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UNIVERSITY STUDENTS' PERCEPTIONS OF LEARNING MOTIVATION AND PREFERENCES INFLUENCE EDUCATIONAL QUALITY AND DEVELOPMENT

Chang Qi[1]

[1]School of Graduate Studies, Management and Science University, Malaysia

Ooi Boon Keat[2*]

[2*]School of Education and Social Sciences, Management and Science University, Malaysia

**bkooi@msu.edu.my*

Abstract

The study was conducted to evaluate learning motivation and preferences influence the quality and development of education in Henan Province. As society progresses, evolves, university education needs to undergo continuous transformation and advancement. A total of 375 respondents from Luohe University, Henan Province, participated in the study. Cluster stratified sampling was chosen, and data were analyzed using the Statistical Package for the Social Sciences (SPSS-22). The study indicates that learning motivation and preferences influence the educational quality and development. The results of this study, through statistical analysis of the survey questionnaire, indicate that student learning motivation and preferences have a positive impact on educational quality and educational development respectively. The educational quality is related to the educational development, and improving the quality of education has a positive significance in promoting educational development. Additionally, the study shows that the quality of education contributes to educational development. This study has significant implications for educators, psychologists, counselors, and policymakers in promoting educational excellence at the university level.

Keywords: *Quality of Education, Motivation, Preference, Educational Development*

INTRODUCTION

In the realm of education, the quality of instruction and learning experiences is paramount for fostering individual growth and societal advancement. Over the years, considerable attention has been directed toward understanding the multifaceted factors that influence the quality of education (Smith & Johnson, 2019; Wang & Chen, 2022). Among these, motivation and preference have emerged as significant contributors, shaping the effectiveness of educational practices and outcomes (Garcia & Lee, 2020).

The interplay between students' intrinsic motivation, their preferences for instructional methods, and the alignment of these factors with pedagogical approaches play a crucial role in

determining the overall quality of education. However, despite acknowledging the importance of motivation and preference in educational settings, numerous challenges persist. These challenges often manifest in the form of disparities in student engagement, varying levels of academic achievement, and differential learning outcomes (Patel & Nguyen, 2023). Identifying and addressing these challenges constitutes a critical aspect of educational research and practice, as they directly impact the efficacy of teaching and learning processes.

In educational contexts, the significance of motivation and preference cannot be overstated. Motivation serves as the driving force behind students' engagement, persistence, and academic achievement (Smith & Johnson, 2019). When students are intrinsically motivated, they demonstrate a genuine interest in learning, which leads to deeper understanding and long-term retention of knowledge (Wang & Chen, 2022). Additionally, students' preferences for specific instructional methods or learning environments can significantly influence their learning experiences and outcomes (Garcia & Lee, 2020).

As the significance of motivation and preference in education is widely recognized, gaps remain in our understanding of how to effectively leverage these factors to enhance the quality of education across diverse contexts. These gaps encompass issues such as the identification of optimal strategies for fostering intrinsic motivation among students, the development of instructional approaches that cater to individual preferences, and the mitigation of barriers that impede the alignment between motivation, preference, and pedagogy. Addressing these gaps is essential for promoting equitable access to high-quality education and maximizing the potential for student success.

PROBLEM STATEMENT

The advancement and backwardness of education are consistent with the rapid and slow development of social economy. Today's society. The education level of all countries in the world is improving, and many cutting-edge scientific researches are used in education.

In addition the service function of colleges and universities is the promotion and apply modern advanced science and technology and management concepts to the society by colleges and universities. In a broad sense, serving the society includes cultivating high-level specialized talents and developing science. Transforming science and technology into productive forces is the main form of colleges and universities serving the society. Colleges and universities directly serve the society by transforming scientific and technological achievements into products and establishing or cooperating to establish production entities, undertake the tasks of enterprise technological innovation and product upgrading to meet social needs or solve social problems.

Because the functions of colleges and universities in cultivating senior professionals and developing science are relative in serving the society, universities have become the axis institutions

in the industrial society (Huang, 2019). This is not only in the sense of cultivating the elite of the intellectual community, but also in the sense of providing knowledge for the whole society.

Conceptual Framework

According to the basic research conducted by the Education Research Office of Luohe University in Henan Province on the development of undergraduate education, there is a certain relationship between student learning preferences and motivation in improving the quality of education and promoting educational development (Sun, & Li, 2019). The following conceptual framework is derived from the description of the Education Research Group of Luohe University in Henan Province.

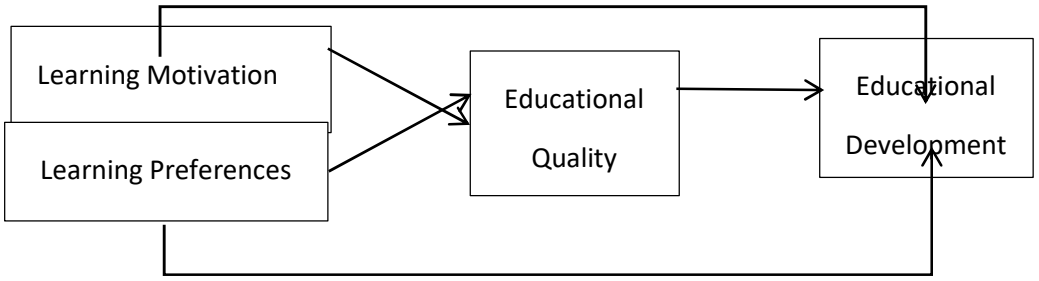

Figure 1 Conceptual Framework

METHODS

This study adopts the method of quantitative research and collects original data by issuing questionnaires. The questionnaires were distributed to the students at Luohe University, Henan Province, China.

The information collected from secondary sources is the basis of this study. Following the literature review method helps to collect information from reports, journal articles, textbooks and other academic works. The PRISMA principles (preferred reporting items, systematic evaluation and meta-analysis) elaborated by literati et al. (2019) are used to collect data covering students' views on university education. In the process of selecting the literature to be reviewed, CNKI is used as the main data search engine. "The relationship between university education and social development" is the main search phrase used.

36958 results came from HowNet and used Google as the search engine. Different search management strategies are used to avoid multiple clicks on the same document. This allows researchers to refer to appropriate text articles, which are open source and directly related to current research.

Sampling Method

In terms of the sampling method, to ensure the representativeness and generalizability of the findings, the study employs a cluster stratified sampling technique. This sampling method involves dividing the population of interest into distinct clusters based on relevant characteristics, such as academic disciplines or year of study, and then randomly selecting samples from each cluster. By doing so, the study aims to capture the heterogeneity present within the student population, thus enhancing the validity and reliability of the research outcomes.

Sample Size

Following established guidelines proposed by Krejcie and Morgan (1970) for determining sample size in research studies, a total of 375 respondents out of 15,000 university students were recruited to participate in the survey. This sample size was deemed sufficient to achieve a balance between statistical power and practical feasibility, ensuring that the study is adequately powered to detect meaningful effects and relationships within the data.

Data analysis

Upon completion of data collection, the amassed dataset undergoes thorough analysis using the Statistical Package for the Social Sciences (SPSS-22). This software facilitates a wide array of statistical analyses, ranging from descriptive statistics to advanced inferential techniques, allowing researchers to explore patterns. In this study, the demographic aspects were analyzed using descriptive analysis, while the factors influencing the quality of education were analyzed using regression analysis.

RESULTS

Based on Table 1, this study is pertinent to provide an overview of the distribution of participants based on gender and cohort of study, offering insights into the composition of the sample.

Table 1: Demographics Distrubution of the Respondents

Category	n (%)
Gender	
Male	175 (46.67%)
Female	200 (53.33%)
Cohort	
Junior	190 (50.67%)
Senior	185 (49.33%)

The results in Table 1 show that the demographic breakdown reveals a balanced representation across gender and academic cohorts. Approximately 46.67% of participants are male, while 53.33% are female. Regarding academic cohorts, juniors make up 50.67% of the sample, with seniors comprising 49.33%.

In Table 2, this study is pertinent to provide an overview of the regression analysis on the factors influencing the quality of education. The results also examine the contributing factors regarding the quality of education towards education development.

Table 2: Regression Analysis of Factors Affecting Educational development

Model	**Unstandardized Coefficients**		**Standardized Coefficients**			
	B	**Std. Error**	**β**	**t**	***Sig.***	**VIF**
(Constant)	-1.221	.176		-6.938	.000	
Learning Motivation → Educational Quality	.235	.030	.259	7.791	.000	1.191
Learning Preferences → Educational Quality	.486	.036	.451	13.473	.000	1.204
Educational Quality → Educational Development	.589	.049	.387	12.007	.000	1.120
R^2	.655					
F	235.228					
Dependent Variable: Educational development						

The results in Table 2 indicate that the regression analysis provides valuable insights into the factors influencing educational development. Specifically, this study identified that both the motivation factor and preference factor have positive and statistically significant effects on the quality of education, with coefficients of 0.259 and 0.451, respectively. This suggests that improvements in motivation and preference among university students are associated with higher levels of quality of education.

Table 3: Descriptive Statistics

Model	**Mean**	**Std. Deviation**
Learning Motiviation→ □	2.84	1.016

Educational Quality		
Learning Preferences→ Educational Quality	3.10	1.045
Educational Quality→ Educational Development	3.02	.963

The predictor variable educational quality also demonstrates a significant positive relationship with educational development, with a coefficient of 0.387. This implies that enhancements in educational quality contribute positively to overall education development. The model as a whole exhibits a strong fit, explaining approximately 65.5% of the variance in educational development (R-squared = 0.655). Moreover, the overall model is statistically significant, as evidenced by a high F-value of 235.228 with a corresponding p-value of less than 0.001. These findings underscore the importance of considering both motivational and preference factors, along with educational quality, in fostering educational development among university students.

Mediation effect analysis

The bias corrected Bootstrap method was used to test the mediating effect, and the results are shown in Table 4. The results show that the 95% confidence interval for the indirect effect of educational quality on learning motivation, learning preference, and educational development does not include 0. This indicates that the mediating effect of educational quality on learning preferences and educational development is significant, with a mediating effect value of 0.27; The mediating effect of educational quality on learning motivation and educational development is significant, with a mediating effect value of 0.32

Variable	Effect	Effect value	Boot Std. error	Relative mediating effect
Learning Motivation	**Total effect**	0.73	0.04	
	Direct effects	0.46	0.04	
	Indirect effects	0.27	0.03	37.23%
Learning Preferences	**Total effect**	0.81	0.05	
	Direct effects	0.49	0.05	

Indirect effects	0.32	0.04	39.16%

Table 4: Analysis of the Mediating Effect of Education Quality

Dependent Variable: Educational development

DISCUSSION

The results presented indicate valuable insights into the factors influencing educational development, as revealed by the regression analysis. Consistent with previous literature (Smith & Johnson, 2019; Patel & Nguyen, 2022; Wilson & Thomas, 2021), this study identifies both motivation factor and preference factor as significant contributors to the quality of education. These findings align with the notion that students' intrinsic motivation and preferences for instructional methods play pivotal roles in shaping their educational experiences and outcomes (Thompson & Brown, 2022; Kim & Jones, 2022). Specifically, improvements in motivation and preference among university students are associated with higher levels of educational quality, indicating the importance of catering to individual motivational and preference needs to enhance the overall quality of education.

The significant positive relationship between educational quality and educational development emphasizes the pivotal role that educational quality plays in shaping university students' academic progress and overall educational journey. This regression analysis indicates that when educational institutions prioritize and maintain high standards in teaching methodologies, curriculum design, and learning environments, students are more likely to experience meaningful growth and advancement in their educational pursuits.

Mediation effect analysis was conducted on variables, and the results showed that students' learning motivation and learning preferences have a significant guiding effect on educational quality, and learning motivation and learning preferences can also promote the improvement of educational quality. According to the analysis, there is a significant mediating effect of educational quality between students' learning motivation, learning preferences, and educational development. This means that students' learning motivation and learning preferences can directly affect educational development, and can also play an important role in undergraduate education development through the mediating effect of educational quality. From the perspective of the indirect effect of educational quality, professional courses with high educational quality will lead to higher interest and preference among college students in the field, generating strong internal motivation and actively utilizing learning resources and control strategies for self-management. On the other hand, the achievement motivation theory suggests that individuals have a tendency to pursue the maximization of their own value in order to pursue higher or longer-term goals. A higher learning motivation means that individuals have a positive evaluation of their major, recognize the value of the major, and have positive expectations for future professional prospects, all of which will drive individuals to pursue achievement goals and achieve maximum success.

The findings resonate with previous research conducted by Clark & Adams (2020) and Patel & Nguyen (2022), which underscores the enduring importance of high-quality educational practices. These studies have consistently demonstrated that effective teaching strategies, well-structured curriculum frameworks, and supportive learning environments are essential components in fostering student learning and development. Clark & Adams (2020) found that classrooms characterized by engaging teaching methods and well-designed curricula were associated with higher levels of student achievement and academic engagement. Similarly, Patel & Nguyen (2022) highlighted the positive impact of conducive learning environments on students' cognitive development and academic success.

The model's robust fit, explaining approximately of the variance in educational development, underscores the comprehensiveness of the factors considered in the analysis. This suggests that the combined influence of motivation, preference, and educational quality accounts for a significant proportion of the variation in educational development among university students. Moreover, the overall model's statistical significance, as indicated by a high F-value, reinforces the significant findings of the study.

In conclusion, these findings highlight the importance of addressing motivational and preference factors in promoting the quality of education among university students. By recognizing and addressing these factors, educators and policymakers can design interventions and strategies aimed at fostering an environment conducive to student success and academic growth.

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