schools in the top five cities in Shandong Province as the research objects. There were 12,000 public middle schools in Shandong Province. The research used convenient sampling to conduct a questionnaire survey among 300 teachers of five schools after contacting them and obtaining the consent of the school authorities. Through the questionnaire survey, the data of demographic variables, teachers' perception of principals' moral leadership and job satisfaction were obtained, and the data were statistically analyzed according to the research purpose.

Research Significance

The research analyzed the concrete behavior performance of moral leadership of elementary and middle school principals at present through the actual investigation in a specific region, using the method of mixed research and combining data and interviews, which played a role in the development of moral leadership theory in education vision. The development of the school was hindered, and the exploration of the principal's moral leadership was obviously of practical significance for promoting

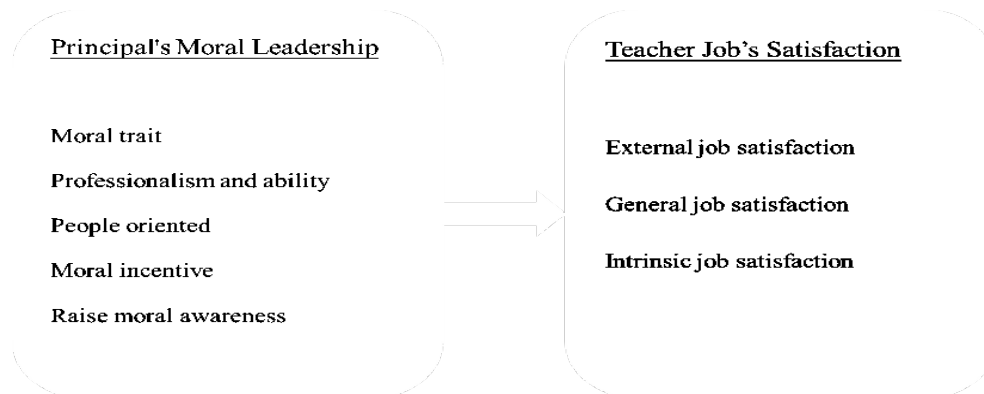
the development of the school.

Theoretical Framework

IV: Independent variables, teachers' perception of principals' moral leadership.

DV: Dependent variables, job satisfaction.

Background variables: gender, age, education background, teaching age, school location, and school type.



Hypotheses

Hypothesis 1: There were significant differences in the teachers' perception of principals' moral leadership with different background variables.

H1-1: There were significant differences in the teachers' perception of principals' moral leadership of different genders.

H1-2: There were significant differences in the teachers' perception of principals' moral leadership of different ages.

H1-3: There were significant differences in the teachers' perception of principals' moral leadership of different education backgrounds.

H1-4: There were significant differences in the teachers' perception of principals' moral leadership of different teaching ages.

H1-5: There were significant differences in the teachers' perception of principals' moral leadership of different school types.

H1-6: There were significant differences in the teachers' perception of principals' moral leadership in different school locations.

Hypothesis 2: There were significant differences in the teachers' job satisfaction with different background variables.

H2-1: There were significant differences in the teachers' job satisfaction of different genders.

H2-2: There were significant differences in the teachers' job satisfaction of different ages.

H2-3: There were significant differences in the teachers' job satisfaction of different educational backgrounds.

H2-4: There were significant differences in the teachers' job satisfaction of different teaching ages.

H2-5: There were significant differences in the teachers' job satisfaction of different school types.

H2-6: There were significant differences in the teachers' job satisfaction at different school locations.

H3: There was a positive correlation between perceived principal leadership and job satisfaction among middle school teachers.

Literatures Review

The research on moral leadership in foreign countries started much earlier than that in China. Most of the literature focused on moral leadership in enterprises, and a small part focuses on schools. The overseas research on moral leadership of principals was mainly divided into three aspects, one was the theoretical research on moral leadership of principals, the second was the empirical research on moral leadership of principals, and the third was the dimension division and measurement research on moral leadership.

The definition of principal leadership in China mainly included three viewpoints: influence theory, energy theory and synthesis theory. Lin (2019) also expressed a similar view. He pointed out that the power of the principal's position was the source of the principal's leadership, and the best criterion to measure the principal's leadership was the educational leadership in the principal's leadership, also known as the educational influence. The most widely used and authoritative model was the "five-dimensional leadership model" established by Professor Zheng (2005). The model divided principal leadership into five dimensions, namely, structural leadership, human leadership, political leadership, cultural leadership and educational leadership. This model had been widely used in the study of principal leadership in Hong Kong, which was highly scientific and operable. Li (2013) investigated the information leadership status of middle school principals. Fu (2019) took the method of case study to investigate the current problems of value leadership of rural school principals, and suggested that value leadership should be improved through spiritual guidance and other ways. Li (2017) also used mixed research methods to explore the influence of principals' moral leadership from the perspectives of principals' self-evaluation and teachers' other evaluation, summarized the current implementation of moral leadership by middle school principals in China, and analyzed the factors influencing the development and application of principals' moral leadership.

Treputtharata & Tayiam (2014) emphasized the importance of school working conditions and pointed out that the improvement of working conditions had a significant impact on improving teachers' job satisfaction. Cao (2021) studied the influence of principal leadership on teachers' job satisfaction

and career intention in the American background. Wu (2019) found that job satisfaction had more influence on teachers' turnover intention than personal characteristics. Dai (2013) found that the job satisfaction of teachers in compulsory education would improve their subjective well-being. Ge (2018) studied the public education training institutions in Chongqing in the relationship between teachers' job satisfaction and organizational commitment, and pointed out the promotion of the teacher's job satisfaction. Muhammad et al. (2019) completed three independent surveys of 467 employees in the Chinese public sector. To explore the relationship between leaders' moral behavior and subordinates' emotions, which mainly referred to teachers' job satisfaction. The research results showed that superiors' moral leadership had a significant positive correlation with subordinates' job satisfaction, which was the same as the research results of Abror (2019).

Research Methodology

The research area of this study was Shandong Province, China. According to the statistical yearbook of Shandong Province in 2022, the total number of full-time teachers in the secondary Educational stage would be 551848 in 2021-2022. This study selected 5 middle schools in five different areas in Shandong Province to conduct a questionnaire survey on the teachers' perception of principals' moral leadership and job satisfaction and the relationship between them, and provided reliable data basis for further analysis. There were more than 1500 teachers in the research area, so a total of 326 questionnaires were issued, and 300 valid questionnaires were obtained. The overall effectiveness rate of the questionnaire reached 92%. According to Morgan's Table on sample selection, a total of 1500 and a sample size of 306 were considered reasonable. The Teachers' Perception of Principal Moral Leadership questionnaire in this study was revised based on the scale "Moral Leadership of High School Principals" compiled by Zou & Hu (2011). The questionnaire measured the principal's moral leadership from five aspects: moral trait, people oriented, moral incentive, raise moral awareness, professionalism and ability. The Cronbach's α was 0.870, indicating high reliability. The Job Satisfaction Scale was widely used in the study of teachers' job satisfaction. The Job Satisfaction Scale contained two kinds of long and short scales. It was divided into external teacher job satisfaction, general teacher job satisfaction and internal teacher job satisfaction. The reliability and validity test results showed that Cronbach's α coefficient of the total scale reached 0.86-0.90, and the overall reliability was high. Each item was well aggregated into each factor, the load of each factor was above 0.5, and the Person correlation coefficient was above 0.4, indicating good validity. The statistical analysis of the collected data, to get the teachers' perception of the principal's moral leadership and job satisfaction. To analyze the impact of demographic variables (gender, age, education, teaching years, school type, school location) on the perception of teachers' perception of principals' moral leadership and job satisfaction, independent sample t-test and one-way analysis of variance were used respectively according to the

different groups compared. Pearson correlation coefficient and stepwise linear regression were used to explore the relationship between teachers' perception of principals' moral leadership and job satisfaction.

Finding and Conclusion

The teacher's perception of the principal's moral leadership was above the medium level. The score of teachers' job satisfaction was at a medium level.

Table 1: Descriptive Statistical Analysis of Each Scale

Variables	Number of Questions	M	SD
Principal's Moral Leadership	21	4.165	.686
Moral Trait	5	4.317	.931
People Oriented	3	4.065	1.031
Moral Incentive	4	4.126	1.002
Raise Moral Awareness	5	4.089	1.021
Professionalism and Ability	4	4.187	.984
Teacher Job Satisfaction	22	3.053	.613
Intrinsic Teacher Job Satisfaction	8	3.047	.765
External Teacher Job Satisfaction	11	3.065	.792
General Teacher Job Satisfaction	3	3.007	.871

According to the teacher's perception of the principal's moral leadership by different genders analysis results. In terms of people-oriented and moral incentive, there were significant differences in the perception of the principal's moral leadership between male and female teachers, $p < 0.01$, respectively, and female teachers were significantly higher than male teachers.

Table 2: Summary of the T-Test for Teachers' Perception of the Principal's Moral Leadership with Different Teachers' Gender

Variable	Gender	M	Sd	T	P
Moral Trait	Male	4.355	0.916	0.757	.445
	Female	4.271	0.949		
People Oriented	Male	3.820	1.025	-4.705***	.000
	Female	4.361	0.961		
Moral Incentive	Male	3.943	0.989	-3.485**	.001
	Female	4.345	0.958		
Raise Moral Awareness	Male	4.039	1.041	-0.998	.317
	Female	4.149	0.010		
Professionalism and Ability	Male	4.185	0.971	-0.143	.885
	Female	4.213	0.994		

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The overall job satisfaction of female teachers was higher than that of male teachers.

Table 3: Summary of the T-Test for Teachers' Job Satisfaction with Different Teachers' Gender

Variable	Gender	M	SD	t	p
Intrinsic teacher job satisfaction	Male	2.891	.715	-4.017***	.000
	Female	3.243	.792		
External teacher job satisfaction	Male	2.914	.772	-3.946***	.000
	Female	3.265	.773		
General teacher job satisfaction	Male	2.861	.816	-3.291**	.001
	Female	3.189	.905		

 Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The teachers' job satisfaction dimensions all reach the level of significance, so the influence of age on teacher job satisfaction had significant differences.

Table 4: Summary of the ANOVA Test for Teachers' Job Satisfaction with Different Teachers' Age

Variable	Age	M	SD	F	p	LSD
Intrinsic teacher job satisfaction	A under 30	2.692	.761	6.224***	.000	C > A E > A B D > A B C
	B 31-36 years old	2.904	.716			
	C 37-43years old	3.029	.753			
	D 44-50years old	3.351	.782			
	E over 50	3.256	.665			
External teacher job satisfaction	A under 30	2.769	.889	5.926***	.000	C D E > A C D E > B
	B 31-36 years old	2.820	.782			
	C 37-43years old	3.126	.699			
	D 44-50years old	3.356	.713			
	E over 50	3.243	.876			
General teacher job satisfaction	A under 30	2.711	.851	3.336*	.012	C D E > A C D E > B
	B 31-36 years old	2.815	.819			
	C 37-43years old	3.091	.873			
	D 44-50years old	3.158	.835			
	E over 50	3.254	.926			

 Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Table 5: Correlation Analysis between Teachers' Perception of Principals' Moral Leadership and Job Satisfaction

	1	2	3	4	5	6	7	8
1: Moral trait	1							
2: People oriented	.345**	1						
3: Moral incentive	.334**	.385**	1					
4: Raise moral awareness	.337**	.377**	.371**	1				
5: Professionalism and ability	.344**	.353**	.312**	.305**	1			
6: Intrinsic satisfaction	.367**	.318**	.321**	.337**	.316**	1		
7: External satisfaction	.339**	.319**	.325**	.368**	.275**	.307**	1	
8: General satisfaction	.316**	.387**	.385**	.421**	.373**	.365**	.347**	1

 Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

There was a moderate positive correlation between teachers' perception of principals' moral

leadership and job satisfaction.

Conclusions

According to the data analysis results of each dimension of the principal's moral leadership, the highest score was the dimension of moral quality, and the lowest score was the people-oriented dimension. The overall level of teachers' job satisfaction was also at an intermediate level.

The research results of teachers' perception of moral leadership of principals: in terms of teachers' gender, there are significant differences in the two dimensions of people-oriented and moral motivation, and female teachers are higher than male teachers; In terms of teachers' academic qualifications, there are significant differences in the professional quality and ability dimensions of principals' moral leadership; In terms of the types of schools where teachers are located, there are significant differences in the two dimensions of moral leadership of principals: people-oriented and professional quality and ability. In terms of different school locations, there are significant differences in the two dimensions of moral quality and moral awareness. Rural teachers have a high perception; In terms of teachers of different teaching ages, there are significant differences in the dimensions of moral incentive and moral awareness promotion. The higher the teaching age, the higher the teachers' perception of the moral leadership of principals.

The research results on teacher job satisfaction: In terms of teacher gender, female teachers have higher overall job satisfaction than male teachers; In terms of teacher education, the job satisfaction of teachers with a master's degree or above is higher than that of teachers with a bachelor's degree. In terms of teacher job satisfaction, private school teachers have higher job satisfaction than public school teachers in terms of the type of school they are in. In terms of teacher job satisfaction, rural teachers are higher than urban teachers in the school location. In terms of teaching age, the longer a teacher's teaching experience, the higher their job satisfaction.

Teachers' perception of principals' moral leadership is positively related to teachers' job satisfaction.

Recommendations

This study would focus on improving the teachers' perception of principals' moral leadership to improve teachers' job satisfaction and promote the development of overall school effectiveness. Improve personal quality and moral awareness, and guide management behavior with morality. To establish a people-oriented concept, middle schools should pay attention to the people-oriented and the development of teachers' professional competence. To improve the job satisfaction of teachers, we must pay attention to the humanistic care for teachers, especially the interpersonal relationship with the boss, which can make teachers feel that they were in a comfortable and harmonious environment, which had

been able to significantly affect the job satisfaction of teachers. First, vision formulation should focus on the participation of all. Second, the formulation process should be flexible and avoid coercion. Thirdly, the vision was not a simple word or a beautiful picture. From various perspectives, it can offer suggestions for the development of our school and contribute to education and teaching work.

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A STUDY ON THE RELATIONSHIP BETWEEN COMPETENCE AND TEACHING EFFECTIVENESS OF PRIMARY SCHOOL TEACHERS IN HUNAN PROVINCE, CHINA

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Abstract: The purpose of this study was to explore the relationship between primary school teachers' competency and teaching effectiveness, including differences in primary school teachers' competency and teaching effectiveness under different background variables, and finally analyze the relationship and predictive role between primary school teachers' competency and teaching effectiveness.

The research results showed that the overall level of competency of primary school teachers was at a high level, while the general level of competency of primary school teachers was above average; the degree of gender difference in the competency and teaching effectiveness of primary school teachers was not apparent; primary school teachers' competency and teaching effectiveness were higher than teachers with a master's degree or above; while the competency of primary school teachers with job titles and teachers with primary school level 1 was higher than that of primary school teachers. The competency of primary school teachers was significantly positively correlated with the overall teaching effectiveness.

Keywords: Competence, Teaching Effectiveness, Primary School Teachers

Introduction

Research Background

In 2012, the “Opinions of the State Council on Strengthening the Construction of the Teaching Force” issued by the General Office of the State Council mentioned that in the process of implementing quality education in China, it was necessary to raise the level of specialization of the teaching force, use the teacher evaluation system, and improve the construction of the teaching force (Cheng & Wang, 2018). Therefore, improving the quality and level of the professional team of teachers was of great strategic importance. To enhance teachers' professional quality and teaching quality, current teachers' professional quality and teaching competency level should be evaluated, thereby providing a basis and sample for assessing and improving teachers' human resources management (Wei, 2006). Compared with ability and quality, “competency” was more job-specific, and “teaching effectiveness” was closely

related to teachers' teaching effectiveness in curriculum reform (Zhang, 2017). However, suppose we want to improve primary school teachers' teaching ability and professionalism effectively. In that case, we must also conduct a subjective and objective study on teachers' competency and teaching effectiveness indicators. The conclusions and strategies formed based on this can only become systematic and objective in teacher management work (Zhao, 2017).

Research Problems

- (1) What was the current primary school teachers' competency?
- (2) What was the current primary school teachers' teaching effectiveness?
- (3) What were the differential results of analyzing different background variables (gender, teaching age, age, job title, academic qualifications) on the competency of primary school teachers?
- (4) What were the differential results of analyzing different background variables (gender, teaching age, age, job title, academic qualifications) on the teaching effectiveness of primary school teachers?
- (5) What was the relationship between primary school teachers' competency and teaching effectiveness?

Objective of the Study

The purposes of this study were as follows:

- (1) To understand the current primary school teachers' competency.
- (2) To understand the current primary school teachers' teaching effectiveness.
- (3) To analyze the significant differences in the competency of primary school teachers with different background variables (gender, teaching age, age, job title, academic qualifications).
- (4) To analyze the significant differences in the teaching effectiveness of primary school teachers with different background variables (gender, teaching age, age, job title, academic qualifications).
- (5) To determine the relationship between primary school teachers' competency and teaching effectiveness, and primary school teachers' competency had predictive effect on teaching effectiveness.

Scope of the Study

This study used a convenient sampling method to investigate the teachers of the top 10 primary schools with 655 primary school teachers in Hunan Province. The aim was to examine the differences in background variables and the relationship between the two by examining the overall level of competency and teaching effectiveness of primary school teachers in Hunan Province. To demonstrate the predictive effect of competency on teaching effectiveness through research results and propose targeted improvement strategies.

Research Significance

The evaluation was based on teachers' fixed subjects and stages using teacher competency

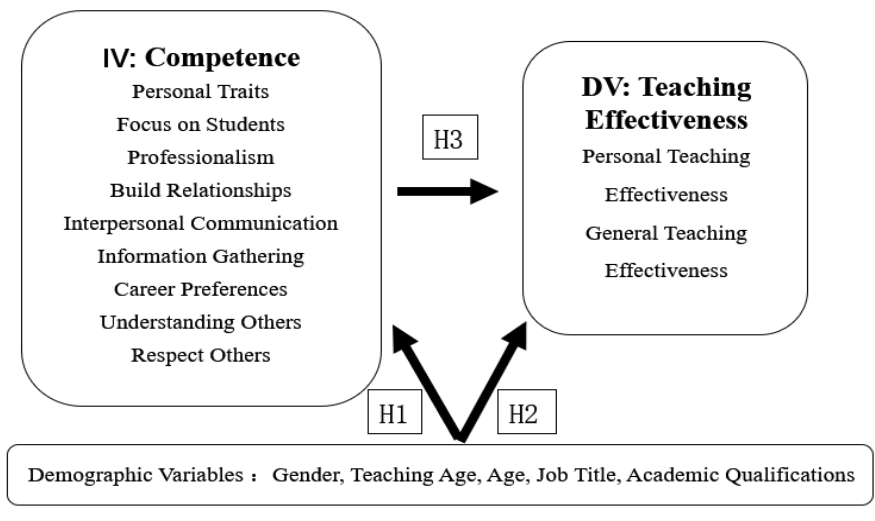
indicators to support and summarize existing research, providing a deeper interpretation of the teacher specialization theory. This study was based on practical research on primary school teacher groups, put forward relevant suggestions and conforms to the teaching requirements after the new curriculum reform and the quality of current teaching expectations, and had specific practical significance.

Theoretical Framework

IV: Independent variables, teacher competency.

DV: Dependent variables, teaching effectiveness.

Background variables: gender, teaching age, age, job title, academic qualifications.



Hypotheses

H1: There were significant differences in the competency of primary school teachers with different background variables.

H1-1: There were significant differences in the competency of primary school teachers of different genders.

H1-2: There were significant differences in competency of primary school teachers of different teaching ages.

H1-3: There were significant differences in competency of primary school teachers of different ages.

H1-4: There were significant differences in competency of primary school teachers with different job titles.

H1-5: There were significant differences in competency of primary school primary school teachers with different academic qualifications.

H2: There were significant differences in teaching effectiveness of primary school teachers with different background variables.

H2-1: There were significant differences in teaching effectiveness of primary school teachers of different genders.

H2-2: There were significant differences in teaching effectiveness of primary school teachers of different teaching ages.

H2-3: There were significant differences in teaching effectiveness of primary school teachers of different ages.

H2-4: There were significant differences in teaching effectiveness of primary school teachers with different job titles.

H2-5: There were significant differences in teaching effectiveness of primary school teachers with different academic qualifications.

H3: The competency of primary school teachers had a significant positive predictive effect on teaching effectiveness.

Literature Review

1) Research on the Concepts of Teacher Competency and Teaching Effectiveness

Research on the concept of teachers' competency, Yang et al. (2018) summarized competency as a characteristic of individual work behavior. This behavioral process specifically included that competent individual perform excellently by work motivation, self-image, work attitude, work values, work skills, personal traits, etc. Research on the concept of teachers' teaching effectiveness, in the 1970s, Bandura et al. (1977) first proposed the concept of "self-efficacy", an individual's expectation and evaluation of completing a set goal in each situation. The self-efficacy could be divided into efficacy and result expectations. Yu & Luo (2000) agreed with this definition and mentioned that teachers' teaching effectiveness was a belief. Also, the study by Han (2016) mentioned that teachers' teaching effectiveness was teachers' patience and motivation at work, and their ability to self-evaluate the impact on students constantly.

2) Research on the Measurement of Teachers' Competency and Teaching Effectiveness

He (2018) found measuring teachers' competency that teachers' knowledge and professional level were low, but teachers' level of competency was high. Xu & Andreas (2022) proposed implementing the "Strong Teacher Plan" to develop teachers' emotional ability, innovative skills, professional strengths, global thinking, etc., as a standard for evaluating teachers' competency, enhancing teaching influence, and cultivating global competency talents as a new shift in teachers' knowledge. Research on measuring teachers' teaching effectiveness, Zhao (2020) designed the "School Psychology Teacher Effectiveness Questionnaire". The questionnaire covered four areas: student counseling, teacher teaching, effectiveness evaluation, and cooperation ability.

3) Research on the Influencing Factors of Teachers' Competency and Teaching Effectiveness

Tang (2018) analyzed the factors affecting the competency of teaching teachers Through multi-factor logistic regression analysis, factors affecting the competency of clinical nursing teachers included

age, teaching age, education, job title, and teacher training status of teachers. Research on factors influencing teachers' teaching effectiveness, Liu & Dan (2019) proposed that teachers' teaching effectiveness was influenced by teachers' age, teaching age, and mood. Shi et al. (2021) found that factors influencing teachers' teaching effectiveness included teachers' age, teaching age, education, job title, etc. Sun (2019) found that her teaching effectiveness was high and obtained differential test results on demographic variables by dividing teachers by gender, age, teaching age, education, and job title, and analyzing and studying primary school teachers' teaching effectiveness.

4) Research on the Relationship between Teachers' Competency and Teaching Effectiveness

The relationship between the competency and teaching effectiveness of physical education teachers in Tianjin, Zhang (2017) showed that physical education teachers' teaching effectiveness had a certain predictive effect on competency. Among them, the teaching effectiveness of skilled and expert teachers had a great predictive effect on competency. Through research on the correlation between teachers' competency and teaching effectiveness, Hu et al. (2022) concluded formulating a growth plan for teachers could help improve teachers' competency and teaching effectiveness. Therefore, this study used primary school teachers as the subject of research on the correlation between primary school teachers' competency and teaching effectiveness.

Research Methodology

This survey scale was derived from the teacher competency questionnaire in this study, which draws on the "Teacher Competency Test" compiled by Xu (2004). The scale was divided into 9 dimensions, with a total of 45 questions. The teaching effectiveness questionnaire was prepared by Yu & Luo (2000). The scale was used to measure the teaching effectiveness of primary and secondary school teachers. There were 27 topics, including two scales of general educational effectiveness and personal teaching effectiveness. This study evaluated the reliability of the formal questionnaire on primary school teachers' competency and teaching effectiveness. Cronbach's α coefficient for each questionnaire and division dimension was more significant than 0.7, indicating that the official questionnaire in this study had good reliability. The KMO value of each questionnaire was more significant than 0.8, and at the same time, the Bartlett sphericity test statistics reached a considerable level, indicating this. The study's formal questionnaire was effective. The scale had good reliability and validity. According to the research objectives and research questions, the reliability analysis, descriptive statistics, independent sample T-test, one-way ANOVA analysis, Pearson correlation analysis, and regression analysis were conducted.

Findings and Conclusions

The study recovered 628 valid questionnaires. The overall competency of teachers was 4.38, the overall

level of competency of primary school teachers was high, a theoretical average of 3 as a medium level.

Table 1: Descriptive Statistical Analysis of the Current of Competency o Teachers (N=628)

Dimension	Number of Questions	Min	Max	M	SD	Overall Ranking
Personal Traits	4	2.00	5.00	4.05	0.56	9
Focus on Students	6	3.00	5.00	4.54	0.43	2
Professionalism	5	3.00	5.00	4.40	0.46	6
Build Relationships	5	3.00	5.00	4.49	0.48	4
Interpersonal Communication	6	3.00	5.00	4.56	0.45	1
Information Gathering	4	2.00	5.00	4.40	0.56	5
Career Preferences	3	2.00	5.00	4.51	0.56	3
Understanding Others	3	2.00	5.00	4.33	0.71	7
Respect Others	2	2.00	5.00	4.18	0.67	8
Overall	38	2.00	5.00	4.38	0.43	-

The overall average of primary school teachers' teaching effectiveness was 3.78. If the theoretical average of 3 was the middle level, then the overall competency of primary school teachers was above medium.

Table 2: Descriptive Statistical Analysis of the Current of Teaching Effectiveness of Teachers (N=628)

Dimension	Numbers	Min	Max	M	SD	Overall Ranking
Personal Teaching Effectiveness	9	2.00	5.00	4.04	0.55	1
General Teaching Effectiveness	9	1.00	4.00	3.52	0.61	2
Overall Average of Teaching Effectiveness	18	2.00	4.00	3.78	0.51	-

As shown in Table 3 (see on the next page), there were significant differences in the competency of primary school teachers by academic qualifications ($t=3.776$, $p<.05$), the undergraduate degrees and below was significantly higher than that of teachers with a master's degree or above.

As shown in Table 4, there were significant differences in the teaching effectiveness of primary school teachers in terms of academic qualifications ($t=2.431$, $p<.05$). The average value of teachers with undergraduate degrees and below was significantly higher than teachers with a master's degree or above.

Table 4: Summary of the T-Test for Teaching Effectiveness of Teachers with Different Academic Qualifications

Dimension	Group	N	M	SD	T	P
Personal Teaching Effectiveness	Undergraduate or below	510	4.06	0.55	2.675**	.008
	Master Degree or above	118	3.91	0.55		
General Teaching Effectiveness	Undergraduate or below	510	3.54	0.61	1.621	.106
	Master Degree or above	118	3.44	0.62		
Overall Average of Teaching Effectiveness	Undergraduate or below	510	3.80	0.49	2.431*	.015
	Master Degree or above	118	3.68	0.56		

Note: * $p<.05$, ** $p<.01$

Table 3: Summary of T-Tests on Competency of Teachers in Different Academic Qualifications

Dimension	Group	N	M	SD	T	P
Personal Traits	Undergraduate or below	510	4.05	0.58	.025	.980
	Master Degree or above	118	4.05	0.46		
Focus on Students	Undergraduate or below	510	4.57	0.42	3.099**	.002
	Master Degree or above	118	4.43	0.46		
Professionalism	Undergraduate or below	510	4.44	0.47	5.004***	.000
	Master Degree or above	118	4.21	0.37		
Build Relationships	Undergraduate or below	510	4.55	0.45	6.766***	.000
	Master Degree or above	118	4.23	0.51		
Interpersonal Communication	Undergraduate or below	510	4.59	0.45	3.129**	.002
	Master Degree or above	118	4.45	0.41		
Information Gathering	Undergraduate or below	510	4.45	0.54	4.288***	.000
	Master Degree or above	118	4.21	0.59		
Career Preferences	Undergraduate or below	510	4.51	0.57	-.018	.985
	Master Degree or above	118	4.51	0.53		
Understanding Others	Undergraduate or below	510	4.35	0.74	1.472	.142
	Master Degree or above	118	4.25	0.56		
Respect Others	Undergraduate or below	510	4.24	0.67	4.604***	.000
	Master Degree or above	118	3.93	0.60		
Overall	Undergraduate or below	510	4.42	0.44	3.776***	.000
	Master Degree or above	118	4.25	0.35		

 Note: * $p < .05$, ** $p < .01$, *** $p < .001$

As shown in Table 5, there was a significant positive correlation between primary school teachers' competency and teaching effectiveness overall ($r=0.320$).

Table 5: Correlation Analysis Matrix of Teachers' Competency and Teaching Effectiveness

	Personal Teaching Effectiveness	General Teaching Effectiveness	Overall Teaching Effectiveness
Personal Traits	.412***	.226***	.360***
Focus on Students	.508***	-.017	.265***
Professionalism	.467***	.104**	.316***
Build Relationships	.445***	-.067	.201***
Interpersonal Communication	.516***	.049	.310***
Information Gathering	.347***	.041	.213***
Career Preferences	.444***	.113**	.309***
Understanding Others	.256***	.176***	.245***
Respect Others	.202***	.033	.129**
Competency	.479***	.100*	.320***

 Note: *** $p < .001$

As shown in Table 6, the overall average of teachers' competency could positively predict the overall average of teaching effectiveness.

Table 6: Summary of the Regression Analysis of Teachers' Competency on Teaching Effectiveness

	Model	Unstandardized Coefficients		Standardized Coefficient	T	P
		B	SE	Beta		
1	(Constant)	2.127	.196		10.848***	.000
	Overall	.377	.045	.320	8.461***	.000
	R=. 320	R2=. 103	Adj.R2=.101		F=71.582***	Sig=.000

a. Dependent variable: overall of teaching effectiveness

Discussion

The competency of primary school teachers was at a high level. The teaching effectiveness level of primary school teachers was above average. Among them, the average interpersonal communication dimension was the highest, indicating that the teachers surveyed complied with the requirements for “home-school communication” and “cultivating students' skills to properly cope with bad emotions and psychological stress such as academics and interpersonal relationships”

(1) The teacher's ability more influenced the sense of effectiveness in individual teaching. (2) The external environment in which teachers live did not necessarily change significantly over time, yet teachers' abilities improved through work practice, thus promoting the improvement of their teaching effectiveness. (3) Primary school teachers a master's degree or above focus on research work rather than teaching practice during the corresponding study period and have slightly less work experience compared to teachers of the same age. (4) The job titles have increased, teachers have taken on more teaching research and subject leadership roles, gradually discovered shortcomings during more work and lowered their perception of competency.

The more competent primary school teachers are, the more confident they were in their ability to guide students effectively and believed that they could instruct students well. The overall average competency of primary school teachers could positively predict the overall average of their teaching effectiveness.

Conclusions

The overall level of competency of primary school teachers was at a high level.

The overall teaching effectiveness level of primary school teachers was above average.

(1) There were no significant gender differences in primary school teachers' competency and teaching effectiveness.

(2) Primary school teachers' competency and teaching effectiveness increased first and then declined as their teaching age increased.

(3) Primary school teachers with a bachelor's degree or below have higher competency and teaching effectiveness than teachers with a master's degree or above.

(4) Teachers with third-level primary school titles and teachers with second-level primary

school titles were more competent than teachers with first-level primary titles.

The competency of primary school teachers was significantly positively correlated with their overall teaching effectiveness.

Recommendations

To improve teachers' teaching effectiveness from the school's management function. School administrators should give full play to the role of coordination and maintenance to make relationships between people of different statuses simple and easy, thereby creating a warm, harmonious, and healthy interpersonal communication environment for teachers, improving teachers' working environment, thereby improving teachers' teaching effectiveness. Scientific training methods to enhance teachers' professional competency. Enriched training methods, improved training efficiency, and enhanced the competency of primary school teachers. Diversification of training forms and content could significantly improve the efficiency or effectiveness of teacher training. Schools could conduct teacher training through the following methods:

Teachers took the initiative to improve the hard-core strength on a personal level. First, teachers should continue to enrich themselves. And to conduct timely teaching reflection. The classrooms were always wrong places to action research. To achieve scientific attribution, and to set an example for yourself.

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A STUDY ON STUDENTS' PERCEPTION SATISFACTION TOWARDS CLASSROOM CLIMATE IN YIYA MIDDLE SCHOOL, CHANGSHA CITY, HUNAN PROVINCE, CHINA

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Abstract: The main purpose of this study is to explore students' perceived satisfaction towards classroom climate in Yiya Middle School, Changsha city, Hunan province, China, and to study the differences under different population background variables. The main subjects of this survey are the students of the high school of Yiya Middle School. 200 questionnaires were distributed through the questionnaire method. After the questionnaire was collected, descriptive analysis, independent T test and single factor variance method were used for specific analysis. The actual results show that, after removing the invalid data, there are obvious differences in the perception of high school English classroom atmosphere among students of different ages and household registration background variables. This paper discusses the results of the survey and puts forward some suggestions. Such as teaching students according to their aptitude for different genders, encouraging students to cooperate in learning, promoting students' active participation in classroom activities, being objective, fair and equal, establishing democratic educational ideas, fully respecting students' personality, personality and experience, and so on, so as to improve the degree of attention to rural registered students.

Keywords: Yiya Middle School in Changsha, English Class, Students' Perceived Satisfaction towards Classroom Climate

Introduction

Classroom climate, also known as classroom atmosphere, classroom environment, classroom psychological environment and so on. As early as the beginning of the last century, foreign scholars carried out research on the influence of classroom atmosphere on teachers and students and found that the perceived degree of classroom climate has an important influence on students. Western scholars believed that students' personal achievement and interest will be improved with the improvement of the classroom climate (Fraser, 1998). It is also pointed out that classroom climate is an important factor

affecting students' knowledge acquisition and mastering (Luketic & Dolan, 2013). In general, the improvement of classroom climate has a very significant effect on students' mastering and understanding English knowledge and improving English ability, which is an important factor that cannot be ignored by educational circles. (McRobbie & Fraster, 1993).

From the perspective of the domestic situation, some scholars conducted a survey on the satisfaction of the English classroom climate of the students of Shilong No. 2 Middle School in Dongguan. The survey results showed that online homework assignment, teaching environment setting, group cooperative learning and other factors will have a significant impact on students' classroom climate, and students' satisfaction with these factors is low (Qi Shiyu, 2017). In order to carry out English classroom teaching better, most schools in China are reforming the class form and teachers' teaching methods so that students can quickly participate in teaching activities. In addition, strengthening the interaction between teachers and students and improving students' interest in English, which can improve their English proficiency in a better environment and promote the growth of teachers and students. The improvement of the English classroom climate can also facilitate students to get help from classmates, so as to solve the difficulties encountered in English learning, make the English classroom atmosphere more active and make progress and promotion of the quality of classroom teaching.

Based on the above background, it is necessary to explore the classroom climate of high school English classes in Changsha YIYA Middle School. It can not only make the teachers and students of YIYA Middle School fully understand the importance of classroom climate for English learning, so as to promote the improvement of English scores, but also promote the improvement of teachers' teaching quality and the overall progress of students. High school students are chosen as the research object because students in this age are in a critical period of personal development; they more mature psychologically and physically than junior high school students; and high school is in a critical period of study, so it is of greater educational significance to carry out research on high school students. However, from the perspective of domestic and foreign research, most scholars mainly explore the academic performance and classroom climate of college students, but there are still few studies on high school. Therefore, this study can also bring some new suggestions and achievements for educators by discussing the perception degree of high school students' classroom climate.

Research Objectives

(1) To investigate the senior high school students in Changsha YIYA Middle School, including their gender, grade and residence registration.

(2) To investigate the satisfaction level of the English classroom climate perceived by senior high school students in Changsha YIYA Middle School.

(3) To understand the differences in students' perceived satisfaction towards classroom climate with different background variables.

Literature Review

At present, scholars at home and abroad have not formed a unified definition of classroom climate, because different researchers have different purposes and academic backgrounds when studying academic classroom climate, the criteria for defining classroom climate are different. As early as 2004, the internationally authoritative theory of classroom quality was proposed (Parkay & Standfor, 2004). According to the theory, classroom climate is actually a quality standard of classroom learning, which is mainly affected by the way of communication between teachers and students. In addition, students' learning motivation is also an important factor in the classroom climate.

Some experts believe that the classroom climate is mainly composed of the ideas of students and teachers. The general environment of the school and the small environment of the class constitute the classroom climate together (Sun, 2009). As a collection of influencing factors of classroom environment, classroom climate has an important impact on students' learning and motivation (Walberg & Anderson, 1968). The main influencing factors include material factors, social factors and psychological factors when teaching activities are developed.

When studying the definition of classroom, some scholars conducted educational analysis through the theory of social interdependence, and carried out many studies to find out the relationship between interdependence theory and classroom climate, and explored the decisive factors (Johnson et al., 1983). The factors that affect the classroom climate are divided into several aspects, including teachers' academic and emotional support for students, students' cooperative attitude towards classroom learning, dependence on positive goals, dependence on positive resources, academic support between students, emotional support between students, classroom fairness, class cohesion, personal self-esteem needs, alienation of emotions and so on.

Others define the classroom climate as a multi-dimensional structure of social form and social dimensions, in which the social form includes the class size, gender, social status and other detailed characteristics of schools and students, while the social climate broadly includes the school organization rules, the relationship between teachers and superiors, school management structure and other objective aspects. In addition, the social dimension also includes the relationship and cooperation between teachers and students, teachers' personal teaching styles and other specific contents (Van et al., 1983).

Based on relevant research, three research models of classroom climate have also been proposed: cooperative classroom climate, individualistic classroom climate and competitive classroom climate (Boricha, 1996). This type of model mainly depends on the classroom subject is, and its scope is relatively narrow. However, some other views believe that classroom climate, as a broad concept,

also includes the creation of the physical environment, the interaction between teachers and students, classroom rules and so on (Creemers & Reezigt, 1999). Classroom climate is also considered as a positive or negative climate generated by the interaction of physical environment and social environment (Buchs & Butera, 2001). Some people think that the core content of classroom climate includes classroom system organization, social attitude, students' preference for other students and teachers, and the actual expectations for efficiency, cohesion, communication and competition in classroom learning. Therefore, it is difficult to define classroom climate from a single point. It is a comprehensive result of the mutual promotion of teachers' management and students' participation (Brekelmans et al., 2005).

Until 2022, there has been no systematic discussion on classroom climate attribution in foreign countries. In many journal papers on classroom climate, most of the research results are based on the content of classroom climate analysis, but lack of specific analysis of attribution.

From the perspective of domestic research status, most achievements are also concentrated in journals, including Huang Xiulan's on Classroom Psychological Atmosphere and Teaching Effect, Song and Dou (1999) on Classroom Psychological Atmosphere and Its Educational Function, Fang (1999) on Classroom Psychological Atmosphere and Its Construction and so on. The above works analyzed attribution from many aspects. For example, some literatures analyzed from the aspects of functional characteristics, emotional pillars, individual psychology and so on. At the same time, they also give full consideration to the school ethos, class ethos and teachers' personal characteristics, so as to judge the psychology of class groups (Huang Xiulan, 1986).

In addition, teachers' ability to deal with emergencies is also an important factor affecting class climate. Whether the teacher treat every student fairly and justly will affect the cohesion of the class. Some scholars put forward that the relationship between teachers and students will directly affect the whole classroom climate, in which teachers' teaching ability, personality and teaching methods will further affect students' affection (Lu Feng, 1992). Class culture is also an important factor to shape the classroom climate. Teacher prestige, classroom coordination and teacher leadership style will affect students' learning attitude and specific cognitive means.

Most experts and scholars regard teachers as the decisive role of classroom climate. Teachers is an irreplaceable role that shoulder the responsibility to guide and improve the classroom climate. Teachers should make full use of their own wisdom to create great classroom climate. Some scholars believe that teachers can inspire students by setting suspense, choosing questions and using electronic information teaching technology in class (Gao Li, 2003). It is also proposed that teachers can use the art of prediction and questioning to control students' activeness, so that the whole class rhythm can be controlled by themselves (Xu, 2004). Some experts suggest that teachers' arrangement of the teaching process and the improvement of the leadership style also play a positive role in adjusting the classroom

climate. Therefore, teachers with rich experience will adjust the class progress according to the actual situation, and try their best to make all students master knowledge and improve their learning enthusiasm. In contrast, inexperienced teachers can hardly improve the whole classroom climate if they only know how to copy and ignore the actual situation (Xu, 2004).

In addition, the teacher's own moral quality will also have an impact on the classroom climate. The teacher's devotion for teaching career, care and help to the class will further affect the classroom climate. In the teaching process, teachers should give full play to their own personality charm and experience, and pay attention to the emotional education of students. While cultivating excellent students, we should not neglect poor students and ordinary students (Sun, 1992).

Teachers' classroom emotions are also closely related to the classroom climate. Teachers are supposed to have the ability to regulate and stabilize emotions, enter the classroom teaching state in time, and infect students with their own feelings. Therefore, in the teaching process, teachers are supposed to try to avoid the third-party feelings into the classroom, so as to create a better classroom climate.

Some scholars believe that the teacher-student relationship and the classmate relationship are also an indispensable part of the classroom climate. In addition to the communication with teachers, the communication with classmates also occupies the daily life of high school students, which also have an important impact on the classroom climate. In the class order, compared with ordinary students, monitor and other students' leaders play a leading role in the classroom climate. The emotions of these students are often easier to feedback and affect others. Therefore, teachers are supposed to pay attention to the guidance of psychological emotions of these students. Teachers should be students' confidant and cultivate students' trust in themselves (Han, 1986).

From the analysis of objective factors, some external interference also plays an obvious influence on the classroom climate, such as the change of class size and number of students (Song, 2015). Maintaining a stable class structure not only allows students to keep familiar with each other, improve their enthusiasm, and form healthy competition among students, but also allows students to discuss and interact the knowledge they have learned, which enables teachers to maintain the enthusiasm of teaching. If the class size is too large or too small, it will be difficult to create a friendly classroom climate. From an international perspective, class climate is best when the class size is 30 to 40 people.

There are many views on the connotation of classroom climate in China, such as the influence of public emotional state, the influence of dominant state, the influence of psychological environment and the influence of emotional state. Some scholars have proposed that the dominant attitude of an individual in the classroom is the comprehensive state of the classroom teaching climate (Pi, 1997). Some scholars have interpreted classroom climate as the public emotional state reflected in classroom

teaching (Shi, 1999), or the emotional reaction generated by teachers and students in classroom teaching (Li, 2001).

The above two statements are both used to analyze emotions from the perspective of classroom communication, and have been affirmed by many educational researchers. On this basis, some experts believe that the dominant comprehensive psychological state is also a part of the classroom climate, and it is directly reflected in the classroom, which is set up according to the teaching purpose (Xue Weiming & Zhang Qing, 2006).

Therefore, teachers need to focus on students in the teaching process and make specific teaching plans according to their thoughts and behaviors. For students, teachers' encouragement and care will be great comfort, so as to further stimulate the motivation of learning, shorten the psychological gap with teachers, and promote the harmonious development of teacher-student relationship.

As mentioned above, there are different definitions of classroom climate at home and abroad. Therefore, there are different ways to distinguish classroom climate types. It mainly analyzes the classroom teaching climate from two aspects: social environment and psychological environment. The classroom climate can be divided into positive types and negative types (Burden & Byrd, 1994). If analyzed from the perspective of psychology, classroom climate can be divided into three types: laissez-faire, authoritarian and democratic. Teachers and students behave differently in different classroom climate (Lewin, 1936). This classification method was further subdivided later, and the authoritarian classroom climate could be divided into tough authoritarian type and benevolent authoritarian type (Lewin, 1936).

Methodology

Statistical software SPSS 22 was used for statistical analysis of all questionnaires, and the data in each part was statistically analyzed, and all percentage data were calculated. Correlation analysis was performed according to the obtained percentage data.

(1) Descriptive statistical analysis

First of all, descriptive statistics are used to understand the perceived satisfaction of high school students in Changsha YIYA Middle School with English classroom atmosphere.

(2) T test analysis and one-way analysis of variance

T test and one-way analysis of variance were used to understand whether there were significant differences in different background variables.

Results

The results of descriptive statistical analysis are shown in the following table:

Table 1: Descriptive Statistical Analysis Results of Different Genders

Dimension	Gender	Number of samples (people)	Average	t	sig
Totality	Male	82	3.32	-1.486	0.697
	Female	94	3.40		
Teacher support	Male	82	2.83	-0.482	0.709
	Female	94	2.87		
Task orientation	Male	82	3.60	-1.556	0.693
	Female	94	3.71		
Student affinity	Male	82	4.01	.893	.373
	Female	94	3.95		
Classroom cooperation	Male	82	3.48	-2.208	.028*
	Female	94	3.64		
Class order	Male	82	3.29	-.958	.339
	Female	94	3.37		

 Note: * $p < 0.05$, ** $p < 0.01$

Table 1 showed the difference analysis of gender perception in classroom climate. As shown in the table, from the average value of the overall perception of male ($M=3.32$) and female ($M=3.40$) in English classroom environment, female's classroom perception is slightly higher than male's. However, from the P-value of the two groups, there is no significant difference between male and female in the overall perception of classroom environment.

Hypothesis H2: There are significant differences in the English classroom climate perceived by middle school students of different grades. The results of descriptive statistical analysis are shown in the following table:

Table 2: Descriptive Statistical Analysis Results of Different Grades

Dimension	Grade	Number of samples (people)	Average	t	sig
Totality	Grade one	63	2.88	-3.894	.000**
	Grade two	58	3.11		
	Grade three	55	3.17		
Teacher support	Grade one	63	2.90	-3.310	.001**
	Grade two	58	2.98		
	Grade three	55	3.19		
Task orientation	Grade one	63	2.76	-2.863	.004**
	Grade two	58	3.11		
	Grade three	55	3.33		
Student affinity	Grade one	63	2.90	-3.887	.000**
	Grade two	58	3.05		
	Grade three	55	3.19		
Classroom cooperation	Grade one	63	3.36	-2.67	.012*
	Grade two	58	3.56		
	Grade three	55	3.44		
Class order	Grade one	63	2.98	-2.119	.036*
	Grade two	58	3.17		
	Grade three	55	3.22		

 Note: * $p < 0.05$, ** $p < 0.01$

Analyzing the data in the table above, it was found that among all high school students, the mean value of senior three students' perception of English classroom climate ($M=3.17$) is significantly higher than that of grade one and grade two students' attitude towards English learning ($M=2.88, 3.17$). From the five sub-dimensions, it can be seen that the average value of grade three, grade two and grade one students presented a ladder arrangement. Students of different grades have significant differences in the overall perception of classroom climate and each sub-dimension.

Hypothesis H3: There are significant differences in the high school students perceived English classroom climate of different registered residences. The results of descriptive statistical analysis are shown in the following table:

Table 3: Descriptive statistical analysis results of registered residences

Dimension	registered residences	Number of samples (people)	Average	t	sig
Teacher support	Rural area	64	2.71	-3.289	.001**
	urban	112	3.11		
Task orientation	Rural area	64	3.59	-2.533	.012*
	urban	112	3.82		
Student affinity	Rural area	64	3.24	-2.853	.005**
	urban	112	3.57		
Classroom cooperation	Rural area	64	3.41	-3.320	.001**
	urban	112	3.75		
Class order	Rural area	64	3.13	-3.988	.000**
	urban	112	3.51		

Note: * $p < 0.05$, ** $p < 0.01$

Table 4: Test Verification of The Research Hypothesis

Research Hypothesis	Validation Results
H1-1: There are significant differences in the high school students perceived English classroom climate of different genders.	Partially established
H1-2: There are significant differences in the English classroom climate perceived by middle school students of different grades.	Established
H1-3: There are significant differences in the high school students perceived English classroom climate of different registered residences.	Established

The author investigated the registered residences of students into rural and urban. Then, the author analyzed and discussed the differences between the two groups of samples by means of independent sample T test. As shown in Table 3, in the five dimensions of English classroom environment perception, the average values of urban students are higher than those of rural students, indicating that urban students have a more positive attitude towards the same English classroom environment. The standard deviation perceived by the two groups of students is also much lower than that of the rural students, which indicates that the perception of classroom environment of the urban

students is relatively uniform. Except for task orientation, students in the two groups showed all dimensions ($P < 0.05$), indicating that there were significant differences in the perception of these dimensions between the two groups of students.

Discussion

Based on the above research results, the thesis mainly discusses from the following aspects:

1. From the research results of gender, the ratio of male to female in Yiya Middle School is relatively balanced, and the number of women is slightly higher than that of men. In terms of the number of people surveyed, the distribution of people in grade one, grade two and grade three is balanced, and grade one is slightly higher than the other two grades. From the perspective of registered residences, most of the students in YIYA Middle School are urban students, but there is also a certain proportion of rural students.

In order to create a stable and warm climate in which students can develop their full potential in the classroom, teachers should play a guiding role in creating a healthy, harmonious and safe environment for students. Ensure that students feel teachers' care to the greatest extent, improving their learning initiative and actively divergent learning thinking (Feng, 2000). Classroom climate is the comprehensive result of complex factors in many aspects, which is difficult to control its variables. Therefore, it is difficult to give specific suggestion on the classroom climate. However, by sorting out the characteristics of healthy classroom climate, specific measures are put forward to optimize the characteristics of relevant classroom climate, including classroom exercises, temporary assignment, collective responsibility of the class, united and friendly relationship between teachers and students, good climate of mutual help among students, motivation to improve academic performance and anxiety, which are supposed to improve students' learning enthusiasm in the classroom.

After summarizing the research status at home and abroad, it is found that Harvard scholars first developed the questionnaire of classroom climate physics, which evaluate the physical environment around students by understanding their learning environment feelings. After that, the questionnaire on classroom climate developed by Moos and other scholars covered multiple age groups of students and carried out a comprehensive analysis. Therefore, the questionnaire survey scale is of certain significance and value. However, some scholars believe that there are certain differences between the educational background of China and the west, so the western questionnaires do not fully conform to the research status quo in China. Some Chinese scholars have developed other questionnaires based on the situation of Chinese schools (Jiang, 2004). The scale used for reference in this thesis is in line with China's national conditions and can provide new findings and gains for Chinese high school English classroom educators.

2. When exploring the English classroom climate perceived by high school students in YIYA

Middle School, it is found that the average value of students' perception of each dimension of high school English classroom environment is high, indicating that high school students in YIYA Middle School have a good perception of English classroom environment.

Specific analysis shows that the average values of four dimensions, student affinity, student cooperation, task orientation and class order are relatively high, indicating that students recognize the classroom climate and have a rational cognition of the purpose of class and the tasks they need to complete. This shows that most classes in Yiya Middle School have strong cohesion, and students and teachers are familiar with each other and support each other.

However, among the five dimensions, the dimension of teacher support is the lowest, which indicates that students' perception of teachers is not satisfied. This may be caused by many reasons. As one of the three basic subjects in high school, English has a high proportion of courses arranged in each class. However, teachers have limited personal energy, which is difficult to help individual when teaching multiple classes. However, in the process of English teaching, some students with poor performance lack the key motivation to learn English, so it is difficult to give feedback to the teacher's interaction and instruction, and their learning enthusiasm will be attenuated. Some studies believe that classrooms with poor performance will have a negative impact on classroom climate (Yang Lijuan, Tian Dong, 2013). In addition, many factors will also interfere with the classroom climate, such as the boring content of textbooks and ppt, the backward traditional teaching methods of teachers and the lack of personality charm of teachers. Therefore, it is necessary to find more feasible ways to help students develop interest in English learning and enhance learning motivation.

3. This study compared the level of high school English classroom climate perceived by students of different genders, grades and household registration. The results are as follows:

1) There is no significant difference in English classroom climate perceived by students of different genders.

According to the final research results, there is no significant difference between the perception of high school boys and girls in the classroom environment. However, from the specific dimension, there are obvious differences between boys and girls in cooperation and task orientation. Other dimensions are relatively balanced, so there is no significant difference in the English classroom climate perceived by students of different genders.

This is similar to some domestic and foreign research results. Actually, female is more interested in collaborative tasks, while male prefer to be independent and achieve personalized goals (Owens & Straton, 1980). It is also believed that female have a higher perception of class than male, which is also consistent with the specific objective of this experiment (Liu & Liu, 2012; Sun, 2008, 2009). In high school, girls learn English more intensively than boys. In addition, female is more talented than male in learning languages, have a more positive learning attitude, and have more

confidence in learning English well. In terms of external feedback, female will gain satisfaction through their English academic performance, gaining admiration and attention among the group. In English competitions and speech competitions at home and abroad, female account for a high proportion. In contrast, male is more composed in learning English. Therefore, the difference between male and female ratio can facilitate teachers to make flexible adjustment and teach students according to their aptitude, so as to ensure that students can meet their own needs to the greatest extent.

The results of the investigation show that female is easier to establish a close relationship than male, and have a closer relationship with teachers. Therefore, they are more active in cooperative activities, and dare to communicate with their peers and teachers when there are problems. From the perspective of dimensions, female has better grades and interests than male, and has higher requirements for English learning. In contrast, most male students usually accept knowledge passively and lack the initiative to learn English. In addition, male do not have a comprehensive plan like female, so it is difficult for male to have a clear understanding of their own problems, which leads to the fact that female has a higher perception of some dimensions than male.

2) There are significant differences in the English classroom climate perceived by students of different grades

The mean value of senior three students' perception of classroom climate is significantly higher than that of senior one and senior two students' attitude towards English learning. Moreover, students of different grades have significant differences in the overall perception of classroom climate and each sub-dimension.

From the detailed situation, the perception degree of task orientation of senior three students are higher than that of senior one and senior two students, which indicates that senior three students have a specific understanding of the teacher's instructions and tasks, and will try their best to complete them. First of all, the third year of high school, as the last year before the college entrance examination, is the most intensive stage in the whole high school, which also lays the foundation for students to learn. Most students have a clear plan and plan, so they do not hesitate to spend a lot of time and energy to do their best. Most students are actively learning knowledge, so they can concentrate on the class. Secondly, compared with senior one student and senior two students who are unfamiliar with the environment, senior three students and teachers have been familiar with each other and can adapt to each other, so as to find out a set of learning methods suitable for students' personalized development. The students have a clear understanding of the teacher's tasks, and the teacher has a comprehensive understanding of the students' personality and shortcomings, which lays a very solid foundation for the formulation of a comprehensive plan.

High schools in the author's area, such as Yiya Middle School, are mostly boarding schools, so high school students lack parental companionship. They need to seek more spiritual sustenance from

teachers and classmates and share the joys and sorrows of life. Therefore, many high school students have established close friendships, which provides the possibility for high school students to cooperate closely. The stable and friendly relationship between classmates promotes the establishment of class order and the improvement of the classroom climate. Compared with other grades, senior three students are developing from juvenile to adult and becoming more mature mentally. Therefore, they have stronger task execution ability and self-restraint ability, as well as stronger sense of responsibility and courage to assume responsibility. When communicating and exchanging with peers, senior three students will be more closely connected with each other. Especially in the very depressing environment of senior three, it is easier for students to open their hearts, share responsibilities and share with each other, and finally establish profound relationship. This is the reason why senior three students have a high affinity perception.

However, in the dimension of cooperation, respondents' perception is not good. This is due to the teaching curriculum of YIYA Middle School. Compared with math and Chinese, English has the same number of classes and carries a large number of tasks. In order to complete the teaching task in the limited time, some teachers adopt the method of indoctrination teaching, which leads to the classroom is too boring, and reduces the motivation of students to learn. Lively and relaxed class is difficult to succeed in a short time. On the contrary, additional arrangements and interactions may have an impact on teachers' teaching plans. Therefore, many teachers simply adopt conservative teaching methods, thus reducing students' cooperation in the classroom. In addition, English classroom has the shortcoming of traditional teaching. In the whole teaching process, teachers still occupy the main position, and students can only accept knowledge as passive listeners. In addition, because of the college entrance examination, the "score-only theory" in class has become the mainstream, which directly affects students' participation in class.

3) There are significant differences in the English classroom climate perceived by students with different registered permanent residence.

In the five dimensions of English classroom environment perception, the average value of urban students is higher than that of rural students, indicating that there are significant differences between the two groups of students in the perception of these dimensions.

Compared with those who grow up in cities, rural students are restricted in many aspects. Whether it is personal family conditions, or life vision, there is an obvious gap. In addition, rural students are unfamiliar with English courses, and their interest in English is still strange and fresh. However, after a long time of contact, rural students will gradually realize the gap between themselves and urban students in English courses, and then lose interest soon (Niu Jianhui, 2008). In addition, parents' family background also plays a decisive role in students' enthusiasm for learning English. However, most rural parents have limited academic level and lack of awareness and interest in English,

which leads to the poor perception of rural students in English classroom climate.

From the perspective of psychological environment, the parents of many rural students studying in YIYA Middle School are basically migrant workers. These students lack confidence and dare not express themselves. They are silent and sensitive in class. Or because of family pressure, they often more focused on getting excellent grades, so they feel stressful. Some rural registered students have a poor English foundation and a big gap with others, so it is difficult to participate in the classroom activities. In addition, some students with rural hukou have low self-esteem and closed heart in high school, and their self-esteem is easily damaged. At the same time, they also have rebellious mood. Therefore, teachers need to correct and adjust them in time.

Conclusions

After studying the current situation of high school English classroom climate in Yiya Middle School, the following contents are obtained:

1. According to the results of this study, the ratio of male to female students in Yiya Middle School is relatively balanced, and the number of female students is slightly higher than that of male students. In terms of the number of people surveyed, the distribution of the number of people in grade One, grade two and grade three is more balanced, and grade One is slightly higher than the other two grades. From the perspective of registered permanent residence, most of the students in Yiya Middle School are urban students, accounting for 63.7%, but there is also a certain proportion of rural students, accounting for 36.4.

2. From the overall situation of the survey, the mean value of students' perception of each dimension of the high school English classroom environment ranges from 2.85 to 3.93, and the mean value of the overall perception is 3.36, which indicates that the high school students of Yiya Middle School have a good perception of the English classroom environment.

3.. A comparative study on the difference of classroom climate perception among students of different genders, grades and household registration.

1) From the average value of male's ($M=3.32$) and female's ($M=3.40$) overall perception of English classroom environment, female's perception of English classroom environment is slightly higher than male's, but there is no significant difference between male's and female's perception of the overall classroom environment.

2) The mean value of high school students' perceived satisfaction towards English classroom climate ($M=3.17$) is significantly higher than that of high school students' attitude towards English learning ($M=2.88, 3.17$). It can be seen from the five sub-dimensions that the mean value of senior three students, senior two students and senior one student presents a ladder arrangement. Students of different grades have significant differences in the overall perception of classroom climate and each sub-

dimension.

3) In the five dimensions of English classroom environment perception, the average value of students with urban household registration is higher than that of students with rural household registration, which indicates that students with urban household registration have a more positive attitude towards English classroom environment. The standard deviation perceived by the two groups of students is also much lower than that of the rural students, which indicates that the perception of classroom environment of the urban students is relatively uniform. Except for task orientation, students in the two groups showed all dimensions ($P < 0.05$), indicating that there were significant differences between the two groups of students in the perception of these dimensions.

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河南省创新创业教育对大学生创业意向的影响因素及对策研究**RESEARCH ON THE INFLUENCE FACTORS AND COUNTERMEASURES
OF INNOVATION AND ENTREPRENEURSHIP EDUCATION ON
COLLEGE STUDENTS' ENTREPRENEURIAL INTENTION IN HENAN
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摘要：本研究通过对中国河南省10所高校408名学生进行问卷调查，立足自我决定理论角度，剖析和探讨创业意向和创业教育两者的相关性，同时将创业自我效能感作为中介变量分析上述两者之间的相关性。研究发现：河南省高校创业教育和创业动机之间、创业教育和创业自我效能感间的关系表现为显著正相关，自我效能感受到创业教育当中个人以及学校两方面的影响。创业自我效能感在创业教育和创业动机之间发挥着中介效应，个人要素不仅会对创业动机产生直接影响，还将通过创业自我效能感的中介作用，对创业动机产生间接影响。在创业自我效能感的中介作用下，学校因素不仅会对创业动机产生间接影响，还可以通过直接影响创业自我效能感来对创业动机产生影响。综上所述，为调动大学生自主创业的主动性和积极性，使之形成创业意向，本研究总结了以下三种建议：提高高校创业实践活动的多样性、形成完整且具有新颖性的创业教学课程体系、优化并健全创业管理保障机制。

关键词：创业教育，自我效能感，创业意向。

Abstract: Based on the self-determination theory, this study analyzes and discusses the relationship between entrepreneurial intention and entrepreneurial education by means of a questionnaire survey of 408 students from 10 universities in Henan province, China, at the same time, entrepreneurial self-efficacy as a mediator variable to analyze the correlation between the two. The results showed that the relationship between entrepreneurial education and entrepreneurial motivation, entrepreneurial education and entrepreneurial self-efficacy was significantly positive correlation, self-efficacy is

influenced by both individual and school in entrepreneurship education. Entrepreneurial self-efficacy plays a mediating role between entrepreneurial education and entrepreneurial motivation. Individual factors not only have a direct impact on entrepreneurial motivation, but also play a mediating role through entrepreneurial self-efficacy, has an indirect effect on entrepreneurial motivation. Under the mediating effect of entrepreneurial self-efficacy, school factors not only have an indirect effect on entrepreneurial motivation, but also have an effect on entrepreneurial motivation by directly influencing entrepreneurial self-efficacy. To sum up, in order to mobilize the initiative and enthusiasm of college students to start their own businesses, so as to form an entrepreneurial intention, this study summarizes the following three suggestions: to improve the diversity of college entrepreneurship practice, to form a complete and innovative entrepreneurship teaching curriculum system, to optimize and improve the entrepreneurial management guarantee mechanism.

Keywords: Entrepreneurial Education, Self-Efficacy, Entrepreneurial Intention

引言

目前，中国处于经济发展的关键时期，创新是中国经济发展、促进就业的重要举措。李克强总理提出了“大众创业，万众创新”的口号更加推动了中国创新创业的发展。大学生创业活动也逐渐受到社会多方主体的关注和讨论。通过研究发现，大学生创业更容易成功，日后的时代发展趋势也会更有利（Dietrich, 1999）。

绪论

各个国家的政府都极为重视大学生创业群体，都在各个方面为其提供了便利（Liñán, 2004）。伴随着高校毕业生人数的逐渐增多，就业压力逐渐上升。大学生创业不但能够提供更多的就业岗位，也能够极大的减轻就业矛盾和压力。

研究背景

目前中国应届大学生创业率仍处于一个较低水平，和欧美大学生相比仍有较大差距，大多数生存型创业，科技类创业刚刚起步，创业形势不容乐观。在这种情况下除了出台相应的支持政策之外，大学生创新创业教育体系有待加强和完善。针对于中国高校创新创业教育的问题先后出台了《关于深化高等学校创新创业教育改革的实施意见》、《国务院办公厅关于进一步支持大学生创新创业的指导意见》以及其他相关文件，为在中国社会中开展创新创业教育改革工作提供指导和参考。近年来随着中国高校创新创业教育课程标准和考核制度的逐渐完善，大学生创新创业的积极性不断提升，这些措施的实施对提高高等教育创新创业质量和大学生创业率起了积极影响。

问题陈述

创业教育首次是由联合国教科文组织于 1989 年提出，它是一种以培养创新型人才为目标的教育，借助最大化激发创业者自身的能力，紧紧抓住时代发展的机遇，增强创业者本身的综合素质与整体素养加以展开。中国的创新创业教育相对起步较晚，虽然得到了国家的支持和推广但仍有很多问题。李耘、李长安(2008) 指出中国目前的创业教育体系仍不完善、资金欠缺、教学目标过于滞后等情况。当前时代下大学生自行开展创新创业活动的主动性不断提升，大学生卖猪肉，种蔬菜，开奶茶店等等新闻司空见惯，高等教育学校不但要肩负起开展教育工作的社会责任，也应当重视创新创业教育工作在解决就业压力和整个社会经济发展中的重要作用，不过高校开展的创新创业教育发挥的实际成效是否和预期相同呢？应该怎样进行教育？怎样去保障大学生在合法合规的基础上开展创业活动呢？这一问题和有关答案极为关键。以创新创业活动为核心展开不但体现了每个学科在理论层面的知识碰撞，也体现了每个学科在成果之间的交融。Krueger（1993）表示对于大学生来说，他们通常面临着创业风险、不确定性和资源限制等挑战，实现创业自我效能感对于大学生形成创业意向至关重要。创业自我效能感（Entrepreneurial Self-Efficacy）是指个体对自己在创业领域中能力和能够成功实现创业目标的自信程度，创业自我效能感的满足能够正面影响创业意向的形成有积极作用（Ding，2009）。各学者围绕着创业意向与创业教育两者的相关性展开了深层次的探讨，但很少有学者从创业意向与创业教育两者之间的相关性角度展开研究。另外当前学术界的确有很多学者分析自我效能感、创业意向之间的相关性，但研究角度并不多元，忽视了各维度之间的相互影响。

研究目的

1. 了解河创新创业教育对大学生创业意向的影响现状。
2. 解析在不同背景变量下大学生创业自我效能感、创业教育与创业意向差异情况，发现其中存在的问题并进行成因分析。
3. 探讨业意向、创业教育和创业自我效能感在大学生群体中的关系具体表现。
4. 确定创业自我效能感能否以中介的作用影响创业意向与创业教育的相关关系。

文献综述

对影响创业意向的有关文献进行汇总我们了解到，创业教育对其有着深远的影响。Ruhland认为，创业教育将重充分地影响创业意向；接受创业教育后的个人创业意向将更多地形成。Hatten（1995）通过创业教育的指导和驱动，可以帮助学生构建创业意向。创业意向是指个人对于创业的认知和态度，是创业行为的前提和动机。创业教育可以通过提供创业知识、

案例分享等方式，帮助学生了解创业，激发热情，从而促进创业意向的构建。Klapper（2004）、Peterman等（2003）证实了创业教育的影响。Han（2009）利用分析认为，在创业教育中最关键的目的便是对个人创业意向的培育与鼓励，这是因为对做出创业行为的个人而言，创业意向是最核心的内部影响要素。Sun（2011）在分析后提到，创业者所处的教育氛围与自己的个人特质均会对创业意向带来有利影响。Jam（2015）认为，接受创业教育的学生更容易产生创业意向，尤其是在接受全面的创业教育后，但在创业竞赛后，学生的创业意向中的“追求名富”维度受到限制。Minoo（2016）进行的一项研究发现，创业教育对于学生的创业意向影响不大，但对于创业能力的提升有巨大的影响。这表明，创业教育应该更加注重提高学生的创业能力和实践经验，而不仅仅是关注学生的创业意向。

在创业自我效能感的有关研究中，Galloway 等（2000）、Peterman 等（2003）、Klapper（2004）、Kuratko（2005）、Souitari（2007）、Boissin等（2009）等经过研究表明，创业自我效能感是影响个体是否从事创业活动的重要因素之一。接受创业教育可以帮助个体提高创业知识和技能，从而增强其在创业领域的自信心和能力感。因此，接受创业教育的个人通常比未接受创业教育的个体具有更高的创业自我效能感。Baron（2006）表示，充分学习创业理论和相关知识，会使个人的机会判断水平有大幅地改善。Jing（2010）再研究中得出，创业自我效能感可以利用有关的环境构建、课程、外部扶持与时间锻炼等领域进行改善与培育。Ding（2011）认为，创业者的创业自我效能感是指其对于自己在创业领域的能力和信心的感知。研究表明，创业自我效能感是影响创业者是否能够成功创业的重要因素之一。接受创业教育可以帮助创业者不断地提高创业水平和管理领域的效能感，进而增强其在创业领域的自信心和能力感。Wang（2011）表示，在开展创业教育时，职业生涯规划可以帮助学生更好地规划自己的职业生涯，从而更好地实现自己的创业目标。Wang（2012）认为，接受创业教育可以帮助大学生获得创业知识和技能，增强其在创业领域的自信心和能力感。Huang（2017）采用问卷调查的形式，经过深入检测，研究发现，参加创业大赛可以增强学生的创业自我效能感，其创业自我效能感显著高于仅接受创业教育的学生。

Chen（1998）研究创业自我效能感发现，创业意向和创业自我效能感有较大的关系。Denoble（1999）利用深入的分析发现，创业自我效能感可以预估创业意向，是其前置变量之一。Levander通过分析研究了解到，个人对创业的综合理解能力是非常重要的因素之一。个人创业综合理解能力，包括对创业市场创业风险等了解。只有具备较强的综合理解能力，个人才能更好地应对创业中的各种挑战和困难，创业自我效能感也对个人的创业理解产生显著的影响。Zhao（2015）将创业自我效能感分成了两个维度：创业自我效能感的信念维度和行动维度，通过问卷，发现创业自我效能感能显著地促进创业意向的构建。Cai（2018）利用对某类大

一与大二学生开展问卷调查研究后了解到，其创业自我效能感的优化能改善其工作意识，并最终影响创业意向。结合上文的介绍，能发现第一，基于创业意向的影响要素而言，在最近这些年，在创业教育的影响下，创业意向产生了各种思想，有学者认为创业教育对创业意向尚无有利的影响，所以还应当深入地验证与分析。第二，目前，对于创业教育的研究主要关注于创业教育、创业意向和创业自我效能感之间的相互关系，但很少将创业自我效能感的作用作为中介因素进行深入分析。实际上，创业的本质在于将个人的意向与所需的知识和技能相结合，从而实现创业目标。在创业教育中，创业自我效能感的使用应该被视为一个重要的中介因素，对于提高创业者的自我信心和创业能力具有重要意义。因此，创业教育在提升理解要素与改善的基础上，也应当指导、培育与展现学生个人的创业意向。因此，本文从该角度开始分析，对创业教育与创业意向间的影响进行了深入的验证，另外与创业自我效能感，分析其中介效果。

研究方法

(1) 通过有关创新创业教育对大学生创业意向的影响的文献分析，探讨有关创业意向、创业教育和创业自我效能感的相关案例、理论观点和实证数据，有助于更好地理解这些概念及其相互关系。

(2) 为了验证创业教育对创业意向的影响和创业自我效能感能否起到中介作用。因此，本研究对中国河南省的高校学生展开问卷调查，根据调查数据进行分析。通过对河南省10所高校大学生的问卷调查，分析高校大学生的学历、专业、家庭背景、创业教育参与度和认同度、创业自我效能感程度、创业动机的强弱等问题，了解当下河南省高校大学生对创业教育的认同情况。

(3) 对收回的问卷进行数据分析，并探索不同因素对创业意向的影响程度。根据分析结果得到河南省内高校大学生创新创业教育现状以及影响因素，结合中国对于高校教育、思想政治工作要求和教师工作职能等方面的法律法规，以及当前国家政策、社会和校园环境提出提升高校大学生创新创业教育的有效策略。

研究结果

河南省高校创业教育和创业动机之间、创业教育和创业自我效能感间的关系表现为显著正相关，自我效能感受到创业教育当中个人以及学校两方面的影响。创业自我效能感在创业教育和创业动机之间发挥着中介效应，个人要素不仅会对创业动机产生直接影响，还将通过创业自我效能感的中介作用，对创业动机产生间接影响。在创业自我效能感的中介作用下，学校因素不仅会对创业动机产生间接影响，还可以通过直接影响创业自我效能感来对创业动机产生

影响。

总结

(1) 创业教育和创业动机之间呈现正向关系。具体来说,相较于学校因素,个人因素对创业动机的影响较小。这是因为在接受创业教育过程中,个人的主观意愿起着至关重要的作用,并且个人自身能力、效能感等因素对其产生更大的影响。

尽管个人因素在创业动机中的影响相对较小,但我们依然可以通过营造一个良好的环境氛围来有效地激发大学生的动机。依据自我决定理论当中所说的有机整合理论与因果定向理论,外部环境的影响能够促使个体的行为发生变化,从而激发其外在动机。此外,外在动机与内在动机之间存在着密切的联系,良好的外在环境能够被转化为内在动机,进而增强动机的强度。因此,在大学校园中营造出良好的创业氛围,能够有效地激发大学生的创业兴趣,促使其内在的创业动机不断增强,最终更加积极地投身于创业实践当中。

(2) 创业教育和创业自我效能感间的关系表现为显著正相关。与之相同的,自我效能感受到创业教育当中个人以及学校两方面的影响。基于自我决定理论当中的诸多心理与认知理论,大学的创业环境与课程的创建,学生学习创业方面的知识后,能对创业产生更大的激情,持续形成创业动力,使得学生更加熟悉创业相关知识,创业的技术和能力在学习活动中持续地获得改善,让大学生持续改善对自我的认知能力。

(3) 创业的自我效能感与创业动机之间呈现显著的正向关系。现阶段在中国的各大高校中,大学生利用多元化的方式得到相应的数据与资源后,可以持续改善大学生的创业技能,让大学生更积极地参与各种有挑战性的活动,可以获得认同,并且还能获取个人空间。结合自我决定理论中的认知评价理论和因果定向理论,大学生创业效能感与其内部动机之间正相关。不断改进个人能力的自我评估,可以激发个体的自主性和胜任感,并进一步塑造出有利的动机环境,从而更加高效地做出自我决策。在创业教育方面,应该注重培养学生的实践能力和创新思维,在帮助学生掌握相关技能的同时,也要考虑到学生的心理需求和自主性,让他们在成长过程中逐渐形成积极的内部动机,不断提升其创业效能感。这样的教育模式不仅可以提高学生的创业成功率,还可以为其未来的职业生涯打下坚实的基础。在现代互联网快速发展的时代环境下,创业的机遇是特别多的,因为大学生对创业效能感的持续改善,在风险、理解、机会判断等领域能力的持续提升与自信心持续的改善,使得个人的内部动机不断外放,以此来不断改进进出创业动机。

(4) 创业自我效能感在创业教育和创业动机之间发挥着中介效应。具体而言,创业自我效能感的五个维度在创业教育的个人要素和创业动机之间起到了一定的中介作用。这意味着

个人要素不仅会对创业动机产生直接影响，还将通过创业自我效能感的中介作用，对创业动机产生间接影响。此外，创业自我效能感的五个维度也在创业教育的学校要素和创业动机之间发挥出了一定的中介效应。换句话说，在创业自我效能感的中介作用下，学校因素不仅会对创业动机产生间接影响，还可以通过直接影响创业自我效能感来对创业动机产生影响。因此，创业自我效能感是一个非常重要的因素，需要在创业教育中得到充分的重视。具体来说，在创业自我效能感的中介影响下，学校要素能间接或直接地对创业动机带来影响。结合自我决定理论，较好的创业环境和外部动机之间呈现正向关系，基于心里需求和有机整合理论，让动机得到持续地提升，协助动机持续地改善；不仅如此，大学生在利用创业教育达成自己的个人心理诉求后，结合认知考核理论，自我效能感获得改善，强化动机的同时，并能在一定程度上优化创业动机。此类结果意味着，创业教育能充分地干预大学生创业者的创业做法，中国的高校需持续提升对创业教育的改革支持水平，应该加强对创业知识和技术方面的学习力度。通过不断地学习和实践，大学生可以更好地掌握创业所需的专业知识和技能，并在实践中逐渐提高自己的创业水平。此外，还需要为大学生构建一个优良的创业环境，营造出积极向上的创业氛围，协助其更为主动地应对创业，高效地参与创业工作。

讨论

(1) 基本情况方面，高校大学生女生占比较大；最高学历大多数为本科其次是研究生，专科学历占比较少；高校大学生在人文社科、理工农医和经管类占比较平均，户籍类型十分均匀不存在显著差异。

(2) 描述性分析结果表明：学校因素、创业动机这两个维度上都位于中高水平，但幅度不大。其余因素都分布在3.0和3.5之间，表示受访者在这些方面也在中高水平以上，但相比于学校因素和创业动机两个方面略低。

(3) 差异分析结果表明：不同性别的学生在创业自我效能感和创业动机存在显著差异，男生高于女生；大专学生创业动机和创业自我效能感最高；学经管类专业的学生创业动机和创业自我效能感要高于其他专业的学生；城镇学生的创业自我效能感和创业动机要高于农村学生。

(4) 相关性分析结果表明：学校因素、家庭因素、社会因素和个人因素与创业自我效能各维度之间均存在较为显著的正相关性。创业自我效能感与创业动机各维度有显著的正相关关系。创业教育和创业动机在各维度存在显著的正相关关系。

(5) 回归分析结果表明：创业教育和创业动机之间呈现正向关系。相较于学校因素，个人因素对创业动机的影响较小。创新效能感在个人因素与创业动机之间、学校因素与创业动

机之间起到了部分中介的作用。学校因素可以影响创新效能感和创业动机，而创新效能感也可以影响创业动机。个人因素和学校因素都可以影响风险承担效能感和创业动机，而风险承担效能感也可以影响创业动机。学校因素、个人因素均可以影响机会识别效能感和创业动机，而机会识别效能感也可以影响创业动机。个人因素、学校因素都可以影响关系协调效能感和创业动机，而关系协调效能感也可以影响创业动机。学校因素可以影响组织承诺效能感和创业动机，而组织承诺效能感也可以影响创业动机。因此，学校因素对创业动机的影响可以通过组织承诺效能感来实现。

(6) 教育和大学生创业动机之间是呈现正向关系的。在高校中，创业教育的学校因素对大学生的创业动机有着极其重要的影响。这是因为创业教育不仅涉及到理论知识，还包括创业操作活动等实践环节。因此，高校需要不断改进创业教育模式，为大学生塑造一个良好的创业环境，并持续满足学生在“自主、胜任和关系”三个领域上的需求。通过这样的方式，外部动机才能转化为内部动机，从而提升学生的整体动机，帮助他们做出最终的自我决定。

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浅谈中国山东省小学教师职业道德建设

TALKING ABOUT THE CONSTRUCTION OF PROFESSIONAL ETHICS OF PRIMARY SCHOOL TEACHERS IN SHANDONG PROVINCE, CHINA

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摘要: 当今社会飞速发展, 随着社会进步和经济的快速发展, 国家和社会对于人才的需求也日益提高, 教育作为培养人才的重要途径, 人们由此对教育教学质量相应就提高了要求, 从而对教师的综合素养也提出了更高要求。教师除了传授知识外, 还必须教导学生承担道德责任。而教师作为学生的榜样, 对学生的行为有示范作用, 要想教导学生学会承担道德责任, 教师必须以身作则, 自身首先要拥有良好的道德, 从思想政治、自身素质、专业能力方面加强自身建设, 爱岗敬业、关爱学生、为人师表, 当好榜样教师, 在学生成长的关键时期引导学生形成正确的人生观、价值观和世界观, 成长为社会需要的高素质人才。然而, 当前在社会不正之风的影响下, 小学教师队伍中也出现了不少违反教学道德的现象, 给学生的身心发展造成了极为不利的影响。因此, 解决建设教育道德问题以及建设良好的小学教师职业道德势在必行。

关键词: 小学教师, 职业道德, 师德建设。

Abstract: With the rapid development of today's society, with the rapid development of society and economy, the country and society's demand for talents is increasing day by day. Education is an important way to cultivate talents. Therefore, people have higher requirements for the quality of education and teaching, and thus have higher requirements for teachers. Higher requirements have also been put forward for the comprehensive quality of students. In addition to imparting knowledge, teachers must also teach students to assume moral responsibility. As a role model for students, teachers have a demonstration effect on students' behavior. To teach students to learn to take moral responsibility, teachers must lead by example. Dedicate oneself to work, care for students, be a good example of teachers, guide students to form a correct outlook on life, values and world outlook during the critical period of students' growth, and grow into high-quality talents needed by society. However,

under the current influence of social unhealthy trends, many violations of teaching ethics have also appeared in the teaching staff of primary schools, which has caused extremely adverse effects on the physical and mental development of students. Therefore, it is imperative to solve the problem of building educational ethics and building a good professional ethics of primary school teachers.

Keywords: Primary School Teachers, Professional Ethics, Teacher Morality Construction

引言

现如今，社会和经济的飞速发展使得国家对人才的需求不断提高，而小学教师作为学生思想的启蒙者，他们的职业素养直接影响着学生的健康成长（郑秀青，2017）。因此，作为学生的领路人，小学教师一定要做好榜样作用（王希武，2017）。而要想切实提升小学阶段的教学质量，注重教师的师德建设是重中之重。只有具备了良好的师德，教师才能引导学生形成良好的学习习惯与行为习惯，从而促进学生身心健康发展（祁金龙，2021）。因此，要深入了解小学教师职业道德的现状，发现小学教师队伍存在的教师职业道德问题，并针对其中存在的问题提出建议，分析小学教师职业道德建设策略，以提高小学教师的职业道德水平，推动教师道德发展，促进学生健康发展。

1. 小学教师师德建设的必要性与重要性

1.1 师德建设的必要性

近年来，广大小学教师在教育行政部门的领导下，围绕“教育强国、办人民满意的教育”的目标，在教师的岗位上勤劳工作，教书育人、无私奉献，涌现出一大批师德典范，出现许多道德楷模教师，为社会主义接班人的培养做出了积极的贡献，受到社会的广泛赞誉。但是，在总体不断向上的同时，小学教师群体中仍存在着如体罚、辱骂学生、私教受贿等不容忽视的问题，阻碍着我国基础教育事业的蓬勃发展。因此，进行小学教师师德建设是必要的，是我国教育事业发展与前进的必行之举。此外，不断加强小学教师的师德建设，也是教师队伍建设的要求，提高教师队伍的整体职业道德，增加教师道德模范，进一步提升教师职业的社会地位（张洁莹，2021）。由此可见，小学教师师德建设，是学生健康成长的需要，是教师专业发展的需要，是推动社会文明的需要。

1.2 师德建设的重要性

1.2.1 小学是塑造学生优秀道德品格和形成其正确三观的重要阶段，这个时段的学生可塑性强，以老师为楷模进行学习与模仿，因此教师这一职业具有举足轻重的作用，老师通过言传身教，将自身的道德品质、思想觉悟等潜移默化的传输到学生身上，对学生人格的成长起

到重要的奠基作用。因此，进行小学教师师德建设是重要的，只有教师具备优秀的道德品质，具备高尚的师德，才能塑造学生优秀道德品格与正确三观。教育绝非单纯的文化传播，而是一个用人格铸造人格、用心灵唤醒心灵的过程。学生从教师身上，直接学习思想和道德、知识和技能。教师只有尽职尽责、率先垂范，才能真正为人师表，为学生的身心健康成长提供示范，帮助他们树立良好的价值观念和远大理想，促进他们全面发展。

1.2.2 教育教学过程中，教师是科学知识的传播者，是人类文明的传承者，更是道德修养的塑造者，是年轻一代人健康成长的引路人。因此，广大教师要坚定理想信念，提高道德情操，掌握扎实学识，永怀仁爱之心（习近平，2014）。作为一名教师，必须忠诚于教育事业，培养崇高的职业理想和高尚的道德境界。教师的学识水平是教育质量的保障，教师的道德品质是端正教学方法的保证，教师不能只重教学，忽视了师德的重要作用。教师的师德水平也体现了教师的责任感，这关系着教学质量水平的高低。因此，对于全面提高教育质量，要办好让人民满意的教育，小学教师的职业道德建设具有十分重要的意义。

1.2.3 教师的角色地位、社会责任崇高于其他职业，因为教师的言行会对学生产生深远的影响，甚至辐射到社会。千年前孔夫子“因材施教”“诲人不倦”“以身作则”的教育思想流传至今，依然可以作为教师道德行为的基本准则（岳军祥等，2020）。近年频出的教师言行不雅、体罚学生、校外兼职的新闻，也证实社会对教师职业在道德行为上的关注与要求，是家长为了孩子在校身心健康发展对教师的基本要求。建设良好的师德，会有力推动社会道德风尚的进步，对构建和谐社会有着重要意义。

2. 小学教师师德现状中存在的问题

2.1 教师素质和思想层次良莠不齐

教师的职业道德要求教师要为人师表，在仪容仪表和言行举止方面应该符合教师行为规范，在教学过程中要发挥楷模作用，这需要教师有很高的综合素质，不仅要求思想品德高尚，也需要专业知识过硬。但是当前一些学校的教师轻视了形象方面的重要性，教师出现奇装异服、举止粗鲁、在课堂中打电话的情况，甚至还在教学中言行不当，出现对学生进行谩骂、人格侮辱的情况，在教学中按照自己的喜好对待学生，体罚、变相体罚，侮辱学生人格等，对学生身心健康发展产生很大不利影响。还有部分小学教师工作消极，出现上课迟到、教学内容浅显、敷衍教学等等行为，学生的学习效果与态度产生消极影响（张洁莹，2021）。

2.2 对教师职业缺少热情，对教学工作消极怠工

作为一名教师，热爱国家、忠诚教育事业是最基本的要求，不违背国家的规章制度和方针政策，爱岗敬业，热爱教育事业，对教学工作高度负责。但随着小学教师队伍逐渐年轻化

，出生在小康社会的他们有部分存在政治观念淡漠、忽视理论学习及理想信念追求、注重个人多于集体等等。还有教师不是出于对教育事业的热爱而是为谋生打算而选择教师职业，缺乏甚至对教师职业毫无崇高敬意，忽视教师对学生身心发展、对学校风气形成和对社会舆论走向的重要作用（张洁莹，2021）。这种错误的想法导致了部分教师将教学活动单纯视为一种获取劳动报酬的活动，逐渐对教育事业失去热情，在工作中存在消极懈怠的情况。在思想层面上，多元价值观的出现和碰撞，以及不同个体价值观念的差异，使得社会中人们的价值观念产生了一定的负面因素。部分小学教师利用自身职业特性和工作便利谋取私利，在校外兼职培训教师，开展一定程度的商业活动，获取高额培训费，而对校内本职工作消极怠工，严重违背教师的职业道德要求（周善良，2020）。

2.3对教师职业责任认识不清，只注重灌输知识，忽略了育人为本

部分小学教师教学观念仍未改变，仍以单一学习成绩为教学依据，一是只注重传授学生知识，忽视其思想品德方面的教育与培养，一些学生出现恶劣行为后没有受到老师的正确引导，导致其道德品质出现问题；二是部分教师以学生的学习成绩作为评判学生的唯一标准，对于学习成绩优秀的学生非常喜爱与上心，对于成绩差的学生则不闻不问或辱骂责打，在日常教学中重视成绩好的学生，轻视成绩差的学生甚至恶语相向（李建群，2019）使得学生成长出现极大分化与偏差。教师的态度会影响学生，会使学生形成一种成绩至上的错误观念，不利于同伴之间人际关系的发展。

3. 小学教师师德建设的建议

3.1加强对师德建设的重视

3.1.1 社会层面：师德具有突出的当代特征，是一定社会道德关系的基本体现，反映了特定历史条件下的基本社会关系和价值认同（褚爱军，2018）。因此，应当坚持以社会主义核心价值观为核心，在政策制定上，建立健全完善的师德建设的领导管理机制，其不仅是小学教师师德建设的基本点，也是实现建设工作规范化和制度化的有力保证（郑秀青，2017）；在法律法规上，完善教师职业道德体系建设，推进教师道德法治化；在舆论导向上，树立教师道德模范典型，始终保持教师良好的职业形象，提高教师的社会地位，减少人民群众对小学教师的误解；经济待遇上，提升小学教师的福利待遇，保证教师生活的经济基础，提高小学教师的经济地位，确保教师不会因为生活上的拮据而无法全身心投入教育事业。从而强化教师的职业理想，增强教师职业幸福感和责任感，在工作中更好的体会到教师职业的崇高性，争当立德树人模范，将提升师德作为一种自觉行为，实现师德建设与社会发展同步，与时俱进。

3.1.2 学校层面：学校应深刻认识师德建设的必要性与重要性，加强对师德建设的重

视程度，将其列为学校管理的重要内容。首先，学校应建立以校长为负责人的师德建设领导小组，为加强师德建设提供组织保障，作为管理层，应该重视自身的道德影响，以身作则，给学校教师树立良好的榜样，这样在进行学校教师道德建设时才更能让人信服和认同。其次，学校应制定师德建设管理制度与规范，为加强师德建设提供制度保障，建立有效的奖励机制，树立校内道德模范，定期评选师德师风突出模范。第三，重视学校老师的政治思想教育，提升老师们的思想觉悟，学校要积极开展各项师德建设活动，营造良好的校园氛围，为师德建设提供活动保障，通过各类活动增进教师团队、师生之间的情感，在实际中加强对师德建设的重视。最后，学校应该对教师们的心理状态有充分的了解，并定期举办师德培训，包括思想道德和职业素养的专题讲座等。这样可以帮助教师们提高自身的道德水平和职业素养，增强学校教师对师德建设重要性的认识，进一步提升教学质量。

3.1.3 教师个人方面：小学教师师德建设从根本上来说，教师主观的重视和努力才是最关键的因素。外部的道德规章制度使教师在教学工作时有章可循，但是否认真遵循还要看个体的思想道德水平。因此教师只有自身真正意识到了提升职业道德水平的重要性，才能够切实为自己的师德做出努力。各大师范类院校在培养教师人才的时候，就应当重视师德教育和思想道德修养培育，保证学生在未来进入教师行业时，能有较高的道德水平。作为小学教师，要做到终身学习，在完成教学工作的同时，重视师德修养的提升，积极参加学校组织的师德培训，学习并吸收一些对学生有益的好方法、新方法运用在实际教学中，以德促教。

3.2加强师德建设奖惩机制

3.2.1 在招聘新教师时，学校应将师德考察作为重要的招聘依据，对于品行不端者，不予录用。

3.2.2 在日常学校工作中，学校可以根据实际情况和经济水平建立一套师德奖励制度，将教师的师德考评纳入奖金标准，并将教师的师德水平与优秀教师评选、职称评定等事项相挂钩，来提升教师对师德的重视程度。对言行举止粗俗、故意不完成教学计划、消极怠工、体罚学生、收受贿赂、课外兼职等师德不端的老师，按照师德不端的程度，进行口头批评、沟通教育，或处以警告、处分、开除等处罚，通过奖惩机制激励全体教师不断提高师德水平。

3.2.3 同时，对教师的师德奖惩要建立在令人信服的考核评选之上，因此，要做好师德评估。学校要建立一套公平、完善的师德考评制度，不徇私作假，要能真正考核出对学生健康发展有益的、师德高尚的教师，也要将师德失范行为写入考评制度，以便及时的教师不良行为做出评价。

3.3提升教师综合素质，塑造高尚师德

3.3.1 学校方面：学校领导以身作则，关爱同事，强化教师职业认同感。以人为本，更

多的关注教师的心理健康与生活问题，做好管理与服务，帮助每个教师消除工作、生活和专业成长中遇到的各种困难，让每个教师能够专心做好本职工作，增强教师对自身职业的尊重和追求，提高教师的工作热情。积极组织教师进行相关政策法规的学习，提高教师职业素养，减少体罚、偏差对待学生等问题的发生；积极开展教师专业技能竞赛，提高教师们的专业知识能力，通过参与竞赛，教师们将有机会与其他教师进行交流和學習，从而不断提升自己的教学技能和专业知識，为学生提供更优质的教育服务。为教师提供继续教育的机会，满足教师专业发展的需要，定期组织教师培训，开展专业教学技能培训班，同时通过培训，引导树立教师们正确的教育观，不只唯成绩是论，使教师为了学生健康、全面发展而努力。

3.3.2教师自身方面：教师应充分发挥自身主观能动性，结合自身的实际情况，不断学习专业知识，丰富自己的知识体系，提升自己的思想修养，树立教师职业远大理想与追求（张海英，2021）。遵守《中小学教师职业道德规范》的要求：爱国守法，爱岗敬业，关爱学生，教书育人，为人师表，终身学习。以饱满的热情投身教育事业，树立正确教育观，不断提高自身素质，努力提升个人教育教学业务水平，积累深厚的文化素养，以高尚的思想品德教书育人，将更多的知识传播给每位学生。

在日常的教育教学和课堂管理中，应该注重师生之间的沟通，努力创造一个和谐的师生关系。在学生面前，教师应当树立一个良好的道德形象，充分尊重学生，认真倾听学生想法，像关心自己的孩子一样关爱学生，了解学生的现状与需求，用爱感化学生，拉近与学生心灵的距离。从而良好的师生关系和积极向上的班级气氛，以自身为榜样影响学生，打造班级德育阵地。

4. 教师职业道德的灵魂——关爱学生

丽江华坪女子高级中学的校长、华坪县儿童福利院（华坪儿童之家）院长张桂梅女士，是一位真正关心学生、师德高尚的人。作为一名教师，她非常关心那些贫困的学生，致力于教育扶贫，在她的努力下，华坪县建成了全国第一所完全免费的女子高中。她坚持德育为先、育人为本，把思想政治建设和理想信念培育作为办学之本。即使长期患病也坚持工作，用实际行动兑现了“只要还有一口气，我就会站上讲台”的诺言。她没有子女，生活节俭，把大部分工资花在帮助有需要的学生，为没有学费的学生支付学费。为了照顾生病的学生，张老师会亲自带他们去看医生，并在寒冷的天气为他们购买衣服和毯子以保暖，全心全意地献出母亲般的慈爱，关心照顾每一个学生 and 孤儿。他不仅在学生的日常生活中给予关怀，还积极培养他们对学习的兴趣和健康的爱好，全方位地照顾他们的需求。

张老师对教育充满热情，对学生充满关爱，他真正做到了让家长放心，让学生成才。

要做到让人民满意的教师，就需要认真贯彻教师职业道德，并加强师德建设。只有这样，才能真正成为受人尊敬的教师。在教学活动中，教师应当向张桂梅老师学习，尊重和关爱学生，切忌体罚、辱骂学生，多站在学生的角度看问题，对学生多些宽容和关爱，只有真心关爱，才能使学生们向着美好的方向茁壮成长。

结论

综上所述，本文简单阐述了小学教师职业道德建设的重要性，分析其中的问题并提出建议。师德建设是教育管理的核心内容之一，在新时期的小学教育实践活动中，教育机构应该高度重视培养师德，创造积极向上的教师职业道德氛围，以促进教师队伍的不断成长和进步。同样，教师作为学生的引路人，应当有提高教师职业道德的高度自觉性，热爱学生、爱岗敬业、无私奉献，不断提升自身的道德修养，在日常中给学生做良好的道德榜样示范，用实际行动感染学生，帮助学生树立正确的价值观，促使他们健康、全面的发展。

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A STUDY ON THE CURRENT SITUATION OF THE LEARNING PRESSURE OF THE INFORMATION AND ELECTROMECHANICAL ENGINEERING COLLEGE OF HUNAN INTERNATIONAL ECONOMICS UNIVERSITY

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Abstract: This study used students from the Information and Electromechanical Engineering College of Hunan International Economics University in China as research subjects. A questionnaire survey was conducted using a convenient sampling method, and the basic situation of 453 students was analyzed to explore the overall situation of college students' learning pressure and the differences in background variables. The results showed that the learning pressure situation of students at the Information and Electromechanical Engineering College of Hunan International Economics University was generally above average. There were significant differences in the overall learning pressure of college students regarding gender. Males have higher learning pressure. There were significant differences in grade levels, with senior students having higher learning pressure. There was a significant difference between a part-time job or none. The learning pressure of students with part-time jobs was higher than others. There were significant differences in participation in classes or associations. Students who frequently participated were more pressured to study than those who did not. There were significant differences in the professional category, where students majoring in mechanical manufacturing and automation and vehicle and materials engineering were under higher pressure.

Keywords: College Students, Learning Pressure, Background Variables

Introduction

College students have just entered college life from high school and need to handle their affairs independently. As a preparation period before entering society, students would inevitably experience some pressure during their studies on campus. According to the survey, most college students were under great psychological stress. The academic pressure, social pressure, employment pressure financial pressure, and life stress of college students during their school years would have a significant impact on college students in terms of both physical and psychological aspects and further influence the behavior of college students. According to some researchers, the most important source of stress for college students

during school life is the stress of studying. (Chen et al., 2011). As a common pressure for college students, academic pressure affects college students in terms of exams, retake exams, postgraduate studies, graduation theses, and various qualification tests. Different students respond to stress in different ways. Overall, moderate learning pressure can create tension and promote efficiency in learning activities. On the other hand, long-term excessive learning pressure can cause students to feel serious anxiety, which can decrease the efficiency of learning activities. If not handled properly, it can also trigger negative feelings such as anxiety and depression, which harmed on students' personality development (Gong, 2017). For college students, although academic tasks were relatively less burdensome than in high school, academic pressure was still one of their primary sources of stress. The academic pressure would be even more significant for "double first-class" students. China's strength in all fields has been significantly enhanced, and its position in the international arena is getting higher and higher. There was an urgent need to cultivate highly qualified talents, so the requirements for college students were becoming more stringent. Various factors have also indirectly caused the student's academic pressure to be too high. Suppose we don't intervene in the student's academic pressure. It would only affect their physical and mental health. It would also affect the training of highly qualified talents in China, which would hinder the development of society as a whole (Li & Tian, 2021). Therefore, it was a vital and meaningful job for scholars and educators to pay great attention to college students' academic stress and help students relieve their learning pressure through appropriate, scientific, and effective methods.

Research Objectives

- (1) What was the profile of the student's gender, grade, participation in classes or associations, part time job or none, and professional category in the Information and Electromechanical Engineering College of Hunan International Economics University?
- (2) What was the student's learning pressure in the Information and Electromechanical Engineering College of Hunan International Economics University?
- (3) What were the differences in the learning pressure of students under different background variables (gender, grade, participation in classes or club work, part-time job or none, and professional category)?

Literature Review

The Concept of Learning Stress

Stress, on a psychological level, was interpreted as "tight restraint." Cannon (1915), an American scholar, first introduced the concept of "stress" into the field of sociological research, and then scholars in various fields studied and explored stress theory. Researchers in many disciplines discussed the concept of stress from the perspective of different subject areas. In the process, the

researchers came to different conclusions on the definition of stress improvement due to differences in factors such as the scope and focus of the research field. Covington (2007) pointed out that learning pressure was a negative feeling, that is, the negative mentality, anxiety, etc., experienced by students when they did not achieve their goals. Carveth et al. (2011) defined learning pressure as a contradictory experience, arguing that the stress of learning was the conflict between students requiring a great deal of knowledge and insufficient time to explore the two.

The Measurement of Learning Stress

Most domestic and international psychological stress measurement studies were based on life events. The questionnaire prepared for college student pressure from outside China began with the “College Student Stress Questionnaire” (SSI) prepared by Dobson & Metcalfe (1983) and the “Daily Trouble Scale for College Students” (BCSH) compiled by Blankstein & Flett (1992). Since then, many researchers have also researched measuring students’ stress (Zhang, Che & Li, 2003; 2005; Yang, 2016). A comprehensive compilation of existing relevant research, combined with the research direction and research content of this study, used Tian & Deng’s (2007) research to prepare a questionnaire on college students’ learning pressure as a research tool for this study.

The Current Status of Learning Stress

Current research on learning pressure mainly focuses on the sources of learning pressure, how to cope with learning pressure, the adverse consequences of excessive learning pressure, the comparison of students’ learning pressure with different background variables, and the relationship between learning pressure and other variables (Ni, 2011; Cai, 2013). Tan (2009) discovered through research on the adaptability of college students’ learning pressure and the correlation between psychological elasticity and positive mood that psychological elasticity could act as a negative mediator in the impact of learning pressure on negative emotions. Psychological elasticity reduces its impact on negative emotions through interaction with learning pressure. On the other hand, Gao (2009) found in a study on the correlation between learning pressure and mental resilience and the mental health of college students that psychological resilience can regulate the relationship between learning pressure and mental health to a certain extent. At the same time, research showed that the severity of students’ physical and mental condition was positively correlated with the external pressure they faced. However, Dai’s (2008) study showed that college students learning pressure were significantly negatively correlated with their sense of learning effectiveness and level of coping with learning. Zhou & Qin (2015) believed that students’ psychological capital had a significant negative predictive effect on learning pressure.

The Influencing Factors of Learning Stress

As students’ primary task, learning occupies most of their daily time, and it is also very important for college students who are about to connect with society. However, excessive learning pressure prevents students from effectively mastering knowledge and skills and had many negative

effects on students' bodies and minds. Examples include poor sleep quality, inner depression, panic, etc. (Xu, 2017). Wang's (2004) research suggested that the reasons that influence students' learning pressure mainly include external environmental factors, personal internal factors, and microenvironmental factors, and suggested that regulation of excessive learning pressure among college students should be carried out at both the external and internal levels. Fang et al. (2019) found that student factors, social factors, employment issues, and education system factors were important factors that stress students in different grades to study. Yang (2017) believed that the psychological stress of art college students in higher vocational colleges comes from the three levels of school, family, and society. Zito (2014) found that college students' academic stress levels greatly influenced academic burnout. Li et al. (2022) suggested that the positive influence of learning styles on academic performance was weak.

Methodology

This study targeted university students from Hunan International Economics University. This study used a convenient sampling method to conduct a questionnaire survey. The number of participants in the survey was 460. A total of 12053 college students of Hunan International Economics University met the requirements of the Morgan Table. After sorting out and screening out the questionnaires, 453 valid questionnaires were determined. After abandoning the seven questionnaires with identical answers and high regularity, the effective recovery rate reached 98.48%. The basic situation of students was investigated for different genders, grades, participation in classes or associations, part time job or none, and professional categories. The scale measurement topics of this study mainly draw on the "College Students' Learning Pressure Questionnaire" prepared by Tian & Deng (2007), which was used as a research tool on the current learning pressure situation of students in the Information and Electromechanical Engineering College of Hunan International Economics University to evaluate the learning pressure results of college students. The college student learning pressure questionnaire's Cronbach's alpha was 0.916, and the internal consistency alpha coefficients for each dimension were 0.888, 0.792, 0.848, 0.763, 0.869, 0.766, and 0.831, respectively, all greater than 0.7. Furthermore, the correlation coefficients between the various dimensions of the questionnaire and the whole were 0.637, 0.758, 0.758, 0.758, 0.627, 0.662, and 0.687. Therefore, it indicates that the questionnaire had good credibility and could be used in this study to investigate the learning pressure of students. And the questionnaire had high reliability and good validity in the total questionnaire and each dimension.

Results

1) Demographic Analysis of the Respondents

This study had 453 valid questionnaires, gender: males 247, females 206. Grade: 107 was the

freshman, 123 was the sophomore, 123 was the junior, and 100 was the senior. Participation in classes or associations: 74 students participated, 160 students occasionally participated, and 219 students did not participate. Part-time job or none: 58 students had part-time jobs, and 395 had no part-time jobs. Professional category: There were 78 students in electronic information, 101 students in computer, 101 students in e-commerce, 97 students in machine manufacturing and automation, and 76 students in vehicle and material engineering.

Table 1: Distribution of Sample Characteristics (N=453)

Demographics	Variable classification	N	Percentage
Gender	Male	247	54.5
	Female	206	45.5
Grade	Freshman	107	23.6
	Sophomore	123	27.2
	Junior	123	27.2
	Senior	100	22.1
Participation in classes or associations	Frequently	74	16.3
	Occasionally	160	35.3
	None	219	48.3
Part time job or none	Yes	58	12.8
	No	395	87.2
Professional category	Electronic information	78	17.2
	Computer	101	22.3
	E-commerce	101	22.3
	Machine manufacturing and automation	97	21.4
	Vehicle and material engineering	76	16.8

2) Descriptive Statistical Analysis

Research results showed that the learning pressure situation of students was generally above the middle level (M=3.46), the pressure of learning competition was the highest (M=4.05), the pressure of learning effect (M=3.72), the pressure of learning prospect (M=3.60), the pressure of learning atmosphere (M=3.34), the pressure of schoolwork burden (M=3.30), the pressure of family expectation (M=3.13) and the pressure of learning conditions (M=3.05). Specific findings were shown in Table 2.

Table 2: Descriptive Statistics on Learning Stress of College Students' (N=453)

Dimension	Min	Max	M	SD
The pressure of learning prospect	1.00	5.00	3.60	0.76
The pressure of learning effect	2.20	5.00	3.72	0.52
The pressure of learning competition	1.50	5.00	4.05	0.68
The pressure of learning atmosphere	1.25	5.00	3.34	0.62
The pressure of schoolwork burden	1.00	5.00	3.30	0.75
The pressure of learning conditions	1.00	5.00	3.05	0.79
The pressure of family expectation	1.00	5.00	3.13	0.78
Overall learning pressure	2.31	4.93	3.46	0.46

3) Results of a Survey on Differences in Learning Pressure among College Students

There was a significant difference in the overall learning pressure of college students regarding gender. Males had higher learning pressure, and females had lower. The results showed differences in each dimension. Among them, the pressure of learning prospect ($t = 3.276$, $p < .01$) and the pressure of learning competition ($t = 2.381$, $p < .05$) indicate that there were significant differences in the gender of students in these two dimensions. Males have higher learning pressure, and females have lower learning pressure.

The pressure of learning effect ($t = 1.089$, $p > .05$), the pressure of learning atmosphere ($t = .768$, $p > .05$), the pressure of schoolwork burden ($t = 1.679$, $p > .05$), the pressure of learning competition ($t = -1.259$, $p > .05$), the pressure of family expectations ($t = 1.174$, $p > .05$) indicate that there were no significant differences in the gender of students in the above dimensions.

Table 3: T-Test of Differences in Learning Stress of Students in Different Genders

Dimension	Gender	N	M	SD	T	P
The pressure of learning prospect	Male	247	3.71	0.74	3.276**	.001
	Female	206	3.48	0.76		
The pressure of learning effect	Male	247	3.74	0.53	1.089	.277
	Female	206	3.69	0.51		
The pressure of learning competition	Male	247	4.12	0.65	2.381*	.018
	Female	206	3.97	0.71		
The pressure of learning atmosphere	Male	247	3.36	0.66	.768	.443
	Female	206	3.32	0.57		
The pressure of schoolwork burden	Male	247	3.36	0.75	1.679	.094
	Female	206	3.24	0.75		
The pressure of learning conditions	Male	247	3.01	0.82	-1.259	.209
	Female	206	3.11	0.76		
The pressure of family expectation	Male	247	3.17	0.79	1.174	.241
	Female	206	3.08	0.78		
Overall learning pressure	Male	247	3.50	0.45	1.981*	.048
	Female	206	3.41	0.46		

There was a significant difference in the overall average learning pressure grade of students in the Information and Electromechanical Engineering College of Hunan International Economics University ($F = 7.804$, $p < .001$), indicating that there was a significant difference in the learning pressure of college students in terms of grade, from senior to sophomore students. The pressure of learning prospects ($F = 10.748$, $p < .001$) indicated significant differences in this dimension. Junior > sophomore > freshman, senior > sophomore > freshman. The pressure of learning competition ($F = 2.657$, $p < .05$) indicates a significant difference in this dimension with senior > freshman students. The pressure of learning competition ($F = 2.921$, $p < .05$) indicates significant differences in this dimension. Senior > freshman, senior students > sophomore. Family expectations ($F = 5.722$, $p < .01$) indicate significant differences in this dimension, with senior > freshman, junior > freshman, and sophomore > freshman.

However, there were no significant grade differences in the three dimensions of the pressure of learning effect ($F = 2.085, p > .05$), the pressure of learning atmosphere ($F = 1.723, p > .05$), and the pressure of schoolwork burden ($F = 1.576, p > .05$).

Table 4: F Test of Differences in Learning Stress of Students in Different Grades

Dimension	Grade	N	M	SD	F	P	LSD
The pressure of learning prospect	Freshman	107	3.31	0.65	10.748***	.000	③ > ② > ① ④ > ② > ①
	Sophomore	123	3.54	0.84			
	Junior	123	3.73	0.72			
	Senior	100	3.85	0.70			
The pressure of learning effect	Freshman	107	3.64	0.50	2.085	.101	
	Sophomore	123	3.69	0.54			
	Junior	123	3.74	0.53			
	Senior	100	3.81	0.49			
The pressure of learning competition	Freshman	107	3.93	0.65	2.657*	.048	④ > ①
	Sophomore	123	4.00	0.73			
	Junior	123	4.10	0.69			
	Senior	100	4.17	0.63			
The pressure of learning atmosphere	Freshman	107	3.28	0.58	1.723	.161	
	Sophomore	123	3.34	0.59			
	Junior	123	3.30	0.65			
	Senior	100	3.46	0.65			
The pressure of schoolwork burden	Freshman	107	3.24	0.67	1.576	.194	
	Sophomore	123	3.22	0.79			
	Junior	123	3.36	0.77			
	Senior	100	3.40	0.74			
The pressure of learning conditions	Freshman	107	2.95	0.68	2.921*	.034	④ > ① ④ > ②
	Sophomore	123	2.95	0.82			
	Junior	123	3.12	0.84			
	Senior	100	3.21	0.79			
The pressure of family expectation	Freshman	107	2.90	0.73	5.722**	.001	④ > ① ③ > ① ② > ①
	Sophomore	123	3.14	0.79			
	Junior	123	3.16	0.80			
	Senior	100	3.34	0.75			
Overall learning pressure	Freshman	107	3.32	0.43	7.804***	.000	④ > ①
	Sophomore	123	3.41	0.46			
	Junior	123	3.50	0.46			
	Senior	100	3.60	0.43			

The verification results of research hypotheses were obtained through descriptive statistical analysis, difference analysis, correlation analysis, and regression analysis of different background variables of college students.

Conclusions

The learning pressure situation of students at the Information and Electromechanical Engineering College of Hunan International Economics University was generally above average. There

were significant differences in the overall learning pressure of college students regarding gender. Males have higher learning pressure. There were significant differences in grade levels, with senior students having higher learning pressure. There was a significant difference between a part-time job or none. The learning pressure of students with a part-time job was higher than others. There were significant differences in participation in classes or associations. Students who frequently participated were more pressured to study than those who did not. There were significant differences in the professional category, where students majoring in mechanical manufacturing and automation and vehicle and materials engineering were under higher pressure.

Table 5: The Results of Verification of Research Hypotheses

	Research Hypotheses	Results
H1	The students learning pressure was generally above the average of the Information and Electromechanical Engineering College of Hunan International Economics University.	Valid
H2	There were significant differences in the learning pressure of students in the Information and Electromechanical Engineering College of Hunan International Economics University with different background variables.	Valid
H2.1	There were gender differences in the learning pressure of students.	Valid
H2.2	There were grade differences in the learning pressure of students.	Valid
H2.3	There were differences in the learning pressure of students in terms of participating in class or club work.	Valid
H2.4	There were differences in the learning pressure of students having whether part-time jobs.	Valid
H2.5	There were professional category differences in the learning pressure of students.	Valid

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THE IMPACT OF PERCEIVED ORGANIZATIONAL JUSTICE ON OCCUPATIONAL STRESS AMONG TEACHERS IN QINGLAI SCHOOL, YUNNAN PROVINCE

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Abstract: The aim of this study is to explore the relationship between organizational justice and occupational stress among teachers at Qinglai School in Yunnan Province, and to analyze whether there are significant differences in the perception of organizational justice and occupational stress among teachers with different background variables. Furthermore, this study aims to examine the predictive power of the different dimensions of organizational justice on occupational stress among teachers. A questionnaire survey was conducted among all 285 teachers at Qinglai School in Yunnan Province. A total of 203 questionnaires were returned, of which 173 were valid. The research tools used in this study were the Organizational Justice Scale developed by Liu Ya (2012) and the Occupational Stress Scale for primary and secondary school teachers developed by Zhu Congshu, Shen Jiliang, and Liu Jiaxia (2013). The research methods included testing the reliability and validity of the questionnaire, descriptive statistics, independent sample t-test, and analysis of variance (ANOVA) to study the impact of organizational justice on occupational stress among teachers. The results of this study showed that there is a significant negative correlation between organizational justice and occupational stress among all teachers at Qinglai School in Yunnan Province.

Keywords: Occupational Stress, Perceived Organizational Justice, Qinglai School

Introduction

The teaching profession has always been a respected and recognized profession, and it is also a high-income, fixed-holiday iron rice bowl that everyone yearns for. However, in fact, I have been in the teaching industry for more than 8 years. From my own experience, teachers are also troubled by occupational stress problems. After gradually deepening into the teaching industry, I found that as the national economy continues to develop, society and families have higher and higher requirements for teachers.

According to relevant statistical data from China Education News, 47.6% and 34.6% of teachers respectively believe that their stress is relatively large and great. Occupational stress among teachers is

affecting their physical and mental health. Professors Koryakov and Sulif at Cambridge University are recognized as the earliest scholars to study teacher stress. They believe that teacher stress is an emotional experience of negative emotions caused by teacher work. This also tells us from another angle that the work stress on teachers has caused negative and potential harm to the physical and mental health of teachers, endangering their physical and mental health. It is not difficult to find from the above several studies that the problems faced by the teaching industry are indeed becoming more prominent day by day, and the stress experienced by teachers in their work has increased dramatically.

The antecedent variables related to teacher occupational stress research include national policies, social expectations, teachers' own occupational identity, organizational justice perception, etc. Organizational justice perception is a comprehensive reflection of employees on various management systems and behaviors of the organization, which will have a significant impact on employee work behavior and organizational effectiveness variables. The impact of organizational justice perception on organizational effectiveness variables such as employee anxiety, employee laziness, employee occupational stress, etc. Any research on organizational management is to optimize management effectiveness variables, and research on organizational justice perception is no exception. The deepening research on the dimensions and influencing factors of organizational justice perception are ultimately aimed at more deeply studying the mechanism of action of organizational justice perception on organizational effectiveness variables. However, among the many antecedent variables in previous research on occupational stress, there are few studies on the impact of organizational justice perception on occupational stress. Teachers' perception of organizational justice is also something that teachers themselves care about and pay attention to. Therefore, this antecedent variable has certain research significance. In summary among the many antecedent variables related to teacher occupational stress research this study chose organizational justice perception as an antecedent variable to conduct research on teacher occupational stress.

This article will focus on the impact of organizational justice perception on occupational stress taking Qinglai School in Mile City Yunnan Province as an example for research. The reason why Qinglai School was chosen as the research object is because during my 8 years in Qinglai School there were indeed many unfair and unreasonable management systems which made me feel stressed. Teacher mobility is also very high which has brought troubles to the stable development of the school. I hope that through this study I can propose countermeasures for optimizing school management while promoting the relief of occupational stress among teachers at this school.

Therefore, this study attempts to open up new ideas focusing on the issue of the impact of teacher's organizational justice perception on occupational stress starting from the perspective of organizational stress management paying attention to the role of organizational justice perception in alleviating occupational stress.

Research Objectives

- (1) What is the relationship between organizational justice and occupational stress among teachers at Qinglai School?
- (2) What is the impact of organizational justice on occupational stress among teachers at Qinglai School?

Literature Review

Organizational Justice

Organizational justice is the sense of justice that people within an organization or unit have towards organizational systems, policies and measures related to personal interests. It involves various aspects of organizational management such as distribution and motivation, and is related to organizational effectiveness and competitiveness. (Guo & Liu, 2022) Organizational justice not only relates to the individual interests of organizational personnel, but also has a greater social impact. A fair group can stimulate the potential of team members, mobilize the enthusiasm of employees to the greatest extent, and help employees achieve their life values.

Organizational justice can be divided into two levels: the first level is the objective state of organizational justice, which refers to a series of rules and regulations formulated by the organization based on fair and just standards. Although these rules and regulations can be continuously improved and enhanced, it is difficult to achieve absolute organizational justice; the second level refers to the subjective feelings of organizational members about justice, also known as organizational justice or organizational justice. (Jiang, 2022) Because everyone's perception of justice is different, there is no uniform standard for whether it is fair or not, nor is there absolute justice. Guo (2021) believes that organizational justice refers to the feeling of justice that organizational members have towards various organizational systems, policies and measures related to their personal interests. This is consistent with the meaning of the first level. Zou (2010) believes that organizational justice refers to the feeling of justice that organizational members have towards various organizational systems, policies and measures related to their personal interests. And this study's organizational justice adopts Wu's (2020) view, which believes that organizational justice is the feeling that organizational members have about whether the organizational behavior is fair or not. This concept interpretation is closer to the public's understanding.

Most of the domestic studies on organizational justice are based on directly drawing on foreign theories and tools. However, due to the differences in culture, system, and organization type, Chinese people's organizational justice may also be different in terms of content, structure, and so on. Western research on organizational justice is mainly based on the distributive justice of material resources, and ultimately points to the justice of resource allocation results, mainly focusing on the instrumental

relationship between individuals and organizations based on the principle of fair exchange. However, in the context of Chinese culture that emphasizes family atmosphere, and team harmony, and encourages collective spirit, the exchange between individuals and organizations is for the sake of long-term and stable social relationships and meeting the needs of care, warmth, security, belonging, and so on. The emotional component is greater than the instrumental component. In addition, according to Xie's (2022) cultural dimension, Chinese culture has a high-power distance, follows rules, and respects authority; collectivist orientation, loyalty, and expectation that organizations can take care of them like a family. Guo, Li and Wang (2021) believe that Chinese culture is a kind of family-oriented humanistic culture, which makes the role and status of leaders as parents more prominent in organizations. Therefore, interactional justice related to leaders should have more important significance in the Chinese cultural context. At present, there are four views on the structural dimensions of organizational justice: Number one is a single dimension; Number two is distributive justice and procedural justice; Number three is distributive justice, procedural justice, and interactional justice; Number four is distributive justice, procedural justice, interpersonal justice, and informational justice. Liu et al. (2012) replaced interpersonal justice with leader justice according to Chinese cultural background, which is more in line with the humanistic environment of Chinese employees and emphasizes the difference between this dimension and interpersonal justice in Western research (Xu, 2020). Therefore, this study adopts Liu et al.'s view and divides organizational justice into distributive justice, procedural justice, leader justice, and informational justice.

Teachers' organizational justice refers to the judgment and cognition of school workers on justice within the school. (Sun & Wang, 2022) Justice theory points out that when individuals perceive justice, it will promote their work behavior and thinking. Some studies have pointed out that the organizational justice perceived by teachers can positively affect individual performance (Zhou, 2021), which may be because when teachers perceive organizational justice, they will find that effort and reward are equivalent in work comparison, thus work harder, ultimately alleviate occupational stress and promote work performance improvement.

At present, many domestic scholars have done more in-depth research on teachers' organizational justice. Gao and Yang (2022) took management as a perspective, based on the theory of psychological contract and organizational justice, and studied the internal and external causes of teachers' lack of justice psychology; constructed a teacher's justice psychology that unified the dominance of school management and teachers' subjectivity, distribution strategy and teachers' comparative psychology, institutional planning, and teachers' practical interests, humanistic care, and teachers' value embodiment. As a good internal psychological resource, organizational justice has a very important impact on teachers' occupational stress (Chen & Liu, 2016).

Occupational Stress

Occupational stress is an important category in the field of stress research, and researchers have given different definitions of it from different perspectives. There is still no complete definition of occupational stress and the concept of stress, and the understanding of stress varies from person to person. However, what is roughly similar is to study occupational stress from the perspective of human-environment interaction. Liu, Xing, Zhao, Cui and Tang (2022) believe that: Occupational stress is caused by the external environment and work conditions and some individual adverse factors. Gou, Yang and Li (2022) believe that occupational stress is psychological anxiety caused by demanding too much of oneself under certain conditions, exceeding one's ability level, and fearing that one will not achieve the expected results. It is called occupational stress when personal and occupational factors interact and cause hangs in personal physiological and psychological conditions (Wang, 2022). In psychology, occupational stress is defined as; The psychological, physiological and behavioral reactions of individuals under external stimuli.

This study mainly understands the concept of occupational stress from the following aspects: (1) The root cause of occupational stress is that individuals are disturbed by external factors, causing psychological and physiological changes; (2) Occupational stress varies from person to person. Under certain stress sources, individual subjective cognition, personality characteristics, and coping methods play an important mediating variable role; (3) The three reactions of occupational stress are mainly psychological reactions. Only when individuals are strongly threatened by stress sources and have no confidence in successfully coping with them will they experience a tense state. In summary, various scholars studying occupational stress have conducted research from different levels, providing a theoretical basis for this study to research and analyze teachers' occupational stress. This study believes that occupational stress is a threat posed by the profession itself to workers. Under the interaction and influence of specific work environments and individual personality characteristics, constantly causes individual psychological, physiological and behavioral changes. A tense state.

Liu (2018) believes that occupational stress refers to any characteristic of the work environment that poses a threat to the individual. Two types of occupational stress may threaten the individual: one is that the demand cannot be met, and the other is that the resources to meet the demand are insufficient. The current mainstream views in the academic world mostly tend to comprehensive views, which regard stress as a comprehensive state of psychological and physiological reactions under the influence of environmental stimuli. Therefore, this study adopts Xu Changjiang's view of occupational stress, which he believes is "in the work environment, the stress source that threatens individual goals acts on the individual for a long time and continuously, under the influence of personality and coping behavior, forming a series of physiological, psychological and behavioral reactions". Zheng and Gu (2019) believe that occupational stress should be divided into three stages: (1) The fundamental influencing

factor causing occupational stress is that the individual is disturbed by external factors, causing psychological and physiological changes; (2) Occupational stress varies from person to person. Under the condition of a certain stress source, the individual's subjective cognition, personality characteristics, and coping methods play an important role as mediating variables; (3) The three reactions to occupational stress are mainly psychological reactions. Only when the individual is strongly threatened by the stress source and has no confidence in coping successfully will a tense state occur. Qian and Zhao (2018) believe that the research on occupational stress can be divided into four stages. On this basis, they propose the fourth stage, which they believe is characterized by a tendency toward prospective research design, emphasizing comparative studies of treatment programs based on etiology and testing the validity of the etiological theory.

This study summarizes the understanding of occupational stress based on the above studies: occupational stress is a threat posed by the profession itself to workers, which constantly causes individual psychological, physiological and behavioral changes in a tense state under the interaction and influence of specific work environment and individual personality characteristics.

The understanding of teacher occupational stress can be said to vary from person to person. In the existing research results in China, the main views on the current situation of primary and secondary school teachers' occupational stress and mental health are as follows:

Ren and Zhang (2017) believe that heavy work and multiple role conflicts lead to boredom. Wu and Ren (2021) believe that primary and secondary school teachers often have to deal with trivial matters in their daily work, which will confuse their profession and development. Zhang (2021) believes that due to the lack of effective incentives for primary and secondary school teachers' work by schools and society, as well as the non-immediate nature of student work, primary and secondary school teachers' input, and output are difficult to be proportional in their work, resulting in frustration in their work.

Based on the understanding of previous views, I believe that teacher stress is essentially negative emotions generated in the teaching process. This negative emotion will be unnaturally reflected from their daily psychological or physiological changes. The purpose of studying teacher occupational stress is to make teachers aware of this stress through research. The harm it brings to physical health and let them self-regulate psychologically to relieve stress.

Research on Perceived Organizational Justice and Teachers' Occupational Stress

Many studies have focused only on the impact of organizational justice on teachers' attitudes and behaviors (Wang & Ma, 2017; Hua, 2018), ignoring the impact on teachers themselves. Injustice can cause stress and tension for teachers, affecting their physical and mental health. It can lead to teachers' emotional depression, dissatisfaction with work, low work efficiency, absenteeism, turnover, etc.

Wang (2018) conducted a survey of 856 teachers randomly selected from 21 schools in Chongqing. The results showed that distributive injustice can cause anger, depression, and stress for teachers. Ma (2020) surveyed teachers' justice and stress at a university in Shandong Province. The results showed that injustice from leaders can cause tension for teachers, a series of health-related symptoms, and higher turnover intention. Sun's (2020) study showed that procedural justice and distributive justice are closely related to stress and tension.

When analyzing the existing theoretical research models, it was found that theoretically, people can expect a great correlation between justice and stress, and can imagine that organizational justice can reduce the uncertainty and lack of control felt in the heart. Sun (2022) also confirmed this in his relevant research. In terms of work stress, the three dimensions of organizational justice are negatively correlated with work stress, and can effectively predict employees' work stress levels and play a mediating role.

In summary, it can be found that research on teachers' organizational justice and occupational stress is still scarce in China. Although the existing research has defined the definition, connotation, generation mechanism, influencing factors, etc. of teachers' organizational justice and occupational stress from multiple perspectives, a few scholars have studied the impact of demographic background variables on teachers' organizational justice or occupational stress through sampling. However, there are not many studies that start from the teacher's perspective and study the impact of teachers' organizational justice on teachers' occupational stress. However, the problem of teachers' occupational stress has attracted much attention and has become a key issue in school management. Teachers' occupational stress is an important factor affecting teachers' teaching effectiveness, teaching behavior, and teacher happiness. What is the impact of teachers' organizational justice on teachers' occupational stress? Is it positive or negative? This will be the focus of this study. Based on previous research, this study will explore the impact of school teachers' organizational justice on occupational stress, study the impact and prediction of each dimension of organizational justice on each dimension of occupational stress more deeply, as well as its internal mechanism of action. At the same time, it will explore how different personal statistical variables and organizational variables affect the impact of organizational justice on occupational stress differently.

Methodology

To better analyze the impact of teachers' organizational justice on teachers' occupational stress, the survey questionnaire of this study is divided into "Teachers' Organizational Justice Questionnaire" and "Teachers' Occupational Stress Questionnaire". Based on the principle of feasibility, this study takes teachers from Qinglai School in Mile City, Yunnan Province as the research object, adopts the method of a school-wide survey, and sends questionnaires to 285 teachers from Qinglai School. The

questionnaire is mainly electronic.

The dimension of organizational justice in this study used Liu's (2012) organizational justice scale, which includes four dimensions: distributive justice, procedural justice, informational justice, and leadership justice. The scale has good reliability and validity and consists of 22 items, with one item deleted for use in this study, resulting in a total of 21 items. Procedural justice dimension includes items 1 to 5, distributive justice dimension includes items 6 to 11, leadership justice dimension includes items 12 to 17, and informational justice dimension includes items 18 to 21. The Likert 5-point scoring system was used, and the internal consistency coefficient α value of this scale was 0.963. The reliability of the scale was analyzed in this study, and the results showed that the α coefficient value of the overall organizational justice scale was 0.986, and the α coefficient values of each subscale were above 0.9. This indicates that the scale has good reliability and validity and is suitable for use in this study.

The occupational stress scale used in this study was based on the "Teacher Occupational Stress Questionnaire for Primary and Secondary Schools" developed by Zhu Congshu, Shen Jiliang, and Liu Jiaxia in 2013. The original questionnaire consisted of 6 factors and 46 questions. For the purposes of this study, some questions were deleted from the original questionnaire. The modified questionnaire contained a total of 29 questions, including 4 questions on exam-related stress factors (Questions 1-4), 6 questions on student-related factors (Questions 5-10), 6 questions on self-development factors (Questions 11-16), 5 questions on family and interpersonal relationship factors (Questions 17-21), 4 questions on work load factors (Questions 22-25), and 4 questions on occupational expectation factors (Questions 26-29). The questionnaire used a 5-point Likert scale, where a score of 1 indicated no stress and a score of 5 indicated very high stress. Higher scores indicated greater levels of occupational stress. The original questionnaire had an internal consistency coefficient of 0.84. Participants were instructed to select responses based on their actual experiences. This study utilized the alpha coefficient to obtain the internal consistency coefficient of each level of the questionnaire, which were 0.913 for exam stress, 0.928 for student factors, 0.889 for self-development needs, 0.853 for family and interpersonal factors, 0.910 for work load, and 0.951 for occupational expectations. The Cronbach's coefficients for the total scale and subscales ranged from 0.853 to 0.951, with a coefficient of 0.940 for the total scale, indicating good reliability of the questionnaire.

Results

Demographic Analysis of Questionnaire Participants

This study distributed questionnaires to all 285 teachers at Qinglai School and received 203 responses, resulting in a response rate of 71.22%. Among them, 173 responses were valid, with a validity rate of 85.22%, as shown in Table 1.

Table 1: Questionnaire Demographic Statistics (N=173)

Background Variables	Grouping	Frequency	Percentage (%)
Gender	Female (1).	112	64.74
	Male (2).	61	35.26
Age	Under 30 years of age (1).	83	47.98
	31-40 years old (2).	74	42.77
	41-50 years old (3).	16	9.25
Seniority	1-3 years (1).	38	21.97
	4-6 years (2).	43	24.86
	7-9 years (3).	35	20.23
	10 years and above (4).	57	32.95
Whether or Not to Work as a Homeroom Teacher	Yes (1).	56	32.37
	No (2).	117	67.63
The Subjects You Teach	English (1).	88	50.87
	Politics, History, Geography (2).	31	17.92
	Physics, chemistry, Biology (3).	31	17.92

Comparison of Differences in Variables in Population Context

(1) Comparison of gender differences in organizational justice and occupational stress

From the table above, it can be observed that there were no significant differences between male and female participants in terms of two factors, namely occupational expectations and workload, indicating consistency in these two factors. However, significant differences were found in the remaining 10 factors, namely organizational justice, information justice, leadership justice, distribution justice, procedural justice, family and interpersonal relationships, self-development, student factors, exam stress, and occupational stress, indicating gender differences in these areas.

Table 2: T- test Comparison Table with Gender as Background Variable (N=173)

Dimensions/Variables	Male (N=66)		Female (N=107)		T Value	Sig. (Double Tailed)
	M	SD	M	SD		
Information Justice	3.538	0.780	2.900	1.246	-4.145***	0.000
Leadership Justice	3.803	1.029	2.942	1.379	-4.681***	0.000
Distribution Justice	3.199	1.037	2.528	1.176	-3.814***	0.000
Procedural Justice	3.155	1.039	2.336	1.158	-4.691***	0.000
Perceived Organizational Justice Variables	3.343	1.077	2.884	1.347	-2.467**	0.015
Occupational Expectations Factor	3.000	1.010	2.720	1.137	-1.643	0.102
Workload Factors	3.019	0.986	2.769	0.998	-1.609	0.109
Family and Interpersonal Factors	2.606	1.011	2.226	0.939	-2.510**	0.013
Self-development Factors	2.639	0.751	2.336	0.762	-2.547**	0.012
Student Factors	3.078	0.876	2.617	1.217	-2.891***	0.004
Exam Stress Factors	3.773	1.001	2.939	1.451	-4.465***	0.000
Occupational Stress Variables	3.022	0.718	2.519	1.078	-3.680***	0.000

(2) Comparison of differences in organizational justice and occupational stress in age

Using analysis of variance to study the differences in the 12 items shown in the table with respect to age, we can see from the table above that: the samples of different ages do not show significant differences in their perception of organizational justice, indicating that different age groups share the same perception of organizational justice without any significant difference. Additionally, the age samples show significant differences in the other 11 items, indicating that different age groups have different perceptions of information justice, leadership justice, distribution justice, procedural justice, occupational expectations, workload factors, family and interpersonal relationship factors, self-development factors, student factors, exam stress factors, and occupational stress.

Table 3: ANOVA Comparison Table with Age as Background Variable(N=173)

Dimensions/ Variables	(1) Under 30 Years Old (N=100).		(2) 31-40 Years Old (N=50)		(3) 41-50 Years Old (N=16)		(4) Over 50 Years Old (N=7).		F- Value	P- Value	LSD
	M	SD	M	SD	M	SD	M	SD			
1	2.77	1.238	3.59	0.77	3.75	0.671	3.86	0.283	9.971	0.000	(4)>(1) (4)>(2) (4)>(3)
2	2.84	1.335	3.77	1.06	3.89	1.068	4.48	0.879	10.623	0.000	(4)>(1) (4)>(2) (4)>(3)
3	2.51	1.217	3.03	0.97	3.29	1.003	3.86	0.813	6.117	0.001	(4)>(1) (4)>(2) (4)>(3)
4	2.32	1.191	2.98	0.99	3.31	0.929	3.51	1.254	7.794	0.000	(4)>(1) (4)>(2) (4)>(3)
5	3.04	1.407	3.02	1.01	3.15	1.053	3.40	1.431	0.211	0.888	(4)>(1) (4)>(2) (4)>(3)
6	2.62	1.131	3.16	1.02	3.17	0.879	2.68	0.886	4.146	0.007	
7	2.65	0.988	3.17	1.00	3.23	0.839	2.96	0.756	6.237	0.000	
8	2.11	0.906	2.72	0.975	2.85	1.080	2.43	0.812	5.751	0.001	
9	2.25	0.735	2.75	0.733	2.68	0.853	2.67	0.533	6.617	0.000	
10	2.49	1.164	3.17	0.951	3.22	0.971	3.50	0.215	11.441	0.000	(4)>(1) (4)>(2) (4)>(3)
11	2.78	1.410	3.91	0.957	3.89	1.080	3.96	0.809	6.077	0.001	(4)>(1) (4)>(2) (4)>(3)
12	2.46	1.050	3.14	0.676	2.94	0.983	2.64	0.889	3.507	0.017	

The numbers 1-12 in the table refer to the following factors: Information Justice (1), Leadership Justice (2), Distribution Justice (3), Procedural Justice (4), Perceived Organizational Justice Variables (5), Occupational Expectations Factors (6), Workload Factors (7), Family and Interpersonal Factors (8),

Self-development Factors (9), Student Factors (10), Exam Stress Factors (11), Occupational Stress Variables (12).

(3) Comparison of differences in organizational justice and occupational stress in teaching years

Table 4: ANOVA Comparison Table with Years of Teaching as Background Variable (N=173)

Dimensions /Variables	(1) 1-3 Years (n=80)		(2) 4-6 Years (n=20)		(3) 7-9 Years (n=22)		(4) 10 years and above (n=51).		F-Value	P-Value	LSD
	M	SD	M	SD	M	SD	M	SD			
1	2.46	1.174	3.99	0.417	3.80	0.549	3.61	0.770	27.500	0.000	
2	2.55	1.285	3.88	0.824	4.05	1.076	3.83	1.047	19.780	0.000	
3	2.23	1.142	3.50	0.767	3.19	0.858	3.21	1.070	14.456	0.000	
4	2.00	1.059	3.45	0.759	3.09	0.915	3.12	1.080	20.612	0.000	
5	3.09	1.501	2.80	0.845	2.99	0.960	3.14	1.128	0.375	0.771	(4)>(1) (4)>(2) (4)>(3)
6	2.34	1.080	3.66	0.552	3.52	0.707	2.96	1.038	15.322	0.000	
7	2.38	0.912	3.66	0.431	3.48	0.805	3.04	0.970	17.910	0.000	
8	1.88	0.775	3.06	0.782	2.86	0.902	2.66	1.017	16.768	0.000	
9	2.05	0.653	3.06	0.392	2.98	0.549	2.62	0.783	21.742	0.000	
10	2.19	1.073	3.67	0.653	3.38	0.742	3.14	0.970	20.683	0.000	
11	2.43	1.335	4.18	0.557	4.15	0.684	3.82	1.042	28.269	0.000	
12	2.23	1.031	3.39	0.429	3.22	0.540	2.98	0.852	16.136	0.000	

The numbers 1-12 in the table refer to the following factors: Information Justice (1), Leadership Justice (2), Distribution Justice (3), Procedural Justice (4), Perceived Organizational Justice Variables (5), Occupational Expectations Factors (6), Workload Factors (7), Family and Interpersonal Factors (8), Self-development Factors (9), Student Factors (10), Exam Stress Factors (11), Occupational Stress Variables (12). Using analysis of variance to study the differences in the 12 items listed in the table with respect to teaching experience, it can be seen from the table that the samples with different years of teaching do not exhibit significant differences in their perception of organizational justice in one item, indicating that the perception of organizational justice is consistent among samples with different years of teaching and does not vary. Additionally, the years of teaching samples exhibit significant differences in the other 11 items, suggesting that there are differences in their perception of information justice, leadership justice, distribution justice, procedural justice, occupational expectations, workload factors, family and interpersonal relationships, self-development factors, student factors, exam stress factors, and job stress factors.

(4) Differences in organisational justice and occupational stress in whether or not to serve as a homeroom teacher

Based on the t-test analysis of the differences in the 12 items shown in the table, it can be observed that the samples of whether or not they serve as homeroom teachers exhibit significant differences in all 12 items. This indicates that whether or not they serve as homeroom teachers has an

impact on the perception of information justice, leadership justice, distribution justice, procedural justice, organizational justice, occupational expectations, workload factors, family and interpersonal relationship factors, self-development factors, student factors, exam stress factors, and job stress factors.

Table 5: T-test Comparison Table with Whether to Serve as Homeroom Teacher as Background Variable (N=173)

Dimensions/Variables	No (N=96)		Yes (N=77)		T Value	Sig. (Double-tailed).
	M	SD	M	SD		
Information Justice	2.768	1.244	3.610	0.756	-5.490***	0.000
Leadership Justice	2.839	1.407	3.810	0.974	-5.349***	0.000
Distribution Justice	2.406	1.159	3.255	1.003	-5.164***	0.000
Procedural Justice	2.235	1.156	3.164	0.999	-5.661***	0.000
Perceived Organizational Justice Variables	2.985	1.390	3.152	1.097	-5.886***	0.000
Occupational Expectations Factors	2.586	1.148	3.127	0.952	-3.387***	0.001
Workload Factors	2.591	0.985	3.205	0.911	-4.208***	0.000
Family and Interpersonal Factors	2.138	0.987	2.662	0.900	-3.615***	0.000
Self-development Factors	2.237	0.743	2.720	0.721	-4.307***	0.000
Student Factors	2.453	1.153	3.216	0.921	-4.841***	0.000
Exam Stress Factors	2.786	1.461	3.844	0.931	-5.779***	0.000
Occupational Stress Variables	2.481	1.069	2.999	0.787	-3.672***	0.000

(5) Comparison of differences in organizational justice and occupational stress in the teaching segment

Table 6: ANOVA Comparison Table with Teaching Level as Background Variable (N=173)

Dimensions/ Variables	(1) Junior High School (N=87).		(2) General High School (N=75).		(3) Vocational High School (technician) (N=11).		F-value	P-value	LSD
	M	SD	M	SD	M	SD			
Information Justice	2.911	1.471	3.347	0.550	3.591	0.465	4.037	0.019	(3)>(1) (3)>(2)
Leadership Justice	2.967	1.549	3.460	0.936	4.379	0.731	7.441	0.001	(3)>(1) (3)>(2)
Distribution Justice	2.797	1.450	2.604	0.619	3.909	0.958	6.365	0.002	(3)>(1) (3)>(2)
Procedural justice	2.538	1.459	2.597	0.631	3.873	0.960	6.799	0.001	(3)>(1) (3)>(2)
Perceived Organizational Justice Variables	2.553	1.383	3.510	0.879	3.987	0.880	17.404	0.000	(3)>(1) (3)>(2)
Occupational Expectations Factors	2.885	1.342	2.830	0.768	2.341	0.710	15.322	0.000	
Workload Factors	2.865	1.234	2.937	0.655	2.364	0.736	17.910	0.000	
Family and Interpersonal Factors	2.352	1.154	2.445	0.775	2.018	0.707	16.768	0.000	
Self-development Factors	2.481	0.884	2.423	0.646	2.416	0.608	21.742	0.000	
Student Factors	2.782	1.436	2.771	0.674	3.030	0.636	20.683	0.000	(3)>(1) (3)>(2)
Exam Stress Factors	2.966	1.652	3.557	0.918	3.523	0.675	28.269	0.000	
Occupational Stress Variables	2.642	1.277	2.810	0.557	2.586	0.497	0.678	0.509	

Using analysis of variance to investigate the differences in the 12 factors listed in the table with respect to the teaching levels of the teachers, it can be seen from the table that different samples of teaching levels do not show significance in one factor, which means that different teaching levels samples exhibit consistency in occupational expectations and do not show differences. In addition, the teaching levels of the teachers show significance in the other 11 factors, indicating that different stage samples have differences in 11 factors, including justice of information, justice of leadership, justice of allocation, justice of procedures, perceived organizational justice, occupational expectations, workload, family and interpersonal relations, self-development, student factors, and exam stress.

(6) Comparison of differences in organizational justice and occupational stress in the teaching segment.

The numbers 1-12 in the table refer to the following factors: Information Justice (1), Leadership Justice (2), Distribution Justice (3), Procedural Justice (4), Perceived Organizational Justice Variables (5), Occupational Expectations Factors (6), Workload Factors (7), Family and Interpersonal Factors (8), Self-development Factors (9), Student Factors (10), Exam Stress Factors (11), Occupational Stress Variables (12). Using analysis of variance to study the differences in the 12 items in the table based on the subjects taught by teachers, it can be seen from the table that significant differences exist in all 12 items among different subject samples. This means that different subjects taught by teachers have differences in the factors of organizational justice, information justice, leadership justice, distribution justice, procedural justice, occupational expectation factors, workload factors, family and interpersonal relationship factors, self-development factors, student factors, exam stress factors, and job stress.

Table 7: ANOVA Comparison Table with Taught Subject as Background Variable (N=173)

Dimensions/ Variables	(1) Others (N=76).		(2) Politics, History, Geography (N=20).		(3) Physics, Chemistry, Biology (N=19).		(4) English (N=58).		F Value	P Value	LSD
	M	SD	M	SD	M	SD	M	SD			
1	2.42	1.163	3.43	0.925	3.87	0.509	3.73	0.708	25.952	0.000	
2	2.53	1.347	3.68	1.132	4.08	0.888	3.84	0.937	19.013	0.000	
3	2.16	1.108	3.10	0.959	3.40	0.915	3.29	0.998	16.570	0.000	
4	1.98	1.072	3.13	0.970	3.40	0.902	3.11	1.021	19.471	0.000	
5	3.07	1.492	3.31	1.015	3.33	1.090	2.87	1.055	1.007	0.391	
6	2.33	1.093	3.03	1.106	3.34	0.602	3.24	0.964	11.180	0.000	
7	2.37	0.886	3.14	1.090	3.37	0.591	3.26	0.929	14.091	0.000	
8	1.90	0.839	2.63	0.927	2.60	0.757	2.82	0.988	12.820	0.000	(4)>(1) (4)>(2) (4)>(3)
9	2.05	0.642	2.49	0.821	2.78	0.535	2.86	0.719	16.985	0.000	(4)>(1) (4)>(2) (4)>(3)
10	2.19	1.076	2.99	1.073	3.28	0.776	3.36	0.885	17.668	0.000	(4)>(1) (4)>(2) (4)>(3)
11	2.41	1.347	3.59	1.286	4.03	0.692	4.01	0.828	26.555	0.000	
12	2.23	1.021	2.93	0.953	3.07	0.519	3.15	0.785	13.138	0.000	(4)>(1) (4)>(2) (4)>(3)

Correlation Analysis

(1) Overall correlation between teachers perceived organizational justice and occupational stress at Qinglai School

The correlation coefficient between teachers perceived organizational justice and occupational stress at Qinglai School reached a significant level, indicating a significant negative correlation. The results showed that as the teachers' perceived organizational justice at Qinglai School strengthened, their occupational stress decreased, while their occupational stress increased as the perceived organizational justice weakened.

(2) Correlation analysis of teachers perceived organizational justice and occupational stress dimensions at Qinglai School

There was a significant negative correlation between teachers perceived organizational justice and occupational stress at Qinglai School. Among them, the negative correlation between perceived organizational justice and exam stress was weaker, at -0.027.

There were significant negative correlations between perceived organizational justice and other dimensions of occupational stress, with the negative correlation coefficient being -0.150 for student factors, -0.276 for self-development factors, -0.253 for family and interpersonal factors, and -0.149 for workload factors.

Table 8: Correlation Matrix between Teacher Organizational Justice Perception and Teacher Occupational Stress (N=173)

	1	2	3	4	5	6	7	8	9	10	11	12
1.Information justice	1											
2.Leadership justice	0.773***	1										
3.Distribution justice	0.718***	0.814***	1									
4.Procedural justice	0.761***	0.793***	0.888**	1								
5.Occupational expectations	0.609***	0.431***	0.502**	0.522***	1							
6.Workload	0.651***	0.469***	0.537**	0.542***	0.878**	1						
7.Family and interpersonal relationships	0.532***	0.429***	0.433**	0.456***	0.769**	0.798***	1					
8.Personal development	0.687***	0.498***	0.542**	0.582***	0.731**	0.743***	0.705***	1				
9.Student factors	0.781***	0.569***	0.593**	0.643***	0.659**	0.689***	0.617***	0.849***	1			
10.Exam stress	0.808***	0.678***	0.574**	0.630***	0.537**	0.570***	0.631***	0.736***	0.810***	1		
11.Occupational stress	0.598***	0.441***	0.476**	0.522***	0.754**	0.689***	0.676***	0.742***	0.699***	0.643***	1	
12.Organizational justice	0.137*	0.195**	0.175**	0.237***	-0.108	-0.149*	-0.253***	-0.276***	-0.150**	-0.027	-0.062	1

* P<0.05, ** P<0.01, *** P<0.001

Regression Analysis

Table 9: Stepwise Regression Analysis Table of Teacher Organizational Justice Perception on Teacher Occupational Stress

Model	R-squared	Adjusted R-squared	R-squared Change	F-value Change	Significant F-value Change
a	0.358	0.354	0.358	95.332	0.000
b	0.359	0.352	0.001	47.633	0.000
c	0.370	0.359	0.011	33.136	0.000
d	0.379	0.364	0.008	25.598	0.000
Model	Explanatory Variables	β Value	T Value	Significance	VIF
1	Information Justice	0.521	9.764	0.000	1.000
2	Information Justice	0.557	6.617	0.000	2.484
	Leadership Justice	-0.041	-0.562	0.000	2.484
3	Information Justice	0.521	6.036	0.000	2.639
	Leadership Justice	-0.130	-1.474	0.000	3.779
	Distribution Justice	0.158	1.736	0.000	3.144
4	Information Justice	0.479	5.305	0.000	2.914
	Leadership Justice	-0.144	-1.626	0.000	3.819
	Distribution Justice	0.038	0.316		5.584
	Procedural Justice	0.180	1.500		5.602

Response variable: Teacher organizational sense of justice

a. Explanatory variables: (constant), information justice

b. Explanatory variables: (constant), information justice, procedural justice

c. Explanatory variables: (constant), information justice, procedural justice, outcome justice

d. Explanatory variables: (constant), information justice, procedural justice, outcome justice, leadership justice

Table 10: Regression Analysis Table of Teacher Organizational Justice Perception and Teacher Occupational Stress (N=173)

R-squared	Adjusted squared	R- F	Significance	B-value	T-value	Significance
0.497	0.427	137.210	.000	-0.213	-13.696	0.000

Strain Volume: Teacher occupational stress

Explanatory variables: (constant), perceived organizational justice

Discussion

Research on the Correlation of Teachers' Perceived Organizational Justice on Teachers' Occupational Stress in Qinglai School

This study investigated and analyzed the correlation between teachers' organizational justice perception and their occupational stress. The results showed that the organizational justice perception of teachers at Qinglai School had a significant negative correlation with various dimensions of their

occupational stress. When comparing with existing theoretical research models, it was anticipated that there would be a significant association between justice and stress, and that the perceived organizational justice could reduce uncertainty and lack of control. This study's findings were consistent with Nie Yongfang's related research in 2022, which showed that the four dimensions of organizational justice were negatively correlated with job stress and could effectively predict the level of occupational stress and play a mediating role. A sense of injustice would bring stress and tension to teachers, thereby affecting their physical and mental health. At the very least, this could result in teacher dissatisfaction, leading to decreased work efficiency, while severe cases could cause absenteeism and resignation.

Among them, teachers' organizational justice perception had a higher impact on the occupational expectation factor and workload factor of teachers' occupational stress, with significant correlation. This research result was consistent with Yan Guangcai and Min Wei's study in 2020, which found that primary and secondary school teachers frequently dealt with trivial matters in their daily work, which caused confusion about their career and confusion about their development. Therefore, the impact of teachers' organizational justice perception on their occupational stress is particularly important.

In addition, the leadership justice in teachers' organizational justice perception had a higher impact on various dimensions of their occupational stress and showed a significant negative correlation. This research result was consistent with Zhou (2015), Yang (2015), and Liu (2015). Due to the lack of effective incentives for teachers' work from schools and social environments and the non-immediate effect of student work, primary and secondary school teachers' work input and output were difficult to match, resulting in a sense of frustration in their work. Therefore, the positive incentive mechanism of leadership justice for teachers is particularly important in alleviating their occupational stress and improving their happiness.

Comparative Discussion on the Relationship Between Organizational Justice Perception and Occupational Stress among Teachers with Different Background Variables at Qinglai School

This study analyzed survey data to explore the differences in organizational justice perception and occupational stress among teachers with different background variables at Qinglai School. Six background variables, including gender, teaching levels, subject, whether or not they concurrently serve as homeroom teacher, age, and teaching experience, were identified as having significant differences in occupational stress. This suggests that different backgrounds can lead to different perceptions of occupational stress and that occupational stress can have various sources. In comparison to previous studies that have only examined limited stress factors or one specific factor, such as those conducted by Yu (2022), Huang (2022), and Wang (2022), this study comprehensively and multidimensionally investigated occupational stress, and the results demonstrated the diversity of its sources.

Conclusions

1) Test results of differences in organizational justice perception among Qinglai School teachers with different background variables: In the analysis of the differences in teaching leadership among Qinglai School teachers with different background variables, seven hypotheses proposed by this study were tested. The results showed that there were significant differences in organizational justice perception among Qinglai School teachers with different genders and teaching levels, while age, teaching experience, position, and subject did not receive support.

2) Test results of differences in occupational stress among Qinglai School teachers with different background variables: In the analysis of the differences in occupational stress among Qinglai School teachers with different background variables, seven hypotheses proposed by this study were tested. The results showed that all hypotheses, except for teaching levels, were supported.

3) Test results of the relationship between organizational justice perception and occupational stress among Qinglai School teachers, as well as the correlation among their dimensions: The hypotheses proposed by this study regarding the relationship between organizational justice perception and occupational stress among Qinglai School teachers and the correlation among their dimensions were supported. There was a significant negative correlation between organizational justice perception and occupational stress among Qinglai School teachers, and the dimensions of the two variables also showed a high degree of correlation.

4) Test results of the predictive power of organizational justice perception on occupational stress among Qinglai School teachers: The hypothesis proposed by this study regarding the predictive power of organizational justice perception on occupational stress among Qinglai School teachers was supported. The standardized coefficients of the four dimensions of teachers' organizational justice perception on the six dimensions of occupational stress (occupational expectations, workload, family and interpersonal relationships, self-development, student factors, and exam stress) were -0.108, -0.149, -0.253, -0.276, -0.150, -0.027, and -0.0621, respectively. This indicates that teachers' organizational justice perception has a significant negative correlation with their occupational stress, and has a significant predictive power on occupational stress.

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STUDENT UNION INNOVATION MANAGEMENT AND ORGANIAZATION EFFECTIVENESS: A CASE STUDY OF ZHENZHOU TECHNOLOGY AND BUSINESS UNIVERSITY

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Abstract: Taking Zhengzhou Technology and Business University as an example, this study aims to explore the impact of different background variables on the innovation management and organizational effectiveness of the student union and the relationship between the innovation management and organizational effectiveness of the student union. The research results not only have practical significance for the improvement of the innovation management and organizational effectiveness of the student union of Zhengzhou Technology and Business University. Moreover, it is also significant for the improvement of student union in other higher education institutes. In this study, college students in Zhengzhou Technology and Business University were selected as the mother group, and the link of questionnaires were distributed to students in Zhengzhou Technology and Business University via WeChat. A total of 261 questionnaires were collected, of which 205 were valid. SPSS software was used to analyze the data using statistical methods such as "descriptive statistical analysis, independent sample t test, one-way ANOVA, regression analysis" and draw conclusions.

The results show that there is a significant correlation between innovation management and organizational effectiveness in the student union of Zhengzhou Technology and Business University. The innovation management of students' union can predict organizational effectiveness, and its innovation promotion has the strongest predictive power, followed by the innovation which has the weakest predictive power. The innovation management of student union has a regression effect on its organizational effectiveness. According to the results, the suggestions for the work of Zhengzhou Technology and Business University and the Student Union are as follows: to consolidate the reform of the student union and achieve results; improve students' ability in innovation and development; improve the student union system; strengthen support and guarantee for students' unions.

Keywords: Organizational Effectiveness, Quantitative Research, Student Union Innovation Management

Introduction

Research Background

Under the background of the new era, the university student union is faced with the new historical mission and the responsibility of the times, as well as various problems in the process of reform. University student union is an important carrier of campus culture and promotes the development of campus culture (Janvrin, Gary, & Clem, 2009). In colleges and universities, campus culture is almost as important to students' education as teaching (Janvrin, Gary, & Clem, 2009). The university student union is an organization under the leadership of the Party, under the guidance of teachers and execution by students, showing the characteristics of bureaucracy, administrative-orientation, lacking vitality, participation and attractiveness; and students are less informed, engaged and satisfied (Rosch& Collins, 2017). Under the background of reform, university student union urgently needs to improve the autonomy of organizational management, strengthen organizational functions, and enhance the vitality and attractiveness of the organization (Zhao, 2022). At present, various colleges and universities have carried out reforms. Although they have produced some positive effects in terms of a vigorous and healthy campus culture, increased participation of students, improved efficiency of services for students, the student union still faces many problems like bureaucracy and poor inclusion, etc. (Marek, & Peter, 2012).

The innovation in student union management needs to be carried out by constantly adjusting its own managerial behavior so that the activities of the student union can gradually achieve the same frequency and synchronization with the teaching requirements of the new course (Ivancevich, Matteson, & Konopaske, 2008). Therefore, under this premise, it is highly necessary to discuss the innovative managerial methods of university student union (Shen, 2017). The organization of student union can stimulate, inspire, implicate and permeate students' thoughts and behaviors (Webster, & Sedlacek, 1982). Educationist Ye Shengtao once said: The purpose of education is to achieve 'no education'. Non-education is not to give up education, but to establish a form of self-education with students as the main body so that students can consciously and actively carry out self-awareness, self-management and education, and constantly improve their own process (Schwarcz, 1986). This is the goal of the Student Union. The purpose of the Student Union is to enable students to educate, manage and serve themselves (Brooks, Byford, & Sela, 2015). And for the creation of student Union such a platform, the 21st century has the following requirements for talents: They must have a strong comprehensive quality, a new knowledge structure, a global vision, in order to participate in international competition and cooperation (McCauley, & Wakefield, 2006). What is needed in the 21st century is comprehensive talents with new ideas, who can constantly engage in technological innovation, be good at management and market development, and have team spirit, which is also placed great hope on the student union cadres (Trilling& Fadel, 2009).

Therefore, we cannot emphasize too much the organization of university student union. At the same time, the university student union is an important front for the ideological and political education of the university students (Li, 2018). It plays an important role in maintaining the stability of the campus, promoting the construction of campus culture and improving the comprehensive quality of the students (Lowe, et al, 2017). The organization of student union can stimulate, inspire, implicate and permeate students' thoughts and behaviors (Fink, et al, 2017). This is the goal of the Student Union. The purpose of the Student Union is to enable students to educate, manage and serve themselves. And for the creation of student Union such a platform. The 21st century has the following requirements for talents: They must have a strong comprehensive quality, a new knowledge structure, a global vision, to participate in international competition and cooperation (Ambrose, & Sternberg, 2016). What is needed in the 21st century is comprehensive talents with new ideas, who can constantly engage in technological innovation, be good at management and market development, and have team spirit, which is also placed great hope on the student union cadres.

College student work assumes the important responsibility of "self-education, self-service and self-management" of college students, and is also the main force of campus culture construction (Chen, et al, 2022). In college, many students choose to participate in the work of student union (Bölling & Eriksson, 2016). How to maximize the value of this organization is an important part of student management in colleges and universities. However, at present, there are some common problems in college student work, such as insufficient communication with students, imperfect system, conflict between class time and student activity time, which hinder the healthy development of college student work to a certain extent (Zhao, 2018).

As a student organization under the leadership of the Communist Party of China and under the direct guidance of the Communist Youth League of China, university students' Union is a bridge and link between the university and the majority of young college students (Briggs, et al, 2019). In the new era, the student union plays a crucial role in fulfilling the fundamental task of cultivating morally and intellectually competent individuals who are well-rounded in character, knowledge, physicality, aesthetics, and labor (Guan, Cole, & Worthington, 2016). However, the current work is restricted by colleges and universities, especially the unclear responsibilities of some colleges and universities for the work of the student union of the Youth League Committee, students and the student union of the university Youth League Committee is not smooth communication, resulting in most of the university Youth League Committee student Union activities there is still a relatively chaotic phenomenon (Al-Abyadh & Abdel Azeem, 2022). The institutional reform requires that the student union of the Youth League Committee in colleges and universities should have a clear orientation, serve the students of colleges and universities and build the connection between the students and the university as the main work goal, and strengthen the working ability of the student union of the Youth League committee in

colleges and universities (Zhang, Lei, & Luo, 2022). Student organizations provide a broad stage for college students to display their talents, exercise their abilities and cast quality, and become a new carrier of college campus culture (Brooks, 2022). Therefore, we should pay attention to student organization and strengthen the sense of service when carrying out the daily work of student organization. We should give full affirmation to the role and influence of student organization in constructing harmonious campus culture (Yao, et al, 2013). In management, "emphasis on guidance, reduce intervention", mainly in the political direction to grasp and guide, other aspects of specific: let go, but not laissez-faire (Wei, 2022). Trust should not be taken lightly, and we should actively guide rather than simply cope with. Chinese college students have made progress in developing a self-management, self-service, and self-education model over the years. However, there are still issues like deviation in positioning, overstaffed institutions, low efficiency, and unclear developmental concepts (Miao, 2019). In the new era, under the stable support of the national policy environment, the internal impetus of the reform of the student union at all levels has been continuously enhanced, and a number of landmark reform achievements have been initially formed (Gao, 2016). Nonetheless, some student union organizations continue to face issues such as excessive bureaucracy, lack of focus on student-related work, and insufficient attention to style construction. These problems hinder the vitality, motivation, attractiveness, and cohesion of the student union, affecting its overall image and the realization of its purpose (Xie& Zhao, 2014).

Research Problems

- (1) What is the current situation of innovation management of university Student Union?
- (2) Explore the status quo of organizational effectiveness of university student Union?
- (3) Identify the differences in background variables of university student union innovation management?
- (4) Identify the differences of organizational effectiveness of university student union in background variables?
- (5) Explore the relationship between innovative management and organizational effectiveness of university student union?
- (6) Explore the influence of innovative management of university student Union on organizational effectiveness?

Scope of the Study

The sample objects of this study are freshmen, sophomores, juniors and seniors of Zhengzhou Technology and Business University, involving people of different majors, genders and grades, which is representative to a certain extent.

Research Significance

Self-education, self-management, self-service "is still the purpose of today's student union

organization. In the new era, students' personality is more self-centered, students' thoughts are more independent, and their character tends to be more independent (Hwami & Kapoor, 2012). The purpose of this study is to find the problems of student union organization and put forward countermeasures. These measures are to make the student union organization to the "three self" return (Islam, Burnett, & Collins, 2021). It is also consistent with the personality characteristics of today's college students, which is also in line with the contemporary call to college students.

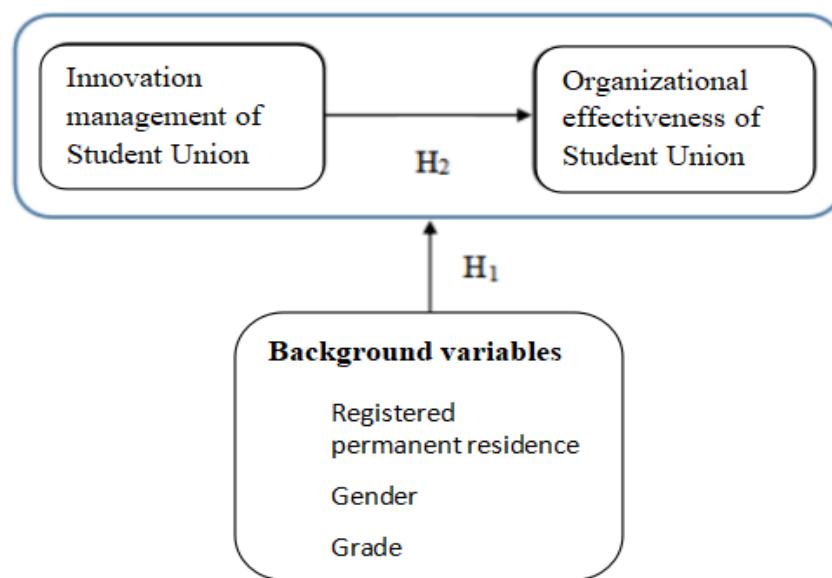
Specifically, the practical significance of this study is as follows:

1. Combined with existing studies, this paper analyzes the appropriate positioning of university student union organizations, providing an ideal model for relevant research on university student union organizations.

2. Promote the student Union organization to serve students better and make it more pragmatic.

From the perspective of empirical research, this study explores the relationship between innovative management of student union and organizational effectiveness, providing a new perspective and method for the management and development of university student union. Questionnaire survey and field interview were used to collect data, and a comprehensive and in-depth study was conducted on the innovation management and organizational effectiveness of the student union from different dimensions. This paper discusses the correlation and influence mechanism between the innovation management of student union and organizational effectiveness, and puts forward corresponding management suggestions and practical significance, which has certain practical application value.

Theoretical Framework



Hypotheses

Based on the above research questions, objectives and framework, this study proposes the following research hypotheses as the basis for statistical test:

Hypothesis 1: Students with different background variables have different views on the innovative management and organizational effectiveness of the student union.

Hypothesis 1.1: Students with different background variables have different views on the innovative management of the student union.

H1.1-1: Students of different genders have different views on the innovative management of the student union.

H1.1-2: Students with different hukou have different views on the innovative management of the student union.

H1.1-3: Students of different majors have different views on the innovative management of the student union.

H1.1-4: Students of different grades have different views on the innovative management of the student union.

Hypothesis 1.2: Students with different background variables have different views on the organizational effectiveness of the student union.

H1.2-1: Students of different genders have different views on the organizational effectiveness of the student union.

H1.2-2: Students with different number of households and total population have different views on the organizational effectiveness of the student union.

H1.2-3: Students of different majors have different views on the organizational effectiveness of the student union.

H1.2-4: Students of different grades have different views on the organizational effectiveness of the student union.

Hypothesis 2: The innovative management of the student union has a significant impact on organizational effectiveness.

H2-1: The innovation management of student union is closely related to the organizational effectiveness of student union.

H2-2: The innovative management ability of students' union affects the organizational effectiveness of students' union to some extent.

Literatures Review

Innovation management ensures that it is possible for the whole organization to adopt new technology, new equipment, new materials and new methods through organizational structure and system innovation (Hidalgo & Albors, 2008). It provides new products and services for the society through decision-making, planning, directing, organizing, motivating, controlling and other management functional activities and combinations (Ortt & Van der Duin, 2008). Management

innovation is a management activity implemented by social organizations to achieve the purpose of scientific and technological progress and adapt to the development and change of external environment and internal conditions (Xu et al., 2007). The competition in innovation is essentially the continuation of knowledge management, which is beyond the existing and potential knowledge competition (Hashmi, 2013). Through the pioneering spirit of innovation, insatiable thirst for knowledge and strong sense of competition, we can provide new knowledge and technology to solve problems, create and design new knowledge management, and form new competitiveness (Gronum et al., 2016; Leiponen & Helfat, 2010). Institutional reform demands a clear direction for college and university student unions to prioritize serving students and fostering connections between students and the institution. It also emphasizes the need to enhance the working capacity of the Youth League Committee's student unions (Briggs et al., 2019; Brooks et al., 2016).

High school student union management model of teamwork performance is not strong (Brooks et al., 2016). At present, the management mechanism of high school student union emphasizes too much the role of student union cadres, instead of building a team and cooperative management mode from the perspective of all teachers and students (Lafer, 2003; Madriaga, 2010). For example, many high school students overemphasize individual division of labor rather than team cooperation in daily management, which makes the daily work of many students unable to achieve the expected effect (Phipps, 2020); in this situation, the outcomes of activities completely fail to meet the multi-dimensional objectives of the new curriculum and the enrichment of the activities of the student union (Singh, Zinni, & MacLennan, 2006). Therefore, only by innovating the management mode of high school student union can good management effects be achieved (Penny, 2019). Foreign literature on student union mainly focuses on the study of university student union, and pays little attention to middle school student union (Espinosa, 2006; Xinzhuo, Junhua, & Zhihuiet, 2015). "A middle school student council" is one of the few articles about a middle school student council (Davodi, 2012). Mr. Oakley, assistant to the principal of the school, introduced a structural reform for the Student Council in Engel Middle School, namely, the establishment of grad level Councils in four grades (McFarland & Starmanns, 2009). Each branch consists of 14-18 representatives democratically elected by students to maximize the representativeness of the student Union and meet the diverse needs of students from different classes in terms of interests, hobbies, etc. (Leask & Carroll, 2011). The student branch has the responsibility to plan the activities of its own students, participate in school policy discussions, and make suggestions to teachers and school leaders (Reichert, 2016). The author thinks that although this is not a research paper of student union with deep theoretical support, the cases of student union reform in Engel middle School share can be used as a reference for the reform of Chinese middle school, especially large middle school students' union, and has a certain practical significance (Leung et al., 2016).

Research Methodology

According to the research questions and objectives, the researchers used the literature analysis and research method to analyze the concept of the literature, adapt the questionnaire in a quantitative way, and apply the fourth order scale to obtain quantitative data. After data sorting, SPSS software was used to analyze the data and give conclusions and suggestions (Al-Abyadh & Abdel Azeem, 2022).

Findings and Conclusions

From the results after the questionnaire statistics, Of the 205 formal samples included in this study, The background variables were "grade", "gender", and "hukou", The "grade" is divided into freshman, sophomore, junior and senior; Gender is divided into male and female; Hukou is divided into towns and villages: (1) the frequency of variable freshmen in the middle grade sample is 47, Accounting for 22.9% of the samples; The sophomore frequency number was 61 people, Accounting for 29.7% of the samples; The frequency of the junior year was 41, Accounted for 20.0% of the samples; Senior frequency of 56, Accounting for 27.4% of the samples; (2) The frequency of gender variable males in the sample was 103, For 50.2% of the samples, The frequency of sex-variable females in the subject sample was 102, Accounting for 48.9% of the samples; (3) The frequency of hukou variables in the sample is 163, Of 79.5% of the samples, The frequency of household variable in the sample was 42, Of the samples, it was 20.5%.

Table 1: Population Background Statistics Table (N=205)

Background Variables	Divide Into Groups	Frequency	Percentage (%)
Grade	Freshman (1)	47	22.9
	Sophomore (2)	61	29.7
	Junior Year (3)	41	20.0
	Senior Year (4)	56	27.4
Sex	Male (1)	103	50.2
	Female (2)	102	48.9
Number of Households and Total Population	Towns (1)	163	79.5
	Country (2)	42	20.5

The sample size obtained in this study contained 205 valid data. Based on these data, this subsection will study the descriptive statistical analysis, difference analysis, correlation analysis and regression analysis, in order to derive the current status and relationship of the independent and dependent variables. In this study, α reliability was analyzed on the reliability of the innovation management and organizational effectiveness scale. The Cronbach's α of each scale title was greater than 0.8, indicating that there was high internal consistency among the variables of the scale. Furthermore, Cronbach's α for all dimensions also exceeded 0.7, indicating good reliability of the questionnaire. Difference analysis is a hypothesis testing method to determine whether these factors can

explain the change in data. Test the differences between different ages and different account backgrounds; single factor ANOVA variance analysis of different management methods, management concept, management promotion, organizational decision-making, organizational environment, organizational responsibilities, and organizational efficiency, if the significant level, according to the significant variance, choose different test methods to further compare LSD post-hoc (Islam, Burnett, & Collins, 2021).

Independent sample t-test was used to analyze the differences between innovation management and organizational efficiency of different genders, and the results are shown in Table 2. The scores of different gender students are described as follows:

Table 2: Comparison Of T-Test Differences with Gender as Background Variable (N=205)

Dimensions / Variables	Male (N=103)	Female (N=102)	T Value		Sig. (Double Tail)	
	M	SD	M	SD		
Innovative Ideas	3.640	1.021	3.495	0.960	1.052	0.294
Innovative Manner	3.669	0.966	3.512	0.943	1.182	0.239
Innovation Promotion	3.629	0.880	3.486	0.885	1.162	0.246
Organizational Decision-Making	3.730	0.987	3.539	0.955	1.410	0.160
Organizational Environment	3.662	1.047	3.524	0.975	0.976	0.330
Organizational Responsibilities	3.480	1.005	3.647	1.124	-1.117	0.265
Organizational Efficiency	3.555	0.863	3.625	0.903	-0.561	0.576

The scoring scenarios at the innovation concept level are as follows: male (M=3.640, SD=1.021) and female (M=3.495, SD=0.960); T =1.052 and P-value =0.294. There was no significant difference between boys and girls at the level of innovative ideas (Ivancevich et al., 2008). The scoring scenarios at the innovation level are as follows: male (M=3.669, SD=0.966) and female (M=3.512, SD=0.943); T-value =1.182 and P-value =0.239. There was no significant difference between boys and girls at the level of innovation approach. The score scenarios for the innovation improvement level are as follows: male (M=3.629, SD=0.880) and female (M=3.486, SD=0.885); T =1.162 and P-value =0.246. There was no significant difference between boys and girls at the level of innovation promotion (Jiachen, 2019). The score scenarios at the organizational decision level are as follows: boys (M=3.730, SD=0.987) and female (M=3.539, SD=0.955); T =1.4108 and P-value =0.160. There were no significant differences between boys and girls at the level of organizational decision-making. The score scenarios of the organizational environment are as follows: male (M=3.662, SD=1.047) and female (M=3.524, SD=0.975); T-value =0.976 and P-value =0.330. There were no significant differences between boys and girls at the level of the organizational environment (Jiachen, 2019). The score scenarios at the organizational responsibility level are as follows: male (M=3.480, SD=1.005) and female (M=3.647, SD=1.124); T = -1.117 and P-value =0.265. There were no significant differences between boys and girls at the level of organizational responsibilities. The scoring scenarios for the organizational

efficiency level are as follows: boys ($M=3.555$, $SD=0.863$); female ($M=3.625$, $SD=0.903$); $T = -0.561$; $P\text{-value} = 0.576$. There were no significant differences between boys and girls at the level of organizational efficiency (Janvrin et al., 2009).

Independent sample t-test was used to analyze the students with different hukou, and the differences in innovation management and organizational effectiveness were analyzed. The results are shown in Table 3. The scores of different registered student union backbone dimensions are described as follows:

Table 3: Comparison of T-Test Differences with Hukou as Background Variable (N=205)

Dimensions / Variables	Town (N=163)		Country Area (N=42)		Sig. (Double Tail)	
	M	SD	M	SD		
Innovative Ideas	3.579	0.960	3.523	1.116	0.325	0.745
Innovative Manner	3.624	0.924	3.464	1.072	0.967	0.335
Innovation Promotion	3.595	0.831	3.416	1.061	1.168	0.244
Organizational Decision-Making	3.645	0.959	3.595	1.040	0.299	0.765
Organizational Environment	3.625	1.001	3.470	1.058	0.887	0.376
Organizational Responsibilities	3.589	1.020	3.464	1.240	0.674	0.501
Organizational Efficiency	3.615	0.854	3.494	0.986	0.792	0.429

The scoring scenario at the innovation concept level is as follows: town ($M=3.769$, $SD=0.960$); rural ($M=3.523$, $SD=1.116$); $T\text{-value} = 0.325$ and $P\text{-value} = 0.745$. There was no significant difference in hukou at the level of innovative ideas (Li, 2016). The scoring scenarios at the level of innovation is as follows: town ($M=3.624$, $SD=0.924$) and rural ($M=3.464$, $SD=1.072$); $T\text{-value} = 0.967$ and $P\text{-value} = 0.335$. There was no significant difference in hukou at the level of innovation. The score scenarios of the innovation improvement level are as follows: town ($M=3.595$, $SD=0.831$); rural ($M=3.416$, $SD=1.061$); $T\text{-value} = 1.168$ and $P\text{-value} = 0.244$. There was no significant difference in hukou at the level of innovation improvement (Malaney et al., 1997). The organizational decision level scores are as follows: town ($M=3.645$, $SD=0.959$); rural ($M=3.595$, $SD=1.040$); $T\text{-value} = 0.299$; $P\text{-value} = 0.765$. Hukou was not significantly different at the level of organizational decision-making. The score scenarios at the organizational environment level are as follows: town ($M=3.625$, $SD=1.001$) and rural ($M=3.470$, $SD=1.058$); $T\text{-value} = 0.887$ and $P\text{-value} = 0.376$. Hukou showed no significant differences at the level of the organizational environment (Marek & Peter, 2012). The score scenarios at the organization responsibility level are as follows: town ($M=3.589$, $SD=1.020$) and rural ($M=3.464$, $SD=1.240$); $T\text{-value} = 0.674$ and $P\text{-value} = 0.501$. Hukou showed no significant differences at the level of organizational responsibilities. The scoring scenarios at the organizational efficiency level are as

follows: town (M=3.615, SD=0.854) and rural (M=3.494, SD=0.986); T-value =0.792 and P-value =0.429. Hukou did not differ significantly at the level of organizational efficiency (Maxwell, 2016).

One-factor analysis of variance (ANOVA) test was used to analyze the differences between innovation management and organizational efficiency of different grades. The results are shown in Table 4. The scores for different grades are described as follows:

Table 4: Comparison of ANOVA difference with Grade as Control Variable (N=205)

Dimensions Variables	① Primary Year (N=47)	② Sophomore Year (N=61)	③ Junior Year (N=64)	④ Senior Year (N=56)	F Value	P Value	LSD				
	M	SD	M	SD	M	SD	M	SD			
Innovative Ideas	3.484	0.995	3.479	0.952	3.573	1.006	3.732	1.025	0.783	0.505	
Innovative Manner	3.484	0.986	3.541	0.917	3.603	0.890	3.727	1.023	0.632	0.595	
Innovation Promotion	3.441	0.923	3.500	0.849	3.527	0.858	3.743	0.899	1.201	0.311	
Organizational Decision-Making	3.526	1.033	3.614	0.930	3.567	0.955	3.799	0.987	0.797	0.497	
Organizational Environment	3.393	1.123	3.528	0.982	3.682	0.996	3.767	0.946	1.361	0.256	
Organizational Responsibilities	3.180	1.178	3.623	1.113	3.737	1.044	3.692	0.867	2.782	0.042	②>③
Organizational Efficiency	3.335	1.080	3.614	0.888	3.682	0.813	3.709	0.700	1.843	0.141	

The scoring scenarios at the innovation concept level are as follows: freshman (M=3.484, SD=0.995); sophomore (M=3.479, SD=0.952); junior (M=3.573, SD=1.006); senior (M=3.732, SD=1.025); T-value =0.783; P-value =0.505. There was no significant difference in grades at the level of innovative ideas (McFarland & Starmanns, 2009). The scoring scenarios at the innovation level are as follows: freshman (M=3.484, SD=0.986); sophomore (M=3.541, SD=0.917); junior (M=3.603, SD=0.890); senior (M=3.727, SD=1.023); T-value =0.632; P-value =0.595. Grade levels did not differ significantly at the level of the innovation approach. The innovation improvement scores are as follows: freshman (M=3.441, SD=0.923); sophomore (M=3.500, SD=0.849); junior (M=3.527, SD=0.858); senior (M=3.743, SD=0.899); T=1.201; P-value =0.311. There was no significant difference in grades at the level of innovation improvement (Ortt & Van der Duin, 2008). The organizational decision scores are as follows: freshman year (M=3.526, SD=1.033); sophomore year (M=3.614, SD=0.930); junior year (M=3.567, SD=0.955); senior year (M=3.799, SD=0.987); T=0.797; P-value =0.497. Grade was not significantly different at the level of organizational decision-making. The scoring scenarios at the organizational environment level are as follows: freshman (M=3.393, SD=1.123); sophomore (M=3.528, SD=0.982); junior (M=3.682, SD=0.996); senior (M=3.767, SD=0.946); T=1.361; P-value =0.256. Grade levels did not differ significantly at the level of the organizational environment (Ou et al., 2018). The responsibility scores are as follows: freshman year (M=3.180, SD=1.178); sophomore

year ($M=3.632$, $SD=1.113$); junior year ($M=3.737$, $SD=1.044$); senior year ($M=3.692$, $SD=0.867$); T -value =2.782; P -value =0.042. Grade varies significantly at the level of organizational responsibilities (Penny, 2019). The score scenario of organizational efficiency level is as follows: freshman year ($M=3.335$, $SD=1.080$); sophomore year ($M=3.614$, $SD=0.888$); junior year ($M=3.682$, $SD=0.813$); senior year ($M=3.709$, $SD=0.700$); T -value =1.843; P -value =0.141. Grade levels did not differ significantly at the level of organizational efficiency.

Through Person correlation coefficient analysis, the correlation analysis results between the dimensions of innovation management and organizational efficiency are described as follows:

Innovative idea and innovative mode ($r=.904$, $p=.000$) shows significant positive correlation; innovation concept and innovation promotion ($r=.906$, $p=.000$) presents a significant positive correlation; innovation concept and home innovation management ($r=.961$, $p=.000$) shows significant positive correlation; innovation idea and organizational decision variables ($r=.489$, $p=.000$) presents a significant positive correlation; innovative ideas and organizational environment variables ($r=.236$, $p=.000$) presents a significant positive correlation; innovation concept and organizational responsibility variables ($r=.476$, $p=.000$) presents a significant positive correlation; innovation idea and organizational efficiency variables ($r=.355$, $p=.000$) presents a significant positive correlation; innovative ideas and organizational effectiveness ($r=.423$, $p=.000$) showed a significant positive correlation (Peterson et al., 2006). Innovation mode and innovation promotion variable ($r=.897$, $p=.000$) presents a significant positive correlation; innovation approach and innovation management ($r=.956$, $p=.000$) presents a significant positive correlation; innovation and organizational decision variables ($r=.222$, $p=.000$) presents a significant positive correlation; innovation and organizational environment variables ($r=.256$, $p=.000$) presents a significant positive correlation; innovation and organizational responsibility variables ($r=.440$, $p=.000$) presents a significant positive correlation; innovation and organizational efficiency variables ($r=.345$, $p=.000$) presents a significant positive correlation; innovation approach and organizational effectiveness ($r=.397$, $p=.000$) showed a significant positive correlation (Phipps, 2020). Innovation promotion and innovation management ($r=.979$, $p=.000$) presents a significant positive correlation; innovation improvement and organizational decision variables ($r=.295$, $p=.000$) presents a significant positive correlation; innovation improvement and organizational environment variables ($r=.340$, $p=.000$) presents a significant positive correlation; innovation improvement and organizational responsibility variables ($r=.463$, $p=.000$) presents a significant positive correlation; innovation improvement and organizational efficiency variables ($r=.365$, $p=.000$) presents a significant positive correlation; innovation improvement and organizational effectiveness ($r=.460$, $p=.000$) showed a significant positive correlation (Pollock, 2003). Innovation management and organizational decision variables ($r=.269$, $p=.000$) presents a significant positive correlation; innovation management and organizational environment variables ($r=.312$, $p=.000$) shows significant positive correlation;

innovation management and organizational responsibility variable ($r=.476$, $p=.000$) presents a significant positive correlation; innovation management and organizational efficiency variables ($r=.369$, $p=.000$) showed a significant positive correlation; innovation management and organizational effectiveness ($r=.4489$, $p=.000$) showed a significant positive correlation (Shen, 2017). Organizational decision-making and organizational environment variables ($r=.879$, $p=.000$) presents a significant positive correlation; organizational decision and organizational responsibility variables ($r=.367$, $p=.000$) presents a significant positive correlation; organizational decision and organizational efficiency variables ($r=.343$, $p=.000$) presents a significant positive correlation; organizational decision making and organizational effectiveness ($r=.812$, $p=.000$) showed a significant positive correlation. Organizational environment and organizational Responsibilities Variables ($r=.367$, $p=.000$) presents a significant positive correlation; organizational environment and organizational efficiency variables ($r=.346$, $p=.000$) presents a significant positive correlation; organizational environment and organizational effectiveness ($r=.814$, $p=.000$) showed a significant positive correlation (Al-Abyadh & Abdel Azeem, 2022). Organizational Responsibilities and Organizational Efficiency Variables ($r=.820$, $p=0.000$) showed a significant positive correlation; organizational responsibility and organizational effectiveness ($r=.800$, $p=.000$) showed a significant positive correlation. Organizational efficiency and organizational efficiency ($r=.775$, $p=0.000$) showed a significant positive correlation.

Table 5: Correlation Matrix of Management and Innovation of Student Union (N=205)

	1	2	3	4	5	6	7	8	9
1. Innovative Ideas	-								
2. Innovative Ways	.904**	-							
3. Innovation and Improvement	.906**	.897**	-						
4. Innovative Management	.961**	.956**	.979**	-					
5. Organize Decision-Making	.236**	.222**	.295**	.269**	-				
6. Organizational Environment	.280**	.256**	.340**	.312**	.879**	-			
7. Organize Responsibilities	.476**	.440**	.463**	.476**	.367**	.367**	-		
8. Organizational Efficiency	.355**	.345**	.365**	.369**	.343**	.346**	.820**	-	
9. Organizational Efficiency	.423**	.397**	.460**	.448**	.812**	.814**	.800**	.775**	-

* $P < 0.05$, ** $P < 0.01$

In order to test the causal relationship among the variables, the research tests whether the innovative management of the student union has significant predictive power on the organizational efficiency through gradual regression analysis. Among them, innovation management includes three dimensions: innovation promotion, innovation concept and innovation mode (Al-Abyadh & Abdel Azeem, 2022). Regression analysis was performed with innovation improvement as the predictor variable (i. e., explanatory variable). In order to investigate the predictive power of students' innovation management on organizational efficiency. According to Table 6, the correlation degree of the three

dimensions of innovation management and organizational efficiency is ranked from low to high, and the improvement of innovation is increased ($r=.979$), innovative concept ($r=.995$), Innovation way ($r=.1.000$), and a gradual regression analysis can be done accordingly.

Table 6: Progressive Regression Analysis Table of Students' Innovation Management on Organizational Efficiency

Model	R	R Square	R Square Change	F Value Change	Significant F-Value Change
A	.979a	0.959	0.959	4768.478	0
B	.995b	0.989	0.030	581.097	0
C	1.000c	1	0.011	1.7335	0
Model	Explanatory Variable	Standardization Coefficient, B	T	Conspicuousness	Vif
A	Innovation Promotion	0.979	69.054	0.000	1
B	Innovation Promotion	0.608	35.690	0.000	5.560
	Innovative Ideas	0.410	24.106	0.000	5.560
C	Innovation Promotion	0.491	74.17	0.000	6.846
	Innovative Ideas	0.276	40.37	0.000	7.283
	Innovative Manner	0.266	40.86	0.000	6.707

Response variable: innovation management

a. Explanatory variables: (constant), innovation and improvement

b. Explanatory variables: (constant), innovation and promotion, innovation ideas

c. Explanatory variables: (constant), innovation and promotion, innovation idea, innovation mode

Table 7: Regression Analysis Table of Student Union Innovation Management on Organizational Effectiveness

R Square	Adjusted-R-Square	F	Conspicuousness	Standardization Coefficient B	T	Conspicuousness
.448	0.197	50.961	.000	0.448	7.139	0.000

Variable: Innovation Management

Interpretive Variables: (Constant), Tissue Effectiveness

Based on the proposed model of the relationship between student union innovation management and organizational efficiency, 205 collected data were statistically analyzed. The analysis results show that 9 of the 9 sub hypotheses proposed in this study are supported and 0 do not. The results of the study hypothesis are shown in Table 8.

1. The results of the test on the differences in innovation management among college students with different background variables. The analysis of the differences in innovation management among college students with different background variables showed that three out of the three hypotheses proposed in this study were supported. Specifically, there were significant differences in innovation management among students of different genders, different hukou, and different grade levels (Ambrose & Sternberg, 2016). 2. Differential analysis showed significant differences in organizational effectiveness among college students with different background variables. Xu (2020), in the differential

analysis of different background variables of college students, there was no significant difference in organizational efficiency among college student union students with different gender, hukou and grade status. 3. Test results of innovation management and correlation of organizational effectiveness in various dimensions. The hypothesis proposed in this study gained support in the test of college students' learning satisfaction and the correlation of students' attitudes towards career choice in each dimension. The learning satisfaction and the various dimensions of college students are all positively correlated with their attitude to career choice (Arshad et al., 2013). 4. Test results of students' innovation management and prediction of organizational efficiency in various dimensions. The hypothesis proposed in this study gained support in the innovation management of students in the student union and the prediction of organizational effectiveness in various dimensions. The three dimensions of innovation management the standardization coefficient of innovation improvement, innovation concept and innovation mode on the organizational efficiency of university student union is 0.979, 0.410 and 0.266 respectively (Shen, 2017).

Table 8: Study Hypothesis Test Results

Research Hypotheses	Results
Hypothesis 1: There are significant differences in students' student union innovation management under different background variables.	Part of the support
H1-1: The innovation management of students of different genders is significantly different.	Part of the support
H1-2: Students with different hukou exhibit significant differences in their innovation management.	Part of the support
H1-3: There are significant differences in the innovation management of students of different grades.	Part of the support
Hypothesis 2: Students have different background variables.	Part of the support
H2-1: The innovation management of students of different genders is significantly different.	Part of the support
H2-2: There are significant differences in the innovation management of students with different hukou.	Part of the support
H2-3: There are significant differences in the innovation management of students of different grades.	Part of the support
Hypothesis 3: The innovative management of the university students' union has a regression effect on the organizational efficiency.	Part of the support
Hypothesis 4: The innovation management of the university students' union is relevant to the organizational efficiency.	Part of the support
Hypothesis 5: Innovative management of university student union is predictive of organizational efficiency.	Part of the support

This study uses the statistical method of difference analysis to analyze the differences between students' innovation management and organizational effectiveness with different background variables (Peterson et al., 2006). In the process of studying students' innovation management and organizational effectiveness, this study finds that there is a certain correlation between innovation management and

organizational effectiveness. At the same time, this study also found that different gender, household registration, grade and other background variables have different degrees of performance in innovation management and organizational effectiveness.

Recommendations

According to the above research results, the paper provides specific suggestions for the Student Union of Zhengzhou Technology and Business University, and finally puts forward specific suggestions for future research.

1. The Student Union of Zhengzhou University of Business and Technology should not only pay attention to its own innovative management, but also pay attention to the students' self-education, self-service and self-management ability. The sample students of this study account for 27.4 seniors, and they are better than students of other grades in innovation management.

Public and rigorous in student management process. Research analysis also found that team member elements also have a great impact on team organizational effectiveness (Jiachen, 2019). The team leader should create a harmonious and united atmosphere in the student team, let the team members form a good attitude of being proud of the team, and let the members integrate their personal goals with the team goals invisibly, so that their direction of struggle is consistent with that of the team.

2. The Student Union of Zhengzhou Technology and Business University has a certain level of innovative management on the whole, but there are still some shortcomings (Janvrin et al., 2009). The student Union still has room for improvement in personnel training, work flow, organizational structure, information technology application and other aspects.

3. The Student Union of Zhengzhou Technology and Business University performs well in organizational effectiveness, but there is still room for improvement in performance evaluation, service satisfaction, organizational reform and other aspects (Li, 2016).

4. Students' innovative management has a significant positive impact on organizational effectiveness (Marek & Peter, 2012). Innovation management can improve the student Union's resource utilization efficiency, stimulate members' innovation awareness and ability, improve self-management and collaboration ability, improve service quality and service level, and thus improve the student Union's performance and organizational effectiveness (Malaney et al., 1997).

5. The grade, position and working years of the members of the Student Union have an impact on innovation management and organizational effectiveness. Members of the student union who are senior, hold senior positions and have a long working life perform better in terms of innovative management and organizational effectiveness (Maxwell, 2016).

Based on the above, it is suggested that the Student Union should strengthen the construction of innovation management, improve the management system and work flow, improve the members'

innovation awareness and ability, and incorporate innovation management into the performance evaluation and service satisfaction assessment system, so as to further improve the organizational effectiveness and service level of the student Union (McFarland & Starmanns, 2009). At the same time, the Student Union should pay attention to the members' career development and ability improvement, so as to lay a good foundation for the sustainable development of the Student Union (Peterson et al., 2006).

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基于“双创”视角下中学班级柔性管理的综述研究**AN OVERVIEW STUDY ON THE FLEXIBLE MANAGEMENT OF
SECONDARY SCHOOL CLASSES BASED ON THE PERSPECTIVE OF
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摘要：随着中国民主化进程的加快，社会对于人性化管理的呼声愈发高涨，人性化管理理念也逐渐渗透到各行各业的管理之中。中学作为中国基础教育的重要组成部分，中学学生的权益受到社会各界的广泛重视。特别是近年来，中国教育部为推动全面素质教育实施，培养具有创新力和创造力的人才教育策略，不遗余力的推动中学学校管理民主化进程。柔性管理作为一种倡导以人为本的管理理念，可以通过柔性管理手段，潜移默化的说服人的内心，让人实现自我管理。该理念已经被引用到诸多学校的班级管理。中学班级管理采用柔性管理可以说是在教育教学上的革故鼎新，柔性管理符合中学生心理发展需求，使之更加自觉的与中学学校的培养目标达成一致，同时柔性管理也是中学班级管理中建立刚柔结合科学管理必不可少的方法内容。本文将从“双创”视角出发，首先探讨日本和西方国家学者关于柔性管理的研究，梳理早期柔性管理理论的起源。其次，分析中国国内学者对柔性管理的研究，阐释柔性管理的概念，以及柔性管理在中学班级管理中的重要作用。

关键词：中学，班级管理，柔性管理。

Abstract: As China's democratization process accelerates, society's call for humane management is growing louder and louder, and the concept of humane management is gradually permeating the management of all walks of life. As an important part of China's basic education, the rights and interests of students in secondary schools have been widely emphasized by all walks of life. Especially in recent years, China's Ministry of Education has spared no effort to promote the democratization of secondary school management in order to promote the implementation of comprehensive quality education and cultivate innovative and creative talents education strategy. As a kind of management concept

advocating people-oriented management, flexible management can subconsciously persuade people's hearts to realize self-management through flexible management means. The concept has been cited in classroom management in many schools. The use of flexible management in secondary school classroom management can be said to be a revolution in education and teaching, flexible management in line with the needs of psychological development of secondary school students, so that they are more consciously with the secondary school's cultivation goals, while flexible management is also the establishment of secondary school classroom management of the combination of soft and rigid scientific management of the indispensable method of content. From the perspective of "Double Creation", this paper will firstly discuss the research of Japanese and Western scholars on flexible management, and sort out the origins of early flexible management theories. Secondly, it will analyze the research of Chinese scholars on flexible management, explain the concept of flexible management and the important role of flexible management in secondary school classroom management.

Keywords: Secondary School, Classroom Management, Flexible Management

引言

随着社会的发展，中国民主化进程不断加快，企业界、教育界等社会各个领域对实行人性化管理的呼声愈发高涨。所谓人性化管理，就是一种在组织管理过程中充分注意人性要素，以充分开掘人的潜能为己任的管理模式。人性化包含很多要素，如对人的尊重，充分的物质激励和精神激励，给人提供各种成长与发展机会，注重组织与个人的双赢战略，制订人的生涯规划等等（魏书生，2014）。人性化管理的核心思想是人本思想，利于促进个人和组织的同向进步。

中学教育是基础教育的重要组成部分，承担着为国家培养高素质创新型、创造型人才的重要责任。中国基础教育已经步入了“新课改”阶段，但是中学学校的班级管理模式较之过去并没有发生太大的改变，仍旧是处处体现旧的教育观念、旧的教学内容形式、旧的管理决策方式（夏铭 & 高阳，2007）。可以说现阶段中国中学学校的班级管理工作仍旧以刚性管理模式为主，柔性管理并未充分渗透到班级管理的实际工作中去，体现了早期西方管理理论对学校班级管理的影响。早期的管理理论对人性的假设是以“经济人”为主，泰勒的科学管理理论强调管理过程中理性的分析与严密的控制。依靠制度控制、重视理性分析以及强调定量研究，是刚性管理模式的基本特征（高涛, 刘新业 & 王纯良，2022）。刚性的中学班级管理模式虽然有利于稳定学校的管理秩序，但刚性管理也带来了一定的弊端。不仅严重限制了新时代中学学生群体创造力的发挥，而且不利于中学学校管理者管理思想和方式的转变，以及中学学校管理者服务意识的欠缺，成为中学学校班级管理中发展和培养“双创”人才的阻碍。

研究目的

中国教育管理制度和模式的改革势在必行，中学学校传统的刚性教育管理理念严重束缚了学生的创新力和创造力，不利于培养身心健康发展，更不利于学生形成健全的人生观、价值观和世界观。新时代环境下，10后作为新新群体已经逐步进入中学校园学习，他们性格独立，思想活泛，独特的个性彰显着青春和活力，他们具有更独特的创新性和创造性，中学学校在班级管理中需要更多的采用和体现出柔性管理，才能充分释放中学学生的潜力（房立艳,张大均,武丽丽 & 胡天强，2017）。总而言之，柔性管理既是提高中学学校班级管理水平的迫切需要，也是进一步提升中学学校办学水平的迫切需要，更是满足中国社会经济快速发展创新型和创造型人才缺口的需要。因此，本课题的研究目的在于对中学学校班级管理采用柔性管理的国内外研究成果进行综述，从相关成果中探讨促使中国中学学校在班级管理中形成人性化的管理机制，体现出中学教育中注重对学生的人性关怀，以及提高中学学校的班级管理水平和完善中学学校的教育教学理念，以此促进学生的全面发展和中国基础教育的进步。

文献综述

国外中学班级柔性管理的研究

1. 早期柔性管理理论的研究

柔性管理源于西方经济管理学，国外学者多是集中于柔性管理在企业管理中的应用，例如“人际关系理论”、“马斯洛需求层次理论”、“期望理论”等等都是具有柔性色彩的企业管理思想理论。柔性管理思想和理论的提出最早出自于日本丰田汽车公司首创的“柔性制造系统”的概念中，之后日本企业将柔性管理思想进行提炼和发扬（冯瑛，2011）。日本企业管理中，柔性管理思想主要体现在四个方面：（1）休戚与共的集体意识；（2）以人本为中心的人本意识；（3）始终如一的教育意识；（4）开发众能的民本意识（雷卫，2012）。在柔性管理的应用中，日本诞生了诸多赢得世界认可的管理理念，如“松下七大精神”、“丰田八大精神”美国心理学家亚伯拉罕·马斯洛（1943）指出依据人类的发展规律，人的需求是一个从低级到高级的发展过程，在不同的过程中会形成不同层次的需要，人的需求从低级到高级可分为生理需求、安全需求、社交需求、尊重需求和自我实现需求，人的需求变化的过程也体现着人性化管理的演变。美国教育学家米勒（1984）提出“亲密”原则，认为亲密感的需求是一种非常基本的人性需求，有了亲密感，才能提高信任、牺牲和忠诚度。帕斯卡尔 & 阿索斯（1981）在著作《日本的管理艺术》中提出了以战略、结构、制度、技术、人员、作风、精神为核心的“7S”模型，成为美国企业管理的新思想，其中“人员、作风、精神”三项是典型的柔性管理指标（冯瑛，2011）。Williams（1993）提出企业中人力资源的合理利用，促使企业战略目标的实现，人力

资源的柔性化促使人力资源管理更加合理化、有效化，因此企业应重视柔性管理的应用（肖磊，2015）。这些研究都从理论上奠定了人本管理的基础，从思想上确立了人本管理的观念。

2. 国外学者在学校柔性管理中的研究

在国外，教育比较注重营造良好的教育环境，对于柔性管理的应用和实施较早。受教育制度和选课制度的影响，教育模式上，多采用相对松散的教育模式；班级管理上，多采取非固定的班级形式来开展教学活动。倡导在充分尊重学生个性化发展的理念下，实施选课制和自主参加社团活动（Vander Putten Jim, 2022）。美国学校非常重视对于学校自身管理水平的提升和教育管理工作服务的提升，因此，学校管理的专业化水平较高。美国学校形成了专业化的服务型管理模式，学生管理人员实现专业化，并根据工作内容的不同设立不同的部门（赵祥麟，1981）。与美国学校相比，英国学校的教育管理工作更加注重为学生提供良好、自由的成长环境和发展空间，重视学生德才全面发展，全力打造轻松和谐自由的学习和管理氛围[6]。英国的学生在面对中学学生管理时可以保持处于一种更加轻松和自由的空间，也使其在被教育管理的过程中切实体会到自身的权利得到了最大程度的保障和尊重，有利于中学教育管理目标的完成（于惠敏 & 侯颖，2006）。阿瑟·W·库姆斯（2002）在《学校领导新概念——以人为本的挑战》一书中提出，在“以人为本”思想的指导下，学校领导者的工作在很大程度上是对人际关系的处理。学校领导必须时刻关注学校里人的问题，有意识地搜寻适当的信息，必须培养和提高感情移入能力，必须在学校组织里帮助营造真实可信的学习和研究气氛等。

国内中学班级柔性管理的研究

1. 柔性管理理论的研究

我国柔性管理理论的相关研究是基于郑其绪教授（1996）《柔性管理》中对于“柔性管理”实质性定义而展开的，书中概述了“柔性管理”的概念，“柔性管理”是根据人们的心理和行为规律的研究成果，通过非强制的方法，潜移默化的说服人们的内心，让组织意志自然而然地成为个体的自觉行为”。并创造性的提出柔性管理的八条基本原则，分别是：（1）内在重于外在；（2）直接重于间接；（3）心理重于物理；（4）个体重于群体；（5）肯定重于否定；（6）身教重于言教；（7）务实重于务虚；（8）执教重于执纪；被众多学者用以参考和借鉴。冯周卓（1993）通过对领导者的权利因素和非权力因素—柔性因素进行分析，强调柔性管理是一种文化管理理念，深入研究了企业柔性组织构建、柔性战略管理、柔性文化管理、柔性团队管理、柔性领导的影响力、柔性人际管理等方面。柔性管理是针对刚性管理而言的，稻香（2006）分析了企业刚性管理与柔性管理的区别，认为由刚性管理向柔性管理是企业必然的发展趋势。

2. 学校柔性管理的研究

郑其绪对柔性管理概念的界定，说明了在实施柔性管理过程中，人既是实施管理理念的主体，也是承受管理理念的客体，其本质在于以人性化的管理方式，在人人平等的基础上，重视激励的作用，将人的潜能、主观能动性和创造性天然的释放。柔性管理起源于经济学，在企业中的发展已经相对成熟，但是在我国中学学校管理工作的运用中上处于起步阶段，中学学校班级管理的柔性管理理论没有形成完整的体系。中学学校班级管理的特征不同于企业管理，中学学校的学生心理发展不成熟，自身行为约束能力较差，同时易受到老师、同学以及社会风气的影响，在中学学校班级管理中形成独特的特征（张晓军，2021）。因此，中学学校必须根据柔性管理的内涵，在对中学学校中学生心理及行为分析的基础上，加强对于班级柔性管理。中学学校班级管理中实施柔性管理的基础是建立管理者与被管理者之间的信任关系，信任能够提高被管理者的忠诚度和自觉性，促使双方形成和谐的关系。正如巩力溪（2018）对于学校柔性管理的定义：“学校管理更加注重人文管理，更加注重被管理者的心理需求和内在想法，在被管理者资源的前提下，以人性化的管理方式，对被管理者进行管理和教育，在他们心中形成一种潜在的说服力，让他们自觉地接受并服从管理”。同样适用于中学学校实施班级柔性管理，中学学校班级管理工作中，也需要运用以人为本的管理理念，注重中学生的利益，通过教育、激励的方式，实现学生的自我管理和自我约束。

3. 中学班级柔性管理的研究

我国从事教育学的学者对于中学校园引进柔性管理的研究主要集中于学生管理。例如郝广新（2007）认为传统的中学学校学生管理模式，也就是纯粹的刚性管理，是指凭借制度约束、纪律监督、奖惩规则等手段进行管理的管理模式，但是这种管理模式在随着我国基础教育的不断深化过程中逐渐显露出众多弊端，实践证明这种管理模式并不适合现代人才培养的众多要求，柔性管理的核心思想是以人为本，也就是要求学生进行自我完善，以学生自身发展为主的一种管理模式（卢宝祥，2011）。也有一部分学者基于柔性管理对于中学学校人力资源管理的影响和其发挥的作用进行研究。例如左杨（2016）提出在中学教育管理中采用柔性管理方式有助于调节学生的心理矛盾，引导学生积极接受各方面的文化知识，陶冶学生的情操，构建文明、和谐的大中学校园。孙立悦 & 高源（2018）认为要全面实施素质教育，培养德智体美全面发展的社会主义建设者和接班人是新时代中国特色社会主义教育的要求，而且创新性的提出中学班级管理“家文化”的应用，使得中学柔性管理更加健康，能为学生提供更好的成长环境。张琪（2017）指出柔性管理作为一种新型管理手段在高校教育管理中发挥着重要作用，可以帮助高校实现人性化管理。胡瑶琳（2018）指出当代中学生思维活跃，传统的教育管理模式对他们起到的作用非常有限，在这种形势下，将发展个性、具有人文关怀的柔性管理融入到学生管理当中，对中学学校学生管理工作的有效开展以及学生的全面发展具有十分重要的意义。

于茜（2016）探讨了适合我国中学学校学生管理的方法，即以柔性管理为主，刚性管理为辅，并提出加强柔性管理的相关策略：一、贯彻“以人为本”的教育理念，凸显学生主体地位；二、构建和谐校园文化，注重无形管理的熏陶；三、提高管理者的自身素质，进一步增强服务能力与意识；四、构建学生自我管理平台，培养自我教育能力；五、树立民主管理意识，增强管理行为程序的合理性。杨卫（2005）提出高校的“柔性”管理应通过营造尊师氛围、采取激励措施、实行民主管理和管理者的人格力量来实现。提出高校“柔性”管理应从以下几个方面来实施：（1）形成尊师氛围服务人；（2）采取激励措施鼓舞人；（3）实行民主管理凝聚人；（4）利用人格力量感召人。

随着我国教育部门越来越重视基础教育的发展，部分学者也对我国中学学校如何引进柔性管理以加强中学学校的管理理念、管理方式进行研究，但是针对于中学学校班级管理如何实施柔性管理和中学学校班级管理采用柔性管理的必要性的研究少之又少。吕越丹（2016）认为进入新时期，我国的中学教育质量在快速提升，与此同时中学学校的办学规模与教育结构上也在不断改进。从一定程度上讲不同地区不同中学学校学生的自身素质可能存在一定的差异，然而为了培养适合现代化社会发展的创新型、创造型人才，中学学校必须着力解决学生的管理问题，柔性管理的方式应运而生。张凤娟（2017）认为随着中学学校教学实践改革深入进行，需要结合中学学校实际情况，采用刚柔并济的管理方式，提升管理的效率，建立完善的管理机制，为学生学习和生活创造良好的环境。陈晓玲（2015）提出中学教育是基础教育必不可少的组成部分，柔性管理和刚性管理相结合的管理方式才是中学学校班级管理走出管理困境的唯一途径。

结论与建议

1. 结论

从对于国内外各类文献的整理、查阅和分析不难发现，国内外学者对于柔性管理的研究主要集中于经济学领域和企业管理等方面，关于中学柔性管理的研究成果并不多，尤其是对中学学校对于班级管理实施柔性管理的研究更是屈指可数，也没有形成系统化的研究体系。西方国家在资本主义思想的影响下，以人为中心的管理理念渗透到生活的方方面面，柔性管理的理念始终融入于学校管理之中，对于学校刚性管理和柔性管理的研究更是稀少。

随着我国教育制度的不断完善，国家民主化和法制化的带动下，我国教育部门越来越重视基础教育中的人性化教育管理。教育界对于中学学校班级管理中柔性管理应用做出了一些研究，提出了诸多强化中学学校班级柔性管理的措施和策略，一定程度上促进了我国中学教育管理模式和教育管理理念的转变。

2 建议

教育是实现中华民族伟大复兴的基础，也是促进我国持续发展的内在动力。中学学校作为我国教育发展的重要组成部分，在我国教育体系中发挥着不可替代的作用，而班级管理则是保障中学学校稳定发展的基础，不仅影响中学学校的教育管理质量，也影响着“中国梦”的实现。在中学学校的班级管理中，无论是院校管理者，还是班级教导员或老师都必须坚持“以生为本”的班级管理理念，以实现中学学生自我管理为主。在班级管理日常工作中，要体现出对中学学生的人性关怀和尊重，使得学生的高层次需求得到满足。

（1）以中学学生为主体的管理理念

中学学生是中学学校班级管理的主体部分，如何调动学生学习的主动性和积极性，从而达到自我管理是中学学校班级管理实施柔性管理的重点部分，也是难点部分。中学学校只有充分调动中学学生的主动性，才能在班级管理过程中融入柔性的管理理念谭福娇（谭福娇，2021）。想让中学学校学生自觉形成自我学习、自我管理、主动发展，使他们自觉树立人生理想和追求，通过自我管理实现自我价值。首先要树立中学学生的班级主人翁意识，让他们以班级主人翁的姿态展示自己的创新力、创造力和主观能动性，中学学校的管理者、辅导员和老师也要尊重学生的主体地位，班级柔性管理工作才能在“以生为本”的基础上开展（麦庆涛，2016）。其次要为中学学生树立良好的外部环境，班级的学习风气、学习意识和中学学校的整体学习氛围都会潜移默化的对中学学生的学习积极性产生影响。

（2）尊重中学学生的思想教育

当代中学学生处于较为复杂的社会环境下，网络的发展和新媒体进步，使他们的思想更加自由，同时随着西方资本主义以人为本思想的传入，中学学生越来越追求和向往西方国家高校的管理理念，而且中学学生的主体意识也在西方文化的冲击下越来越强烈（钱飞，2012）。中学学校需要以科学的方式引导和教育中学学生理性的接受西方文化思想，潜移默化的告知中学学生如何对西方文化取其精华去其糟粕，并将西方教育文化精华部分融入到自我管理之中，从而实现中学学生的全面发展

（3）管理工作的人文关怀观念

人文是中国优秀传统文化的精髓，“文”以“人”为本，“人”以“文”为质，人文关怀具有丰富的科学内涵（张艳欣，2009）。中学学生在日常学习和生活中会遇到各种各样的难题，例如中学生在参与某程序设计比赛时，会遇到程序设计缺乏统筹思路，导致程序设计混乱，程序存在高危漏洞，基于自己的知识和经验积累，无法自行解决，而且无法向他人倾诉自己已经很努力、却身心的参与到比赛中去，致使在激烈的竞争压力下，抑郁成疾，造成了严重的心理压力，在日后的学习中一蹶不振。此时，就需要班级管理者和参与班级管理的老师、辅导员努力为

此学生创造再接再厉的认为关怀氛围，并对此学生进行科学的心理分析，帮助此学生进行心理疏导，给与学习上和心理上的帮助，让学生化阻力为动力，勇敢的面对自身的不足，以及树立正确的人生观和价值观，再接再厉的迎接下一个挑战，让其在比赛中展示自我，认可自我。

（4）建立刚柔互济的班级管理

刚性管理是由美国“科学管理之父”弗雷德里克·温斯洛·泰勒所提出的经济学管理理论，他认为刚性管理是一种以制度为中心，并强调规章制度重要性的管理方式，属于科学管理的范畴，有效的提升效率和执行能力。一个班级，没有刚性规章制度框架的约束，班级管理必然是混乱不堪的。刚性管理和柔性管理犹如道家太极图八卦图中的阴阳两级，二者相辅相成，互为表里，无高低贵贱之分，只有互补短长，交相交融（成达如，2004）。刚性管理所形成的班级量化指标，有利于强力约束学生的行为规范和应严格遵守的班级纪律，有利于中学学校班级管理的有序开展。柔性管理在于强调以人为本的管理思想，对于营造和谐班级学习环境、塑造班级核心文化具有重要作用，而且有利于班级民主化进程的推进和中学学生个体的创新性和创造性的发挥，激发中学学生内心的主动性、积极性，从而自觉服从于班级管理。柔性管理和刚性管理和谐统一，互补短长，极大程度的增长了中学学校班级管理的科学性。

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