



Sustainable Career Development of Nursing Graduates in Higher Vocational Colleges: A Case Study of Weifang Nursing Vocational College

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Abstract

Background and Aims: Currently, in China nursing graduates of higher vocational colleges are restricted by many factors, particularly career development. Career development is an important indicator for measuring the quality of nursing graduates and the extent to which government and hospitals attach importance to the employment of nursing graduates in higher vocational colleges. Therefore, it is necessary to delve into the career development of nursing graduates in vocational colleges under the current employment situation. This study mainly aimed to investigate the current situation of nursing graduates' career development and factors affecting the career development of nursing graduates.

Materials and Methods: The sample was drawn from the 2019 nursing graduates in Weifang Nursing Vocational College using non-random sampling. These nursing graduates participated in the research voluntarily participation and accepted their participation in the research consent form. Data were collected using a questionnaire. The questions focused on many factors that affected their career development, including how hiring practices at government, hospitals, and colleges, factors affecting the recruitment process, and challenges facing career development.

Results: The results show that nursing graduates have basic knowledge and skills in nursing. The results also showed that government employment policies, teaching program management, and employability development were the key factors influencing the career development of nursing graduates from higher vocational colleges are relatively successful. Additionally, results indicated that school-based classroom environments have a significant and positive impact on nursing graduates' career development. The government should increase employment efficiency and change employment policies as necessary to achieve sustainable professional development. Educational institutions and nursing schools should improve their teaching and learning management systems to align with employment policies and needs.

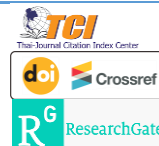
Conclusion: The results emphasize how crucial it is for the government to get involved in employment policy optimization to promote the nursing profession's long-term growth. In addition, educational establishments need to modify their pedagogical approaches to better prepare nursing graduates for the skills required by changing job markets and facilitate a smooth entry into the workforce.

Keywords: Sustainable Career Development; Employment Policy; Employability; Nursing Graduates; Higher Vocational College

Introduction

The COVID-19 pandemic began in Hubei Province, China in 2019. The number of Chinese graduates is increasing just as COVID-19 is expanding and affecting all sectors, which makes the paradox of "fierce competition and difficult employment" extremely real (Chen, et al, 2023). According to the latest statistics, 10.76 million. The number of Chinese college graduates reached a new high in 2022, while at the same time, unemployment among new students rose to 18.4%, resulting in jobs now selecting Individuals rather than people choosing their jobs (Wu & Zhao, 2022). This is crucial for Higher education institutions (HE) and all students have paid close attention to employability, as higher education institutions play an essential role in preparing students to find suitable jobs and students are aware of the increasing competitiveness of the labor market (Byrne, 2022). Furthermore, graduates are under enormous pressure to find employment and educational institutions are facing unprecedented challenges in supporting students to acquire knowledge and skills to prepare them for their future careers.





To improve students' employability, better coordination between educational institutions and employers in the public and private sectors needs to be developed, as unemployment is often due to a mismatch between the qualities of graduates and the requirements of employers (Bennett et al., 2016).

Although "employability" and "employment" are two different concepts, the graduate employment rate is commonly used to assess the quality of the offering of educational institutions, particularly the career development courses offered while students are enrolled in higher education institutions. Therefore, these institutes must help students succeed and prepare for high-value careers, especially by supporting those who are still unsure about their future path (Ciarocco, 2018, Senter, 2020). Zhao and Wu (2022) claimed that career development courses aim to meet the needs of students considering multiple careers or majors. However, one of the problems with career development and the limiting obstacles in today's globalized and competitive world of work is the problem of changing management and adaptability (Asuquo & Inaja, 2013). In addition, the Ministry of Education of China has proposed several Employment Guidance Policy Outlines, such as the "14th Five Year Plan" Employment Promotion Plan, to improve the employability of college students through training and help them make better decisions to improve their career development (Liu et al., 2021).

With this in mind, students and various institutes must figure out how to maintain their career successes in difficult situations, as a "successful" or "satisfying" career may not have the same value in the future. Increasingly complicated and dynamic professional circumstances present opportunities to improve career sustainability (Wu & Zhao, 2022). Among these three components of career development, including government employment policy, curriculum management, and employability development, it was found that sustainable career development for students was a key indicator that determines whether graduates completing their studies are successful or not in terms of employability (Zhao & Wo, 2022). Research is therefore needed to help students better understand sustainable career development and employability. Although the Chinese government requires colleges and universities to offer career development courses, research on the application of their knowledge and skills to their employability has been insufficient. Therefore, when designing or revising an undergraduate program, course developers, educational administrators, and stakeholders should be informed about how career development courses impact students' career employability. In addition, the research findings would be beneficial to educational institutions as they could provide career guidance and thus better prepare students for quality careers.

The career development of nursing graduates from higher vocational colleges is an important indicator of the teaching quality of nursing programs, and the importance that governments and hospitals attach to the employment of nursing graduates from higher vocational colleges. Despite the overall deteriorating employment situation in China, hospital positions are in short supply. At the same time, the career development of nursing graduates from higher vocational colleges is still problematic due to the influence of various factors such as government employment policy, teaching management, and teaching ability. Therefore, it is necessary to examine the career development status of nursing graduates of higher vocational colleges through a survey study to understand the effects of these three elements mentioned above, and in response to these effects, implement optimization strategies to promote the career development of nursing graduates of higher from higher educational institutions.

Therefore, this study mainly aimed to conduct research with nursing graduates of Weifang Nursing Vocational College, examining the career development status of nursing graduates of higher vocational colleges, examining the various factors affecting the career development of graduates, and enriching the theory of career development of career training in nursing.

Research Objectives

The objectives of this research were

1. to investigate the current career development status of nursing graduates from Weifang Nursing Vocational College.
2. to examine the impacts of government employment policies, teaching curriculum management, and employability training on the career development of nursing graduates.





Review of Literature

The Concept of Career Development

Typically, career development theories have focused on connecting individuals with careers. It was expected that once people have appropriate access to information people would make good career decisions. Career development has an important relationship with government employment policy, career development courses provided by the college, and employment development. To elaborate, it is a lifelong process, that requires being prepared for pursuing, and continually selecting from all of the careers provided by society. It extends for the whole of a person's life. Since the golden stage of individual career preparation, the university years are the most crucial for a person's future career choice and career development preparation (Wang et. al, 2023). Career development theories thus were applied to provide frameworks for understanding how individuals make decisions and choose their careers. Bal and Arian. (2020) stated that career development is driven by adaptation to a series of transitions from school to work, job to job, and occupation to integrate people with their environments being person–environment integration (pp.145-146).

Numerous studies on career development and career development programs designed to help college students make the transition to their working lives revealed positive results. The findings from Wang et al. (2023) indicated that psychological characteristics contribute to the sustainable career development of college students. The findings contribute to the understanding of Generation Z (the post-00s) college students and encourage them to participate in more fruitful career exploration activities. The study also indicated that by conducting a dynamic study of career development from college to graduation, educational administrators can better understand these college students in creating appropriate interventions to help them better plan their career paths. Zhao and Wu (2022) found a positive relationship between career development courses and undergraduate students' career-related outcomes, such as career awareness, job search self-efficacy, and career planning ability. The findings additionally indicated that one student's career knowledge could significantly improve students' career awareness and career planning ability. Zhao et al. (2022) discovered that, even during the pandemic, self-perceived employability as a significant personal resource was essential for sustainable career advancement. The findings also showed that self-perceived employability helps not only an individual's professional advancement but also companies since it encourages improved employee productivity and mental health. Pasha and Abedi (2020) examined the effects of career path skills training based on Super's development theory on students' academic self-concept. The findings showed that career path skills training had a significant positive effect on students' academic self-concept (Super 1992).

Factors Affecting the Career Development

Collaborative Governance Theory

Ansell and Gash (2007) defined collaborative governance as a governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets (p.2). Collaborative governance involves bringing individuals together across boundaries to achieve a public goal in a positive way (Emerson, Nabatchi & Balogh, 2011). To create or implement public policy or manage public programs or assets, is also defined as a situation in which one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberate (Ansell & Gash, 2007).

Collaborative governance is also described as the process in which multiple supplying subjects, such as government, enterprises, and non-business organizations, jointly manage public affairs in an open and complex environment through power-sharing and information cooperation, to realize and promote public interests. In response to the national employment support policy, government departments all across China have created and released more comprehensive policies on entrepreneurial employment and talent acquisition. Collaborative governance is usually characterized by public nature, consistency, and interaction. The realization of the goal of collaborative governance depends on the path of collaborative governance. (Ansell & Gash (2007).





Government Employment Policies

Government employment policies have an impact on the career development of college graduates since employability programs at higher educational institutes are viewed as a response to government policies that emphasize the importance of students developing skills to suit employers' demands (Frankham, 2017). The Chinese government places great importance on the issue of employment and views employment as the priority to ensure both the stability of its society and people's means of survival (Xiaohan et al., 2021). However, due to the COVID-19 pandemic, which has had a significant influence on the labor market, Chinese graduates now face more of a challenging market. The loss of human capital that occurs when educated workers are unemployed frequently causes significant economic and social problems (Wu et al., 2022). The Chinese government therefore actively promotes active employment-supporting policies, such as "mass entrepreneurship and innovation," which encourages social entrepreneurship. In response to the national employment support policy, government departments all across China have created and released more comprehensive policies on entrepreneurial employment and talent acquisition (Xiaohan et al., 2021). These policies have stimulated the entrepreneurial spirit in society. This has resulted in a good employment environment for fresh graduate students in China's higher vocational colleges. Wu, et al. (2022) conducted text analysis based on the 72 employment support policies collected via the Chinese government network. It was discovered that the real thrust of emergency policymaking lies at the local level of the entire system. Regional governments may exercise economic or administrative independence. This study has implications for how governments around the world can help students manage employment difficulties to create better career development opportunities.

Nowadays people in China do not change careers frequently due to cultural beliefs, employment practices, family factors, and personal circumstances. Therefore, the career development of college graduates is closely related to their first employment. Employment policies have an important impact on the employment choices of college graduates. If the government introduces preferential employment policies for doctors and nurses, students of nursing schools will be mainly employed in their specialty. If the government continues to support the development of medical careers, the career growth of employed students will be smoother. On the other hand, if the government's employment policies are strict and restrictive certain industries will not enter or leave the industry, and their career growth will be slower.

The Management of Teaching Programs

The management of teaching programs has an impact on the career development of college graduates. Higher education learning is an important knowledge foundation for students to engage in various careers in the future. Ho, et al.(2022) cited Watts' concept of teaching management (2006) and asserted that career development courses in colleges or schools focusing on the design of education and practice help college students gain the qualifications they will need for their future jobs. This is consistent with Cheng, et al. (2022) who noted that to help students become in-demand workers and perform effectively at a professional level. Integrating subject-specific knowledge and skills with lifelong learning and career management is very important. In other words, a solid foundation for a student's future professional growth may be established if the school curriculum is appropriate, integrates theoretical learning with practical teaching, and helps students gain more knowledge and skills in the classroom. However, if the school curriculum does not provide the courses that students need and can be applied in their careers, this will affect their career development. According to Zhao and Wu (2022), educational institutions all around the world often provide career development courses or comparable courses to better prepare undergraduate students for future career paths. It is critical to comprehend whether these job development courses help students achieve favorable professional outcomes.

Additionally, school employability training can improve the ability of graduates to find employment and develop their careers, and schools will normally provide students with employment training to help them learn about employment. Higher educational institutes, usually cooperate with





relevant social organizations and enterprises to help students acquire vocational skills through practical activities and learn more about career development and career opportunities.

In summary, the literature reviewed and the findings of the previous studies were consistent. It was found that government employment policies, career development courses offered by the institution, and employability development all have a significant relationship with career growth leading to sustainable career development. Based on the above analysis, the researcher proposed three hypotheses.

Research Hypotheses

Hypothesis 1: Government employment policies have a positive impact on the career development of nursing graduates in higher vocational colleges.

Hypothesis 2: Teaching program management has a positive and significant effect on the career development of nursing graduates in higher vocational colleges.

Hypothesis 3: Employability training has a positive and significant impact on the management and employability training career development of nursing graduates in higher vocational colleges

The conceptual framework of this research is illustrated in Figure 1

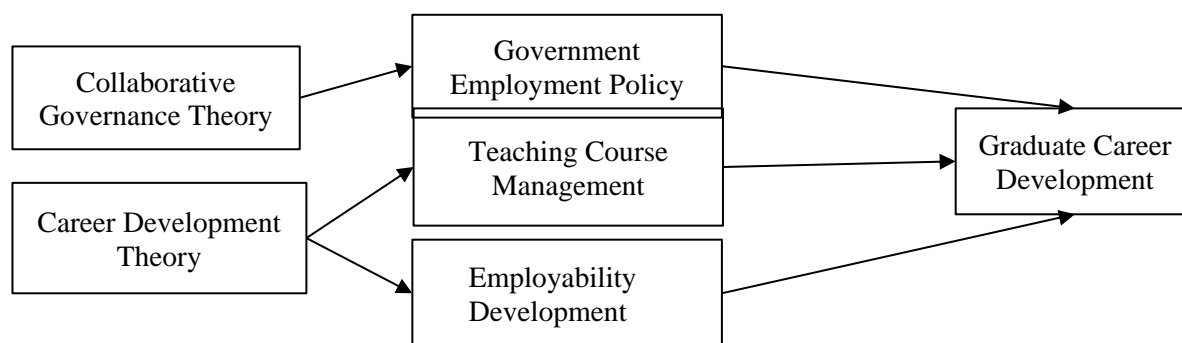


Figure 1: Conceptual Framework of this Research

Research Methodology

Sample Size and Sampling Method

The sample of this survey was the nursing graduates who graduated from Weifang Nursing Vocational College in 2019. This study focused on the nursing graduates who graduated from Weifang Nursing Vocational College in 2019. The reason for the sample selection was that this research mainly takes the graduates of Weifang Nursing Vocational College as a reference, analyzes the influencing factors of career development of nursing graduates in higher vocational colleges, and puts forward innovative countermeasures. Provide a reference for future researchers. The population of the group of this study is the graduate students of Weifang Nursing Vocational College.

A total of 580 graduates of 2019 were voluntarily investigated in this survey. The range of graduates were the students who graduated from Weifang Nursing Vocational College in 2019. Due to the contact information, contact scope, and possibility of contact, a total of 580 questionnaires were distributed online

Sampling Method

Research Design

This study aimed to determine the problems existing in the career development of Weifang Nursing Vocational College graduates and the factors that affect the career development of nursing graduates from higher vocational colleges. Questionnaire surveys are used as a research tool to measure the impact on the career development of nursing graduates. The research was conducted by using a quantitative survey technique. The theoretical foundation was based on collaborative governance theory and the



theory of career development. The main research instrument was the Survey 30 questionnaire; it was a researcher-made questionnaire constructed based on the review literature and career development theories. This study was conducted between February 1, 2023, and February 15, 2023, at Weifang Nursing Vocational College. The questionnaires were administered online.

Research Instrument

The main research instrument was the questionnaire, divided into four parts. The first part is mainly the personal situation of the 2019 graduates of Weifang Nursing Vocational College, with five items. The second part asked about government employment policies with a total of eight items. The third part asked about the school teaching program management, with eight items. The fourth part mainly asked about school employability training management with a total of nine items. The questionnaire used a five-point Likert scale, from 1 to 5, from low to high. for statistics and summary 1 point=strongly disagree, 2=disagree, 3 points= Neutral, , 4 points=agree, 5 points= Strongly agree.

Reliability and Validity of the Research Instrument

In this study, reliability and validity tests were conducted using SPSS 2.7 software. Reliability tests and validity tests were conducted on 570 sets of data collected. The acceptability of the coefficient alpha should be at least 0.7 and if it is less than 0.4, the reliability is considered unacceptable. Table 1 presents the reliability value of the questionnaire.

Table 1: Reliability Values (α) of the Questionnaire

Variables	Reliability	No. of items
Government employment policy	0.969	8
Management of school teaching programs	0.940	8
School employability development	0.970	9

The results of the internal reliability test using Cronbach's Coefficient Alpha (α) ranged from 0.97, 0.94, and 0.97 respectively. This proved that the questionnaire has a high degree of Cronbach's Coefficient Alpha.

The validity value of the survey questionnaire was also examined, and the validity results are shown in Table 2.

Table 2 Validity Value

Variables	KMO	Approx. ChiSquare	df	Significance
Government employment policy	0.947	6968.390	28	0.000**
Management of teaching programs	0.880	2562.898	28	0.000**
School employ Ability development	0.921	4790.051	15	0.000**

As shown in Table 2, the significant value (SIG) is 0.000, which is less than 0.05, indicating that the respondents can well understand the intention of the questionnaire designer, i.e., this questionnaire survey achieved the purpose of the survey, which showed that the test results of the questionnaire can represent the real situation of the respondents.

Data Collection and Analysis

The researcher initially contacted nursing graduates to ask if they would be willing to ask students to complete the questionnaire. Before answering the questionnaire students will be asked if they understand their rights regarding the survey to meet ethical requirements. A total of 580



questionnaires were distributed online and valid 570 questionnaires were returned, with a recovery rate of 98.28%. Descriptive statistics were employed through SPSS2.7 to analyze the rating scales from the questionnaires in terms of frequency and percentage for the demographic information of the respondents, and the means and standard deviations were calculated to examine the current situation of career development of nursing graduates. To test the hypothesis for the factors affecting the career development of nursing graduates, linear regression analysis and ANOVA were used.

Results

Characteristics of the Respondents

Table 3 presented the characteristics of the respondents calculated in terms of gender, workplace, jobs, and income, using frequency and percentage.

Table 3: Number and Percentage Respondents' Gender

Variables		Frequency	Percent (%)	Valid percent	Cumulative percent
Gender	Male	146	25.60	25.60	25.60
	Female	424	74.40	74.40	100
	Total	570	100	100	
Workplace	Public hospitals	229	40.20	40.20	40.20
	Private hospitals	42	7.40	7.40	47.50
	Medical-related companies	67	67	11.80	59.53
	Medical-related companies	232	40.70	40.70	100
	Total	570	100	100	
Jobs	Ordinary employee	470	82.50	82.50	82.50
	General management	34	6.00	6.00	88.40
	Middle management	25	4.40	4.40	92.80
	Senior management	41	7.20	7.20	100
	Total	570	100	100	
Income	Less than 3,000	261	45.80	45.80	45.80
	3,001-5,000	177	31.10	31.10	76.80
	5001-7000	65	11.40	11.40	88.20
	More than 7001	67	11.80	11.80	100
	Total	570	100.0	100.0	

Table 3 shows that out of the 570 nursing graduates, the number of males totaled 146 or 25.60% and the number of females was 424 or 74.40%. The data were reasonable because graduates of the School of Nursing are predominantly female.

In terms of the workplace, 229 respondents (40.20%) are currently employed in public hospitals. Forty-two (42) or 7.40% were employed in private hospitals. Sixty-seven, or 11.80%, were employed in healthcare-related companies. There were 232 people, (40.70%), who were employed in other industries. From the results, a total of 59.30% of the students who graduated from the School of Nursing were employed in hospitals and health-care-related industries, so the data were reasonable.

According to the job, and position of the respondents, 470 (82.50%) are currently in the general staff. There are 34 general managers, representing 6%. There were 25 middle managers or 4.40%. There are 41 senior managers or 7.20%. From the results, the data are reasonable as most of the graduates of the School of Nursing are general employees and some of them grow to become unit managers. Table 6 presents the number and percentage of respondents' income (CNY).



Finally, regarding the number and percentage of respondents' income (CNY), the results show that of the 570 graduates surveyed, 261 (45.80%) were paid less than 3,000 yuan. 177 (31.10%) were paid 3,001-5,000 yuan. 65 (11.40%) were paid 5,001-7,000 yuan. 67 (11.80%) were paid more than 7,001 yuan. The data are reasonable considering China's per capita income level, the average salary level of the medical industry, and the characteristics of the personnel's jobs.

The Current Career Development Status of Nursing Graduates

The first objective of the study was to investigate the current career development status of nursing graduates from Weifang Nursing Vocational College, the quantitative data from the questionnaires were calculated for the mean values in terms of three main factors: government employment policies, Management of teaching programs, and employability development. The means received were interpreted into five scales according to the criteria for interpretation: 4.51–5.00 (*Very High*), 3.51–4.50 (*High*), 2.51–3.50 (*Moderate*), 1.51–2.50 (*Low*), and 1.00–1.50 (*Very Low*). Table 4 presents the mean and standard deviation of the current career development status of nursing graduates

Table 4: Mean and Standard Deviation of Career Development Status of the Nursing Graduates

Variables	M	S.D.	Variance	Interpretation Value
Government employment policies	3.75	1.050	1.105	High
Management of teaching programs	3.74	.936	.877	High
Employability Development	3.95	.032	.868	High

As shown in Table 4, the results revealed the means scores of three variables exceeded 3.51 indicating that of those variables: the government employment policies, the management of teaching programs, and the employment development of the nursing graduates.

Results of the Hypotheses Testing: Regression Analysis

The study also tested three hypotheses to determine if government employment policies, management of teaching programs, and employability development, (considered as independent variables) have an impact on the career development of nursing graduates (considered as independent variables). The data was analyzed using a linear regression analysis. The results are presented in Table 5.

Table 5 Summary of the Model

	R	R square	Adjusted square	RStd.Error of the Estimate
1	.843a	.710	.709	.34918
a. Predictors: (Constant), Employability Development, Government Employment Policies, Management of Teaching Program Settings				

As can be seen from Table 5, government employment policies, management of teaching programs, and employability development were considered independent variables, while the career development of nursing students in higher vocational colleges was regarded as a dependent variable in a linear regression analysis. The R-squared value of the model is 0.843, which means that government employment policy, management of teaching program, and employability development cultivation can explain 84.30% of the variations, indicating that government employment policies, management of teaching program, and employability development have 84.30% of the influence on the career development of nursing students.

To ensure the model construction is reliable, Table 6 illustrates the construction formula of the model.

**Table 6** ANOVA (Alpha)

Model		Sum of Squares	df	mean square	F	significance
1	regression (statistics)	169.225	3	56.408	462.628	.000 b
	residual	69.012	566	.122		
	Total	238.237	569			
a. Dependent variable: career development						
b. Predictors: (Constant), School Employment Training, Government Employment Policy, School Instructional Setting						

As shown in Table 6, the model passes the F-test ($F=462.628$, $p=0.000<0.05$), which means that the model construction is meaningful.

Table 7: Model *B* (Beta)

Model		Unstandardized coefficient		Standardized coefficient	<i>t</i>	significance
		B	Standard error	Beta		
1	(Constant)	1.082	.066		16.407	.000
	Government employment policy	-.026	.027	-.043	-.987	.324
	School Setting	.201	.036	.292	5.639	.000
	School Employment Training	.437	.025	.629	17.501	.000

As shown in Table 7, Career development = $1.082 + 0.201 \times \text{Government employment policy} + 0.201 \times \text{Management of teaching program setup} + 0.437 \times \text{Management of the teaching program and employability development}$, and the square value of the model is 0.843, which means that the government employment policies, management of teaching program setup, and school employability development explain 840.3% of the variation. The model passed the F-test ($F=462.628$, $p=0.000<0.05$), which implies that government employment policies, management of teaching program settings, and employability development will all have an impact on the career development of nursing students in higher vocational colleges. In addition, the multicollinearity test of the model found that all VIF values in the model are less than 6, which means that there is no collinearity problem. the D-W value was at 4, which indicates that the model is better because there is no autocorrelation and there is no correlation between the sample data. The final specific analysis shows that the regression coefficient of government employment policy is -0.026 ($t=-0.987$, $cp=0.324>0.01$), government employment policies will not have a positive impact on the career development of graduates.

The regression of management of the teaching program is 0.201 ($t=5.639$, $p=0.000<0.01$), which means that management of the teaching program will have a significant positive effect on graduates' career development. The regression of employability development is 0.437 ($t=17.501$, $p=0.000<0.01$), which means that college employability will have a significant and positive impact on the career development of nursing graduates. Additionally, as presented in Table 8, it was found that the R-squared value of the model is 0.843, the R-squared value of the model is 0.001, which means that there is no effect of gender, workplace, income, or jobs on career development.





Table 8: The Effect of Other Variables: Gender, Workplace, Income, and Jobs on Career Development of Nursing Graduates

Model	R	R-square	Adjusted R-square	Std.Error of the Estimate
Gender	.001a	.000	-.002	.64763
workplace	.037a	.001	.000	.64720
income	.009a	.000	-.002	.64761
jobs	.009a	.000	-.002	.64761

a. Predictors: (Constant), School Employment Training, Government Employment Policies, School Instructional Settings

Discussion and Conclusion

This study investigated the current career development status of nursing graduates at a university and the impact of government employment policies, teaching management programs, and employability development on the career development of nursing graduates at Weifang Nursing Vocational College. The results were discussed based on the literature and the findings of the previous studies.

First, the results of the current study showed that the nursing graduates have basic nursing knowledge and nursing skills, coupled with the fact that the college's teaching setup and employment cultivation are doing relatively well. Their current career development status is at a relatively high level for all of the three factors including government employment policies ($M=3.75$, $S.D. =1.050$), management of teaching programs, ($M=3.74$, $S.D. =.936$), and employability development ($M=3.95$, $S.D. =.032$).

Second, through the analysis of questionnaire group characteristics and model regression analysis, the results revealed that the three factors hypothesized, consisting of government employment policy, teaching program management, and employability development (school employment training), impact the nursing students' career development. The government's employment policies hurt the career development of nursing graduates. The findings were consistent with the study by Zhao and Wu (2022), Pshembayeva, et al. (2022), and Bal and Arikan, S. (2020). The possible explanations were as in the following.

The Current Career Development Status of the Nursing Graduates

To begin with, nursing graduates have basic nursing knowledge and nursing skills, and their current career development status is at a relatively high level for all three factors, including government employment policies, management of teaching programs, and employability development. The analysis of data from the questionnaire indicated that all of the 570 people were employed, of which the number of people entering public hospitals reached 229, accounting for 40.20%. The number of people who entered private hospitals amounted to 42, accounting for 7.40%. The number of people engaged in medical-related enterprises was 67, accounting for 11.80%. That is to say, 59.30% of the nursing graduates of Weifang Vocational College of Nursing are engaged in medical-related industries, indicating that they have high achievements in medical and nursing professional teaching settings and medical industry employment training. At the same time, it should be noted that there are 232 people involved in other industries, accounting for 40.7%, which means that as long as the college's teaching and employment training are well organized, even if they are unable to engage in the majors they studied in school, they can still find jobs in other industries. This can also be confirmed by the student's career growth. Among the 570 students, 41 of them are already senior managers and 25 of them are middle managers, accounting for 11.60%, which indicates that the career growth of the graduates is more satisfactory.

The Significant Impact of School Teaching Setting Management and Employability Training on Nursing Graduate's Career Development, and Government Employment Policies

Through the analysis of questionnaire group characteristics and model regression analysis, it can be seen that teaching course management, settings, and employability development have a positive and



significant impact on the career development of nursing graduates. The findings were consistent with Zhao and Wu's research (2022). This study indicated a positive relationship between students' career awareness and career development courses. In addition, understanding graduates' underlying self-perceptions of their employability is important to reduce the impact of potential mismatches between their perceptions and those of other stakeholders. Weifang Nursing Vocational College has been engaged in medical education for a long time, and it has rich medical teaching experience. The college has set up a reasonable variety of theoretical and practical courses to help students learn more professional knowledge. Weifang Nursing Vocational College has been engaged in medical education for a long time, and it has rich medical teaching experience, and the college has set up a reasonable variety of theoretical courses and practical courses to help students learn more professional knowledge. At the same time, the college has established a good cooperative relationship with various hospitals, medical enterprises, and other medical institutions in Shandong Province, and often organizes students to go to various enterprises for practical internships and apply the knowledge they have learned to do practical operations.

Previous studies have shown that career development courses can promote self-efficacy in job hunting. In this study, the researchers found that it was difficult to distinguish the self-efficacy of job hunting between students who took one career development course and students who did not take a career development course. However, this difference is evident when students take two or more professional development courses. The more courses a student takes, the higher the student's ability to find a job (Reese & Miller, 2006, Lin & Flores, 2013). That is, the appropriate degree of a single career development course will improve with the following increases in the calculated number of courses the student took. These nursing participants took different courses and did extracurricular activities during their college life, so they developed employability. Therefore, it is necessary to have enough time to develop those abilities with job guidance and those who have taken career development courses (Zhao & Wu, 2022).

However, through the questionnaire group characterization and model regression analysis, in this study, the government employment policies hurt the career development of nursing graduates. Pshembayeva et al. (2022) noted that career development is an ongoing process consisting of learning about individuals and the environment. Similarly, Nagy et al., (2019) asserted that career growth is influenced by individual changes, career values, and goal-setting, a continuous process that goes along with career growth. This study, like our research, highlights the importance of fostering a desire for career growth during the university years.

In the model regression analysis, it was found that the impact of government employment policy and the hypothesis results appear inconsistent. The impact of government employment policies on graduates' career development is negatively correlated. This is inconsistent with the hypothesized results, and there are three main reasons for analyzing. First, the development of China's economy has brought about significant changes in employment positions, and employment policies are increasingly affecting graduates of technical colleges. It can also be confirmed from the employment line that 40.70% of the graduates are not engaged in hospitals and medical-related industries, and they decide to choose their careers. Secondly, there is a change in graduates' concept of employment. With more flexible employment opportunities, many college graduates are engaged in more favorable career development in the digital industry, civil service, education, and other occupations, and some of them have started their businesses. The changes in attitudes have led to the diminishing influence of government employment policies. Third, the government's employment policy itself has weakened (Pshembayeva et al., 2022). China's current rapid development of various industries, compared with the medical and hospitals, governments are very concerned about many jobs, but unlike the previous obvious trend, supporting policies. The Chinese government has adopted more and more policies to support the development of the real economy, while market actors independently determine the supply of labor to provide a platform, but will not directly intervene, leading to a decline in the influence of government employment policy.





For nursing graduates of higher vocational colleges, they need to pay attention to the following three aspects. Although the influence of government employment policies is declining, it should be noted that hospitals and other medical industries are the basic industries for national development and public life, and they are the important basis for safeguarding the health and life of the public. Although the government's employment policy is constantly being adjusted and healthcare reform is being promoted, the overall policy of supporting and encouraging the development of the medical industry has not changed. This needs to be emphasized by future graduates of nursing programs in higher vocational colleges. To take advantage of the government's favorable employment policies to achieve better development of their careers.

Recommendations and Implications

The findings of the current research have important practical implications. First, a nursing program in higher vocational colleges should increase students' interests and the importance of career development learning. The more that students recognize the impacts of career development on their future careers, the greater their belief in their future employability.

Second, career development courses delivered as a successor to the career future paths could aim to increase students' employability to help them during their college life. Universities can also increase their efforts to support students in career planning through activities such as establishing a career center, providing guidance and advisory services, incorporating career-related resources, and offering seminars on various topics related to career life.

To improve the career development status of nursing graduates in higher vocational colleges, the following suggestions are put forward.

The government needs to exercise caution and rigor when deciding how to promote the growth of medical higher vocational institutions and realize the balanced development of medical-vocational education. Increase awareness and guidance, challenge conventional thinking, and achieve the advancement of academic and vocational education. To fulfill the need for doctors and nursing staff in the medical business, it is especially important to boost the growth of the nursing profession in higher vocational institutions.

More research and consideration should be given to the curricula of nursing majors in higher vocational colleges, and more guidance should be given to students on employment, to raise their professional awareness. Integrate the employment service platforms of vocational colleges and universities, deepen the integration of industry and education, school-enterprise cooperation, and implement "order-type" cultivation, to realize full employment and effectively increase the rate of professional matching.

Higher vocational colleges should pay attention to improving the quality of teachers and effectively enhancing the employment stability rate. They should adopt various ways to promote the comprehensive quality of nursing teachers, cultivate "dual-teacher" teachers, and improve their professional ability and teaching level. By the requirements of "full staffing, specialization, and informatization", guidance and training should be strengthened, students' abilities should be upgraded in a targeted manner, employment services should be provided purposefully, and a nursing vocational skills, evaluation system, and salary system should be established in a coordinated manner, to effectively enhance the sense of achievement of nursing professionals.

Increase cooperation between higher vocational nursing programs and society, hospitals, medical and other institutions, actively cooperate with other institutions, and increase the frequency and depth of cooperation with hospitals and enterprises, so that more students can learn about social employment policies and hospital employment orientation. Increase the intensity of "career lectures", inviting well-known experts to schools to provide nursing students with guidance on improving their vocational skills and adjusting their employment mentality, to help nursing students in vocational colleges and universities find high-quality employment.

In future research, researchers need to add more factors that influence the career development of nursing graduates according to the actual situation of higher vocational colleges and universities, such





as the family factors that the respondents are in, regional economic factors, and factors of the overall employment situation, to make the research more comprehensive and in-depth.

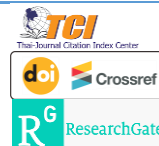
Ethical Statement

The respondents participated voluntarily in the research. The participants provided their written informed consent to participate in this study. The results' confidentiality was guaranteed by the researcher. The online survey questionnaires did not include questions on respondents' personal information.

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