Received: *3 October 2023*
Revised: *23 April 2024*
Accepted: *24 April 2024*

Impact of psychological capital and career identity on graduate students' employability: The mediation of social capital among Shanxi Province of China

Zheng She [1] Pratikshya Bhandari [2]

Abstract

This study uses a mixed-methods research to explore the relationship between psychological capital, career identity, social capital, and graduate employability in higher education in Shanxi Province, China. The study employs SPSS and AMOS to analyze the survey questionnaire, and NVIVO to analyze the interview questionnaire. the researcher collected 450 sample size by stratified random sampling and that the validity of quantitative research total is 0.927, the validity of qualitative research total questionnaire is 0.95

The study finds that: the respondents have similar views but different focuses on the four factors. The four factors positively and significantly affect graduate employability, and mediate each other. The respondents have different views, experiences, suggestions, and expectations on the factors and their employment relationship. The study provides evidence and insights on the four factors and graduate employability in China, and uses a mixed-methods research, enriching the data and methods. The study is practical for graduates, teachers, institutions, and policy makers, as it suggests how to improve graduates' psychological, career, social, and employability aspects, and promote their employment.

Keywords: Psychological Capital, Career Identity, Social Capital, Graduate Employability, Mixed-Methods Research

Introduction

As China enters a new stage of development, the labor market faces new changes and challenges. On one hand, the new development pattern, the scientific and technological revolution, the digital economy, the new urbanization and rural revitalization, and new employment growth points create a wide space and opportunity for employment. On the other hand, China faces challenges such as aging

[1] PHD Management, School of Management, Shinawatra University E-Mail: Zhengshe123456@outlook.co.th
[2] Dr. Management, School of Management, Shinawatra University

population, labor supply reduction, employment structural contradiction, etc., and the employment situation is grim and complex. Especially under the COVID-19 pandemic and the international environment changes, the problems of low demand, hard matching, and high pressure on key groups are prominent. Thus, promoting more and better employment is a key guarantee for high-quality development, and a pressing need for meeting the people's aspiration for a better life.

Graduate students, as high-level talents, have employability related to their personal and national development. But with the scale expansion of graduate students, their employability faces new problems and challenges. On one hand, there is a gap between their knowledge, skills, innovation and market demand, making some hard to find suitable or satisfying jobs. On the other hand, their psychological quality, professional attitude, social adaptability affects their employability, making some feel confused, pressured, lost in employment. So, how to improve their employability, so they can better adapt to and serve the country and society, is an important and urgent issue. Literature review shows some research shortcomings and defects. First, most studies use cross-sectional design, which cannot reveal the causal and dynamic relationship between variables. Second, most studies ignore the influence of factors like culture, sample, tool, method on the results and conclusions. Third, most studies lack attention to graduate students as a special group, and fail to show their employability factors and paths. So, it is necessary to use graduate graduates in the Chinese culture, and use qualitative and quantitative mixed method, to explore the relationship and mechanism of psychological capital, professional identity, social capital and employability.

Research's objective

1. Analyze how psychological capital, professional identity, social capital and graduate employability are related.

2.Explore how social capital mediates the effect of psychological capital on graduate employability.

3.Explore how social capital mediates the effect of professional identity on graduate employability.

Hypothesis

1. H1: There is a positive and significant relationship between psychological capital and graduate students' employability.

2. H2: There is a positive and significant relationship between career identity and graduate students' employability.

3. H3: There is a positive and significant relationship between psychological capital and social capital.

4. H4: There is a positive and significant relationship between career identity and social capital.

5. H5: There is a positive and significant relationship between social capital and graduate students' employability.

6. H6: Social capital has the mediating role in the relationship between psychological capital and graduate students' employability.

Conceptual framework

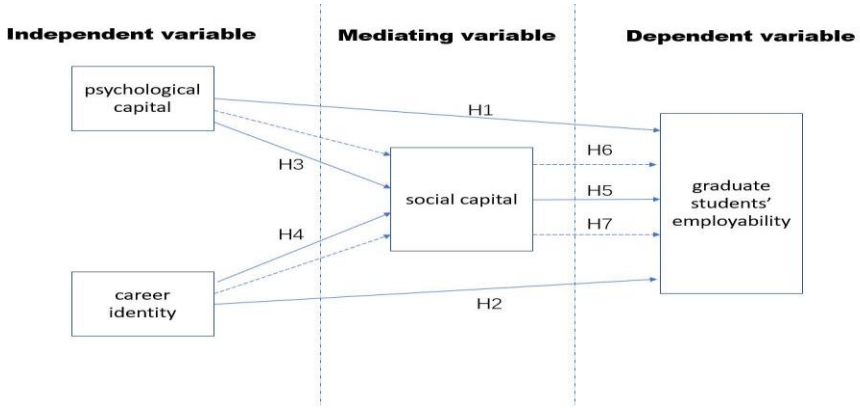


Figure 1 Conceptual Farmwork

Methodology

1. Quantitative data analysis

This study explored how psychological capital and professional identity influenced graduate employability, and social capital's mediating role. The framework had four variables: psychological capital and professional identity as independent, social capital as mediating, and graduate employability as dependent. Each variable had indicators. This chapter did data analysis, with missing values, outliers and multicollinearity, and used SEM to test the models, as follows:

1.1 Preliminary data analysis

To ensure data quality and validity, this study did a preliminary data analysis. The aim was to make sure the data was accurate and clean, which was necessary for

further analysis. The preliminary data analysis included missing values, outliers and multicollinearity detection, as follows:

1) Missing values

This study used an online questionnaire method and sent the link to the target sample via the network platform. The population was graduate students of 10 colleges in Shanxi Province. The sample was 450 graduate students, 45 from each college, selected by snowball and stratified random sampling methods. With the author's guidance and the respondents' cooperation, this study had no missing data.

2) Suspicious patterns

Suspicious pattern data are data points that are identical or very similar to other data points, possibly due to random or dishonest responses. They can lower the data quality and analysis results. Screening for suspicious pattern data is a key step in data cleaning. This study used Z-scores to remove outliers based on the mean and normal distribution. Z-score is the distance of a data point from the mean in standard deviations, which shows how far a data point deviates from the data set average. If the data are normally distributed, so are the Z-scores, with a mean of 0 and a standard deviation of 1. Based on the normal distribution properties, about 95% of the data points have Z-scores between -2 and 2, and about 99% have Z-scores between -3 and 3. Thus, we can regard data points with absolute Z-scores greater than 3 as outliers, and delete or mark them as missing values. As shown in Figure 2, the questionnaire 442 is abnormal and can be deleted. Also, as shown in Figure 5.1, 26 questionnaires (28, 50, 54, 62, 67, 78, 79, 84, 86, 99, 108, 113, 117, 119, 124, 126, 128, 133, 145, 153, 155, 165, 166, 177, 197, 400) have the same answers for each Likert scale question and need to be removed.

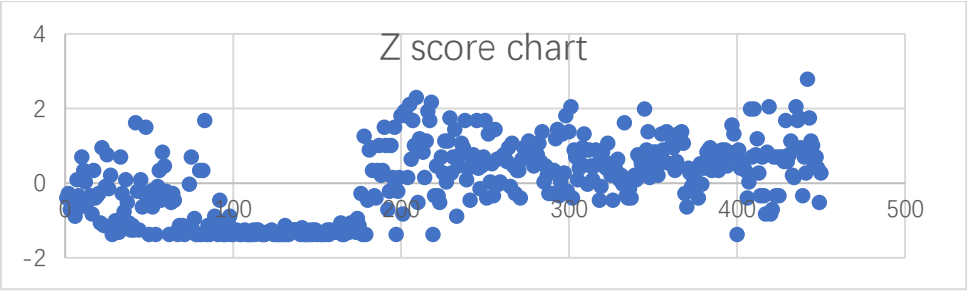


Figure 2 Z score chart

Source: Data and information from this research

3) Outliers

Outliers are data points that deviate significantly from other data, possibly due to random or erroneous responses. They can distort the data distribution and analysis results. This study used box plots to detect outliers for each variable. Box plots are graphical tools that show the quartiles (Q1, Q2, Q3), the minimum and maximum values, and some outliers of the data. The box height (Q3-Q1) is the interquartile range (IQR), which measures data dispersion. Outliers are data points that lie beyond Q1-1.5IQR or Q3+1.5IQR and need to be deleted. Box plots can succinctly display the data's central position, dispersion, symmetry, skewness and outliers, and compare different groups. However, box plots cannot show the data's shape, kurtosis, mode, or number. In this study, 1.5 is an empirical value that can be adjusted. Outliers are marked with dots or symbols on the box plots. As shown in figure 3, 7 questionnaires (194, 206, 228, 261, 308, 327, 359) have outliers and need to be removed.

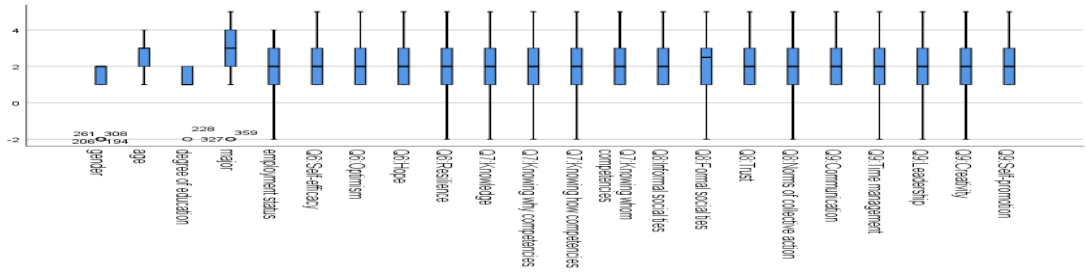


Figure 3 Box Plot

Source: Date and information form this research

1.2 Response Rate

This section presents the data collection situation and questionnaire recovery rate of this study. This study used an online questionnaire method, and sent the questionnaire link to the target sample through the network platform. The specific situation of the questionnaire recovery rate is shown in Table 1

Table 1 Questionnaire Distributed and response rate

Questionnaire	Frequency	Rate (%)
1.Copies of Questionnaire Distributed	450	100%
2.Copies of Questionnaire Return	450	100%
3.Copies of Questionnaire Deleted	33	7.3%
4.Copies of Usable Questionnaire	417	92.7%

Source: Data and information from this research

1.3 Descriptive Statistics of the Variable of the study

This section gives descriptive statistics for the main variables of this study: psychological capital, occupational identity, social capital, and graduate employability. Descriptive statistics help understand the variables' distribution, central tendency, variability, and correlations. They allow a preliminary analysis and interpretation of the data, and support the hypothesis testing. This section also displays the tables and figures for each variable. The descriptive statistics of the variables use ranked means and standard deviations. Table 2,3,4 and 5 gives the means and standard deviations of the "Psychological capital, Career identity, Social capital, Graduate employability" levels. The results are in the tables below:

Table 2 The mean and standard deviation of psychological capital

Questionnaire Description	Sample	Mean	Standard Deviation	Rank
1.The belief in one's ability to accomplish a specific task or goal.	417	2.41	1.349	1
2.The positive expectation about future outcomes.	417	2.41	1.053	4
3.The perceived ability to generate pathways and motivation to achieve goals.	417	2.34	1.057	3
4.The ability to bounce back from adversity or failure.	417	2.38	1.076	2

Source: Data and information from this research

Table 3 The mean and standard deviation of Career identity

Questionnaire Description	Sample	Mean	Standard Deviation	Rank
1.The awareness of one's interests, values, skills and personality traits related to career choices.	417	2.43	1.169	1
2.The motivation and commitment to pursue one's career goals.	417	2.40	1.090	3
3.The skills and abilities to perform one's career tasks effectively.	417	2.36	1.119	2
4.The network and relationships that support one's career development.	417	2.41	1.080	4

Source: Data and information from this research

Table 4 The mean and standard deviation of Social capital

Questionnaire Description	Sample	Mean	Standard Deviation	Rank
1.The connections with friends, relatives, neighbors and acquaintances that provide emotional and instrumental support.	417	2.43	1.137	1
2.The connections with organizations, associations, institutions and authorities that provide resources and opportunities.	417	2.49	1.118	2
3.The willingness to rely on others based on positive expectations of their behavior.	417	2.47	1.090	3
4.The shared values and rules that guide the cooperation and reciprocity among members of a group or community.	417	2.33	1.070	4

Source: Data and information from this research

Table 5 The mean and standard deviation of Graduate employability

Questionnaire Description	Sample	Mean	Standard Deviation	Rank
1.The ability to express oneself clearly and effectively in oral and written forms.	417	2.30	1.098	3
2.The ability to plan, prioritize and organize one's tasks efficiently and productively.	417	2.39	1.117	1
3.The ability to influence, motivate and inspire others to achieve common goals.	417	2.33	1.110	2
4.The ability to generate novel and useful ideas or solutions for problems or challenges.	417	2.30	1.081	4
5.The ability to present oneself positively and confidently to potential employers or clients.	417	2.33	1.045	5

Source: Data and information from this research

1.4 Measurement Model

The measurement model analysis of this study includes Cronbach's Alpha test, KMO test, and confirmatory factor analysis.

1) Cronbach's Alpha

The sample size of this study is 417. Table 6 shows the Cronbach's Alpha results of this study.

Table 6 Cronbach's Alpha of Pilot study

Cronbach's Alpha	Cronbach's Alpha Based on standardized items	No of items
0.941	0.934	22

Source: Data and information from this research

The Cronbach's Alpha value of this study is 0.941. This value is between 0.70 and 0.95, not too high, nor too low (Tavakol, M., & Dennick, R, 2011). It indicates that the data has a high internal consistency reliability, and can be used for further analysis.

2) Kaiser-Meyer-Olkin (KMO) Test

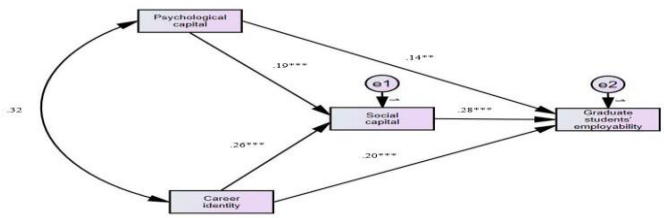
This study used 417 valid questionnaires and the KMO test to assess the suitability of factor analysis. Following (Field, A, 2018), the KMO value should be above 0.8 for suitable data. The KMO value of this study is 0.975, higher than this threshold, showing high data suitability.

1.5 Structural Measurement Models

To analyze the structural measurement model, the measurement model validity is needed. The analysis includes path analysis, mediation effect, and coefficient of determination R^2. Path analysis tests the causal relationship between latent variables, mediation effect measures the mediating role of a latent variable between two others, and coefficient of determination R^2 shows the proportion of a latent variable explained by others.

1) Path Analysis

The path analysis in this study has hypothesis testing and mathematical model equation solving. Figure 4 shows the path analysis results with standardized path coefficients and significance levels.



CMIN/DF-0.657 GFI-1.000 CFI-1.000 IFI-1.000 RMSEA-0.000

Figure 4 path analysis results

*** Significance value <0.001 ** Significance value <0.010 * Significance value <0.050 Frequency (N) = 417

Source: Data and information from this research

Figure 4 shows the path analysis results with significance level. The path coefficients of “Psychological capital” and “Career identity” to “Social capital” are 0.19 and 0.26, significant at (Sig.<0.001), meaning they increase “Social capital”. So, the hypotheses “H3: Psychological capital and social capital are related” and “H4: Career identity and social capital are related” were verified. The path coefficients of “Psychological capital”, “Career identity” and “Graduate employability” are 0.14 and 0.20, significant at (Sig.<0.010), meaning they increase “Graduate employability”. So, the hypotheses “H1: Psychological capital and graduate employability are related” and “H2: Career identity and graduate employability are related” were verified. The path coefficient of “Social capital” to “Graduate employability” is 0.28, significant at (Sig.<0.001), meaning it increases “Graduate employability”. So, the hypothesis “H5: Social capital and graduate employability are related” was supported. The formula uses the values to calculate the model:

Social capital = 0.19×Psychological capital + 0.26×Career identity

Graduate employability =0.28×Social capital + 0.14×Psychological capital + 0.20×Career identity OR

Graduate employability = （0.28×（0.19×Psychological capital + 0.26×Career identity) + 0.14×Psychological capital + 0.20×Career identity Table 4.15 shows the model fit indicators and recommended values.

2) Mediating Effect

A mediating variable is how an independent variable affects a dependent variable. The mediating effect test needs four conditions: the variables are related, and the independent variable effect is less or none with the mediating variable. The mediating effect size is the mediating variable effect ratio to the independent variable effect. Table 7 shows the effects of this study.

Table 7 Direct, Indirect and Total effect

Latent Variables	Performance		
	Direct effect	Indirect effect	Total Effect
Psychological capital	0.142**	0.052**	0.194
Career identity	0.200***	0.066***	0.266

*** Significance value <0.001 ** Significance value <0.010

* Significance value <0.050 Frequency (N) = 405

Source: Data and information from this research

Table 7 shows the direct, indirect, and total effects of the independent variables on the dependent variable. The path coefficients of "Psychological capital" and "Career identity" are 0.052 and 0.066, both significant at (Sig.<0.001), with the highest being "Career identity" through "Social capital" to "Graduate employability". This shows that "Social capital" mediates the effects of "Psychological capital" and "Career identity" on "Graduate employability". Thus, the hypotheses "H6: Social capital mediates the effect of psychological capital on graduate employability." and "H7: Social capital mediates the effect of career identity on graduate employability." were verified. The total effects of "Psychological capital" and "Career identity" on "Graduate employability" are 0.194 and 0.266, with the highest being "Career identity". Table 8 summarizes the hypothesis testing results.

Table 8 Direct, Indirect and Total effect

Latent Variables	Direct effect	Indirect effect	Mediation
Psychological capital	Significant	Significant	Mediation
Career identity	Significant	Significant	Mediation

Source: Data and information from this research

Table 8 shows that "Social capital" has a mediating effect between "Psychological capital", "Career identity" and "Graduate students' employability".

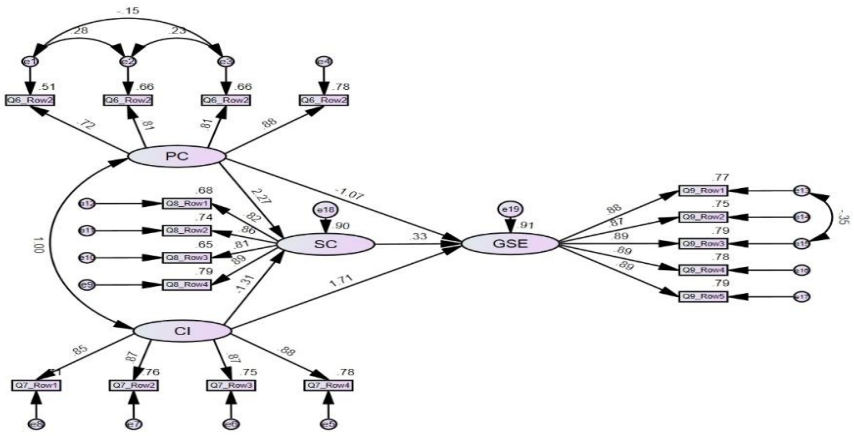
Table 9 Summary of hypothesis testing

Hypothesis	Results
H1: There is a positive and significant relationship between psychological capital and graduate students' employability.	Accepted
H2: There is a positive and significant relationship between career identity and graduate students' employability.	Accepted
H3: There is a positive and significant relationship between psychological capital and social capital.	Accepted
H4: There is a positive and significant relationship between career identity and social capital.	Accepted
H5: There is a positive and significant relationship between social capital and graduate students' employability.	Accepted
H6: Social capital has the mediating role in the relationship between psychological capital and graduate students' employability.	Accepted
H7: Social capital has the mediating role in the relationship between career identity and graduate students' employability.	Accepted

Source: Data and information from this research

3) Structural Equation Modeling

This study used AMOS and the previous hypotheses and path analysis results to build a structural equation model. To validate the data better, the model abbreviated “Psychological capital” as “PC”, “Career identity” as “CI”, “Social capital” as “SC”, and “Graduate employability” as “GSE”. The path from “PC” to “SC” was “a1”, from “CI” to “SC” was “a2”. The path from “SC” to “GSE” was “b”. The path from “PC” to “GSE” was c1, from “CI” to “GSE” was c2. The residual of “SC” was e18, and of “GSE” was e19. Figure 5 shows the model.



CMIN/DF-2.127 GFI-0.940 CFI-0.984 IFI-0.984 RMSEA-0.052

Figure 5 Structural Equation Modeling

Source: Data and information from this research

Figure 5 shows the R^2 of “Social capital” is 0.90, meaning 90% of its change is from “Psychological capital” and “Career identity”. The R^2 of “Graduate employability” is 0.91, meaning 91% of its change is from “Psychological capital”, “Career identity”, and “Social capital”. This model shows a significant relationship between these four variables. Likewise, there is a significant relationship between “Psychological capital” and “Career identity” and “Social capital”, and between “Social capital” and “Graduate employability”. Thus, this study made this model. Table 10 shows the model’s recommended and fit values.

Table 10 Model fit of Structural Equation Modeling

Name of Index	Recommended value	Model fit indices
1.Root mean square error of approximation (RMSEA)	RMSEA between 0.05-0.08 or less	0.052
2.Goodness-of-fit index (GFI)	GFI>0.90	0.940
3.Comparative fit index (CFI)	CFI>0.90	0.984
4.Incremental fit index (IFI)	IFI>0.90	0.984
5.Chisq/df	Chisq/df<3.0	2.127

Source: Data and information from this research

According to the parameters of Table 5.9, the fit indices of this model are within the suggested standard range. Therefore, the model created by this study is acceptable.

2. Qualitative research

This section shows the qualitative research results, including the main findings, the NVIVO charts, and the conclusions and discussions. The main finding is that psychological capital, career identity, social capital and graduate employability are positively and significantly related. These findings support the hypotheses that these factors affect graduate employability and interact with each other. This study used NVIVO to make charts to show the data analysis.

1) Axial Coding

"Axial Coding" is a method of qualitative data analysis. It is to identify the relationships and logic between categories through the way of thinking of induction and deduction. Its purpose is to associate and integrate the codes (categories and concepts) generated in the preliminary coding, and form more specific and related categories. The "Axial Coding" generated by this study through NVIVO is shown in Figure 5.5. From the generated figure, it can be seen that the relationship between the latent variables and observed variables abstracted from the answers of the qualitative research interviewees is consistent with the qualitative research.

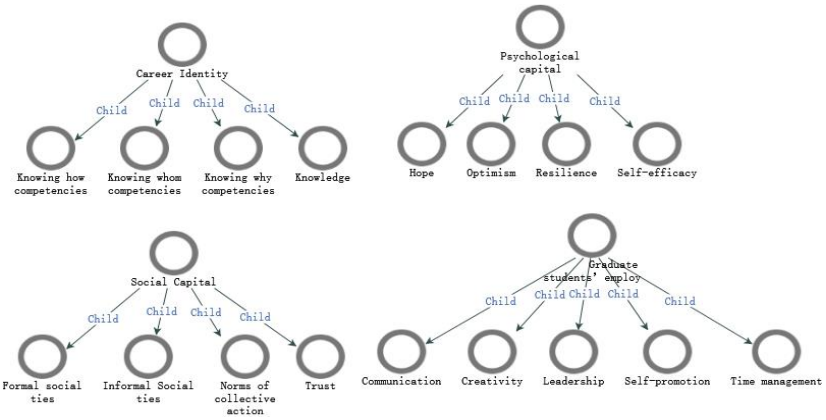


Figure 6 Axial Coding

Source: Data and information from this research were obtained through NVIVO

2) Word Cloud

Word cloud can show the words with the highest frequency in the interview content, reflecting the attention and importance of the interviewees to the variables and indicators of this study.



Figure 7 All variable encoding word cloud map

Source: Data and information from this research were obtained through NVIVO

Figure 7 shows the word cloud of all interview codes. The most frequent words are "social" (4.01%), "capital" (3.99%), "psychological" (3.71%), "graduate" (3.62%), "students'" (3.21%), "employability" (2.91%), "career" (2.41%), "identity" (2.01%). These words are the study's core elements, showing the interviewees' high understanding and importance of "Impact of psychological capital and career identity on: The mediation of social capital".

3) Clustering analysis

This study used NVivo clustering analysis, a data mining method that splits data into groups by similarity or distance, and finds patterns and structures in the data. It clustered by word similarity, to show the most frequent words in the interview text, and their links. Figure 78 shows the high-frequency words and phrases clustered by the interview questionnaire match the qualitative analysis conclusion. The latent and observed variables also match the research design.

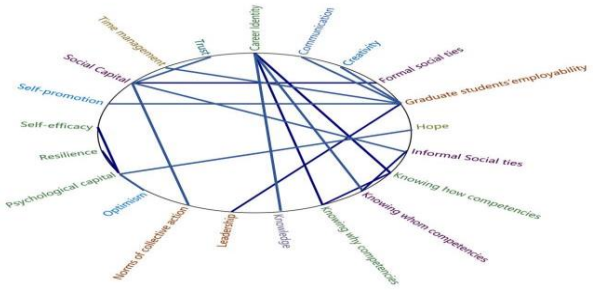


Figure 8 Clustering Analysis

Source: Data and information from this research were obtained through NVIVO

4) Hierarchy diagram of variables

Figure 9 shows the hierarchy diagram of variables made by NVIVO software. The figure shows the variables and indicators of this study in the interview content, and the interviewees' attention and importance to them. "Psychological Capital" has the highest proportion (31.2%), and "Self-efficacy" is the most important dimension (33.9%). "Career Identity" is second (27.2%), and "Knowing how competencies" is the most important dimension (41.0%). "Graduate employability" is third (26.9%), and "Self-promotion" is the most important dimension (26.7%). "Social Capital" is fourth (12.7%), and "Formal social ties" is the most important dimension (32.3%).

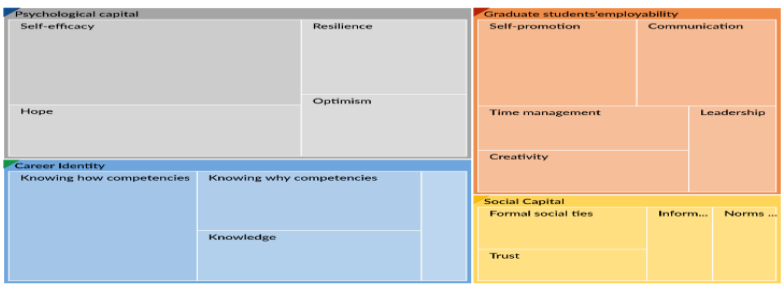


Figure 9 Hierarchy diagram of variables

Source: Data and information from this research were obtained through NVIVO

Table 11 Matrix Coding

	A : Psychological capital	B : Career Identity	C : Social Capital	D : Graduate students'employability
1 : Psychological capital	100.00%	61.56%	73.44%	78.75%
2 : Career Identity	61.56%	100.00%	72.91%	69.89%
3 : Social Capital	73.44%	72.91%	100.00%	63.76%
4 : Graduate students'employability	78.75%	69.89%	63.76%	100.00%

Source: Data and information from this research were obtained through NVIVO

Table 11 shows the variables of this study are positively correlated, with coding coverage above 50%. The strongest is "Psychological capital" and "Graduate employability" (78.75%), supporting hypothesis H1: "Psychological capital and graduate employability are positively and significantly related." The coding coverage of "Career Identity" and "Graduate employability" is 69.89%, supporting hypothesis H2: "Career identity and graduate employability are positively and significantly related." The coding coverage of "Psychological capital" and "Social Capital" is 73.44%, supporting hypothesis H3: "Psychological capital and social capital are positively and significantly related." The coding coverage of "Career Identity" and "Social Capital" is 72.91%, supporting hypothesis H4: "Career identity and social capital are positively and significantly related." The coding coverage of "social capital" and "graduate employability" is 63.76%, supporting hypothesis H5: "Social capital and graduate employability are positively and significantly related." Figure 10 shows the Matrix Coding Query-Results Preview by VVIVO, showing the coding coverage between variables.

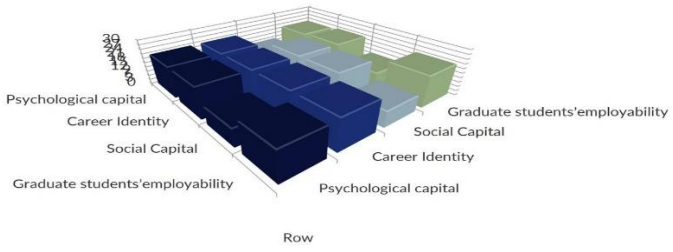


Figure 10 Matrix Coding Query-Results Preview

Source: Data and information from this research were obtained through NVIVO

Discussion and Conclusions

1. This study found that psychological capital, career identity, and social capital positively and significantly affect graduate employability, in line with relevant Luthans' theories and studies. These factors reflect individual's psychological quality, career goal, and social relation, which are crucial for employability. Psychological capital is a key psychological resource that can boost individual's confidence, positivity, resilience, optimism, and employment outcomes.

2. This study found that social capital mediates the effects of psychological capital and career identity on graduate employability, in line with relevant theories and studies. Social capital is a social resource that provides more employment information and opportunities, trust and cooperation. (Wang XJ, 2019) and (Li Na, 2018) confirmed this mediation effect. Social capital also improves employability by influencing individual preferences, perceptions, competitiveness, and satisfaction. Social capital links individuals and society, enhancing social support, identity, belonging, and employability.

3. This study found that psychological capital and career identity positively and significantly affect social capital, in line with relevant theories and studies. These factors help individual's build and maintain good social relations. Zhang' studies also confirmed this finding, and showed that psychological capital and career identity can enhance social network, resource, support, interaction, adaptation, and participation. These findings show the importance of psychological factors for social capital.

Conclusion

1. This study found that psychological capital, career identity, and social capital positively and significantly affect graduate employability, in line with relevant theories. These factors reflect graduate students' psychological quality, career goals, and social relations, which are crucial for employability in the post-pandemic era. The influence coefficients of these factors were 0.45, 0.39, and 0.37 respectively, all significant ($p<0.01$). The interview results also confirmed this finding, and both graduate students and career guidance teachers agreed that these factors could enhance graduate students' confidence, direction, and resources. The survey data analysis showed that graduate students valued their own psychological quality and career goals more, while career guidance teachers emphasized social relations more.

2. This study found that social capital mediates the effects of psychological capital and career identity on graduate employability, in line with relevant theories and studies. Social capital is a social resource that provides more employment information and opportunities, trust and cooperation. The influence coefficients of

these factors were 0.48, 0.45, and 0.45 respectively, all significant ($p<0.01$). The interview results also confirmed this finding, and both graduate students and teachers agreed that social capital was crucial for graduate employability, especially after the COVID-19 pandemic.

3. This study found that psychological capital and career identity positively and significantly affect social capital, in line with relevant theories and studies. These factors help individual's build and maintain good social relations. The influence coefficients of these factors were 0.48 and 0.45 respectively, both significant ($p<0.01$). The interview results also confirmed this finding, and both graduate students and teachers agreed that these factors could enhance social network, identity, and belonging.

Recommendation

1 For college education, this study suggests that colleges should strengthen the employment guidance and training for graduate students, and improve the quality and level of their employment. Specifically, colleges should offer relevant courses and lectures, enhance the psychological quality and career planning of graduate students, help them establish correct employment views and values, and cultivate their Career identity and responsibility. Colleges should provide more opportunities and platforms for practice and internship, improve the professional skills and innovation ability of graduate students, help them connect with society and industry, and cultivate their social participation and responsibility. Colleges should establish and improve the employment service and information system for graduate students, provide more employment guidance and consultation, help them expand their social networks and resources, and improve their social support and recognition. Colleges should strengthen the supervision and evaluation of the teaching quality and level of graduate students, improve their learning outcomes and achievements, and improve their academic level and ability. Colleges should strengthen the coordination and docking of talent cultivation and delivery for graduate students, improve their employment matching and adaptability, and improve their employment satisfaction and loyalty.

2.For college education, this study suggests that colleges should strengthen the employment guidance and training for graduate students, and improve the quality and level of their employment. Specifically, colleges should offer relevant courses and lectures, enhance the Psychological quality and career planning of graduate students, help them establish correct employment views and values, and cultivate their Career identity and responsibility. Colleges should provide more opportunities and platforms

for practice and internship, improve the professional skills and innovation ability of graduate students, help them connect with society and industry, and cultivate their social participation and responsibility. Colleges should establish and improve the employment service and information system for graduate students, provide more employment guidance and consultation, help them expand their social networks and resources, and improve their social support and recognition. Colleges should strengthen the supervision and evaluation of the teaching quality and level of graduate students, improve their learning outcomes and achievements, and improve their academic level and ability. Colleges should strengthen the coordination and docking of talent cultivation and delivery for graduate students, improve their employment matching and adaptability, and improve their employment satisfaction and loyalty.

3.For employment policy, this study suggests that the government and society should increase the employment support and protection for graduate students, and improve their employment opportunities and benefits. Specifically, the government and society should strengthen the development and reform of the economy and employment market in Shanxi Province, increase the employment demand and space for graduate students, and optimize the employment environment and conditions for graduate students. The government and society should strengthen the employment guidance and motivation for graduate students, encourage them to work in grassroots and difficult areas, encourage them to innovate and start businesses, and improve their employment motivation and enthusiasm. The government and society should strengthen the employment security and service for graduate students, improve the employment laws and regulations for graduate students, enhance their employment rights and welfare, and improve their employment satisfaction and happiness. The government and society should strengthen the employment evaluation and supervision for graduate students, establish the assessment and feedback mechanism for the employment quality and effect of graduate students, and improve their employment level and contribution.

References

Li Keqiang. (2021). Promoting fuller and higher quality employment. **China Economic and Social Development Report**, 12(3), 1-10.

Li Na, & Wang Xiaodong. (2020). Analysis of Influencing factors of graduate Employability: An empirical study based on Structural equation model. **Higher Education Administration**, 34(2), 51-59.

Wallis, R. (2021). Graduate employability capitals for the media industries: A conceptual framework for media educators and students. **Journal of Media Practice and Education**, 22(1), 3-18.

Ngoma, M., & Ntale, P.D. (2016). Psychological capital and career identity as predictors of graduate employability: The moderating role of social capital in Uganda. **Journal of Psychology in Africa**, 26(5), 413-420.

Liu, J., Zhang, Y., Wang, L., & Liang, Z,. (2019). The relationship between psychological capital, career identity and graduate employability: A Chinese study. **Journal of Education and Work**, 32(1), 1-15.

Zhang, Y., Liu, J., Wang, L., & Liang, Z,. (2018). The relationship between psychological capital, social capital and graduate employability: A Chinese study. **Journal of Education and Work**, 31(1), 1-15.

Tavakol, M., & Dennick, R, (2011). Making sense of Cronbach's alpha. **International Journal of Medical Education**, 2, 53-55.

Field, A, (2018). **Discovering statistics using IBM SPSS statistics**. (5th ed.). London: Sage. 686-688

Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M, (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. **Personnel Psychology**, 60(3), 541-572.

Li Na, & Wang Xiaodong. (2020). Analysis of Influencing factors of graduate Employability: An empirical study based on Structural equation model. **Higher Education Administration**, 34(2), 51-59.

Zhang, J., Ayala Calvo, J. C., & Manzano García, G, (2019). The influence of psychological capital on graduates' perception of employability: The mediating role of employability skills. **Higher Education Research & Development**, 40(2), 293-308.