



Examining the Correlation-ship Between Learning Motivation and Major Identity of Normal Students in Local Undergraduate Universities

Yan Li

School of Education Science, Weinan Normal University, Weinan, Shaanxi, China

Abstract: The study examined the level of learning motivation, the state of major identity, and the relationship between learning motivation and major identity. A questionnaire was used to survey 342 normal students in local undergraduate universities. The study suggests these findings. (1) Learning motivation and major identity were at intermediate levels. (2) learning motivation and major identity were significantly different on some demographic variables. (3) External motivation was higher than internal motivation. (4) The level of professional sentiment was the highest and professional behavior was the lowest. (5) There was a significant positive correlation between major identity and learning motivation, major identity positively predicts learning motivation.

Keywords: learning motivation, major identity, relevance, normal students

1. Introduction

China's higher education has entered the stage of popularization, but the growth of quantity does not directly represent the improvement of quality. Balancing the relationship between expanding the scale of higher education and improving its quality is an inevitable requirement for building a strong educational country. In recent years, the perspective of evaluating the quality of higher education has shifted from focusing on academic value to focusing on student-centered[1]. More and more colleges and universities have begun to focus on stimulating students' learning motivation and major identity. Although college students are maturing physically and psychologically, many of them are still in a state of confusion when they enter college and face a brand new learning environment and different learning styles, with insufficient enthusiasm and insufficient motivation for learning. In addition, some students don't know much about their majors, thus lacking the initiative and enthusiasm to learn, and these problems will further affect the effect and quality of learning. It has been shown that the level of students' motivation and the strength of their major identity are significantly correlated with learning outcomes[2-4], but is there a correlation between the learning motivation and major identity? Furthermore, is there a predictive relationship between these two variables? However, there are not many studies in this field. Most of studies were centered on sports majors, medical majors, and so on, and few studies focus on normal students. This paper attempts to fill the gaps by exploring the correlation-ship between the learning motivation and major identify based on the survey data of the normal students in local undergraduate universities, and further examines the influence of relevant demographic variables on motivation and major identity, so as to provide suggestions for improving the quality of normal students training.

2. Literature Review

2.1 Researches on learning motivation

Learning motivation refers to the psychological disposition that triggers and sustains a learner's learning behavior and moves the learner toward certain academic goals. British scholars Williams and Burden proposed a social constructivist theory of motivation, and categorized learning motivation into internal and external motivation. Internal motivation includes nine factors such as intrinsic inclination towards the activity, interest, curiosity, etc., while external motivation consists of a wide range of environmental factors such as significant others, the nature of interactions with others, and the learning environment[5]. It has been shown that internal motivation tends to be more stable and persistent than external motivation, and learners who hold internal motivation show higher motivation in learning activities[6]. Factors affecting learning motivation are also diversified, for example, basic education is more focuses on the acquisition of knowledge, so students' learning motivation is greatly influenced by external factors such as examination, teacher-student relationship, family pressure, etc., whereas university education has a wider focus and more diverse pathways, and students pay more attention to the applicability and practicability of the learning content, so the proportion of internal motivation will be increased. There are also many versions of test scales about college students' learning motivation, although there are differences in

observation indexes, but the overall measurement is from the two aspects of internal motivation and external motivation, as shown in Table 1.

Table 1. Statistics of the main scales of college students' motivation[7-10]

Researcher (Year of presentation)	Composition of learning motivation variables	
	internal motivation	External motivation
Ausubel (1978)	Cognitive Drive: acquisition of knowledge and skills	Self-enhancement Drive: to gain some status and honor Affiliative Drive: to be recognized by others
Amabile (1994)	Purpose Determination; Competence; Task Engagement; Curiosity; Enjoyment; Interest	Focus on competition; Evaluation; Recognition; Money or other tangible incentives; Constraints from others
Chi Liping (2006)	Challenging; Enthusiasm	Dependence on others' evaluations; Selection of simple tasks; Focus on interpersonal competition; Reward-seeking
Tian Lan (2006)	Knowledge-seeking interest; Competence pursuit	Reputation acquisition; Altruistic orientation

2.2 Researches on major identity

Some scholars usually equate the concept of 'major identity' with 'occupational identity', and believe that major identity is the individual's sense of identification with the profession in which he or she is engaged[11]. The Chinese scholars Wang Ding-ming and Liu Yong-cun believe that major identity refers to the individual's acceptance and recognition of the major on the basis of cognition and understanding of the major studied, accompanied by positive attitudes and proactive behaviors to explore the major[12]. Regarding the consists of major identity, the cognition, sentiment, and behavior are commonly considered in most of studies, a few studies also proposed that the consists of major identity should include professional evaluation, professional commitment, professional support and other aspects[13-15]. The influencing factors of major identity can be divided into objective factors such as social evaluation, school policies, curriculum, teaching methods, etc., and subjective factors mainly involve personal interests, interpersonal relationships, and self-qualification[16-17]. Regarding the measurement tools of professional identity, the composition of the dimensional indicators is different for different research purposes. Qin Pan-bo measured college students' professional identity in four aspects: cognition, sentiment, behavior, and appropriateness[18]. Fu Li-hong and Li Mei-jie's measurements mainly include three dimensions: professional cognition, professional sentiment, and professional behavior[19].

3. Research Design

3.1 Sample

This study selected normal students of a local undergraduate college in Shaanxi Province as the survey subjects, involving students of four grades from freshman to senior in the university. Given the limitations of the objective conditions related to the survey process, this study mainly utilized the Questionnaire Star website platform to design the questionnaire, and distributed the questionnaire through the WeChat platform. A total of 368 questionnaires were returned, of which 342 were valid, giving an effective return rate of 93%.

3.2 Questionnaire

The questionnaire used in this study consists of three parts, the first part is the basic information of the individual. The second part is the learning motivation scale, which mainly adopts the method of Tian Lan[10] to measure the learning motivation from the four dimensions: knowledge-seeking interest, competence pursuit, reputation acquisition, and altruistic orientation, with a total of 34 items, among which there are 11 items for knowledge-seeking interest and 8 for competence pursuit, which are 19 items measuring internal learning motivation; 7 items for reputation acquisition, and 8 items for altruistic orientation, and these 15 items measure external learning motivation. The third part is the major identity scale, which mainly adopts the method of Fu Lihong[19] to measure the major identity from the three dimensions: professional cognition, professional sentiment, and professional behavior, with a total of 22 items, including 8 items of professional cognition, 8 items of professional sentiment, and 6 items of professional behavior. Prior to the commencement of the formal investigation, 200 sample data are used to test the reliability and validity of two Likert-5-point scales, which shows that the value of Cronbach's alpha and KMO are 0.934 and 0.92 respectively in the learning motivation scale, and the value of Cronbach's alpha and KMO are 0.898 and 0.903 respectively in the major identity scale. The test results demonstrate both two Likert-5-point scales perform well.

3.3 Hypotheses

The research hypotheses of this study are as follows:

H1: The learning motivation and major identity of normal students in local undergraduate universities were at modest levels

H2: The significant differences in demographic variables were present in both learning motivation and professional identity.

H3: There is a significant correlation between learning motivation and major identity.

H4: The level of major identity positively predicts the level of learning motivation.

4. Analysis

4.1 Sample description

Considering the needs of the study and the characteristics of the survey respondents, gender, grade, major category, and ways to choose a major were finally determined as the basic information of the students, and the composition of the basic information of the empirical sample is shown in Table 2.

Table 2. Composition of basic information of the empirical sample

Basic Information	Category	Number of people	Proportions
Gender	Male	89	26.02%
	Female	253	73.98%
Grade	Freshman year	163	47.66%
	Sophomore year	106	30.99%
	Junior year	44	12.87%
	Senior year	29	8.48%
	Humanities and social specialties	167	48.83%
Major category	Science and engineering specialties	164	47.95%
	Arts and Physical education specialties	11	3.22%
	Autonomous choice	221	64.62%
Ways to choose a major	Parental or other wishes	50	14.62%
	Transfer specialty	71	20.76%

4.2 Situational analysis of learning motivation

4.2.1 Analysis of the general situation of learning motivation

The purpose of descriptive analysis is to summarize and describe the whole picture of a set of data in order to better understand the information contained in these data. The Overall level of learning motivation of normal students in local undergraduate universities is shown in Table 3 below.

Table 3. Overall level of learning motivation of normal students in local undergraduate universities

Dimension	Number of questions	Mean	Standard deviation
Internal learning motivation	Knowledge-seeking Interest	11	3.02
	Competence Pursuit	8	2.65
External learning motivation	Reputation Acquisition	7	2.99
	Altruistic Orientation	8	3.21
Total Learning Motivation Scale	34	3.00	0.32

The overall mean score of learning motivation of normal students in local undergraduate universities is 3.00, which is the same as the theoretical median of 3.00, which means that the students' learning motivation is at an intermediate level. The mean values of the four dimensions in descending order are: altruistic orientation, knowledge-seeking interest, reputation acquisition, competence pursuit, and it can also be seen that the external learning motivation of normal students is greater than the internal learning motivation. This shows that the overall level of learning motivation of normal students in local undergraduate universities is not optimistic, especially the internal learning motivation needs to be strengthened.

4.2.2 Test for differences in learning motivation

Difference analyses were done to analyze the learning motivation status of the normal students under different variables such as gender, grade, major category, and ways to choose a major, respectively. It is found that there is no significant difference in the level of learning motivation of normal students in terms of gender and major category, but there is a significant difference in terms of the variables of grade and ways to choose a major.

(1) Comparison of the differences in 'grade'.

The differences in learning motivation levels of normal students in different grades are mainly in altruistic orientation ($p=0.006<0.01$) and overall level of motivation ($p=0.025<0.05$), and there are no significant differences in the other dimensions, as shown in Table 4. The results of the Least Significant Difference (LSD) Post Hoc Comparison show that this difference is reflected in the fact that freshman scored significantly lower than sophomore and senior students on altruistic orientation and the overall level of learning motivation.

Table 4. Differences in learning motivation of normal students in local undergraduate universities by grades

Dimension	Grade (mean± standard deviation)				F	p
	Freshman year	Sophomore year	Junior year	Senior year		
Knowledge-seeking Interest	2.96±0.64	3.20±0.70	2.76±0.53	3.14±0.66	1.820	0.149
Competence Pursuit	2.62±0.41	2.72±0.54	2.55±0.45	2.68±0.56	0.518	0.671
Reputation Acquisition	2.92±0.41	3.03±0.60	2.97±0.42	3.09±0.70	0.457	0.713
Altruistic Orientation	3.03±0.36	3.30±0.48	3.26±0.46	3.47±0.43	4.410	0.006**
Learning Motivation Overall	2.90±0.23	3.09±0.38	2.95±0.26	3.15±0.37	3.263	0.025*

(2) Comparison of the differences in 'ways to choose a major'.

Differences in learning motivation on the variable of 'ways to choose a major' are mainly reflected in knowledge-seeking interest ($p=0.006<0.01$) and altruistic orientation ($p=0.034<0.05$), and there are no significant differences in the other dimensions, as shown in Table 5. Further analysis of the differences in the dimensions of knowledge-seeking interest and altruistic orientation, the results show that the mean scores between the groups in these two dimensions are: autonomous choice>parental or other wishes>transfer specialty.

Table 5. Differences in learning motivation of normal students in local undergraduate universities on the variable of 'ways to choose a major'

Dimension	Ways to choose a major (mean± standard deviation)			F	p
	Autonomous choice	Parental or other wishes	Transfer specialty		
Knowledge-seeking Interest	3.32±0.66	3.12±0.48	2.83±0.67	5.345	0.006**
Competence Pursuit	2.57±0.46	2.65±0.48	2.80±0.49	1.942	0.149
Reputation Acquisition	3.09±0.52	2.81±0.51	2.94±0.48	2.450	0.092
Altruistic Orientation	3.30±0.47	3.25±0.41	3.02±0.37	3.504	0.034*
Learning Motivation Overall	3.07±0.33	2.99±0.31	2.90±0.31	0.071	0.932

4.3 Situational analysis of major identity

4.3.1 Analysis of the general situation of major identity

The overall professional identity of normal students in local undergraduate universities is shown in Table 6 below.

Table 6. Overall level of major identity of normal students in local undergraduate universities

Dimension	Number of questions	Mean	Standard deviation
Professional Cognition	8	3.14	0.59
Professional Sentiment	8	3.31	0.71
Professional Behavior	6	2.67	0.75
Total Major Identity Scale	22	3.05	0.43

The overall mean score of major identity of normal students in local undergraduate universities is 3.05, which is very close to the theoretical median of 3.00, which means that the overall degree of major identity of normal students is not high,

and the mean values of the three dimensions in descending order are: professional sentiment, professional cognition, and professional behavior.

4.3.2 Test for differences in major identity

Differential analyses were done to analyze the major identity status of the normal students under different variables such as gender, grade, major category, and ways to choose a major, respectively. It is found that there is no significant difference in the degree of major identity of normal students in terms of gender and grade, but there is a significant difference in the two variables of major category and ways to choose a major.

(1) Comparison of differences in 'major category'.

The difference in the degree of major identity of normal students in different major categories is mainly reflected in professional sentiment ($p=0.025<0.05$), and there is no significant difference in other dimensions, as shown in Table 7. After LSD multiple post hoc comparisons, the results show that this difference is reflected in the fact that the degree of professional sentiment of normal students in the category of humanities and social specialties is significantly higher than students in other major categories.

Table 7. Differences in major identity of normal students in local undergraduate universities on the variable of 'major category'

Dimension	Major category (mean± standard deviation)			F	p
	Humanities and social specialties	Science and engineering specialties	Arts and Physical education specialties		
Professional Cognition	2.78±0.86	2.59±0.45	2.08±0.58	1.294	0.285
Professional Sentiment	3.50±0.65	3.11±0.71	2.50±0.50	4.043	0.025*
Professional Behavior	3.03±0.50	3.41±0.63	2.93±1.01	2.287	0.114
Major Identity Overall	3.10±0.43	3.07±0.34	2.54±0.67	2.438	0.100

(2) Comparison of the differences in 'ways to choose a major'.

Differences in major identity on the variable of 'ways to choose a major' are mainly reflected in professional sentiment ($p=0.013<0.05$), and there are no significant differences in other dimensions, as shown in Table 8. The results of the LSD multiple post hoc comparisons show that students who have autonomous choice in their major had the highest level of professional sentiment, which was significantly higher than that of the other two groups of students.

Table 8. Differences in major identity of normal students in local undergraduate universities on the variable of 'ways to choose a major'

Dimension	Ways to choose a major (mean± standard deviation)			F	p
	Autonomous choice	Parental or other wishes	Transfer specialty		
Professional Cognition	2.59±0.75	3.08±0.87	2.45±0.54	2.792	0.073
Professional Sentiment	3.56±0.57	3.50±0.87	2.91±0.55	4.796	0.013*
Professional Behavior	3.11±0.63	3.15±0.60	3.18±0.60	0.055	0.947
Major Identity Overall	3.09±0.39	3.24±0.51	2.87±0.35	2.801	0.072

4.4 Analysis of the relationship between learning motivation and major identity

4.4.1 Correlation analysis

In this study, Pearson's correlation coefficient was used to test the relationship between learning motivation and major identity of normal students in local undergraduate universities, and the results are shown in Table 9. It can be seen that there is a significant positive correlation between learning motivation and major identity ($r=0.325$, $p<0.01$), as well as a significant positive correlation between the dimensions of learning motivation and the dimensions of major identity.

Table 9. Correlation analysis of learning motivation and major identity

	Knowledge-seeking Interest	Competence Pursuit	Reputation Acquisition	Altruistic Orientation	Learning Motivation
Professional Cognition	0.313**	0.368**	0.269**	0.305**	0.352**
Professional Sentiment	0.527**	0.396**	0.213**	0.301**	0.383**
Professional Behavior	0.556**	0.549**	0.394**	0.495**	0.559**
Major Identity	0.587**	0.545**	0.362**	0.458**	0.538**

4.4.2 Regression analysis

On the basis of the correlation between major identity and learning motivation, linear regression analysis was used to check whether there was a significant linear relationship between major identity and learning motivation of normal students in local undergraduate universities. According to the results of the one-way linear regression of major identity on learning motivation, the squared value of the correlation coefficient between the independent variable major identity and the dependent variable learning motivation is equal to 0.501, and the F-value for the overall significance test of the regression model is 242.924 ($p < 0.05$), which indicates that major identity can explain 50.1% of the variance of learning motivation, and the regression equation is: $\text{learning motivation} = 0.459 + 0.778 * \text{major identity}$.

Further, multiple linear regression analysis was conducted with the dimensions of major identity as the independent variable and learning motivation as the dependent variable, and the results are shown in Table 10. The Beta values of professional cognition, professional sentiment, and professional behavior are 0.238, 0.200, and 0.381 respectively, which are all greater than 0, and the significance is less than 0.05, that means the dimensions of major identity have a significant positive effect on learning motivation. From the relevant values in the Table 10, the regression equation can be established: $\text{learning motivation} = 0.462 + 0.353 * \text{professional behavior} + 0.224 * \text{professional cognition} + 0.182 * \text{professional sentiment}$.

Table 10. Linear regression of dimensions of major identity on learning motivation

	Unstandardized coefficient		Standardized coefficient	t	significance	covariance statistics	
	B	standard error	Beta			tolerances	VIF
(Constant)	0.462	0.114		4.059	0.000		
Professional Cognition	0.244	0.062	0.238	3.931	0.000	0.564	1.773
Professional Sentiment	0.182	0.059	0.200	3.074	0.002	0.487	2.055
Professional Behavior	0.353	0.057	0.381	6.151	0.000	0.539	1.854

5. Discussion

5.1 Current status of learning motivation of normal students in local undergraduate universities

The study shows that the overall learning motivation of normal students in local undergraduate universities is at a medium level, reflects the negative attitude of normal students in learning, which is consistent with the conclusion of Hou Xiao-bing's study[20]. As far as the mean value is concerned, external motivation is higher than internal motivation, which indicates that normal students exhibit insufficient interest in learning and a lack of self-actualization need. The difference test shows that the freshman have the lowest levels of overall learning motivation and altruistic orientation, while the normal students who have autonomous choice in their major have the highest levels of knowledge-seeking interest and altruistic orientation.

5.2 Current status of major identity of normal students in local undergraduate universities

The overall professional identity of normal students in local undergraduate universities is at a moderate level. As far as the mean value is concerned, professional sentiment scores the highest, followed by professional cognition and finally professional behavior. This indicates that normal students have high enthusiasm and pride in their majors, but they are not motivated enough in the learning process. Difference test shows that in terms of 'ways to choose a major', normal students who have autonomous choice in their major hold the highest degree of professional sentiment. In terms of 'major category', students in the category of humanities and social specialties have the highest degree of professional sentiment, which may be due to the fact that the learning tasks of humanities and social specialties are relatively less challenging, and students are less likely to encounter setbacks in the learning process, so students have stronger professional sentiment towards their majors, a finding that is consistent with the results of the study by Kong Wei-heng[21].

5.3 The relationship between learning motivation and major identity of normal students in local undergraduate universities

The results of the correlation analysis indicate that there is a significant positive correlation between major identity and learning motivation of normal students in local undergraduate universities. The results of regression analysis further indicate that the major identity, as well as its various dimensions, can positively predict learning motivation, i.e., the more normal

students accept and recognize their major, the better they can maintain a high level of learning motivation, this conclusion is also supported by other studies[22-23].

6. Recommendations

Based on the above findings, in order to further enhance the level of major identity and learning motivation of normal students in local undergraduate universities, the following points need to be taken into consideration during the training process of normal students.

First, cultivate the internal learning motivation of normal students. During the teaching process, teachers can stimulate students' curiosity and desire for knowledge by creating problematic situations, and need to meticulous planning and organization so as to make the methods vivid and interesting, the process logical and systematic, and the content innovative, which are conducive to drawing students' attention to the knowledge itself.

Second, learning motivation is appropriately reinforced by external factors. Although internal motivation is the fundamental driving force to promote students' continuous learning, it does not mean that external motivation should be completely abandoned. Research findings show that the external learning motivation of normal students in local undergraduate universities is higher than the internal learning motivation, therefore, teachers can appropriately strengthen the learning motivation through external factors during the teaching process, such as excellence, competition, etc., but in this process, we should make students pay more attention to the enhancement of their own knowledge and skills rather than obtaining external material rewards.

Thirdly, major identity education should be implemented throughout all stages of undergraduate studies. Major identity education for students should be carried out throughout the entire learning process. Beginning with freshman education, normal students can deepen their cognition of the major through lectures, regular internships in elementary school, observation of open classes and other forms; major sentimental education can be infiltrated into teaching, so as to make students have a stronger sentiment towards their major; more competitions and practical activities in professional skills can be held in daily life, so as to encourage students to participate in them actively and proactively.

Fourth, safeguard students' right to choose their majors. Research has shown that normal students who autonomously choose their major have a significantly higher sense of major identity; therefore, institutions of higher education can provide policy support in terms of changing majors, minors, double degrees and class insertion, etc., to give students a second chance to choose their majors.

Fifth, stimulate students' self-efficacy. Research shows that the degree of major identity of normal students in local undergraduate universities can positively predict their learning motivation, so we should pay attention to cultivating the accumulation of professional knowledge and skills in daily education, consequently, this approach equips normal students with the essential skills they need to pursue careers in education, and then further develop a sense of professional competence. In addition to consolidating the foundation, we should also create a variety of situations that can bring about successful experiences for students, so as to stimulate their self-confidence in major learning and enhance their sense of self-efficacy. Specific operations such as reasonable control of the difficulty of assignment, so that students can get a sense of achievement through the completion of assignment, for another example organizing simulated teaching, so that students can get a sense of success in teaching by playing the role of a teacher and experiencing the actual teaching process, and so on.

Acknowledgments

This paper was supported by the following fund projects: the '14th Five-Year Plan' Educational Science Program of Shaanxi Province (Project No. SGH22Y1449) and the Philosophy and Social Sciences Research Program of Weinan Normal University (Project No. 2022ZS34).

References

- [1] GUO Jian-peng, SUN Ai-jing, LU Shuai. Does high student satisfaction mean high educational quality? — A longitudinal study on university students' learning[J]. *Journal of Higher Education*, 2023, 44(02): 83-92.
- [2] Skinner E A, Belmont M J. Motivation in the classroom: Reciprocal effects of teacher behavior and student engagement across the school year[J]. *Journal of educational psychology*, 1993, 85(4): 571-581.
- [3] Vansteenkiste M, Sierens E, Soenens B, et al. Motivational profiles from a self-determination perspective: the quality of motivation matters[J]. *Journal of educational psychology*, 2009, 101(3): 671.
- [4] ZHANG Meng, LI Ruo-lan. The effect of speciality identity on university students' learning engagement: The mediating

- role of school belonging[J]. Heilongjiang Researches on Higher Education,2018,(03):94-99.
- [5] WILLIAMS M, BURDEN R L. Psychology for language teachers:A social constructivist approach[M]. Cambridge:- Cambridge University Press, 1997:121–123.
- [6] LEE J Q, MCINERNEY D M, LIEM G A D, et al. The relationship between future goals and achievement goal orientations:An intrinsic–extrinsic motivation perspective[J]. Contemporary Educational Psychology, 2010, 35(4):264–279.
- [7] D.P. Ausubel, Educational psychology, a cognitive view [M].1978.
- [8] Amabile T.M.,Hill K.G.,Hennessey B A.,et al.The Work Preference Inventory:Assessing Intrinsic and Extrinsic Motivational Orientations [J].Journal of Personality and Social Psychology,1994,66(05):950-967.
- [9] CHI Li-Ping,XIN Zi-Qiang. The measure of learning motivation and the relationship between it and self-efficacy of college students[J]. Psychological Development and Education,2006,(02):64-70.
- [10] Kang Ya-ting. The study on the relationship between learning motivation, self-efficacy and burnout in college students [D]. Shanxi University of Finance and Economics,2018.
- [11] Mawhinney H, Xu F. Restructuring the professional identity of foreign-trained teachers in Ontario Schools[J]. TESOL Quarterly,1997(3):632-639.
- [12] Wang Ding-ming,Liu Yong-cun. A survey on speciality identity of master's degree students[J]. China Higher Education Research,2007,(08):18-22.
- [13] Xu Shi-mei. The Development of Major Identity Scale of Post-graduates and the Analysis of Reliability and Validity[J]. Journal of Beijing University of Chemical Technology (Social Science Edition),2018,(01):106-110+85.
- [14] Zhou San. The professional identity of postgraduate of education [D]. Soochow University,2012.
- [15] Zhou Ying. The research on major identity of preschool education students in normal colleges in Anshan city [D]. Anshan Normal University,2018.
- [16] Li Li,Yang Hai-hua. Model construction of factors affecting professional identities of preschool education students based on grounded theory[J]. Journal of Shaanxi Xueqian Normal University,2020,36(08):91-99.
- [17] Xie Yong-qi,Rao Bin. Influencing factors and promotion paths of professional identity of VET masters-Based on grounded theory analysis of 21 VET masters[J]. Vocational and Technical Education,2024,45(35):32-38.
- [18] Qin Panbo. The characteristics and correlation study of college students' speciality identity [D]. Southwest University,2009.
- [19] FU Li-Hong,LI Mei-Jie. An empirical study on professional identification of information science in china[J]. Documentation,Information and Knowledge,2019,(02):51-59+119.
- [20] Hou Xiao-bing,Guan Shuang-qiu. An empirical study on the relationship between learning motivation and learning engagement of normal students from local colleges and universities[J]. Journal of Jimei University(Education Science Edition),2019,20(04):35-41.
- [21] Kong Wei-heng. Research on the mediating role of college students' learning self-efficacy in the relationship between professional identity and burnout[D]. Shanghai Normal University,2019.
- [22] CHEN Qiu-zhu,XU Hui-qing,ZHENG Mei-ni. The relationship between professional identity and self-directed learning motivation of preschool education students:Analysis of sequence mediating effect of psychological resilience and learning burnout[J]. Studies in Early Childhood Education,2019,(10):56-66.
- [23] Li Jie. Research on professional identity, learning motivation and their correlation among medical college students in Henan Province[J]. Medicine and Society,2019,32(10):98-101.

Author Bio

Yan Li, School of Educational Sciences, Weinan Normal University, Weinan, China.