



An analysis of the interaction between occupational identity and social expectations in college students' employment choices

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SUMMARY: *Based on the theory of social cognition and career development, this study constructs a mixed research framework, integrating questionnaire survey (N=520) and in-depth interviews (N=30) to explore the interactive effects of occupational identity and social expectations on college students' employment choices. The study found that occupational identity was significantly positively correlated with employment choice tendency ($r=0.672$, $p<0.001$), explaining 45.2% of the variance, with occupational value identity playing the most prominent role. Social expectations were also significantly positively correlated ($r=0.589$, $p<0.001$), explaining 38.7% of the variance, with family expectations playing the most critical role. There was a significant interaction effect ($\beta=0.213$, $p<0.001$), explaining an additional 12.8% of the variance. Longitudinal tracking further reveals its dynamic evolution path. Based on this, this study proposes that we should promote the healthy development of occupational identity and guide the formation of reasonable social expectations from multiple dimensions such as education policy, family environment and social support.*

KEYWORDS: *occupational identity, social expectation, employment choice, college students, mixed study*

1 Introduction

In modern society, career choice is not only for making a living, but also for realizing personal value and sense of achievement. In the process of college students' career choice, career identity and social expectations play a crucial role. Occupational identity refers to an individual's sense of recognition and satisfaction with the occupation he or she is engaged in [1]. Occupational identity has a positive impact on the career development of college students [2]. Firstly, the sense of occupational identity can enhance the individual's commitment and full participation in the occupational position [3]. Secondly, career identity can enhance college students' motivation and determination for career development. When individuals have a high sense of identity with the career they are engaged in, they will work harder to improve their abilities and skills and pursue higher career goals [4, 5]. Occupational identity can also improve job satisfaction and quality of life. When individuals are satisfied with the occupation they are engaged in, work is no longer a mandatory burden but a sense of enjoyment and fulfillment, and this positive work attitude helps to improve work performance and creativity, which in turn enhances the quality of life [6-8].

The employment problem of college students is not only a personal problem, but also a social problem. Social expectation is the cognition, emotion and value identity of the social group to which college students belong, which is the psychological connection between

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individuals and social groups [9, 10]. For the employment choice, the influence of social expectations is reflected in what kind of industry and position college students are expected to engage in by their families, schools and social circles [11]. Unlike career identity, which is based on students' personal cognitive choices, social expectations are more inclined to “emotional pressure”. Most college students will consider the psychological conflicts such as “what my parents want me to be” and “what kind of talent my school wants me to be” in their employment choices, and its influence on career choices sometimes even exceeds that of college students' occupational identity [12-14]. Career identity and social expectations interact with each other and not only have a mutually reinforcing relationship, but also face the possibility of conflict, which requires college students to make a proper balance in their career choices.

This paper mainly utilizes social perception theory as well as career development theory to design a questionnaire and conduct semi-structured interviews. The questionnaire was first administered using stratified random sampling to select a sample size of 500 or more college students; The questionnaire is divided into two parts: the first part is about the individual's own career identity, including four aspects: career values, career role perception, career sense of belonging, and career development prospects; The second part is about the degree of influence of external factors on college students, i.e., in terms of family factors, peer group factors, socio-cultural factors, and school factors. Based on a typical sample of students (a total of 30), the interview method was used to collect information and combined with the thematic analysis method to explore the students' psychology and process of employment; at the same time, a variety of research perspectives were used to analyze the data and corroborate with each other, with a view to clarifying the relationship between vocational identity and social expectations.

2 Theoretical foundations

2.1 Theoretical foundations of professional identity

Conceptualizations about occupational identity have gone through a unipolar to multipolar process, in which identity development theory provides the psychological basis for occupational identity, considering the choice of a career as an important period in defining one's identity. Occupational identity is part of a stable self-concept in a stage of career development that lasts a lifetime, and it is an attitude toward career choice that develops after exploration and commitment, which emphasizes that the degree of match in the person-job match perspective determines the degree of identity. And based on social cognitive theory, it is understood as an individual's integrated mental representation of a specific situation. Its internal structure contains four interrelated core dimensions, cognitive dimension (rational judgment of occupation), affective dimension (emotional attachment and sense of belonging), behavioral dimension (practical action related to occupation) and value dimension (recognition of social and personal meaning of occupation). Emotional identity, in which it plays a central regulatory role. Its development follows a certain pattern, from instability in the formative period to consolidation and deepening after entering the profession.

Academic research has mainly focused on the development of measurement tools and empirical expansion, revealing the positive correlation between occupational identity and job satisfaction, performance, etc., and has begun to pay attention to the new characteristics of the digital era. Although the relevant research started later, it focused on cultural adaptation and found that Chinese college students' career identity is more externally oriented and influenced by multiple factors such as family and society, and the relevant research provides a basis for vocational education in colleges and universities. Career identity affects individual's information processing, decision-making mode and specific behaviors in career choice, and

there is a dynamic interaction between the two.

2.2 Theoretical foundations of social expectations

The way that social expectation acts on individuals is through the process of cognitive influence, emotional reaction and behavioral performance which are intertwined to produce effects. Among them, cognitive influence refers to changing people's knowledge and perception of work with information prompts, value references, and direction of attention, so that when facing work choices, people can make choices in accordance with socially recognized standards. In the emotional aspect, stimulate the individual's homecoming needs, recognition needs and the desire for success and other psychological basis, to meet the expectations of the emotional experience enhances the obedience of people, and expected violation of the guilt and tension is a strong internal constraints; in the action aspect, prompting people to consciously carry out the employment preparation activities, career orientation and career goals of the choice of change, in line with the requirements of the expectations of important others, the interests involved in the game and the search for the right to work. The game of interests and strategies involved are complex.

The study of social expectations has evolved considerably in both theory and practice, with early explorations of the effects of teacher expectations sparking numerous subsequent empirical studies. In recent years, academics have also begun to focus on issues such as new features of social expectation communication in the digital age and the mechanism of cultural differences in social expectations. Research has focused more on the local and cultural specificity of social expectations, arguing that the special importance of Chinese family expectations in the structure of social expectations is based on the filial piety culture and collectivist values in traditional Chinese culture, and that this gives rise to greater emotional and moral normative influence. The positive and negative effects of social expectations on career choice and career development are bidirectional. Appropriate and reasonable expectations are conducive to the establishment of personal development goals and the maintenance of motivation, guiding individuals to actively learn and grow, and improving their own quality in order to increase the competitive advantage of career choice and employment; however, excessively high or irrational expectations will constrain an individual's right to free choice, resulting in giving up one's own interest in specialties and engaging in inappropriate professions, as well as anxiety and depression and other psychological disorders. The gap between ideal and reality is one of the important factors that restrict the employment quality of college students. When the real work experience is different from the expectation, it will produce disappointment and confusion and affect the individual's career commitment and development motivation. Therefore, the establishment of scientific and reasonable career expectations and effective expectation management is one of the key factors to ensure the healthy career development of individuals.

2.3 Interaction between professional identity and social expectations

As one of the classic topics in the psychological field of career development, the intricate interaction between career identity and social expectations determines the direction of people's career development. Originally proposed by Career Aspirations Theory, social expectations are constraining to career identity in the sense that people's exploratory activities are limited by the gender role norms in which they find themselves, their high social status, and their level of self-efficacy. These limitations are the effects of desired occupational boundaries on personal identity orientation.

The ternary interaction model based on social cognitive career theory reveals that individuals, environments, and behaviors interact with each other in the process of influencing

occupational identity; in which the environment exerts a certain influence on the individual, which is achieved by influencing the individual's self-efficacy and outcome expectations, and then influencing the level of his or her occupational identity. Specifically:

(1) The cognitive level is manifested in the social expectations that provide the framework of occupational information and evaluation criteria to influence the individual's cognitive construction of a particular occupation, while the existing occupational identity will selectively accept or resist certain social expectations, forming a cognitive screening and reconstruction mechanism.

(2) The affective level is reflected in the social expectations that stimulate individuals' belonging needs and identity motivation, prompting them to produce positive affective associations with occupations that meet the expectations. At the same time, a strong sense of occupational identity will also enhance the individual's emotional commitment to the relevant social expectations and value recognition.

(3) Behavioral level is realized through the mutual reinforcement of expectation compliance behavior and identity expression behavior. Individuals adjust their occupational readiness behavior to meet the expectations of important others, and this adjustment further deepens the level of their identification with the corresponding occupation.

(4) The influence on the value level is a deep-level influence, in which the values contained in social expectations and people's occupational values combine to form their own unique occupational values.

The interactions of the four dimensions constitute an organically integrated dynamic system, the complexity of which can be expressed by the multivariate interaction model:

$$Y_{career} = \beta_0 + \beta_1 PI + \beta_2 SE + \beta_3 (PI \times SE) + \sum_{i=1}^n \beta_i \times X_i + \varepsilon \quad (1)$$

where Y_{career} represents the outcome of career choice, PI denotes career identity, SE denotes social expectations, $(PI \times SE)$ is the interaction term between the two, and X_i is the other control variables.

Adolescents are more likely to undergo changes in occupational self-identity in response to social expectations, while in adulthood individuals are more stable and less susceptible to external expectations. Cross-cultural comparisons show that the interactions between cultures are different, with individuals in individualistic cultures being more inhibited by societal expectations, while in collectivistic cultures, societal expectations have a greater impact on individuals' occupational identity. In the digital age, changes in the way social expectations are communicated have new implications for the development of professional identity. New media, online professional communities, and other new vehicles can provide a new venue for the transmission of expectations and the building of identity, and the interactions in these venues are different from traditional forms of interaction; and the introduction of neuroscience into these venues provides new ways to understand the physiological basis of such interactions. The introduction of neuroscientific methods into the study provides a new way of understanding the physiological basis of such interactions. Inconsistency between occupational identity and social expectations triggers the conflict monitoring system in the prefrontal cortex, whereas congruency activates dopamine reward circuits, which supports the assumption of the relevant brain mechanisms in the interaction modeling hypothesis.

3 Research methodology

3.1 Study design

3.1.1 Research framework

This paper adopts a multi-stage progressive research framework, i.e., the analytical model based on the mixed research paradigm is shown in Fig. 1, to explore the relationship between occupational identity and social expectations in the process of influencing college students' employment decision-making. This paper firstly puts forward the hypotheses theoretically, and argues them through the survey of college student groups, and finally elaborates their inner mechanisms with relevant conclusions. Quantitative analysis is combined with qualitative analysis to ensure the rigor of the study while striving to dig deeper into the connotations. The overall approach adopted is an interpretive series of mixed research methods, i.e., large-scale quantitative research is first used to arrive at a statistical regularity of understanding. Then, in-depth interviews were utilized to seek the causal relationships behind them, so as to establish an overall grasp of the issues under study.

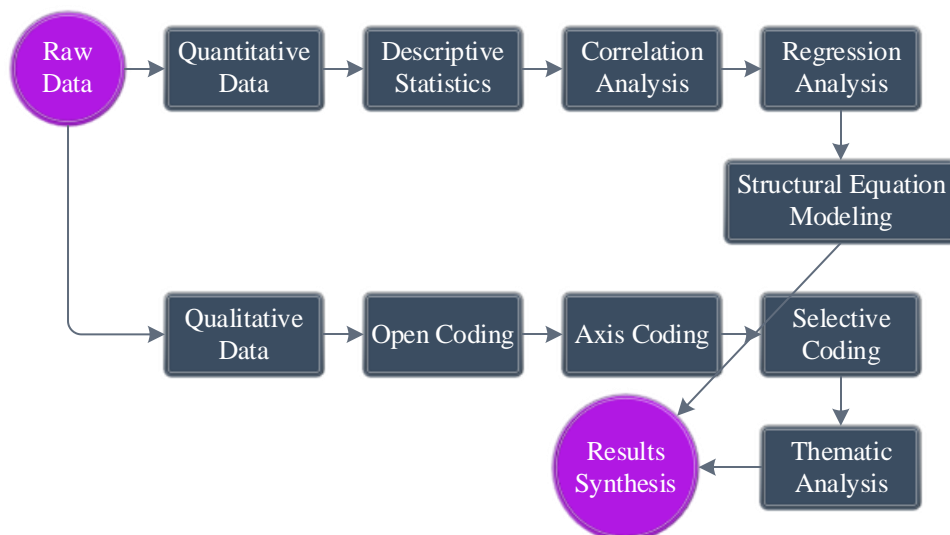


Figure 1: Research framework

The adoption of the mixed research method is based on the consideration that the influencing factors of the interaction of professional identity and social expectations are pluralistic and interactive, and not one research method can accurately reflect all situations, while multiple research methods can complement each other and support each other's evidence. At the same time, this study is based on the pragmatism perspective, with the goal of solving practical problems as the orientation, focusing on the choice of research methods. It not only respects the regularity of understanding behind the objectively existing statistical data, but also focuses on the construction of meaning behind the data, and uses different types of evidence to corroborate each other in order to enhance the validity and persuasiveness of the arguments.

3.1.2 Objects of study

Stratified whole cluster sampling was used to draw survey respondents to ensure that the sample is representative while improving the validity of the conclusions. Sampling was conducted with students enrolled in grades one to four of full-time undergraduate and specialized colleges in

China, with a stratified design according to the dimensions of region, nature of school, academic discipline, and grade, with geographic location including the eastern, central and western regions, taking into account the developed and underdeveloped regions in the eastern and western parts of the country. Schools are categorized into different types of universities, such as comprehensive universities, science and technology, teacher training, finance and economics, representing different types of school sponsors. Majors are divided into different majors such as arts, science, medicine, and arts, representing the different professional backgrounds that influence the variability of students' career identity and social expectations. The grades are from freshman to sophomore to senior, distilling the changing characteristics of each stage in career development.

The quantitative part determines the sample size based on the analysis of statistical test efficacy, and after deriving the minimum sample size in G*Power and combining the requirements of more complex statistical methods such as multiple regression, structural equation modeling and other factors such as invalid questionnaires and sample attrition, the effective sample capacity is determined to be 520 students, and the proportional stratified sampling method is adopted for the sampling of the samples. The sample size was drawn according to the total proportion accounted for by each stratum, and the results are shown in Table 1. The qualitative part of the survey was conducted by selecting a total of 30 representative respondents for semi-structured interviews among the quantitative survey respondents by means of convenience sampling method. According to the selection of factors such as the degree of professional identity, the level of social support, the major of study, family conditions and so on, to ensure that the interviewees have a certain degree of representativeness as well as coverage, according to the difference in the value of the score of professional identity will be divided into three groups (high, medium and low), and selected 10 students respectively; according to the strength of social support will be divided into three groups and all are reflected. Professional background includes major academic disciplines and is gender-balanced; family background takes into account urban-rural differences, family income, and the nature of parents' work, etc., and is designed to ensure the representativeness of the sample.

Table 1: Quantitative research sample allocation plan

Hierarchical variable	Category	N	Proportion (%)	Sampling method
Gender	Male	260	50.0	Simple random sampling
	Female	260	50.0	Simple random sampling
Grade	Freshman	130	25.0	Systematic sampling
	Sophomore year	130	25.0	Systematic sampling
	Junior year	130	25.0	Systematic sampling
	Senior year	130	25.0	Systematic sampling
Region	East region	208	40.0	Cluster sampling
	Central region	156	30.0	Cluster sampling
	West region	156	30.0	Cluster sampling
Professional	Humanities and Social Sciences	156	30.0	Stratified sampling
	Science and Engineering	182	35.0	Stratified sampling
	Medicine	104	20.0	Stratified sampling
	Art	78	15.0	Stratified sampling

3.2 Research methodology

Firstly, the research methodology followed the principles of research question orientation and multiple methods complementing each other; secondly, the quantitative stage mainly adopted the method of survey, using mature scales to collect a large amount of valid information, and analyzing and verifying the relationship between variables using simple analysis, significance correlation analysis, linear regression analysis, and path analysis. The qualitative research mainly adopted the open-ended in-depth interview method, using open-ended questions to ask respondents about the process, motivation and reasons for their career choices, and utilizing thematic analysis methods to code the interview results and construct theories. The two methods present a progressive relationship of quantitative followed by qualitative in the time series, realize the organic combination of statistical law discovery and mechanism in-depth interpretation in the function, and constitute a triangular relationship of mutual verification and supplementation in the level of evidence.

The data collection process is carried out in strict accordance with research ethics and scientific operation procedures, including the preparation stage, implementation stage and finishing stage. Among them, the preparation phase includes the selection of research tools, training of investigators, pre-survey, and the development of formal survey protocols to ensure the standardization and normalization of data collection. The implementation phase adopts a combination of online and offline methods. The online survey is released with the help of a professional questionnaire website and promoted in social media and major university websites to ensure sample coverage. The offline survey was distributed on-site at the universities for in-depth research to improve the recovery rate of the questionnaire and the quality of the data. Face-to-face, one-on-one in-depth interviews are conducted with respondents in a quiet environment, each interview lasts 60 to 90 minutes, and the entire process is recorded and instantly organized and transcribed. The transcription process includes data cleaning, coding input, quality verification, etc., forming a complete database and backup. The data analysis method presents holistic and diverse characteristics, and the statistical data analysis follows the process from descriptive statistics to inferential statistics, from one-dimensional analysis to multivariate analysis, and then from cross-sectional analysis to time series analysis. Descriptive statistics can reflect the main information of the sample as well as the distribution among the variables, which is the basis for the subsequent analysis.

Correlation analysis was conducted to test the strength of the association between occupational identity and social desirability, and the correlation coefficient was calculated using the formula:

$$r = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2 \sum_{i=1}^n (Y_i - \bar{Y})^2}} \quad (2)$$

where X_i and Y_i represent the observed values of occupational identity and social desirability, respectively, and \bar{X} and \bar{Y} are the mean values of the corresponding variables.

Multiple regression analysis was conducted to explore the predictive effect of the core variables on employment choices, and the regression equation took the form:

$$Y = \beta_0 + \beta_1 PI + \beta_2 SE + \beta_3 (PI \times SE) + \sum_{j=1}^k \gamma_j C_j + \varepsilon \quad (3)$$

where Y denotes the propensity to make employment choices, PI is occupational identity, SE is social expectation, $(PI \times SE)$ is the interaction term, C_j is the control variable, and

ε is the random error term.

Structural equation modeling tests the theoretical assumptions and mediating effects, and presents the interaction mechanism between the factors in a pathway manner. Qualitative data analysis was coded at three levels according to Zagan theory, including open coding, axial coding, and selective coding. The data were analyzed qualitatively with the help of NVivo software. Uniformity and accuracy of coding were ensured. This study has three innovations in research design:

First, in terms of theory, various theoretical resources such as career development theory, social cognitive theory, and cultural psychology theory were integrated to form a theoretical analysis framework applicable to Chinese culture;

Second, the methodological approach combines quantitative statistical analysis with qualitative in-depth interviews, and utilizes a sequential explanatory design to corroborate different types of evidence. In terms of technology application, modern information technology is used to enhance the efficiency of the research and the accuracy of data analysis, and advanced technologies such as online questionnaire system, statistical analysis software, and qualitative analysis software are used as the technical guarantee of this study. In terms of the overall structure, the study has taken into account the feasibility, scientificity, and novelty of the study, and provided methodological support for further exploration of the interaction between professional identity and social expectations.

3.3 Data collection

Test preparation is the first step in the implementation of this survey. After fully understanding the relevant knowledge and the basic principles of measurement, this paper proceeds to develop a valid questionnaire that can accurately reflect the occupational identity and social expectations of college students. In the process of measuring college students' occupational identity, after consulting data, consulting experts, test-testing and repeated modifications, a more stable scale of college students' occupational identity was formed, which includes four parts: occupational values, occupational identity, occupational emotional experience and aspirations for occupational development. The reliability indicators of each dimension of the questionnaire are shown in Table 2. Of these, there are seven topics under each dimension, totaling 28 items. This scale uses a five-point Likert-type scale for assessment. "Strongly Disagree", "Not So Disagree", "Neutral", "Relatively Agree", and "Strongly Agree" are respectively assigned scores of 1 to 5. The score ranges from 28 to 140, with a higher score indicating a higher level of career identity. The Social Expectations Scale, on the other hand, is measured from four dimensions: family expectations, friends' expectations, school expectations, and socio-cultural expectations with 6 questions per entry, totaling 24 questions, also on a 5-point scale, with a total score of 24-120 points. In addition, this paper adds a complete set of demographic information sections to the questionnaire, including questions on gender, age, grade, major studied, place of origin, family economic level, parental occupation and education level, as control variables in the analysis of variance and moderated effects tests. The entire scale was designed in a simple, easy-to-understand and logical manner, and the estimated time for completion was 15-20 min to ensure that sufficient information was obtained without fatiguing the subjects.

Multiple methods were used to test the reliability and validity of the questionnaire to ensure the scientific validity of the scale. In terms of content validity, expert evaluation was adopted, and 10 experts in educational psychology, career development, and social psychology were selected to evaluate the degree of content relevance, the reasonableness of wording, and the appropriateness of structure of each topic in the questionnaire, and the inter-expert concordance was above 0.85. In terms of structural validity, this study adopts the method of exploratory factor analysis combined with validation factor analysis, with a KMO statistic value of 0.892

and a Bartlett's test of sphericity of $P < 0.001$, which is suitable for factor analysis. The factor structure obtained from exploratory factor analysis basically conformed to the theoretical assumptions, and the cumulative variance contribution rate was 67.8%, and the validated factor analysis model had a good fit index, which met the standards recommended by psychometrics. The internal consistency and retesting were used in the reliability testing process, and the Cronbach's alpha coefficient of the Occupational Identity Scale was 0.91, and the Cronbach's alpha coefficient of the Social Expectations Scale was 0.88, and the reliability coefficients of all dimensions were all greater than 0.75, which indicated that the scales had a good internal reliability. The re-test reliability was assessed by repeated measurements at two-week intervals, and the correlation coefficient reached 0.84, indicating that the scale has good stability.

Table 2: Reliability and validity indicators of each dimension of the questionnaire

Scale dimension		N	Cronbach's	Factor loading range	AVE	CR
Professional identity	Professional value identification	7	0.87	0.72-0.85	0.61	0.89
	Role identity	7	0.84	0.68-0.82	0.58	0.87
	Emotional belonging	7	0.89	0.75-0.88	0.64	0.91
	Development expectations	7	0.86	0.71-0.84	0.59	0.88
Social expectations	Family expectations	6	0.82	0.69-0.81	0.56	0.86
	Peer expectations	6	0.79	0.65-0.78	0.53	0.84
	Expectations of educational institutions	6	0.85	0.73-0.86	0.62	0.89
	Social and cultural expectations	6	0.83	0.70-0.83	0.57	0.87

A two-step stratified random sampling method was used to survey undergraduate students enrolled in general colleges and universities in mainland China, stratified by geography, college level, major category and year of enrollment nationwide, and 12 colleges and universities were selected in three zones: east, middle and west. Five hundred and eighty questionnaires were distributed, and 520 valid questionnaires were returned (validity rate of 89.7%), with the sample covering the characteristics of major demographic variables. The data collection method of the survey was a combination of online and fieldwork, with the "Questionnaire Star" distributed online and centrally distributed and retrieved on campus, with a ratio of online to offline retrieval of around 6:4. All work was done with the informed consent of the subjects and in accordance with the relevant principles. Among them, the in-depth interviews belonged to purposive sampling, and a total of 30 representative people were selected from the questionnaire respondents for semi-structured in-depth interviews, which mainly involved attitudes toward their own careers as well as the influence of the surrounding environment on them, etc., and lasted for one to one and a half hours, and the interviews were recorded at the same time. Strict quality control was exercised during the survey process, such as logic checking in questionnaire design, inverse indicators, vacancy value processing and interviewer training, audio-recording verification and transcription double-checking, etc. A total of four months were spent on data collection work, and a good foundation was laid for subsequent analysis.

3.4 Methods of statistical analysis

The questionnaire data analysis model designed in this paper is a combination of quantitative and qualitative methods, and conducts layer-by-layer in-depth research to explore the specifics

of the issues of the factors and degree of influence of vocational identity and social expectations on college students' career choices. This paper uses SPSS 26.0 and Mplus 8.0 software to complete the quantitative statistical analysis of data, and carries out the thematic analysis of in-depth interview data in NVivo 12, so that the treatment can ensure the effectiveness and accuracy of the whole process. Quantitative statistical analysis is a process from descriptive to inferential and univariate to multivariate, in which descriptive statistics include mean, variance, skewness, kurtosis, etc. to describe the research object in general. Normality test adopts Kolmogorov-Smirnov test combined with Shapiro-Wilk test as one of the basic conditions of parametric test. Correlation analysis used Pearson's product-difference correlation and Spearman's rank correlation to analyze the relationship between each factor of occupational identity and each factor of social expectations, and $\alpha=0.05$ was used as the criterion for determining the significance and 95% CI was given to estimate whether the degree of correlation was reliable or not.

4 Findings

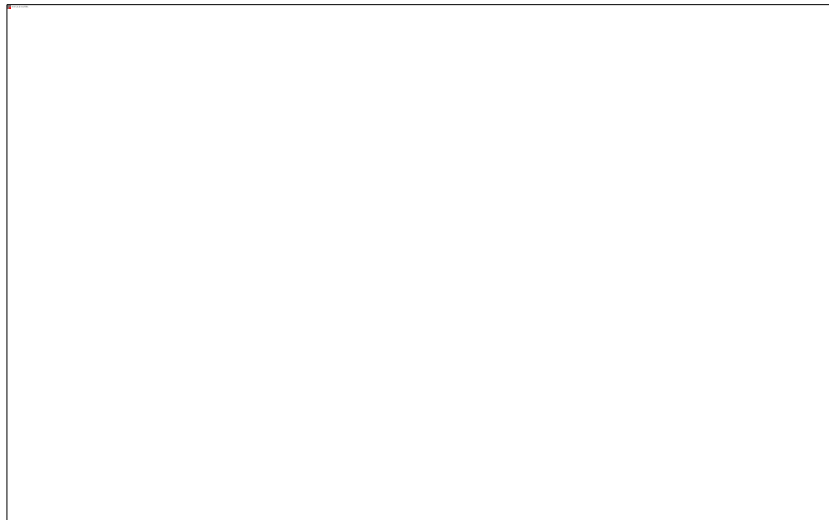
4.1 Influence of professional identity on employment choices

Occupational identity is a general term for people's value recognition, role acceptance and emotional belonging to a certain occupational field, which has a fundamental and decisive role in college students' employment choice. The influence of occupational identity on employment choice is shown in Table 3, and the relationship between occupational identity and employment choice tendency is shown in Figure 2, which shows that there is a significant positive correlation between occupational identity and employment choice tendency ($r = 0.672$, $P < 0.001$), suggesting that there is a significant difference between occupational identity on the influencing factors. Using multiple regression, this study found that occupational identity can explain 48.5% of employment choice intention, indicating that occupational identity is an important psychological factor influencing college students' employment choice. And according to the results of path analysis, occupational identity determines employment choice intention from different perspectives through the influence of sense of value, sense of role, sense of belonging and sense of development of occupation respectively. The greatest influence was found in occupational value identity ($\beta = 0.324$, $p < 0.001$), followed by emotional belonging ($\beta = 0.287$, $p < 0.001$), and finally role identity ($\beta = 0.231$, $p < 0.001$) and developmental expectations ($\beta = 0.198$, $p < 0.01$). This suggests that the subcomponents of occupational identity have varying degrees of influence on college students' propensity to choose a career and reflect different modes of action of the intrinsic structural features: occupational value identity influences individuals' preferential judgments about careers in the form of values fit. Emotional belonging is to increase the individual's emotional attachment to a certain type of occupation through the mechanism of emotional investment. Role identification is the mechanism of identity construction, which prompts individuals to accept a certain occupational role. Developmental expectation is to mobilize the individual's consciousness of career pursuit through the mechanism of looking into the future.

Table 3: The Impact of professional identity on Employment choices

Dimension of professional identity	Mean	SD	Correlation coefficient	Regression coefficient	Sig.
Professional value identification	3.78	0.82	0.634***	0.324***	p<0.001
Role identity	3.65	0.76	0.587***	0.231**	p<0.01
Emotional belonging	3.71	0.89	0.612***	0.287***	p<0.001
Development expectations	3.82	0.74	0.569***	0.198**	p<0.01
Total score of professional identity	3.74	0.68	0.672***	0.485***	p<0.001

Note: ***p<0.001, **p<0.01, *p<0.05

*Figure 2: The relationship between professional identity and employment choice tendency*

In addition, the information obtained from individual interviews also deepened our understanding of the influential role of vocational identity. In the course of individual interviews with 30 representative students, it was learned that the role of vocational identity on college students' career choice behaviors is not absolutist and varies depending on many factors.

When it comes to career choice, students with high career identity are more certain about their goals and have a certain degree of confidence. A computer science student said, "I think I have determined my future career direction relatively early to be a programmer this kind of work, because I have determined in my second year of college that I want to engage in software development work in computer-related majors in the future, on the one hand, I like the process of this work, and on the other hand, I also think that this is a job that can make me realize my own potentials and gain fulfillment." It can be seen that their willingness to choose a career is greatly influenced by their personal career value orientation, and they make choices based on their own inner feelings.

On the contrary, among the students with lower career identity, they show more indecision. For example, a student majoring in management said, "I don't know what I want to do in the future, I studied management, but I'm not sure if I really want to work in management, sometimes I feel that my major is quite useful, and sometimes I feel that what I studied is so vague, I don't know what I can do after graduation". I don't know what I can do after graduation". The above words reflect the unfavorable impact of insufficient career identity on career choice, and it is difficult for those with low career identity to establish their career interest and development direction.

4.2 Impact of social expectations on employment choices

Since the family is the place where individuals are initially socialized, it influences college students' employment to a significantly greater extent than all other sources of expectations. The influence of social expectations on employment choice is shown in Table 4, and its influence is emphasized in Figure 3. The survey showed a significant positive correlation between social expectations and employment choice propensity ($r=0.589$, $p<0.001$), and the results of multiple regression analysis showed that social expectations explained 38.7% of the total variation in employment choice propensity. Path analysis shows the greatest influence on family expectations ($\beta = 0.356$, $p < 0.001$), which is related to the fact that China attaches importance to family education, and the parents' occupational expectations of their children largely represent an expectation of the whole family; followed by expectations of the educational institutions ($\beta = 0.298$, $p < 0.001$), which indicates that the educational institutions play an important role in cultivating college students, and to a certain degree can be an important reference basis for college students' employment. Social and cultural expectations ($\beta = 0.247$, $p < 0.01$) have a small degree of influence, but the coverage is wide and long-lasting, and they have an invisible impact on students' employment outlook. The expectation from peers is the smallest ($\beta=0.186$, $p<0.05$), which may be due to the existence of competition between college students and the different values of each other, and the opinions of their classmates are mostly for reference only, but not decisive.

Table 4: Statistics on the impact of social expectations on employment choices

Dimension of professional identity	Mean	SD	Correlation coefficient	Regression coefficient	Sig.
Family expectations	3.92	0.78	0.623***	0.356***	$p<0.001$
Peer expectations	3.45	0.85	0.467*	0.186*	$p<0.05$
Expectations of educational institutions	3.73	0.72	0.578***	0.298***	$p<0.001$
Social and cultural expectations	3.68	0.81	0.534**	0.247**	$p<0.01$
Total score of social expectations	3.70	0.64	0.589***	0.421***	$p<0.001$

Note: *** $p<0.001$, ** $p<0.01$, * $p<0.05$

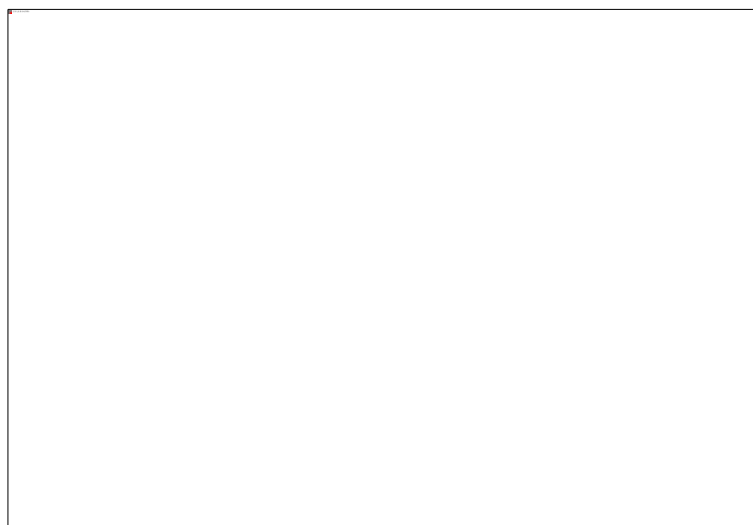


Figure 3: Analysis of the impact of social expectations on employment choices

In the course of in-depth interviews with 30 respondents, it was found that the psychological mechanism of being influenced by social expectations is very complex and there are obvious

group differences. Those who felt a higher degree of social expectations were more inclined to external factors in making choices of majors as well as employment directions, and one student majoring in economics said, "My dad and my mom want me to go to work in a bank because it's relatively stable and has a good future, but I want to open my own store or something myself, but they've spent quite a bit of money for me to come to school, so I'd better think about the bank first". This shows that under the influence of family expectations, people constrain their behavior more from the perspective of moral obligation. They tend to think that it is their responsibility to fulfill what is expected of them by their family.

The path of influence of school expectations is more informed by professional knowledge, as the computer science major said, "The department leaders always emphasize the prospect of artificial intelligence and big data development for us to focus on, and my teacher's prediction made me choose such a direction in my job search." Social and cultural expectations are imperceptible but subconsciously affecting college students. A law student said, "The leaders of the department always emphasize the prospect of the development of artificial intelligence and big data, so that we focus on it, and the teacher's prejudgement made me choose such a direction in my job search." The path of influence of peer group expectations contains both positive positive communication and negative negative pressure.

4.3 Analysis of the interaction between professional identity and social expectations

The influence of social expectation and career identity on college graduates' career choice is not a simple additive process, but there is a complex interaction process, a multi-directional interaction process. The interaction between social expectation and career identity is shown in Table 5 and shown in Figure 4. Further analyzing the interaction term, the results show that the higher the level of identification, the higher the expectation of family, friends and society for the field, and the higher the probability of the field being chosen, and the coefficient of the interaction term between the two is 0.213 ($\alpha=0.00$), which is significantly different at the 0.01 level, i.e., the two are positively correlated. However, under a low level of professional identity, for every unit increase in social capital, college students' career choice intention increases by 0.298 units; on the contrary, under a high level of professional identity, for every unit increase in social capital, college students' career choice intention increases by 0.634 units. This differential mechanism of action suggests that internal drive and external pressure are not simply additive, but that there is some psychological regulation.

Table 5: Interaction between professional identity and social expectations

Interaction type	Regression coefficient	SE	t value	Sig.
The main effect of professional identity	0.485	0.067	7.24	p<0.001
The main effect of social expectations	0.421	0.059	7.13	p<0.001
Interaction effect	0.213	0.045	4.73	p<0.001
Interaction among science and engineering majors	0.287	0.078	3.68	p<0.001
Interaction between humanities and social sciences	0.198	0.071	2.79	p<0.01
Medical professional interaction	0.156	0.083	1.88	p<0.05
Interaction of teacher education majors	0.142	0.076	1.87	p<0.05
High professional identity conditions	0.634	0.089	7.12	p<0.001
Low occupational identity conditions	0.298	0.072	4.14	p<0.001

Note: Control variables include gender, grade, family background, etc

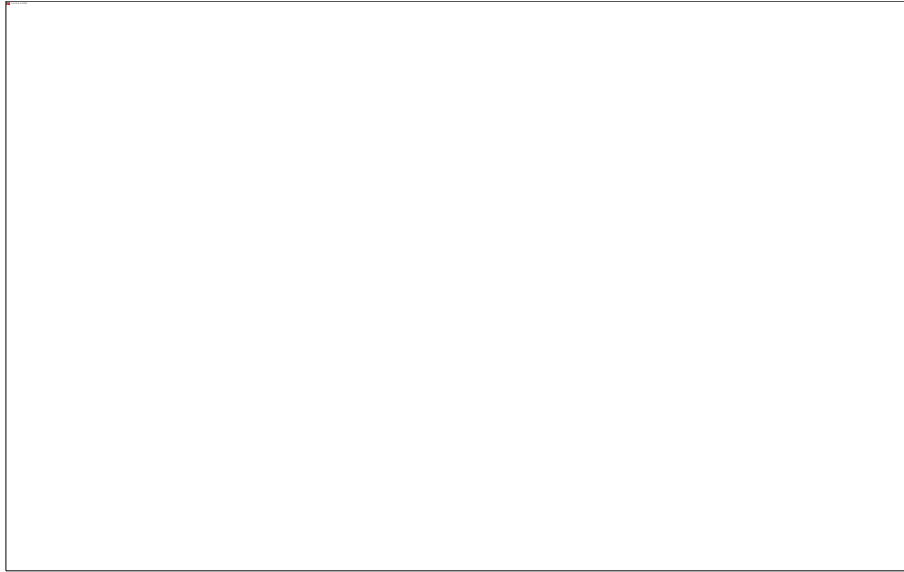


Figure 4: The interaction between professional identity and social expectations

The interaction term coefficients have significantly different development paths and stages with the change of grade level, which indicates that this factor changes with the increase of the level of college students' awareness of employment and the perception of social pressure. The interaction effect is smaller when the grade is 1 ($\beta=0.127$, $P<0.05$), which is due to the fact that first-year university students have just entered the school gate, and their understanding of their majors is still in the stage of perceptual awareness, on the one hand, students have not formed a stable career psychological structure. On the other hand, in the absence of employment pressure, the perception of students' social expectations is ambiguous and passive, thus lacking the basis for substantive interaction between the two. As the degree of understanding of the major and career exploration increased, the interaction term in sophomore and junior year showed an increasing trend and then leveled off (sophomore: $\beta = 0.198$, $p < 0.01$; junior year: $\beta = 0.245$, $p < 0.001$), the main reason is that students entering their sophomore and junior years began to have a more in-depth understanding of this professional knowledge through the courses taken, internships and employment, and participation in career courses, etc., and the career identity became clear and specific and deepened. At the same time, with the graduation and the gradual emergence of employment pressure, they become more sensitive to and concerned about the career expectations from their families, peers and the society, and their internal identity and external expectations begin to produce substantial collision and integration. Fourth year is the last year of university, facing the important decision point in life of graduating and looking for a job, with the largest interaction effect ($\beta = 0.289$, $p < 0.001$), students need to balance the contradiction between their self-will and social needs in a relatively short period of time, and make reasonable choices to take into account both their self-ideal and objective constraints. This looming real-world pressure forces the interaction mechanism to be maximized.

In addition, the impact of interpersonal interactions among female students was greater than that of male students in terms of gender (female $\beta = 0.231$, $p < 0.001$; male $\beta = 0.195$, $p < 0.01$). This may be due to the fact that female students will pay more attention to interpersonal, family, and social factors when choosing a job, so they are more susceptible to the influence of external expectations. At the same time more pursuing the balance and coordination between work values and external environment. In addition, can not be ignored is the family socio-economic status in which to play a moderating role, from the high socio-economic status of the family has a greater interaction effect, because it tends to have a richer social capital and cultural capital,

the children's career development has a clearer, higher expectations, and can provide more resources for the development of their sense of identity and support, to provide more opportunities for the platform, so that the inner They can also provide more resources and support for the development of their professional identity and more opportunities and platforms, so that it is easier for internal identity and external expectations to reach a positive interaction and synergistic development.

5 Conclusion

Based on the questionnaire of 520 college students and interviews with 30 students, this study examines how it affects college students' career choices in terms of career identity and social expectations. The so-called occupational identity refers to a psychological state formed by people's value recognition, role competence, and emotional inclination towards a certain type of occupation, which plays a key role in the process of college students' career choice. It is positively predictive of the propensity to make employment choices ($r=0.672$, $p<0.001$), explaining 45.2% of its variance. Among them, the influence of occupational value identity was the largest ($r=0.324$, $p<0.001$), followed by affective belonging ($\beta=0.287$, $p<0.001$), which indicated that there was a difference in the role of the influence of different dimensions, which might stem from the heterogeneity among the different constituent dimensions of occupational value identity. Social expectations, as an external influencing force from family, peers, educational institutions and social culture, had a significant impact on college students' employment choices ($r=0.589$, $p<0.001$), explaining 38.7% of the variance in the propensity to make employment choices. The strength of the influence of family expectations was the most significant ($\beta=0.356$, $p<0.001$), reflecting the far-reaching influence of family-oriented value orientation in traditional Chinese culture. Social expectation and professional identification showed a spiraling interactive synergistic effect, with a regression coefficient of 0.213 ($p<0.001$) for the interaction term, which alone explained 12.8% of the variance in employment intention. For every unit increase in social expectation, students' employment intentions increased by 0.634 units when they possessed a high degree of professional identity, whereas they could only obtain an effect value of 0.298 units of social expectation with a weak sense of professional identity.

References

- [1] Cruess, S. R., Cruess, R. L., & Steinert, Y. (2019). Supporting the development of a professional identity: general principles. *Medical teacher*, 41(6), 641-649.
- [2] Wei, L. Z., Zhou, S. S., Hu, S., Zhou, Z., & Chen, J. (2021). Influences of nursing students' career planning, internship experience, and other factors on professional identity. *Nurse education today*, 99, 104781.
- [3] Tomlinson, M., & Jackson, D. (2021). Professional identity formation in contemporary higher education students. *Studies in Higher Education*, 46(4), 885-900.
- [4] Starcic, A. I., Barrow, M., Zajc, M., & Lebenicnik, M. (2017). Students' Attitudes on Social Network Sites and their Actual Use for Career Management Competences and Professional Identity Development. *International Journal of Emerging Technologies in Learning*, 12(5).

- [5] Zhang, P. G., & Tu, C. C. (2023). Impact of Chinese College Students' Professional Identity on Their Academic Achievement: Career Maturity as a Mediator. *International Journal of Educational Methodology*, 9(2), 397-408.
- [6] Zhang, T., Feng, J., Jiang, H., Shen, X., Pu, B., & Gan, Y. (2021). Association of professional identity, job satisfaction and burnout with turnover intention among general practitioners in China: evidence from a national survey. *BMC Health Services Research*, 21(1), 382.
- [7] Sabanciogullari, S., & Dogan, S. (2015). Relationship between job satisfaction, professional identity and intention to leave the profession among nurses in Turkey. *Journal of nursing management*, 23(8), 1076-1085.
- [8] Zhong, Y., Ma, H., Zhang, C. C., Jiang, Q. Y., Li, J., Liao, C. J., ... & Shu, L. (2024). Professional identity, job satisfaction, and turnover intention among Chinese novice nurses: A cross-sectional study. *Medicine*, 103(3), e36903.
- [9] Saniuk, S., Grabowska, S., & Gajdzik, B. (2020). Social expectations and market changes in the context of developing the Industry 4.0 concept. *Sustainability*, 12(4), 1362.
- [10] Khmil, V. V., & Popovych, I. S. (2019). Philosophical and psychological dimensions of social expectations of personality. *Anthropological Measurements of Philosophical Research*, (16), 55-65.
- [11] Sharif, N., Ahmad, N., & Sarwar, S. (2019). Factors influencing career choices. *IBT Journal of Business Studies (JBS)*, 1(1).
- [12] Aslan, Y., & Koçak, O. (2025). How do family influence on career choices and perceived social support affect students' life satisfaction in Turkey? The role of vocational outcome expectations as mediator. *International Journal for Educational and Vocational Guidance*, 25(2), 1-18.
- [13] Wang, R., Wang, M., & Georgiev, G. V. (2023). The influence of personal evaluation and social support on career expectations of college students. *Behavioral Sciences*, 13(12), 992.
- [14] Brennan, G. J., & Gallagher, M. (2017). Expectations of choice: an exploration of how social context informs gendered occupation. *Irish Journal of Occupational Therapy*, 45(1), 15-27.