Proactive Personality, Career Social Support, and Career Decision-Making Self-Efficacy Among Chinese College Students

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Abstract – In recent years, China has witnessed a remarkable increase in university graduates, intensifying competition in the job market and reshaping employment perspectives. This study explores the factors influencing the career planning abilities of Chinese university students and proposes enhancement strategies. Through a survey of 430 students from J University in Zhejiang Province, utilizing SPSS 25.0 for analysis, it identifies individual proactive personality, career social support, and career decision-making self-efficacy as pivotal influences on students' career planning. Stronger proactive personality correlates with increased career social support and greater career decision-making self-efficacy, thereby enhancing career planning capabilities. The study recommends universities prioritize career planning education, guiding students from their freshman year to develop personal career plans, fostering self-management and decision-making skills. Integration of career planning education with professional education is advised to acquaint students with market demands. Strengthening employment service systems is crucial, offering professional career counseling and organizing activities like mock interviews and workshops to bolster students' decision-making skills and prepare them for societal integration. This research provides deep insights into talent cultivation and offers specific recommendations for enhancing university students' career planning abilities, aiding them in effective career planning and goal achievement. It also offers valuable perspectives for researchers studying career planning among high school and middle school students.

INTRODUCTION

Employment is the cornerstone of social welfare, vital for individual survival and development, and crucial for improving quality of life. According to the International Labour Organization, even in the best times, young people face significant challenges in the job market. Before the COVID-19 pandemic, the risk of unemployment for young people was approximately three times that of adults; currently, the unemployment crisis has further exacerbated inequalities both within and between countries. Changes in employment relations, the increase in inequality, and economic stagnation severely hinder the realization of full employment and decent work for all [1].

According to data from China's Ministry of Education, to meet the demands of the 21st-century economic and social development, enhance national quality, and satisfy the broad demand for higher education, the Chinese government began to expand university enrollment in 1999. That year, 2.7545 million students were admitted to universities, and the number has continually increased, reaching 11.58 million graduates in 2023. The report released by China's National Bureau of Statistics in July 2023, "Economic Performance in the First Half of 2023," shows that the average urban unemployment rate was 5.3%, with a staggering 21.3% among those aged 16 to 24, indicating significant challenges in the job market for the youth, particularly among university graduates. With the rapid development of higher education in China, the number of university students has continued to rise, surpassing market demand, leading to increasingly intense competition for jobs [2].

Currently, China faces significant employment challenges and structural problems in the job supply and demand. The structural contradiction between the difficulty of college graduates finding jobs and employers' recruitment challenges is particularly evident [3]. Affected by an oversupplied job market, the phenomena of degree devaluation and educational inflation are intensifying, increasingly adding to the employment pressure on university graduates [4].

The unemployment of college graduates not only

increases social inequality and injustice but also weakens social cohesion and centripetal force, adding instability and affecting social stability. Additionally, this issue reduces the efficiency and dynamism of the labor market, decreases economic productivity and innovation potential, and undermines consumer demand and investment confidence, thereby negatively impacting the speed and quality of economic growth [5].

The university phase is a period when an individual's vitality and creativity are at their peak and is also crucial for forming one's career, value, and life perspectives. Unemployment or the inability to find a job adversely affects an individual's psychological well-being, capabilities, and income, hindering personal growth and development. Moreover, college graduates' inability to find work increases the economic burden on families, lowers household consumption and quality of life, and may even disrupt family emotional relationships, leading to disharmony and conflicts [6].

The core of addressing employment issues lies in resolving the supply-demand relationship. From the supply side, the employment issue of college students is an educational one. The primary task of universities is talent cultivation, providing more fresh forces for social development. According to Jackson et al. [7], universities need to enhance students' career planning abilities to better help them determine career goals, make career choices, and realize their life values in addressing students' employment issues. The career planning of college students is crucial for their development and future success.

This study focuses on analyzing the impact of proactive personality, career social support, and career decision-making self-efficacy on career planning among Chinese university students. Proactive personality refers to individuals' tendency to actively influence their external environment. Individuals with proactive personalities are typically proactive, predicting and implementing changes, and actively improving their current environment. McCormick et al. [8] explored the relationship between proactive personality and proactive behavior, emphasizing the interaction between individuals and the environment. Wang et al. [9] suggested in their study that proactive personality can increase individuals' vocational adaptability resources, thereby enabling students to achieve higher levels of career development potential. Valls et al. [10] found in their research that autonomy personality indirectly influences individuals' job satisfaction by affecting career planning.

Career social support involves individuals receiving assistance and resources from their social networks, including family, friends, teachers, classmates, and relatives, to aid in their career development. Jolly et al. [11] argue that social support can bring about positive development for employees and organizations, fostering higher-quality relationships, positive emotional responses, enhanced individual performance, and buffering against employment-related stress. Salwani et al. [12] suggest that there is a significant positive correlation between family social support and the self-efficacy of career decision-making among university graduates, indicating that greater family social support is associated with stronger career decision-making self-efficacy among university graduates.

Career decision-making self-efficacy refers to an individual's belief in their ability to make effective career decisions, which influences the extent of their exploration of career choices and their confidence in making career decisions. Chuang et al. [13] suggest that enhancing career decision-making self-efficacy can help students overcome difficulties in career decision-making. Ozlem [14] argues that significantly increasing college students' career decision-making self-efficacy can help them build confidence and make career decisions according to their own wishes and ideas.

In summary, a proactive personality drives students to face opportunities and challenges, career social support provides a supportive network for students' development and career decision-making self-efficacy enables students to make wise career choices with confidence. Although proactive personality, career social support, and career decision-making self-efficacy have been extensively studied in the fields of education, psychology, and career development, their mechanisms of action in the specific cultural and social environment of China are not yet clear.

In recent years, the impact of career planning on the employment of college students has been increasingly studied, both in China and other countries. Many scholars focus on the influence of social environment, individual characteristics, and cultural factors on career planning. Currently, research on career planning for Chinese college students mainly focuses on theoretical and qualitative studies, with relatively few empirical and quantitative studies. Additionally, there are still some issues in the education of career planning for Chinese college students, such as inadequate self-awareness and insufficient self-efficacy stimulation. Tian [15] pointed out in his research that many career planning courses used by Chinese universities are mostly borrowed from foreign teaching materials. However, there are

significant differences between domestic and foreign educational contexts. Direct application may lead to a disconnection from the Chinese social environment, rendering the corresponding guidance and educational value ineffective.

Through reviewing relevant literature, it has been found that proactive personality, career social support, and career decision-making self-efficacy play significant roles in shaping students' career development, including seizing career opportunities and coping with career challenges. Ye et al. [16] found in their study that career decision-making self-efficacy partially mediates the relationship between proactive personality and career planning, where proactive personality not only directly influences career planning but also indirectly predicts it through career decision-making self-efficacy. Liu et al. [17] discovered in their research that family support is significantly positively correlated with students' career decision-making self-efficacy and career exploration, and there is also a significant positive correlation between career decision-making self-efficacy and career development.

Through extensive literature review and practical work, this study will analyze university students' career planning from diverse perspectives and investigate the correlations and mechanisms of influence among proactive personality, career social support, and career decision-making self-efficacy, further examining their impact on university students' career planning. This research will not only contribute to understanding the uniqueness of career planning among Chinese university students but also provide theoretical and empirical support for the formulation of higher education policies and university career planning. Additionally, it will enrich the research on career planning education and offer new perspectives and insights for the development of career planning education in China.

OBJECTIVES OF THE STUDY

This study determined the proactive personality, career social support, and career decision-making self-efficacy of Chinese college students, and use this as a reference for college students' career development planning. Specifically, this described the profile of the respondents in terms of sex, grade, major category, and family location; determined proactive personality in terms of autonomy, advocate spirit, and active exploration; identified career social support as to family, friend, and from others (teachers, classmates, relatives); assessed career decision-making self-efficacy in terms of self-awareness, collection of career information, setting goals and making plans, and job hunting ability; tested the significant differences in responses after grouping based profile variables; tested the significant relationships among the three variables; and proposed career development program based on the results of the study.

MATERIALS AND METHODS
Research Design

The main objective of this study is to explore the influencing factors of career planning among college students. In line with this objective, the study combines descriptive statistical analysis with literature review and questionnaire surveys for comprehensive investigation.

Based on a summary analysis of existing literature, the study ultimately identified three variables: proactive personality, career social support, and career decision-making self-efficacy. Regarding research tools, the study determined the sample selection and size for the questionnaire survey, as well as the distribution and testing process of the survey questionnaire, along with the research's route and framework. Descriptive research is a method that provides descriptions and conclusions by validating explanations of existing phenomena, patterns, and theories [18]. It helps researchers gain a deeper understanding of the research problem and the ability to present complex findings.

Respondents of the Study

The participants of this study were undergraduate students, specifically those enrolled in J University in Zhejiang Province, China, from freshman to senior year. Questionnaires were distributed using the online platform "Questionnaire Star" and conducted through online surveys. J University has approximately 20,000 enrolled students, and the questionnaires were distributed to students across different academic years.

Under the guidance of the statistics adviser at LPU Graduate School, a total of 500 questionnaires were distributed, with 450 returned, resulting in a response rate of 90%. After verification, 430 questionnaires were deemed valid.

Data Collection

The questionnaire in this study consists of four parts. The first part covers demographic information of the participants, the second part includes the questionnaire on proactive personality, the third part comprises the questionnaire on career social support, and the fourth part involves the questionnaire on career decision-making self-efficacy. Likert four-point scales

are used for the second, third, and fourth parts of the questionnaire.

For the "Proactive Personality Questionnaire" in the second part, this study utilized the proactive personality questionnaire proposed by Chinese scholar Shang Jiayin after localization, which includes three dimensions: autonomy, advocacy spirit, and active exploration, with a total of 24 questions. The questionnaire has been repeatedly applied and validated, demonstrating good reliability.

For the "Career Social Support Questionnaire" in the third part, this study employed the comprehension of social support questionnaire proposed by Chinese scholar Jiang Qianjin after localization, which consists of three dimensions: family support, friend support, and other support (teachers, classmates, relatives), totaling 20 questions. The questionnaire has been repeatedly applied and validated, demonstrating good reliability.

For the "Career Decision-Making Self-Efficacy Questionnaire" in the fourth part, this study adopted the career decision-making self-efficacy questionnaire proposed by Chinese scholar Shi Hui after localization. This questionnaire comprises four dimensions: self-awareness, gathering career information, setting goals and making plans, and job seeking and employment ability, with a total of 32 questions. The questionnaire has been repeatedly applied and validated, demonstrating good reliability.

Table 1
Reliability Results-Cronbach Alpha

Indicators	Cronbach Alpha	Remarks
Proactive Personality		
Autonomy	0.911	Excellent
Advocate spirit	0.895	Good
Active exploration	0.900	Excellent
Career Social Support		
Family support	0.905	Excellent
Friends support	0.883	Good
Others support them (teachers, classmates, relatives)	0.849	Good
Career Decision-Making Self-Efficacy		
Self-awareness	0.922	Excellent
Collect career information	0.903	Excellent
Determine your goals and make plans	0.895	Good
Job hunting ability	0.909	Excellent

George and Mallery (2003) provide the following rules of thumb:
"_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 –
Questionable, _ > .5 – Poor, and _ < .5 – Unacceptable"

A Cronbach Alpha value greater than 0.8 indicates good reliability of the questionnaire, while a value exceeding 0.9 indicates excellent reliability. Based on the Cronbach Alpha values in Table 1, the questionnaire demonstrates good internal consistency and is suitable for this study.

The usual index for evaluating reliability is the Cronbach's alpha coefficient developed for Likert scales. The higher the coefficient, the higher the degree of internal consistency, and thus the better the reliability of the scale.

The table below displays the participants' inclinations towards the variables of proactive personality, career social support, and career decision-making self-efficacy, along with the Cronbach Alpha values for 10 dimensions. The reliability coefficient values range from 0 to 1.0, with Cronbach Alpha values for the 10 dimensions being 0.911, 0.895, 0.900, 0.905, 0.883, 0.849, 0.922, 0.903, 0.895, and 0.909, respectively.

Data Gathering Procedure

For the convenience of the survey, this study conducted an online questionnaire survey. The specific steps are as follow:

The online questionnaire survey was conducted using the internet-based survey platform "Questionnaire Star." The questionnaire content was created, checked, and tested on the "Questionnaire Star" platform to ensure its accuracy and normal use. To facilitate the survey process, the researcher contacted colleagues at J University in Zhejiang Province, where the researcher work, explained the purpose of this survey in detail, obtained their consent and support, and requested them to forward the survey link to the students.

Initially, 60 questionnaires were distributed to determine the validity and reliability of the study. After testing by the Graduate School of LPU, the questionnaire's effectiveness was qualified. Subsequently, a large number of questionnaires were distributed to the selected school, J University in Zhejiang Province. The collected questionnaire data was exported through the "Questionnaire Star" platform's result export function. Finally, after exporting the questionnaires, the questionnaire data was input into Excel, and the input data was checked to ensure accuracy.

To eliminate invalid questionnaires, preliminary processing of the questionnaires was conducted, and questionnaires were screened according to the following principles: 1. Questionnaires with over 20% of questions left unanswered were considered invalid. 2. Questionnaires completed in a very short time were

deemed invalid, set a time limit for questionnaire completion on the "Questionnaire Star" platform, considering any questionnaire completed in less than 150 seconds as invalid. 3. Questionnaires where all checkboxes were the same or followed a pattern were considered invalid. Finally, if an individual filled out more than two questionnaires, all questionnaires after the second one.

Data Analysis

For data analysis, various statistical techniques were employed in this study. Firstly, frequency and percentage distributions were used to describe the demographic characteristics of the participants. Additionally, weighted averages and rankings were utilized to assess participants' tendencies towards proactive personality, career social support, and career decision-making self-efficacy. Non-parametric tests, including two-group independent samples t-tests and one-way analysis of variance (ANOVA) for three or more groups, were conducted to determine significant differences. Pearson correlation coefficients were employed to examine the important relationships among proactive personality, career social support, and career decision-making self-efficacy.

The Likert scale was used to evaluate the three variables, where scores ranging from 3.50 to 4.00 indicated strong agreement, 2.50 to 3.49 indicated agreement, 1.50 to 2.49 indicated disagreement, and 1.00 to 1.49 indicated strong disagreement. All data analyses were performed using SPSS version 25 to further interpret the research findings, with a confidence interval of 95% and a significance level of 0.05.

After collecting the questionnaires, the answers were coded in Excel format and then sent to the LPU research center, where statistical personnel processed the data using SPSS software to further interpret the research outcomes.

Ethical Considerations

The ethical considerations of this research were centered on three basic ethical principles: respect for participants, beneficence or welfare of the participant, and justice. Informed consent was also a key component of the process. Moreover, ope rationalizing the research process occurred within the norms and mores of established ethical codes in academia.

To maintain confidentiality, respondents were clearly informed in the questionnaire that their responses to the questionnaire would be used for academic research purposes only. From the questionnaire survey, all the statistical data in this article are correct. Moreover, the moral permission came from the research center of Lyceum of the Philippines University.

RESULTS AND DISCUSSION

Table 2
Proactive Personality Career

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Autonomy	3.21	Agree	3
2. Advocate spirit	3.22	Agree	2
3. Active exploration	3.38	Agree	1
Composite Mean	**3.27**	**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 2 shows that Active Exploration scored the highest score with a weighted mean of 3.38, Advocate Spirit ranked second with a weighted mean of 3.22, and Autonomy ranked third.

Proactive personality is a key factor in career planning for college students. Proactive personality can be categorized into three main aspects, autonomy, advocate spirit, and active exploration, and these traits have a profound impact on college students' career planning. Proactive personality refers to an individual's initiative in seeking change in the environment, acting spontaneously, and displaying a positive attitude in achieving goals [20].

In terms of autonomy, as described in the previous literature review, autonomy refers to an individual's independence and self-direction in life and work. In career planning, autonomy is reflected in the individual's ability to independently set career goals, self-motivation and self-management in the process of career development. Analyzed in terms of intrinsic motivation and goal pursuit, autonomous college students are more inclined to set career goals based on their own interests, abilities and values; they are not driven by external factors (e.g., parental expectations, social standards) but by intrinsic desires and motivations. Analyzed in terms of self-management ability, autonomy implies strong self-management ability in the process of career development, which includes time management, emotion regulation, stress management, and self-efficacy enhancement.

In terms of decision-making and responsibility, autonomy enables individuals to play a leading role in career choice and decision-making, and individuals are willing to take responsibility for their own decisions,

which increases the adaptability and individualization of career planning.

In terms of Advocacy which reflect the individual's ability to take initiative and influence in their career, especially in driving change and achieving goals. Analyzed from the level of leading and influencing organizations, college students with advocate spirit tend to assume leadership roles in teams; individuals are able to influence others through their ideas and actions, and drive teams or organizations toward common goals. From the perspective of change and innovation, individuals with an advocate ethos are more likely to challenge the status quo and propose and implement innovative ideas; in career planning, these individuals are more willing to explore new career paths or create new job opportunities; from the perspective of networking and resource integration, an advocate ethos builds and utilizes a broad social and professional network throughout their career, which is essential for accessing information, resources, and opportunities.

Active exploration involves the seeking and utilization of new information, opportunities and experiences, which are essential in career development. Analyzed from the perspective of opportunity recognition and seizing, individuals who are actively exploring are more astute in identifying career opportunities, and the individual's quest for new information, skills, and experiences enables him or her to identify and seize opportunities that may have been overlooked by others. Analyzed from the perspective of the ability to adapt to change, these individuals are better able to adapt to changes in the occupational environment as a result of continuous exploration of new fields and skills, which enables individuals to be more flexible in their careers and adapt to changing market demands. Analyzed from the perspective of lifelong learning, the combination of active exploration and the spirit of lifelong learning allows individuals to grow in their careers, not only in terms of professional knowledge and skills, but also in terms of personal qualities and overall competence.

In fact, autonomy, advocate spirit and active exploration work together in career planning to form a mutually reinforcing mechanism. With autonomy as the basis, autonomy provides the intrinsic motivation and self-management of career planning, enabling individuals to make decisions based on their own interests and goals. Motivated by the advocate spirit, the advocate spirit inspires individuals to take initiative in their careers, striving not only for their own goals, but also contributing positively to the goals of the team and the organization. Expanding one's landscape with active exploration enables individuals to discover more opportunities and provides the motivation to continue learning and adapting to new challenges.

In summary, autonomy, advocate spirit, and active exploration are important factors that influence college students' career planning. By cultivating these traits, college students can better plan and achieve their career goals, adapt to rapidly changing work environments, and achieve sustained growth and development throughout their careers.

Table 3
Career Social Support

	Indicators	Weighted Mean	Verbal Interpretation	Rank
1.	Family support	3.16	Agree	3
2.	Friends support	3.19	Agree	1
3.	Others support them (teachers, classmates, relatives)	3.18	Agree	2
Composite Mean		**3.18**	**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 3 presents the family support, friend support, and other people support (teachers, classmates, and relatives) in occupational social support, with a composite mean score of 3.18, which means that the respondents all agreed. Of the three dimensions, friend support received the highest score with a weighted mean of 3.19; family support received the lowest score of 3.16; and other people's support (teachers, classmates, and relatives) scored in the middle of the scale at 3.18.

Social support is often considered as the individual's perceived support and is the result of the interaction between the objective environment and competent feelings. Students from big cities have relatively more social resources. Social resources affect the individual's access to information and opportunities, and it comes from various sources. With the changes in the society, it can be found that social skills, emotional skills and interpersonal relationships play a very important role in career development. Family support, friend support, and other people's support (teachers, classmates, and relatives) have a profound impact on college students' career planning, and these social supports play a key role in providing an emotional foundation, resources and

information, professional guidance, and career exploration.

Family support dimension. Analyzed from the dimensions of emotional foundation and sense of security, the emotional support provided by families is an important foundation for college students' career planning, and the understanding, encouragement, and comfort of family members can provide individuals with a necessary sense of emotional security in the process of career exploration and decision-making. Analyzed from the perspective of resources and financial support, families may also provide necessary resources and financial support, such as educational expenses, internship opportunities, or vocational training. These resources help individuals acquire career-related skills and knowledge. Analyzed from the perspective of values and expectations, family has a significant impact on the formation of individuals' career values, and family expectations and attitudes may influence individuals' career choices and planning to a certain extent.

Friend support aspect. Analyzed from the perspective of social network and information exchange, friends are an important source for building social network and information exchange, and individuals can provide information such as internship experience. Analyzed from the perspective of emotional empathy, emotional empathy among friends provides important emotional support when facing difficulties in career planning, and this support can help individuals remain positive and resilient under pressure. Analyzed from the perspective of exploration and feedback, communication among friends also facilitates feedback and communication about career exploration, which helps individuals gain a more comprehensive understanding of their career interests and strengths.

Other people support (teachers, classmates, relatives) aspects. Analyzed from the perspective of professional guidance and advice, teachers are able to provide professional career guidance and advice to help individuals make informed decisions about career planning. From the perspective of career experiences and insights, relatives can share their career experiences and insights and provide different industry information, which is very important for individuals to understand the diverse career world. From a motivational perspective, the experiences and successes of teachers, relatives, and older classmates can inspire individuals to pursue their career goals.

Table 4
Career Decision-making Self-efficacy

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Self-awareness	3.26	Agree	1
2. Collect career information	3.07	Agree	3
3. Determine your goals and make plans	2.96	Agree	4
4. Job hunting ability	3.23	Agree	2
Composite Mean	**3.13**	**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 4 reflects the summary table of respondents' tendencies for each dimension of self-efficacy in career decision-making, the combined mean score of the four dimensions is 3.13, which indicates that the respondents all agree. Among the four dimensions, self-awareness scored the highest with a weighted mean of 3.26; setting goals and making plans ranked second with a weighted mean of 3.23; gathering career information ranked third with a weighted mean of 3.07; and setting goals and making plans ranked last with a score of 2.96. The analysis of respondents' tendencies shows that respondents have higher tendencies for higher self-knowledge and job-seeking employability, and relatively weaker tendencies for gathering career information, determining goals and making plans.

Career decision self-efficacy affects individual's career development. Career decision self-efficacy is a core variable of career development, which has a positive impact on career outcome expectations, career planning and career development exploration. Self-efficacy in career decision-making focuses on the individual's subjective initiative, and college students must learn to accurately assess their own abilities, effectively collect career information, choose goals, make plans and be able to solve problems. The four dimensions of self-perception, career information gathering, goal setting and planning, and job search and employment ability together constitute the core of career decision self-efficacy. They not only influence each other, but also work together in the whole process of individual career planning, affecting career choice, development path and ultimate career success. Therefore, improving the cultivation of these abilities is an indispensable part of college students' career planning education, which helps individuals plan and manage their careers more effectively.

Self-perception. From the analysis of influencing factors, self-perception affects individuals' understanding of whether a career is suitable for them, and a clear self-perception helps individuals recognize their own strengths and interests, so that they can choose career paths that are more suitable for them. From the analysis of enhancing self-efficacy, having a clear understanding of oneself can enhance one's self-confidence in career decision-making; when an individual understands his/her own abilities and interests, he/she is more likely to believe that he/she can be successful in his/her chosen career field. From the analysis of influencing career planning, self-knowledge can help individuals avoid paths that do not match their abilities and interests in the process of career exploration, so as to save time and resources and focus more on the areas in which they excel.

Aspects of collecting career information. From the analysis of influencing factors, effectively collecting and analyzing career information can help individuals better understand the reality of different careers, including job content, development prospects, and required skills. Analyzed in terms of enhancing self-efficacy, mastering rich career information can enhance individuals' decision-making ability because they can make more informed career choices based on the information. In terms of influencing career planning, the richness of information has a direct impact on the effectiveness of career planning, as individuals can identify career opportunities, assess the match between themselves and their careers, and develop strategies to adapt to the job market based on detailed information.

Aspects of defining goals and making plans. From the analysis of influencing factors, clear career goals and detailed plans can help individuals maintain the direction and motivation of career development, and the setting of goals is based on the comprehensive analysis of personal interests and career information. From the analysis of enhancing self-efficacy, having the ability to make and execute plans can significantly enhance students' self-efficacy, and when individuals move forward according to their plans and achieve their small goals, individuals will have more confidence in their big goals in the future. From the analysis of influencing career planning, effective plan-making covers not only short-term goals but also planning for long-term career development, which helps individuals maintain the right direction and rhythm of life at all stages of their career.

Table 5
Relationship Between Proactive Personality and Career Social Support

Autonomy	rho-value	p-value	Interpretation
Family support	0.392**	<.01	Highly Significant
Friends support	0.231**	<.01	Highly Significant
Others support them (teachers, classmates, relatives)	0.277**	<.01	Highly Significant
Advocate spirit			
Family support	0.390**	<.01	Highly Significant
Friends support	0.331**	<.01	Highly Significant
Others support them (teachers, classmates, relatives)	0.346**	<.01	Highly Significant
Active exploration			
Family support	0.335**	<.01	Highly Significant
Friends support	0.269**	<.01	Highly Significant
Others support them (teachers, classmates, relatives)	0.261**	<.01	Highly Significant

Legend: Significant at p-value < 0.05

Table 5 presents the relationship between proactive personality and career social support, the "p-value" in the table is less than 0.01, which can indicate that there is a significant correlation between the three dimensions of proactive personality: autonomy, advocate spirit, and active exploration, and the three dimensions of occupational social support: family support, friend support, and other people's support (teachers, classmates, and relatives).

Effect of autonomy on occupational social support. Family support dimension. Analyzed in terms of autonomy and family support, individuals with high levels of autonomy may be more inclined to make decisions independently in the family, which may prompt family members to provide more understanding and support, rely less on direct family intervention, and instead seek encouragement and understanding from the family.

Analyzed in terms of family roles in the decision-making process, family members may play the role of advisors and supporters rather than commanders in the career decision-making process of these individuals. Friend Support Aspects. Analyzed from autonomy and

social networks, individuals with high autonomy may demonstrate clearer personal goals and aspirations in their social networks and be able to express their career aspirations and needs more clearly, thus obtaining more targeted support among their friends.

Analyzed in terms of proactive help-seeking, these individuals may be more proactive in seeking advice and help from friends when needed, especially when it comes to career planning and decision-making. Other People Support Aspects. Analyzed in terms of mentoring professional relationships, autonomy may motivate individuals to be more proactive in making connections with teachers, classmates, and relatives, especially those who can help in career development. Analyzed in terms of participation in career development activities, individuals with high autonomy can be more actively involved in extracurricular activities, internship hours, and career counseling, thus receiving support from these sources.

Impact of Advocacy on Career Social Support. Family Support Aspects. Analyzed from a motivational perspective, individuals with an advocate spirit may inspire support from family members through their own positive attitudes and self-confidence, and may serve as a facilitator of career planning in the family, motivating family members to work together to explore and support the individual's career choices.

Analyzed in terms of roles in the family, as advocates, these individuals may play the role of role models in the family, influencing family members' career attitudes and support styles. Friend Support Aspects. Analyzed in terms of influence, individuals who are advocates in spirit may have a greater influence in their circle of friends and be able to encourage and motivate their friends to adopt a more positive attitude toward career planning. Analyzed in terms of shared exploration, these individuals may motivate friends to engage in career activities together and explore future career opportunities together. Other people support aspects. Analyzed in terms of making professional connections, individuals who are strong advocates may be more proactive in making career-related connections with faculty, classmates, and relatives, especially those who can provide professional guidance and opportunities. Analyzed in terms of becoming opinion leaders, these individuals may become opinion leaders among their classmates and relatives.

Impact of active exploration on career social support. Family support. Analyzed in terms of spiritual resonance, an attitude of active exploration may resonate with the expectations of family members, especially if this attitude of exploration coincides with the values of the family. Analyzed in terms of career development experiences, individuals who are actively exploring may share their career exploration experiences with family members, enhancing the connection and support among family members. Friend support aspect. Analyzed in terms of exploring with friends, positive exploratory attitudes may promote cooperation and joint exploration among friends, especially in terms of career development and job search activities. Analyzed in terms of expanding friend networks, individuals who are actively exploring may be more open to making new social connections, resulting in more diverse support among friends. Other People Support Aspects. Analyzed in terms of proactively obtaining professional advice, these individuals may be more proactive in seeking career advice and support from faculty, classmates, and relatives, especially when faced with career choices and challenges.

The three dimensions of proactive personality, autonomy, advocate spirit, and active exploration, play an important role in career social support. These traits not only shape an individual's initiative and motivation in career planning, but also influence the type and degree of support an individual receives from family, friends, and other important people (e.g., teachers, classmates, and relatives). Autonomy emphasizes the individual's independence and self-determination in career decision making and promotes the likelihood that the individual will receive support from family and friends. Advocacy highlights influence and inspiration, which play a role not only among friends but also in family and other social relationships, enhancing the individual's chances of receiving support. An attitude of active exploration will promote positive interactions with one's surroundings, whether in the family, circle of friends, or wider social network, and contribute to the development of supportive relationships.

Table 6 presents the relationship between proactive personality and career decision-making self-efficacy, the "p-value" in the table are less than 0.01, which can indicate that the three dimensions of proactive personality, namely, autonomy, advocate spirit, and active exploration, and the four dimensions of career decision-making self-efficacy, self-concept, gathering career information, determining goals and formulating plans, and job-seeking and employability, have a significant correlation.

Analyzed in terms of intrinsic drive and self-confidence, individuals with high autonomy usually have high intrinsic drive and self-belief, which helps

individuals to have a clearer understanding of their career interests, abilities, and career goals. Analyzed from carrying out career decision-making independently, autonomy prompts individuals to show more independence in career decision-making and less dependence on external opinions, thus enhancing individuals' self-confidence in career planning. In terms of collecting career information. From the analysis of the initiative of obtaining information, individuals with autonomy may be more proactive in seeking career-related information, such as attending career counseling and career fairs. Analyzed in terms of information screening, proactivity is manifested in the screening and analysis of information, enabling individuals to more effectively utilize the collected information

Table 6
Relationship Between Proactive Personality and Career Decision-making Self-efficacy

Autonomy	rho-value	p-value	Interpretation
Self-awareness	0.291**	<.01	Highly Significant
Collect career information	0.241**	<.01	Highly Significant
Determine your goals and make plans	0.293**	<.01	Highly Significant
Job hunting ability	0.344**	<.01	Highly Significant
Advocate spirit			
Self-awareness	0.400**	<.01	Highly Significant
Collect career information	0.350**	<.01	Highly Significant
Determine your goals and make plans	0.250**	<.01	Highly Significant
Job hunting ability	0.282**	<.01	Highly Significant
Active exploration			
Self-awareness	0.360**	<.01	Highly Significant
Collect career information	0.301**	<.01	Highly Significant
Determine your goals and make plans	0.462**	<.01	Highly Significant
Job hunting ability	0.294**	<.01	Highly Significant

Legend: Significant at p-value < 0.05

Analyzed from clear career goals, individuals with high autonomy are more explicit and focused in determining career goals, and they tend to set goals based on their interests and strengths. Analyzed in terms of practical and feasible plan-making, autonomy makes individuals more practical and feasible in formulating career plans, taking into account personal abilities and market demands. Aspects of job-seeking employability. Analyzed from the independent choice of job search strategies, autonomy enables individuals to be more confident in choosing strategies and paths that suit them in the job search process. Analyzed in terms of performance in interviews and job search, individuals with autonomy tend to be able to express themselves more confidently in all aspects of job search, such as resume writing and interviews.

From the analysis of self-worth, individuals with advocate spirit usually recognize their own influence and value, which helps he individual to have higher self-efficacy in career choices. Analyzed in terms of career goals, individuals may combine career goals with a desire to impact society and the environment to develop a more holistic career perception. Aspects of gathering career information. Analyzed in terms of acquiring and sharing information, individuals with advocate spirituality not only actively acquire career information, but also tend to share this information with others, thereby building support and resources in their career networks. Analyzed in terms of utilizing information, these individuals may deeply analyze career information and use it to influence others and guide their own career decisions. Goal Setting and Program Development Aspects.

Analyzed in terms of influencing career goals, individuals who are advocates may strive to be leaders in their organizations. Analyzed in terms of career planning goals, individuals' career plans often revolve around how to maximize their influence with a clear purpose and direction. Job Search Employability Aspects. Analyzed from interviews, individuals who are advocates in the job search process are likely to demonstrate their influence and leadership skills in interviews and networking. Analyzed in terms of job search strategies, individuals are likely to take a more positive and proactive approach in their job search.

Analyzed in terms of self-exploration, individuals who are actively exploring are constantly updating and adjusting their career perceptions as new experiences and information are accumulated. Analyzed from the attitude toward the future, this attitude of continuous exploration makes individuals curious and open to the future, which helps individuals remain flexible and adaptable in career decision-making. Aspects of gathering career information. Analyzed from searching for information, actively exploring individuals tend to collect career information from multiple sources.

Analyzed from grasping information, individuals not only collect information, but also actively analyze how this information applies to their career planning. Goal setting and plan making aspects.

Analyzed in terms of career goals, individuals who are actively exploring are likely to set more flexible and open-ended career goals in order to adapt to changing career environments and personal growth. Individuals analyzed in terms of career planning may be more adaptive and able to adjust to new information and experiences. Job Search Employability Aspects. Analyzed in terms of job search methods, a positive exploratory attitude allows individuals to be more flexible and innovative in their job search, able to try new methods and strategies. Analyzed in terms of interview situations, this attitude of active exploration manifests itself in curiosity and enthusiasm for new opportunities during interviews and career exchanges.

Autonomy, Advocate Spirit, and Positive Exploration, the three core dimensions of proactive personality, play an important role in the formation and development of career decision-making self-efficacy. These traits influence how individuals recognize themselves, gather and utilize career information, set and achieve career goals, and demonstrate their individual abilities and potential in the job search process. Through a deeper understanding of the interactions between these dimensions, colleges and universities can better guide and support the growth and development of college students in career planning.

Table 7 presents the relationship between career social support and career decision-making self-efficacy, the "p-value" in the table is less than 0.01, which can indicate that the three dimensions of vocational social support, namely, family support, friend support, and other people's support (teachers, classmates, and relatives) have significant correlations with the four dimensions of vocational decision-making self-efficacy: self-concept, gathering vocational information, determining goals and making plans, and job-seeking and employability. There is a significant correlation between the four dimensions of competence.

Families play a fundamental role in the formation of an individual's self-perception. Family members help individuals understand their own abilities and interests through feedback and communication, and improve self-confidence and self-efficacy. Support and encouragement in the family environment can enhance individuals' confidence in their own career decisions and help them recognize their own potential and possibilities. Aspects of gathering career information. Information

and insights provided by family members are important sources for gathering career information. Family experience and knowledge can provide valuable perspectives for career exploration. Family support plays an ancillary role in the information screening and assessment process, helping individuals understand and utilize career information.

Table 7
Relationship Between Career Social Support and Career Decision-making Self-efficacy

Family support	rho-value	p-value	Interpretation
Self-awareness	0.410**	<.01	Highly Significant
Collect career information	0.286**	<.01	Highly Significant
Determine your goals and make plans	0.313**	<.01	Highly Significant
Job hunting ability	0.375**	<.01	Highly Significant
Friends support			
Self-awareness	0.349**	<.01	Highly Significant
Collect career information	0.281**	<.01	Highly Significant
Determine your goals and make plans	0.291**	<.01	Highly Significant
Job hunting ability	0.257**	<.01	Highly Significant
Others support them (teachers, classmates, relatives)			
Self-awareness	0.262**	<.01	Highly Significant
Collect career information	0.271**	<.01	Highly Significant
Determine your goals and make plans	0.275**	<.01	Highly Significant
Job hunting ability	0.301**	<.01	Highly Significant

Legend: Significant at p-value < 0.05

Family support provides motivation and guidance in setting career goals and developing career plans. Expectations and advice from family members can influence an individual's career choices. Family encouragement and resource support help individuals develop more realistic and feasible career plans. Job Search Employability Aspects. Families provide the necessary support for the development and practice of job search skills. Family members' networks and resources can help in the job search process, such as recommending job opportunities and providing career

advice.

Communication and feedback among friends is critical to the development of an individual's self-perception, and encouragement and positive feedback from friends can enhance an individual's self-confidence and self-efficacy. The exchange of insights and experiences from peers helps individuals to more fully understand their position and potential in their careers. Aspects of gathering career information. Friends are one of the most important channels for obtaining career information, and the sharing of friends can provide diverse career insights and information. Discussions and explorations among friends help in self-awareness. Goal setting and plan making aspect.

Friend support plays a motivational and inspirational role in the process of career goal setting and planning. Friends' success stories and challenging experiences can motivate individuals to set higher career goals. Communication and comparison among friends help individuals to revise and improve their career plans. Job search and employability. Mock interviews among friends can improve individuals' job search skills. Recommendations and suggestions from friends also play an important role in the job search process, especially in understanding and responding to market demands.

Feedback and guidance provided by teachers, classmates, relatives, etc. are crucial in forming and developing an individual's self-perception, and their suggestions and evaluations can help an individual to recognize himself/herself more accurately. At the same time, the support and encouragement from these people can help enhance the individual's self-confidence and autonomy in career decision-making. Aspects of gathering career information. Specialized information provided by teachers and professionals is crucial for individuals to understand specific industries and fields. Experiences and information shared by classmates and relatives help individuals to obtain broader and diversified career information.

The experiences and guidance of these individuals have a significant impact on the individual's ability to identify career goals and plan career paths. In particular, the professional advice of teachers is decisive in guiding students' career planning. Support and advice from classmates and relatives also help individuals make more rational choices in the career planning process. Job search and employability aspects. Teachers and professionals can provide training and advice on job search skills, such as interviewing techniques and resume writing. Networks of classmates and relatives

can help provide job search opportunities and increase confidence in the job search process.

CONCLUSION AND RECOMMENDATION

Majority of the respondents are female junior students from Science and Engineering, and Liberal Art majors, and are from rural area. Chinese college students are good at actively exploring the external world, willing to try to change the external environment, confidently expressing their views and sticking to their ideas. They believe that proactive personality can have a positive effect on career development. The students hope to get support from friends, teachers, classmates and family members. Vocational social support can better help college students find jobs and provide emotional support, information support and financial support for college students. The students have a clear understanding of themselves, have mastered certain job hunting and employability through the study of school career planning courses, and have certain plans and directions for the future. College students with a strong sense of self-efficacy are more likely to succeed in career planning and management because they are confident in their ability to effectively respond to career challenges and seize career opportunities. There are significant differences in students' grade, major category, family location, proactive personality, occupational social support, and self-efficacy in career decision-making. There is a significant correlation among the three variables of autonomy personality, career social support and career decision self-efficacy. The stronger students' autonomy personality, the more career social support, the stronger career decision self-efficacy and the stronger career planning ability. This study formulated a training and development plan to help students improve their career planning abilities and help schools better serve students in career planning.

Colleges and universities may attach great importance to college students' career planning. Schools actively encourage and guide college students to make personal career planning from the beginning of their freshman year, including career goals, skills improvement and personal growth, so as to enhance their self-management and independent decision-making ability. The administration may actively integrate curriculum offerings and combine career planning education with professional education to help students better understand the career world and market needs. Universities should build closer partnerships with enterprises and provide more internship and career opportunities for students to gain practical work

experience and career guidance. Universities may provide professional employment consulting services, organize mock interviews, career planning workshops, resume making competitions and other activities to help students practice and improve their career decision-making ability. The government may formulate supportive policies in line with the career development of college students, and use supportive policies to help students find high-quality employment; At the same time, the media should raise the social awareness of the importance of career development through publicity, and encourage families and enterprises to participate in the training of students' career planning ability. Future researchers can further study how to improve the career planning abilities of middle school and high school students based on the factors influencing career planning of college students in this study. The training and development plan for college students proposed in this study may be reviewed and tabled for implementation.

REFERENCES

[1]   Gutowski, E., Blustein, DL, Kenny, ME, & Kozan, S. (2021). The decline of decent work in the twenty-first century: Implications for career development. In The Oxford Handbook of Psychology of Working. Oxford University Press.

[2]   Liu, B., Guo, Y. & Ao, N. (2022). The impact of the COVID-19 epidemic on the employment quality of college graduates - a comparative analysis based on a survey of 19 universities across the country before and after the epidemic. Chinese Youth

[3]   Guo, B. (2022). Labor supply and structural employment contradiction: characteristics, impact and relief. Contemporary Economic Management (12), 73-80. doi:10.13253/j.cnki.ddjjgl.2022.12.008.

[4]   Wang, A. & Cheng, L. (2022). The impact of college students' proactive personality on career choice anxiety: the chain mediating role of career choice self-efficacy and job search clarity. Heilongjiang Higher Education Research (07), 132-137. doi:10.19903/ j.cnki.cn23-1074/g.2022.07.017.

[5]   Bao, W., Chen, D. & Yue, C. (2020). International comparison of youth employment support policies - Enlightenment on employment policies for Chinese college graduates in the post-epidemic era. Educational Development Research (23), 66-76. doi:10.14121/j. cnki.1008-3855.2020.23.011.

[6]   Zhang, B. (2022). Expanding employment capacity and improving quality to promote common prosperity - focusing on accelerating the resolution of structural employment contradictions. Industrial Economics Review (02), 168-185. doi:10.19313/j.cnki.cn10-1223/f .2022.02.006.

[7]   Jackson, D., & Tomlinson, M. (2020). Investigating the relationship between career planning, proactivity and employability perceptions among higher education students in uncertain labor market. Higher Education.

[8]   McCormick, BW, Guay, RP, Colbert, AE, et al. (2019). Proactive personality and proactive behavior: Perspectives on person–situation interactions. Journal of Occupational and Organizational Psychology, 92(1), 30-51.

[9]   Wang, X. & Zhou, Y. (2021). Influencing factors and educational countermeasures for college students' career planning. Chinese Adult Education (17), 28-32.

[10]   Valls, V., González-Romá, V., Hernandez, A., & Barbera, U. (2020). Proactive personality and early employment outcomes: The mediating role of career planning and the moderator role of core self-evaluations. Journal of Vocational Behavior.

[11]   Jolly, PM, Kong, DT, & Kim, KY (2021). Social support at work: An integrative review. Journal of Organizational Behavior.

[12]   Salwani, A., & Cahyawulan, W. (2022). The relationship between family social support and self-efficacy in career decision-making of final year university students. Enlighten: Jurnal Bimbingan Konseling Islam.

[13]   Chuang, NK, Lee, PC, & Kwok, L. (2020). Assisting students with career decision-making difficulties: Can career decision-making self-efficacy and career decision-making profile help? Journal of Hospitality, Leisure, Sport & Tourism Education.

[14]   Ozlem, UK (2019). The effects of career interventions on university students' levels of career decision-making self-efficacy: A meta-analytic review. Australian Journal of Career Development.

[15]   Tian, L (2021). Brief analysis and countermeasure research on college students' career planning issues. University (18), 153-156.

[16]   Ye Baojuan, Sun Yuan, Gao Liang, Xia Fei, & Yang Qiang. (2020). The relationship between proactive personality and career maturity of college students: a moderated mediation model.

Psychological Development and Education, 36(3), 304-310.

[17] Liu Limin & Zhang Dajun. (2021). The impact of parenting behavior on career exploration: the mediating role of career decision-making self-efficacy. Journal of Southwest University (Natural Science Edition) (10), 44-51. doi:10.13718/j.cnki .xdzk.2021.10.006.

[18] Atmowardoyo, H. (2018). Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. Journal of Language Teaching and Research, 9(1), 197-204.

[19] Zhang, T. & Liang, J. (2023). Investigation on the current situation of college students' career planning and its coping strategies. Heilongjiang Science (11), 134-136+140.