Personal skills, career needs and employment capability of university Chinese students: Basis for career development program

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Abstract

Personal skills, career needs, and employment capability are the foundation for university students' career development after graduation, based on the social workplace. This paper had Chinese university students as the main survey object and used a questionnaire survey related to personal skills, career needs, and employment capability to analyze the relationship among personal skills, career needs, and employment capability. The study found that there was a highly significant relationship between the personal skills, career needs, and employment capability of university students. The better the assessment of personal skills, the better the assessment of career needs; the better the assessment of personal skills, the better the assessment of employment capability. The better the assessment of career needs, the better the assessment of employment capability. The study also formulated a career development plan for university students and proposed suggestions for improving their career development from the perspectives of universities, teachers, governments, enterprises, and university students. This had important practical significance for the recruitment and talent development of enterprises and organizations and provided a reference for the government to formulate future education policies and talent introduction policies.

Keywords: personal skills, career needs, employment capability

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1. Introduction

With the continuous development of the economy and the improvement of education level, the demand for talent in society is also constantly changing. The modern job market has put forward higher requirements for the personal skills and employment capability of university students (World Economic Forum, 2020). In this fiercely competitive era, university students need to possess more skills and abilities to adapt to future career needs. The personal skills, career needs, and employment capabilities of university students are receiving increasing attention, and career development has become one of the important issues in the field of education. Therefore, studying the personal skills, career needs, and employment capability of university students is crucial for their career development.

Personal skills, career needs, and employment capability are considered as important factors that affect the career development of university students (Römgens, I., Scoupe, R., and Beausaert, S., 2020). This topic has received a lot of academic attention, and given the lack of connection between different scholars, it may miss out on the close connection and mutual influence among the three. In fact, there is a mutual influence and promotion relationship between personal skills, career needs, and employment capability. Therefore, understanding the current situation and gaps of university students in these three aspects is of great significance for formulating effective career development programs.

The main variables of this study include personal skills, career needs, and employment capability. The personal skills of university students, in simple terms, are various skills that university students need. The personal skills of university students are the knowledge, skills, and abilities acquired through learning and practice, which are the foundation of career development. Personal skills refer to the various skills that university students master in their learning and daily life. The importance of personal skills lies in that they are essential basic qualities for students' future career development (Whiting, 2020). Personal skills can help university students better adapt to social development and changes, enhance their competitiveness, and increase their employment rate. The personal skills of university students in this study cover aspects such as communication skills, interpersonal skills, intellectual skills, self-management skills, learning skills, management, and career development skills.

On the other hand, career needs usually refer to the rigid requirements of a company or organization for recruitment positions, including skills, experience, education, language proficiency, etc. Career needs are the guidelines for the career development of university students, which reflect the demand and trend of society for professional talents. Career needs have an important impact on career development. Furthermore, career needs reflect the needs of society for a certain profession. University students should choose their majors based on career needs in order to better adapt to social development and changes. Additionally, career needs can also help university students understand the trends and directions of career development, and improve their employment capability. For example, Blustein, and Flum (2019) provides a comprehensive overview of the psychology of career choice and development, the authors discuss the major theories of career development, the factors that influence career choice, and the challenges and opportunities that individuals face in their careers.

Lastly, the career needs of this study refer to occupational knowledge requirements, career self-efficacy, resources and strategies for career/academic decision-making, knowledge of self, multiple life roles, and job-hunting techniques. Another skill needed by the students is employment capability which refers to the various abilities that university students need to possess to succeed in the workplace. Simply put, it refers to a series of abilities and qualities that individuals should possess in the process of job hunting and career

development (Whiting, 2020). Employment capability is the result of career development, and it is an important indicator to measure students' professional level. The employment capability of this study includes students' positive self-concept, self-control, social skills, and problem-solving skills. Hence, this paper aimed to provide better guidance and help university students better prepare for their future careers by studying the relationship among their personal skills, career needs, and employment capability. At the same time, understanding these variables can also help educational institutions and policymakers better formulate career development plans to meet the needs of the future career market.

At present, scholars have achieved certain results in their studies on the personal skills, career needs, and employment capability of university students. However, most of these studies focus on the individual factors in university student's personal skills, career needs, and employment capability. There is relatively little comprehensive research on the personal skills, career needs, and employment capabilities of university students, and there is a lack of exploration of the relationship among their personal skills, career needs, and employment capability. Therefore, this study aimed to fill this gap, explore the relationships among these variables, and provide some suggestions to help university students better prepare for their future careers.

This study assumed that there was a close relationship among the personal skills, careers, and employment capability of university students, and this relationship was of great significance for career development. The purpose of this study was to provide a reference for career development and decision support for educators, university students, and career demanders. Through this study, people can gain a deeper understanding of the relationship among personal skills, career needs, and employment capability of university students, thereby better-formulating career development plans and improving their employment competitiveness and career development potential. At the same time, this study can also provide guidance for recruitment and talent development for enterprises and organizations, and cultivate more high-quality talents for society.

Objectives of the Study - The main objective of the study was to create a career development program for Chinese students based on their personal skills, career needs and employment capability. More specifically the study described the profile of the respondents in terms of sex and category; assessed personal skills as to communication, interpersonal, intellectual, self-management, learning, and management career development; identified career needs in terms of occupational knowledge requirements, career self-efficacy, resources and strategies for career / academic decision – making, knowledge of self, multiple life roles and job hunting techniques; measured employment capability as to positive self-concept, self-control, social skills, and problem solving skills; tested the significant difference on personal skills, career needs and employment capability when grouped according to profile; tested the relationship among the three variables and proposed a career development program in order to prepare students for better employment.

2. METHODS

Research Design - This study used a descriptive study as the research method. Li (2022) stated that descriptive study, also known as descriptive study, refers to a study whose research results accurately describe the characteristics or panorama of certain populations or phenomena. The task of descriptive research is to collect data, discover situations, provide information, and describe the main patterns and characteristics of the chaotic phenomena. Therefore, this study aimed to systematically describe, summarize, and explain the personal skills, career needs, and employment capabilities of current university students. The main purpose was to describe the current situation, characteristics, and relationships of students' personal skills, career needs, and employment capability, and to understand the basic attributes, characteristics, and distribution of university students. In this study, quantitative data was collected through the distribution of survey questionnaires, and then summarized and described through statistical analysis, charts, weighted mean scores, and other methods. It should be noted that this study did not involve causal analysis, but mainly focused on the description and summary of data.

Participants of the Study - The researcher used simple random sampling techniques and established clear criteria for selecting and excluding respondents. Among the target group of university students, the researcher used a random sampling method to select respondents as the research sample. Every university student has an equal chance of being selected during the sampling process, ensuring the representativeness and randomness of the sample. This study sets the selection criteria for respondents: University undergraduate and graduate students who were currently studying or have already graduated; aged between 18 and 45 years old; from different universities and job positions, taking into account the diversity of students and majors; Possessed basic reading and understanding abilities of questionnaire surveys and willing to participate in research and provide true and accurate information.

At the same time, the researcher also stipulated exclusion criteria for respondents: Non university, under 18 years old or above 45 years old. university students who are concentrated in the same academic stage, major, or institution, or have graduated from positions in the same region. have cognitive or Communication disorder, unable to accurately understand and answer the questionnaire. And those who refuse to participate in research or provide inaccurate information. After sampling and screening, a total of 550 university students were included in the study. These university students cover students of different grades, government employees, employees of enterprises and institutions, businessmen, Freelancer, etc., representing student groups of different universities, majors, and jobs, with a certain diversity, which is consistent with our research purposes and questions. The researcher ensured the representativeness and quality of the sample through strict criteria for selecting and excluding respondents. This provided a foundation for the researcher to deeply understand the personal skills, career needs, and employment capability of university students, and provide strong support for career development planning and guidance.

By using random sampling techniques and clear criteria for selecting and excluding respondents, the researcher can obtain a representative sample of university students, which helps to conduct in-depth research on their personal skills, career needs, and employment capability. At the same time, the development of selection and exclusion criteria for respondents also helps to eliminate potential bias factors and improve the credibility and reliability of the study. The number of respondents had certain limitations, as the age coverage at each stage was not comprehensive enough, the geographical distribution was not wide, and the occupational coverage was not broad, which may affect the universality of the researcher's research conclusions.

Data Gathering Instrument - This research plan used the revised survey questionnaire as the main tool to mine researcher information, and the survey questionnaire was designed with three tables. The first table was a personal skills table, which was from the Skills for Learning Questionnaire published on the website of College of Physiotherapists of Ontario in December 2011. The researcher selected 35 of the 39 Skills from the original questionnaire as part of the questionnaire. The second table was the career needs table, which was related to the development and validation of an Adult Students' Career Needs Questionnaire Needs Questionnaire, a doctoral dissertation written by Connie Sylve Briscoe of the University of Tennessee - Knoxville in May 2002. According to the research needs of the researcher, 35 of them were selected as part of the questionnaire. The third table was the employment capability table, which was a paper written by Dershem in June 2016- Skills to Successful Employment Assessment Tool: Development of English Version and Adaptation Process for the Philippines Country Office. The researcher selected 41 of these questions as part of the questionnaire.

The first part of the questionnaire described their sex, major studied, and demographic characteristics of whether they had graduated. The second part of the questionnaire includes 35 questions about the personal skills of university students, the third part includes 35 questions about career needs, and the fourth part of the questionnaire consists of 41 questions about employment capability. Based on the results of the pilot testing, the researcher has preliminarily concluded that the personal skills, career needs, and employment capability scale is reliable. The Cronbach alpha value is a method of measuring the reliability of a scale, and the higher the value, the higher the internal consistency of the scale. Generally speaking, a Cronbach alpha value greater than 0.7 indicates high reliability of the scale, while a value greater than 0.8 indicates high reliability of the scale. From

the table, it can be seen that the Cronbach alpha values for most skills are above 0.7, and some even exceed 0.9, indicating that these scales have high internal consistency. In summary, the Cronbach's alpha results of most indicators perform well or excellently, indicating good internal consistency among the measurement items of these indicators. However, some indicators have slightly lower Cronbach's alpha results, but they are still within an acceptable range. Overall, this table provides a detailed overview of career development skills indicators and their reliability, and these results provide a preliminary evaluation of the reliability of each indicator, which is an important part of the discussion on questionnaire reliability in the paper.

Data Gathering Procedure - The data collection for this paper was obtained through a survey questionnaire. The survey questionnaire is sent via electronic links through WeChat and QQ groups, and all questionnaires are randomly distributed to ensure scientific, truthful, and reliable sampling. After exporting the questionnaire, import the collected data into an Excel spreadsheet and check the input data to ensure the accuracy of the questionnaire. The survey questionnaire was only used for academic research and was filled out anonymously, requiring respondents to patiently fill out the questionnaire. A response time of 10 minutes was specified, and the data obtained was for statistical research and analysis purposes only, without any commercial use. After data collection, clean and organize the data to eliminate data noise, and construct a basic variable model. After retrieving the questionnaire, the answers will be encoded in Excel format and sent to the research center for decoding by statistical personnel using professional statistical software. Next, statistical methods such as factor analysis are used to analyze the relationship and impact between data. Specifically, the relationship among the personal skills, career needs, and employment capability of university students will be explored, and their impact on the job market will be tested.

Ethical Considerations - The surveyed university students have the right to know the purpose of this experiment and remain anonymous throughout the entire research process, voluntarily filling it out. The data collected from the questionnaire survey, the statistical data in this paper were all original data, and had not been revised. From the questionnaire survey, it can be seen that the statistical data in this paper were all correct. In addition, ethical practices were followed throughout the entire study.

Data Analysis - To perform data analysis, the following statistical tools were used. Frequency and percentage distribution were used to describe the profile of the respondents in terms of sex and category. Weighted means and ranking were used to assess personal skills as to communication, interpersonal, intellectual, self-management, learning and management career development; identified career needs in terms of occupational knowledge requirements, career self-efficacy, resources and strategies for career / academic decision – making, knowledge of self, multiple life roles and job hunting techniques; measured employment capability as positive self-concept, self-control, social skills and problem solving skills. The result of Shapiro-Wilk Test revealed that p-values of the main variable was less than 0.05 which means that the data set is not normally distributed. Therefore, Mann Whitney U test for two groups and Kruskal Wallis for three groups were used as part of the non-parametric tests to determine the significant differences. Likewise, Spearman rho was used to test the significant relationship of the treated variables. In addition, post hoc test was also conducted. In addition, all data were treated using a statistical software known as PASW version 26 to further interpret the result of the study using an alpha level of 0.05 and 0.01.

3. Results and Discussion

Table 1
Percentage Distribution of the Respondents Profile

Sex	Frequency	Percentage %
Male	227	41.3
Female	323	58.7
Category		
College Students	359	65.3
Graduate Students	191	34.7

Table 1 statistics of the sex and basic information of 550 responses randomly selected for study or graduation It can be seen from the table that there were 227 male students, accounting for 41.3%, and 323 female students, accounting for 58.7%. The number of female students was significantly higher than that of male students. This was consistent with the high proportion of female students in higher education in China (Dong, 2021). With the improvement of the urbanization level, the development of economic level and the growth of regional education finance, the inequality between men and women's access to education will gradually narrow (Shi, et al., 2021). Liu (2018) pointed out that with the popularization of higher education, women's liberation, the spread of equality ideas, etc., Women in China's higher education has developed rapidly and presented a strong state, the development of the country is undoubtedly extremely advantageous.

Cao (2016) wrote in the Reversal of the Sex ratio of University Students and Its Impact on Higher Education that with the consolidation of compulsory education and the promotion of the popularization of higher education, the sex structure of university students has changed significantly, and the proportion of female university students has increased significantly. From the table, it can be seen that there were 359 college students, accounting for 65.3%, and 191 graduate students, accounting for 34.7%. In 2018. The 2018 National University Graduates Employment and Entrepreneurship Work Network Video Conference and the 2018 Employment Bluebook revealed that the number of 2018 national university graduates is expected to reach 8.2 million, plus graduates returning from abroad and preparing for employment, the number of employment is expected to reach "1000w+", a record high (Chen, Tang, and Mai, 2020). By 2021, China's higher education enrollment rate reached 57.8% (China's higher education enrollment rate reaches 57.8%, 2022), while in 2012 it was only 30% (Textor, 2022), indicating a significant improvement in the scale and quality of China's higher education. Li (2017)'s research has found that China's higher education is continuously becoming popular, and the number of graduates from Chinese universities is increasing year by year. The performance in the labor market is that the supply of labor continues to exceed its demand. In other words, there is a problem of over education in China.

There are always two sides to the development of things. Qin and Wang (2017) found that even after excluding the short-term impact of the policy of expanding enrollment in universities, the scale of higher education still has a positive effect on regional economic growth. As the scale of higher education expands, the economic level of the region will also improve. However, according to Wang (2017), the total population of higher education age in China has entered a declining stage. The population size among different age groups has shifted from a huge gap to a significant narrowing of the gap.

Table 2

Assessment on Personal Skills

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Communication	2.71	High	6
2. Interpersonal	2.79	High	4.5
3. Intellectual	2.81	High	2.5
4. Self-Management	2.81	High	2.5
5. Learning	2.83	High	1
6. Management and career development	2.79	High	4.5
Composite Mean	2.79	High	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

According to the data in Table, it can be seen that the learning indicators have the highest weighted mean score, with a mean score of 2.83, ranking first. This indicates that university students have strong learning abilities and motivation, can actively, effectively, and continuously participate in learning activities, and can apply the knowledge and skills they have learned to solve problems. This result is consistent with the intrinsic regulatory motivation in the self-determination theory, which states that students' motivation for learning comes from their interest and enjoyment in the learning itself, rather than from meeting external requirements or rewards. Generally speaking, higher levels of learning motivation can promote students' autonomy, ability, and sense of belonging, thereby improving their learning performance and satisfaction (Cerasoli, Nicklin and Ford, 2021)

The communication indicator weighted mean score is the lowest, with a score of 2.71, ranking sixth, indicating that students still need to improve in expressing their own ideas, understanding others' viewpoints, and communicating with people from different backgrounds and cultures. This result is consistent with the effective student communication in educational communication research, which means that the effectiveness of student communication not only depends on their own abilities and attitudes, but also on their interaction and feedback with teachers and classmates. Different types of communication skills, such as oral, written, and nonverbal, need to be improved through education and practice (Klefbeck, 2021). Teachers and parents can promote students' communication skills development by providing diverse communication scenarios and tools, as well as providing positive feedback and encouragement (Gieras, 2020).

The "Interpersonal" and "Management and career development" occupied the fourth place, with a weighted mean of 2.79 for the Interpersonal indicator, which belonged to a high level. This indicates that students had good abilities in communicating and cooperating with others, understanding and expressing emotions, and establishing and maintaining relationships, but there is still room for improvement. Interpersonal abilities can help students: enhance their understanding of themselves and others, enhance confidence and self-esteem (Coursera, 2023); Establish good friendships, gain social support and a sense of belonging (Jagran Josh, 2017). The weighted mean score of the "Management and Career Development" indicator was also 2.79, which belonged to a high level. This indicates that students have good abilities in managing their own learning and life, planning their career paths, and adapting to social changes and needs, but there was still room for improvement (Wiernik & Wille, 2018; Neale, 2021; Independent Editorial Team, 2021).

As revealed in the table, the level of intellect among university students was 2.81 considered a high level. This indicates that students have strong intellectual abilities and can effectively think and understand various concepts, viewpoints, arguments, and information (Martise, E., 2023). According to the table, the students' level in Self-Management was also 2.81, which belonged to a high level. This indicates that students have good Self-Management abilities, are able to actively manage their studies and lives, and have a clear understanding and expectations of themselves (Neale, 2021).

Table 3

Identified Career Needs

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Occupational Knowledge Requirements	3.04	Agree	4.5
2. Career Self-Efficacy	3.02	Agree	6
3. Resources and Strategies for Career/Academic Decision-Making	3.04	Agree	4.5
4. Knowledge of Self	3.06	Agree	2
5. Multiple Life Roles	3.05	Agree	3
6. Job Hunting Techniques	3.07	Agree	1
Composite Mean	3.05	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table is a summary table of Career Needs, with a composite mean of 3.05. The weighted mean scores from high to low are Job Hunting Techniques, Knowledge of Self, Multiple Life Roles, Resources and Strategies for Career/Academic Decision Making, Occupational Knowledge Requirements, and Career Self Efficiency, with scores of 3.07, 3.06, 3.05, 3.04, 3.04, and 3.02, respectively.

Among them, Job Hunting Techniques had the highest score. With the development of society and changes in the market, the demand for talent in different industries is also constantly changing, and the job market is becoming increasingly competitive. Therefore, mastering some job hunting skills that adapt to market demand can help university students better find suitable jobs and increase the probability of being hired by employers, which is a practical need. Huang (2017) proposed ideas and measures to systematically address the ecological dilemma of university students' employment: university students should rationally adjust their psychological expectations and solidly improve their career selection abilities; Strengthen the learning of job search skills and actively cultivate their own competitiveness; Optimize the structure of professional knowledge and enhance

professional competence and literacy.

The second highest weighted mean score in the table was Knowledge of Self, with a mean score of 3.06. University students' self-awareness refers to their understanding and cognition of themselves. Through self-awareness, university students can better utilize their strengths, while also actively improving their shortcomings, enhancing their personal qualities and competitiveness. It is also of great significance for future career planning and the formulation of life goals.

The second to last scorer is Occupational Knowledge Requirements, with a score of 3.04. At present, university students have some problems in these areas, such as a lack of practical experience, insufficient mastery of vocational skills and knowledge, etc. Therefore, university students need to acquire professional knowledge through various channels, and focus on practice and application to enhance their professional literacy and competitiveness. Xie, Ma, and Li (2023) proposed that in the future, vocational courses should further establish a vocational competence view centered on vocational knowledge, improve competency based courses based on vocational knowledge, and develop vocational activity carriers based on the transformation of vocational knowledge.

The lowest weighted mean scores was Career Self-Efficiency, with a mean score of 3.02. Student career self-efficacy refers to the level of confidence and confidence that university students have in successfully completing tasks and achieving goals in their professional field. It is a subjective evaluation of a person's abilities and one of the important factors that affect their career development. Generally speaking, people with a high sense of self-efficacy are often more likely to achieve career success because they have confidence in their abilities and are better able to cope with challenges and stress. Because career self-efficacy can affect an individual's career choices, performance and persistence, job satisfaction, career satisfaction, job happiness, and career identity (Wang & Song, 2022).

Table 4

Measured Employment Capability

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Positive Self-Concept	2.95	Agree	3
2. Self-Control	2.94	Agree	4
3. Social Skills	3.03	Agree	1
4. Problem-Solving Skills	2.99	Agree	2
Composite Mean	2.97	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table is a summary of Employment Capability, with a composite mean of 2.97. The weighted mean scores of these four items were 3.03, 2.99, 2.95, and 2.94 from high to low, respectively. The highest weighted mean score was Social Skills, with a score of 3.03. Overall, the overall level of social skills among university students was relatively high. In order to better adapt to the social and workplace environment, university students need to continuously improve their social skills. Tan (2022) proposed that we should combine the physiological, psychological and environmental factors that affect Social anxiety, develop an education management plan with value guidance, strengthening the education management mechanism and comprehensively expanding social experience as the main strategy, improve students' self-acceptance level, enhance students' social skills, and then alleviate university students' Social anxiety.

The lowest weighted mean score was Self-Control, with a score of 3.03. University students should have the ability to self-regulate, manage themselves, and remain calm and rational when facing temptations and challenges. Self-Control is a very important factor as it can help people cope with challenges and stress and improve learning efficiency and quality of life. Geng and Zhang (2023) believe that in the process of growth, university students need to constantly correct their own problems and gaps through self-control, in order to better promote their own development. Overall, Self-Control is a very important factor that has a profound impact on the success and happiness of university students.

Difference of Responses on Personal Skills When Grouped According to Profile

The results revealed the comparison of responses on personal skills when grouped according to profile. It was observed that there was no significant difference found when grouped according to profile since all the computed p-values were greater than 0.05 alpha level. This means that the responses do not differ statistically and reveals that the assessment was the same across their profile. The table shows that there is no significant difference in the personal skill level of university students among different personal characteristics, such as sex and category. This may indicate that the personal skill level of university students is not only influenced by personal characteristics, but also by other factors such as family background, social environment, and educational development (Gao, 2017). Some students who lack the spirit of exploration and research may miss many opportunities, leading to a lack of improvement in their personal skills. Wang (2020) believes that for the self-development of university students, it is necessary to continuously enhance their comprehensive development ability through the cultivation of innovative practical abilities, in order to promote their future social practice and career development.

Meanwhile, the table shows that there is no significant difference in the personal skill level of university students among different skill types (such as communication, interpersonal, intelligence, etc.). This may indicate that the personal skill levels of university students are relatively balanced, without obvious advantages or disadvantages (Chen, X., and Li, X., 2019). From another perspective, there was no significant difference in the skill level of university students among different types, which is beneficial for their employment quality and competitiveness as they can adapt to different job requirements and environments (Zhao, T., and Wang, X., 2018).

Difference of Responses on Career Needs When Grouped According to Profile

The comparison of responses on career needs when grouped according to profile. It was observed that there was no significant difference found when grouped according to profile since all the computed p-values were greater than 0.05 alpha level. This means that the responses do not differ statistically and reveals that the assessment was the same across their profile. The table shows that there was no significant difference in the career needs of university students among different personal characteristics (such as gender and category). This may indicate that the career needs of university students are relatively consistent, without significant differences or preferences (How to Choose a Career: 7 Ways to Narrow Your Options, 2023). There was no significant difference in students' career needs among different types of needs, such as career knowledge, career self-efficacy, decision-making resources, etc. This may indicate that students' career needs are relatively balanced, without obvious advantages or disadvantages (14 Important Student Skills, 2023). This is beneficial for students' career development and success, as they can fully utilize various resources and strategies to achieve their career goals (Difference Between Job and Career, 2018).

Difference of Responses on Employment Capability When Grouped According to Profile

The comparison of responses on Employment Capability when grouped according to profile. It was observed that there was a significant difference in self-control when grouped according to sex since the computed p-value of 0.031 was less than the 0.05 alpha level. This means that the responses differed statistically and based on the test conducted, it was found that males have a better assessment of self-control. The result also shows that students' employment capability only shows significant differences in self-control among different personal characteristics (such as gender and category), while there was no significant difference in other aspects (such as positive self-concept, social skills, problem-solving skills). This is beneficial for students' career development and adaptability, as they can showcase their abilities in different work environments (What Are Employment Skills and Why Do They Matter, 2023).

In addition, the result shows that students' employment capability varies to varying degrees among different types of abilities (such as positive self-concept, self-control, social skills, and problem-solving skills, with

self-control being the only significant difference, and males having higher levels of self-control than females. This may indicate that students' employment capability is imbalanced, with some advantages and disadvantages (14 Important Student Skills, 2023). From a gender perspective, men have higher levels of self-control than women, indicating that they have more self-regulation and stability in complex situations and challenges, and can better control their behavior and emotions. This also demonstrates the importance of self-control in employment.

Based on the above findings, students should pay attention to the cultivation and enhancement of self-control when improving their employment capability. As seen from the result, the computed rho-values indicate a moderate direct correlation and the resulting p-values were all less than the alpha level. This means that there was significant relationship and implies that the better the assessment of personal skills, the better is the assessment of career needs.

Relationship Between Personal Skills and Career Needs

There was a significant positive correlation between the personal skill level and career needs assessment of university students. This means that students with higher skill levels are usually better able to meet the requirements of their job positions. Therefore, for students who hope to have successful careers in the future, continuously improving their skill levels is very important. It is not difficult to find that high-level personal skills are not only the foundation of students' career development, but also the pursuit of employers in various industries. In today's market where talent is increasingly valued, excellent personal skills can create a more competitive professional image for job seekers, thereby gaining an advantage in the career selection process. The content of shaping the professional image of contemporary university students includes appearance, professional philosophy, knowledge of workplace social and business etiquette, and personal behavior and behavior in the workplace (Chen and Zhang, 2016).

In addition, the table shows that the degree of correlation between personal skills and career needs of university students varies between different skill types (such as communication, interpersonal, intelligence, etc.) and demand types (such as career knowledge, career self-efficacy, decision-making resources, etc.), with Self-Management having the highest correlation with career self-efficacy (.362**), The correlation between communication skills and employment skills is the lowest (.212**) (Relationship Between Students Skills and Career Needs, n.d.).

The correlation between the professional needs and personal skills of university students is an interesting topic. The personal skills and professional needs of university students are multidimensional, and there are varying degrees of correlation between different types of skills and needs. Among them, the correlation between Self-Management ability and career self-efficacy is the highest (.362**), indicating that university students need to master self-management skills and grasp their self-confidence and decision-making ability in the workplace in their career development. It was also found from the table that the correlation between communication skills and employment skills is the lowest (.212**). This suggests that university students must further cultivate good communication skills, while also paying attention to learning employment skills, such as how to showcase their competitiveness in the workplace, writing application letters, and so on. In order to improve the employment capability of vocational university students, it is necessary to establish correct concepts and master good job search skills in terms of subjective factors (Zang, Yao, Wang, Li, and Cao, 2017).

Relationship Between Personal Skills and Employment Capability

By improving their skill levels, students can enhance their employment capability, while enhancing their employment capability can stimulate their skill learning (A Comprehensive Study on University Students' Perceived Employability: Comparative Effects of Personal and Context Factors, 2021). This results shows a very significant positive correlation between personal skills and employment capability. This means that if a person has a higher level of skills, they usually also have stronger employment capability. The researcher can conclude that personal skills are crucial for employment capability.

In addition, the table shows that the degree of correlation between personal skills and employment capability varies between different skill types (such as communication, interpersonal, intelligence, etc.) and employment capability types (such as positive self-concept, self-control, social skills, problem-solving skills, etc.), with the highest correlation between learning skills and positive self-concept (.506**), The correlation between communication skills and problem-solving skills is the lowest (.351**) (Relationship Between Students Skills and Employment, n.d.). This may indicate that personal skills and employment capability are multidimensional, and there is varying degrees of correlation between different types of personal skills and employment capability.

According to Liu (2015)'s explanation, employment capability is an absolute dimension related to personal skills and characteristics, as well as a relative dimension related to external environments such as labor market supply and demand. The development of university students' employment capability requires the joint efforts of government forces, corporate responsibilities, university obligations, and individual consciousness.

Based on the data gathered, it can be found that there is a certain correlation between personal skills and employment capability. The degree of correlation between different types of skills and employment capability varies. In summary, from the data presented in the table, it can be seen that diverse skills are important in the job market, and the degree of correlation between different abilities also varies. University students need to comprehensively improve their abilities in various aspects based on their actual situation, in order to better cope with the challenges in the workplace.

Relationship Between Career Needs and Employment Capability

The association between career needs and employment capability. It was observed that the computed rho-values indicates a moderate direct correlation and the resulted p-values were all less than the alpha level. This means that there was significant relationship found and depicts that the better the assessment on career needs, the better is the assessment on employment capability. The result shows that there was a significant positive correlation between students' career needs and employment capability, that is, the higher the level of students' career needs, the higher the evaluation of employment capability. This may indicate that students' career needs and employment capability are mutually reinforcing. By understanding and meeting their career needs, students can enhance their employment capability, and by improving their employment capability, they can achieve their career goals.

The result also shows that the degree of correlation between students' career needs and employment capability varies between different types of career needs (such as career knowledge, career self-efficacy, decision-making resources, etc.) and types of employment capability (such as positive self-concept, self-control, social skills, problem-solving skills, etc.), The correlation between social skills and Resources and Strategies for Career/Academic Decision Making is the highest (.488**), while the correlation between self-control and Job Hunting Techniques is the lowest (.249**) (Relationship Between Career Needs and Employment, n.d.). This may indicate that the career needs and employment capability of university students are multidimensional, and there is varying degree of correlation between different types of career needs and employment capability.

According to the results displayed in the table, we can see that the degree of correlation between different types of career needs and employment capability varies. In terms of career needs, different types of career needs such as knowledge, self-efficacy, and decision-making resources all have different demands for employment capability. In terms of employment capability, different types of employment capability, such as positive self-concept, self-control, social skills, and problem-solving skills, also correspond to different types of career needs. Among them, social skills and Resources and Strategies for Career/Academic Decision Making have the highest correlation, which means that among these occupational demand types, having good social skills and resources and strategies have the greatest impact on employment success. Human career development cannot be separated from society and social interaction activities, and social skills have a significant impact on an individual's career development (Xie, 2015).

Table 5

Proposed Career Development Plan

Key Result Area & Objectives	Strategies / Activities	Success Indicator	Person Responsible
Student Skill Communication (Foreign Language) Communicate with foreign friends, teachers, or other language exchange platforms at least once a quarter to practice speaking and culture.	Provide quality foreign language education resources.	A student's achievement in passing a foreign language test.	Foreign language teacher or academic affairs office staff.
Student Skill Interpersonal (LEADERSHIP ability) Organize learning discussions at least once a week and use audio software to communicate and interact with group members.	Offer management training courses, including leadership, communication skills, teamwork, etc.	Results of the assessment of students' management ability.	The Dean's Office or the Student Union.
Student Skill Intellectual (CREATIVITY ability) Try at least one creative method every day and use online platforms to learn and practice different creative techniques or tools.	Organize innovation competition, encourage students to participate actively, improve their innovation awareness and practical ability.	The number of students participating in innovation competitions and awards	The Dean's Office or the Student Union
Student Skill Self-Management (PROACTIVE APPROACH ability) Prepare at least one social welfare activity per week and use online platforms to publish and promote your activities.	Organize event training and workshops to invite professionals to provide guidance and share experience.	Student's level of experience and skill in participating in activities	Student union or association federation
Student Skill Learning (LEARNING PLANNING ability) Read at least one book or article related to writing every month, and use online platforms to record and share your thoughts and comments.	Set up a learning plan counseling center to provide students with personalized learning plan guidance and support.	Utilization and outcomes of the learning Program Counseling Center	The Dean's Office or the Student Union
Student Skill Management and career development (MANAGEMENT) Conduct student guidance and guidance at least once a day to answer and guide each student's questions and difficulties.	Establish a tutor system to provide individualized guidance and support to students.	The implementation of the tutor system	The Dean's Office or the Student Union
Career Needs Occupational Knowledge Requirements (Identify appropriate sites) Apply for at least one volunteer or internship opportunity related to writing every month, search and select suitable projects.	A school-enterprise cooperation platform will be established to provide students with opportunities to contact enterprises and learn about actual career needs and industry dynamics.	University-enterprise cooperation platform docking situation and results	Dean's Office or career Center
Career Needs Career Self-Efficacy (Identify strategies) Whenever encountering age discrimination, it is necessary to promptly and properly handle it, and seek legal or psychological help and support. Participate in activities or organizations related to gender diversity at least once a week, and register and participate in different projects.	Organize gender equality and age equality activities, such as women's leadership forum, age equality lectures, etc., to raise students' awareness of gender and age equality and gender and age equality.	The number and results of anti-sexism and anti-ageism activities	The Dean's Office or the Student Union
Career Needs Resources and Strategies for Career/Academic Decision-Making (Identify advisors) Every time you choose a course or major, you should follow your own interests and goals, and refer to and imitate successful career plans and paths.	Recruit a professional team of course consultants, including professors, industry experts and alumni, etc., to enhance the professional level and experience of course consultants.	Professional level and experience of course consultants	The Dean's Office or the Student Union
Career Needs Knowledge of Self (Identify work or volunteer opportunities) Every time you participate in work or volunteer activities, you should evaluate and test your match with your profession based on your interests, skills, values, and career goals.	Organize job fairs and career lectures, invite enterprise representatives and industry experts to provide students with employment guidance and career planning advice.	The number and results of internship and volunteer activities	Career center or student union
Career Needs Multiple Life Roles (aware) Every time you choose a course or major, you should follow your own interests and goals, and refer to and imitate successful career plans and paths.	Establish a family support network that provides students with opportunities to connect and communicate with family members and learn about their expectations and needs.	The relationship between students' career decisions and aspirations and family members	The Dean's Office or the Student Union

Career Needs	Organize cover letter writing competitions and encourage students to participate actively to improve their ability of writing cover letters.	The number of people who participated in the cover letter writing contest and the results	The Dean's Office or the Student Union
Job Hunting Techniques (write an effective cover letter) Every time you write a Cover letter, you should refer to and imitate successful Cover letter examples according to your professional background and advantages.			
Employment Capability Positive Self-Concept (powerless) Whenever encountering difficult situations related to emotions, it is important to understand and treat them with respect, and to acquire and adopt effective coping strategies and methods.	A life skills guidance center has been established to provide students with life skills guidance and counseling services.	Students' mental health level and self-regulation ability	Mental health center or student office
Employment capability Self Control (only do) Every time a task is submitted, it is necessary to provide timely and polite feedback on the results and gains of the task, and maintain contact and communication with the teacher or boss.	The self-management practice platform should be established to provide practical opportunities and exercise platforms for students and improve their practical operation ability.	Satisfaction and utilization of self-managed counselling services	The Dean's Office or the Student Union
Employment capability Social Skills (make a decision) Every time a decision is made, it is necessary to ensure that each member agrees and supports the decision, and to evaluate and test each member's satisfaction and recognition of the decision.	Establish a case base for team decision-making, provide students with practical cases and scenario simulation, and help students exercise their team decision-making ability.	Student's level of teamwork and decision-making skills	The Dean's Office or the Student Union
Employment capability Problem-Solving Skills (not change mind) Before making a decision, collect as much relevant information as possible, and search and analyze different data and perspectives.	Carry out comprehensive ideological education activities, guide students to correctly treat new information, cultivate their independent thinking and judgment ability, so that they can correctly accept new information, so as to change their own views and opinions.	Students' information literacy level and application ability	The school's educators and student council

4. Conclusions and Recommendations

Majority of the respondents were female and under the category of college students. The respondents had a high level of personal skills, but their interpersonal communication level was the weakest among their personal skills. The respondents agreed on career needs such as Occupational Knowledge Requirements, Career Self-Efficacy, Resources and Strategies for Career/Academic Decision-Making, Knowledge of Self, Multiple Life Roles and Job-Hunting Techniques. College and graduate students have positive assessment on Positive Self-Concept, Self-Control, Social Skills and Problem-Solving Skills. There was no significant difference in personal skills and career needs, however, in terms of employment capability, males had a better assessment on self-control. There was a highly significant relationship between the personal skills, career needs, and employment capability of university students: the better the assessment of personal skills, the better the assessment of career needs; The better the assessment of personal skills, the better the assessment of employment capability; The better the assessment of career needs, the better the assessment of employment capability. The study proposed a career development plan to help university students to improve their personal skills, career needs and employment capabilities.

Universities may offer courses and lectures related to career planning and development, strengthen practical teaching, and establish a school enterprise cooperation mechanism. Teachers may provide personalized guidance and suggestions for career planning and development, encourage university students to participate in various practical activities and competitions, and guide them to actively participate in social services and public welfare activities. While, the government may increase its support for vocational education, formulate relevant policies and measures to promote school enterprise cooperation and the integration of industry, academia, and research; Strengthen support and services for entrepreneurship and innovation among university students. Enterprises may strengthen cooperation with universities, provide vocational training and skill certification for students, and establish a school enterprise cooperation mechanism. Furthermore, the university students may establish clear

career goals and plans, actively participate in various practical activities and competitions, and participate in social services and public welfare activities. The proposed career development program maybe tabled for discussion and implementation. A similar study may also be conducted as to what significantly predicts the employment capability of students.

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