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Investigation and Countermeasures of the Present Situation of Preschool Teachers' Independent Study in Guizhou Minority Areas

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Abstract:

Independent study is an important way to promote the professional development of preschool teachers. Based on objective sampling, the status of independent study of 520 preschool teachers in Guizhou minority areas were investigated by using mean comparison, variance analysis, and independent sample T test. It was found that independent study of kindergarten teachers in Guizhou minority areas has reached the middle-to-high level; in all dimensions of independent study, the score of self-development and regulation is the highest and the score of autonomous development awareness is the lowest. There are significant differences in gender, age, profession, professional title, educational age, type of kindergarten and region in the independent study of kindergarten teachers. The author puts forward some suggestions to improve the social status and salary of kindergarten teachers, strengthen the professional beliefs of kindergarten teachers; create a study community, strengthen the guidance and training of young teachers; improve the awareness of kindergarten teachers' independent study, enhance the professionalism of kindergarten teachers; establish the awareness of lifelong study and cultivate the self-reflection ability of preschool teachers.

Keywords: Kindergarten; Independent study; Strategy

I. INTRODUCTION

Independent study is a self-study based on teacher's individual research^[1]. It is a way of professional development in which teachers independently determine goals, develop resources, and evaluate results according to the needs of school development and self-development^[2]. Independent study for preschool teachers means that preschool teachers rely on independent development awareness, proactively formulate professional development plans, and promote the development of their professional knowledge and abilities through self-learning, reflection and self-monitoring^[3]. Research on preschool teachers' independent study carries great significance, which is manifested in the following aspects: First, independent study is an important means to achieve the lifelong study of preschool teachers^[4]. Second, independent study is an important way to promote the professional growth of preschool teachers^[5], which can improve the domestic preschool education quality. Studies have found that previous research on

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"Teachers' Independent Study" mainly focuses on primary and secondary school teachers, and there is little research on the independent study of preschool teachers in Guizhou minority areas. In view of this, this study mainly uses research methods such as questionnaires to investigate the professional identity status of preschool teachers in the Guizhou minority areas, which will provide some reference for improving the independent study level among preschool teachers in the Guizhou minority areas.

II. RESEARCH OBJECTS AND RESEARCH TOOLS

2.1 Research Objects

The study takes preschool teachers as the sample parent group, uses the "Questionnaire Star" online questionnaire platform, lets teachers fill the questionnaire through WeChat and QQ forwarding, and selects the preschool teachers in the Guizhou minority areas as the research object. A total of 520 valid questionnaires were obtained, of which most were women, including 498 women and accounting for 95. 77%. There were 22 men, accounting for 4. 23%.

2.2 Research Tools

This paper mainly adopts the questionnaire method. The questionnaire mainly draws on the questionnaire compiled by Yang Yi. The questionnaire has an internal consistency coefficient above 0. 80^[3], so it can be used as a tool for research and information collection. The questionnaire structure consists of three parts: the first part is basic information, including the teacher's gender, age, ethnicity, education, profession, professional title, educational age, kindergarten type, identity, etc.; the second part is the status quo, including self-development awareness, self-development action, self-development regulation, self-development planning and self-development reflection. For self-development awareness, there are mainly five topics including "I think even without others' supervision, teachers should study hard and improve their quality"; for self-development action, there are mainly 5 topics including "I actively participate in education and teaching research in the kindergarten"; for self-development regulation, there are mainly 4 topics including "I can continuously adjust my professional growth plan according to my needs to make it more perfect"; for self-development planning, there are mainly 3 topics including "I have a reasonable plan for teaching level improvement"; for self-development reflection, there are mainly 4 topics including "I will set aside a little time for reflection every week". There are 21 topics in total. The third part is the influencing factors, including the five dimensions of growth need, leadership style, study atmosphere, social recognition and interpersonal support. For growth need, there are mainly 5 topics including "I am willing to input more energy to do my job better"; for leadership style, there are mainly three topics including "During my professional growth, the leaders have given me a lot of support and

help"; for study atmosphere, there are mainly 4 topics including "The kindergarten often organizes competition activities, empathic study"; for social recognition, there are mainly 4 topics including "the profession of preschool teacher is relatively respected in society"; for interpersonal support, there are mainly 5 topics including "I get along well with my colleagues". There are 21 topics in total. A 4-point score is used, from 1 (non-conformity) to 4 (conformity). The research data was statistically analyzed and processed with SPSS26. 0 social statistics software.

III. RESEARCH RESULTS

- 3.1 Analysis on the Current Situation of Preschool Teachers' Independent Study in Guizhou Minority Areas
 - 3.1.1 Overall situation of preschool teachers' independent study in Guizhou minority areas

See TABLE I for the overall situation of independent study among preschool teachers in Guizhou minority areas. For TABLE I, a 4-point scale is adopted and the highest score is 4 points. Generally speaking, Qiannan preschool teachers' independent study has reached a middle-to-high level. In all dimensions, self-development regulation has the highest average score, followed by self-development reflection, self-development action, self-development planning and self-development awareness.

TABLE I. Independent study of preschool teachers in Guizhou minority areas and analysis of its dimensions

	SELF-DEVELOP	SELF-DEVELOP	SELF-DEVELOP	SELF-DEVELOP	SELF-DEVELOP	INDEPEND	
ITEM	MENT	MENT	MENT	MENT	MENT	ENT	
	AWARENESS	ACTIONS	REGULATION	PLANNING	REFLECTION	STUDY	
MEAN	2, 985	3. 238	3, 636	3. 051	3. 565	3. 295	
VALUE	2. 903		3. 030	5. 051	3. 303	3. 293	
STAND							
ARD	0. 450	0. 408	0. 466	0. 461	0. 479	0. 303	
DEVIAT	0.430		0.400	0.401	0.4/9		
ION							

3.1.2 Analysis on the gender differences of preschool teachers' independent study in Guizhou minority areas

An independent sample T-test analysis on gender regarding independent study of preschool teachers in Guizhou minority areas shows that there is no significant difference in self-development awareness among preschool teachers of different genders, but in self-development action, self-development regulation,

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self-development planning, self-development reflection and independent study, there are significant differences. From the average point of view, female preschool teachers have significantly higher score than male preschool teachers.

3.1.3 Analysis on the age differences of preschool teachers' independent study in Guizhou minority areas

A single-factor variance analysis on age regarding independent study of preschool teachers in Guizhou minority areas shows that preschool teachers of different ages are not significantly different in self-development awareness, self-development action, self-development planning, self-development reflection, and independent study, but there are significant differences in self-development regulation. The post-detection value of self-development regulation is not significant according to the Levene method, which shows that the variance is homogeneous. Multiple comparisons with the LSD method reveal that in terms of self-development regulation, preschool teachers aged 31-35 are significantly superior to those aged 21-25, preschool teachers over 41 years old are significantly superior to those aged 21-25 and 26-30, indicating that age affects the degree of self-development regulation of preschool teachers.

3.1.4 Analysis of the differences in ethnicity, education and teachers' identity of preschool teachers' independent study in Guizhou minority areas

An independent sample T-test analysis was carried out on ethnicity and teacher identity regarding independent study of preschool teachers in Guizhou minority areas. Single factor variance analysis on education reveals no significant differences in self-development awareness, self-development action, self-development regulation, self-development planning, self-development reflection, and independent study between preschool teachers of different ethnicities, identities and education, indicating that ethnicity, teacher identity, and education are not differential variables affecting independent study of preschool teachers.

3.1.5 Analysis on professional differences of preschool teachers' independent study in Guizhou minority areas

An independent sample T-test analysis on profession regarding independent study of preschool teachers in Guizhou minority areas shows that there are no significant differences in self-development action, self-development regulation, self-development planning, self-development reflection, and independent study between preschool teachers of different professions, but there are significant differences in self-development awareness. From the average point of view, preschool teachers of preschool education

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major are significantly superior to those of non-preschool education major.

3.1.6 Analysis on the differences of professional titles of preschool teachers 'independent study in Guizhou minority areas

A single factor variance analysis on professional titles regarding independent study of preschool teachers in Guizhou minority areas shows that preschool teachers with different professional titles have no significant differences in self-development awareness, self-development action, self-development planning, self-development reflection, and independent study, but there are significant differences in self-development regulation. The post-detection value of self-development regulation is not significant according to the Levene method, which shows that the variance is homogeneous. Therefore, the Turkey HSD method is used for multiple comparisons. In terms of self-development regulation, preschool teachers with intermediate professional titles are significantly superior to unrated and junior preschool teachers, indicating that professional title will affect the degree of self-development regulation among preschool teachers.

3.1.7 Analysis on the educational age differences of preschool teachers' independent study in Guizhou minority areas

The single-factor variance analysis on educational age regarding independent study of preschool teachers in Guizhou minority areas shows that there are no significant differences in self-development awareness and self-development reflection between preschool teachers of different educational ages, but significant difference is found in self-development action, self-development regulation, self-development planning and independent study. The post-detection values of self-development action, self-development regulation, self-development planning, and independent study are not significant according to the Levene method, which shows that the variance is homogeneous. Multiple comparisons with the LSD method show that in terms of self-development action, preschool teachers with a educational age of 5-10 years, 11-15 years, and 20 years are significantly superior to those with a educational age of less than 5 years. In terms of self-development regulation, preschool teachers with a educational age of 5-10 years, 11-15 years and over 20 years are significantly superior to those with a educational age of less than 5 years. In terms of self-development planning, preschool teachers with educational age of 5-10 years are significantly superior to those with a educational age of less than 5 years. In terms of overall independent study, preschool teachers with a educational age of 5-10 years are significantly superior to those with a educational age of less than 5 years, indicating that educational age will affect the degree of independent study among preschool teachers.

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3.1.8 Analysis on the differences of kindergarten types of preschool teachers ' independent study in Guizhou minority areas

The independent sample T-test analysis on kindergarten type regarding independent study of preschool teachers in Guizhou minority areas show that preschool teachers in different kindergarten types are not significantly different in self-development awareness, self-development action, self-development planning, self-development reflection and independent study, but there are significant differences in self-development regulation. From the average point of view, public kindergarten teachers are significantly superior to private kindergarten teachers.

3.1.9 Analysis on the regional differences of preschool teachers' independent study in Guizhou minority areas

An independent sample T-test analysis on region regarding independent study of preschool teachers in Guizhou minority areas shows that there are no significant differences in self-development awareness, self-development action, self-development regulation, self-development reflection, and independent study between preschool teachers in different regions. However, there are significant differences in self-development planning. From the average point of view, rural preschool teachers are significantly superior to urban preschool teachers.

- 3.2 Analysis on Influencing Factors of Preschool Teachers' Independent Study in Guizhou Minority Areas
- 3.2.1 Correlation analysis of influencing factors of preschool teachers' independent study in Guizhou minority areas

The Pearson correlation analysis results are shown in TABLE II. According to Qiu Haozheng's standards for the intensity and significance of correlation coefficients, ^[6] overall independent study is moderately correlated with the various influencing factors. The five influencing factors of growth need, leadership style, study atmosphere, social recognition, and interpersonal support are significantly positively correlated with preschool teachers' independent study. Social recognition has the lowest correlation with independent study (r=0. 420), while growth need has the highest correlation with independent study (r=0. 510). The data shows that it is very appropriate to use regression analysis to explore the effect of each influencing factor on independent study of preschool teachers and the way how it affects, thereby constructing the corresponding relationship model.

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TABLE II. Correlation matrix of influencing factors of preschool teachers 'independent study

	OVERALL INDEPENDEN T STUDY	GROWT H NEED	LEADERSHI P STYLE	STUDY ATMOSPHER E	SOCIAL RECOGNITIO N	INTERPERSONA L SUPPORT
OVERALL INDEPENDENT STUDY	1					
GROWTH NEED	0.510***	1				
LEADERSHIP STYLE	0. 442***	0. 350***	1			
STUDY ATMOSPHERE	0. 454***	0. 293***	0. 663***	1		
SOCIAL RECOGNITION	0. 420***	0. 337***	0. 503***	0. 505***	1	
INTERPERSONA L SUPPORT	0. 449***	0. 393***	0. 488***	0. 430***	0. 654***	1

3.2.2 Multiple regression analysis on the influencing factors of preschool teachers' independent study in Guizhou minority areas

In order to further explore the effect of the various influencing factors on the independent study of preschool teachers, this study conducted a multiple regression analysis, as shown in TABLE III. The results are as follows: First, the results of the stepwise regression analysis produce a total of three models. The third model is composed of four variables including constants, growth need, study atmosphere, and interpersonal support. The tolerance of Model 3 is between 0. 74-0. 83, which is not less than 0. 2, and VIF is between 1. 21-1. 36. Tolerance and VIF are in compliance with the standard, so there is no collinearity. Secondly, F value for the overall test of regression model 3 is 115. 76 (p<0. 001). Therefore, we further analyze the independent variable's explanatory power against the total score of independent study. The analysis results found that there are three independent variables with explanatory power, specifically growth need, study atmosphere and interpersonal support. The multivariate correlation coefficient (R) between the three independent variables of this model and the total score of independent study is 0. 63, and the coefficient of determination R² is 0. 40, indicating that these three independent variables explain 40% variation in the total score of independent study. Third, from the perspective of explanatory power of individual variables, the total score of independent study has the highest explanatory power for growth need, with an individual explanation degree of 27%. The next is study atmosphere, with an explanation degree of 10%, followed by interpersonal support, with an explanation degree of 3%. Fourth, seen from the standardized regression coefficients, growth need has a value of 0. 36 (t=9. 57, p<0. 001), study atmosphere has a value of 0. 27 (t=7.06, p<0.001), and interpersonal support has a value of 0. 20 (t=5.11, p<0.001). All are positive numbers, indicating that their effect on the total score of independent study is

positive, while the first is the most influential. Finally, based on the non-standardized and standardized regression coefficients, the equations are written as follows: Non-standardized equation: the original total score of independent study = $1.46 + 0.31 \times \text{growth need} + 0.12 \times \text{study atmosphere} + 0.10 \times \text{interpersonal support}$. Standardized equation: total Z score of independent study= $0.36 \times \text{growth need} + 0.27 \times \text{study atmosphere} + 0.20 \times \text{interpersonal support}$.

The above correlation and regression analysis show that the five factors are very closely correlated with the overall level of preschool teachers' independent study. Where, growth need has the greatest impact on preschool teachers' independent study, followed by interpersonal support and study atmosphere. Social recognition and leadership style indirectly affect the overall level of preschool teachers' independent study through growth need, interpersonal support and study atmosphere.

TABLE III. Stepwise multiple regression analysis on influencing factors of preschool teachers ' independent study

Prediction variable order	R	K	R-square	F	F variation	Original regression coefficient (b)	Standardized regression coefficient (β)	t ·	Collinearity diagnosis	
			variation						tolerance	VIF
Constant						1.46		13.46		
Growth need	0.52	0.27	0.27	188.78	188.78***	0.31	0.36	9.57*	0.83	1.21
Study atmosphere	0.61	0.37	0.10	153.17	86.43***	0.12	0.27	7.06*	0.80	1.26
Interpersonal support	0.63	0.40	0.03	115.76	26.09***	0.10	0.20	5.11*	0.74	1.36

IV. DISCUSSION AND SUGGESTIONS

4.1 Discussion

4.1.1 Gender and educational age differences in independent study

Independent study is an activity in which individual teachers take the initiative to continuously improve respective professional development through study, reflection and practice^[7]. The research results found that male preschool teachers are inferior to female preschool teachers in independent study;

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preschool teachers with 5-10 years of educational age far exceed those with educational age under 5 years in independent study. Affected by traditional concepts and pressure from society, coupled with family burdens, male preschool teachers will not focus more on professional development and promotion. Compared with male preschool teachers, female preschool teachers prefer children and are willing to spend more time on study, reflection and self-monitoring, which improves their professional capabilities. New preschool teachers with a educational age of less than 5 years pay more attention to whether they are qualified for the job, while the preschool teachers with a educational age of 5-10 years have entered the mature stage. Gradually becoming aware of their professional growth objectives, they formulate professional growth plan for themselves to reflect on the problems that arise in the process of professional growth, thus able to deal with the potential difficulties.

4.1.2 Differences in age, professional title and kindergarten types in self-development regulation

In terms of self-development regulation, this study found that preschool teachers aged 31-35 and over 41 are significantly superior to those aged 21-25; unrated and junior preschool teachers are inferior to those with intermediate titles; private kindergarten teachers are inferior to public kindergarten teachers. For its possible reason, older preschool teachers are more experienced than younger teachers, who can manage and use time more effectively and reasonably. Compared with unrated and junior preschool teachers, preschool teachers with intermediate professional titles are generally older with longer educational age, who will constantly adjust their professional growth plans, discover problems in professional growth, and work hard to resolve them. Compared with public kindergarten teachers, private kindergarten teachers have low salaries, lack of work enthusiasm, and lack of plans and goals for their professional development.

4.1.3 Professional differences in self - development awareness

The key to enhancing preschool teachers' professional development lies in self-development awareness. This study found that preschool teachers of preschool education majors are significantly superior to those of non-preschool education majors in terms of self-development awareness. For its reason, compared with preschool teachers of non-preschool education majors, preschool teachers who have received professional knowledge and skills on systematic preschool education in school are more willing to apply the learned theoretical knowledge to practice, and are more enthusiastic. When difficulties arise, they will take the initiative to actively face and solve them, thereby improving their professional development level.

4.1.4 Regional differences in self-development planning

The research results found that urban preschool teachers have inferior self-development planning than rural preschool teachers. Compared with rural preschool teachers, urban preschool teachers are under great

pressure, heavy tasks, thus physically and mentally exhausted. They lack confidence in their own work and have little or no time to formulate professional development goals and plans. On the other hand, rural preschool teachers are more passionate in pursuing goals, pay more attention to their own professional development, use their leisure time to formulate effective professional growth goals and development plans, and find corresponding solutions.

4.2 Suggestions

4.2.1 Improve the social status and salary of preschool teachers, strengthen the professional beliefs of preschool teachers

According to the survey data, only 26. 2% preschool teachers selected conformity for the topic "the profession of preschool teacher is respected in the society". More than half of the preschool teachers selected low conformity for the topic "in people's mind, preschool teachers have similar social status as teachers of other stages". 58. 5% preschool teachers selected low conformity for the topic "the labor income of preschool teachers is proportional to the economic income". It can be seen that while advocating the importance of preschool education, the state should strive to create a social atmosphere of respecting and emphasizing teachers^[8]. It should also perfect the wage protection mechanism to meet and guarantee the reasonable work and life needs of preschool teachers, improve the social status of preschool teachers, so that the profession of preschool teachers is enviable^[9], which will enhance the professional happiness and professional belief of preschool teachers^[10], and then actively improve their professional level.

4.2.2 Create a study community, strengthen the guidance and training of young teachers

The survey found that older preschool teachers are significantly superior to younger teachers in self-development regulation. Preschool teachers with a educational age of 5-10 years far exceed those with a educational age of less than 5 years in independent study. Female preschool teachers are significantly superior to male preschool teachers in independent study. At the same time, it is found that study atmosphere is a direct factor that affects preschool teachers' independent study. Palmer pointed out: "Teaching is to create a space for real community practice" [11]. Through mutual aid study and discussion in the community, it will stimulate the inner study ability of preschool teachers, help them accumulate more practical experience and acquire teaching inspiration, so that teachers form a relationship of mutual influence and mutual promotion, which ultimately promotes the growth of individuals. It can be seen that, kindergarten leaders should create a harmonious, mutual-aid, democratic and free study community, and implement various forms of study community activities^[12], for instance, helping young teachers and male teachers in kindergarten become more competent at work by letting the old bring the new and forming

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master-apprentice pairing. It is necessary to organize more competitions and observation activities inside and outside the kindergarten, invite famous preschool teachers from provinces and cities to give special lectures^[13], carry out normal kindergarten-based research, and improve the effectiveness of kindergarten-based research^[14]. At the same time, it is possible to invite university experts to guide preschool teachers in subject research^[15], and provide young teachers with more opportunities to go out for exchanges and training. Through on-site observations, seminars and other research activities, preschool teachers can continuously improve themselves amid spiral reflection of "problem proposal –problem analysis-problem solution" ^[16] and improve professional ability.

4.2.3 Improve the awareness of preschool teachers' independent study, enhance the professionalism of preschool teachers

The study found that among the five dimensions of independent study, self-development awareness has the lowest average score. It also found that growth need exerts the greatest influence with a direct effect among the factors that affect the independent study of preschool teachers. The internal cause is the driving force for the development of things, and the external cause only works through the internal cause. It can be seen that it is very necessary to urgently raise the awareness of independent study among preschool teachers. Preschool teachers should face the preschool education career with a positive attitude, focus on internal development to enhance professional quality, achieve professional autonomy^[17], increase the subjective initiative in independent study^[18], seize opportunities for professional development, actively participate in various teaching seminars and training^[19], and improve the ability of independent development. The "Guidelines for the Implementation of Standardized Training among New Preschool Teachers" stipulate: we should help new teachers familiarize with and participate in teacher research and kindergarten-based research, understand and implement career planning. It can be seen that relevant education and management departments should guide preschool teachers to formulate professional development plans in line with respective reality^[20], and take the initiative to implement them in actions to enhance teachers' professional growth.

4.2.4 Establish the awareness of lifelong study and cultivate the self-reflection ability of preschool teachers

The "Professional Standards for Preschool Teachers (Trial)" clearly states that preschool teachers must have the awareness and capability of lifelong study and sustainable development, actively collect and analyze relevant information, make continuous reflection, and improve health care and education. It can be seen that kindergartens should encourage and cultivate teachers' lifelong study and self-reflection abilities, and preschool teachers should take the initiative to learn and establish ideals and beliefs for lifelong love

towards preschool education^[21]. Reflection is an important capability necessary for preschool teachers to conduct research and an important condition for promoting teachers' professional development. Preschool teachers should learn to reflect, be able to reflect and continue to reflect in teaching research^[22], and pay equal attention to reflection before and after practice^[23], so that reflection become a professional habit of teachers. Also, they need actively participate in professional training, business study and conservation education research activities, read more, observe more, discover more at the same time, frequently reflect on problems encountered in the process of education and teaching, and find reasonable and effective solutions. It is also possible to use the Internet to find, search and integrate study resources to improve preschool teachers' study, research, behavior, thinking, and writing capabilities^[5], thus promoting their own professional development.

V. CONCLUSIONS

- 5.1 The overall status of independent study among preschool teachers in Guizhou minority areas is fine, but further improvement is needed. There is an imbalance in the various dimensions of independent study among preschool teachers. Where, self-development regulation and self-development reflection are in the best situation, self-development consciousness is in the worst situation, and self-development action and self-development planning are somewhat in between.
- 5.2 There are differences in gender, age, profession, professional title, educational age, kindergarten type and region regarding independent study of preschool teachers in Guizhou minority areas. The effect and influence of these factors on preschool teachers' independent study are mainly reflected in the following aspects:
- 5.2.1 Gender has a significant impact on preschool teachers' independent study. Female preschool teachers are significantly superior to male preschool teachers in self-development action, self-development regulation, self-development planning, self-development reflection and independent study. Male preschool teachers demand more help and guidance.
- 5.2.2 Age has a significant impact on preschool teachers' self-development regulation. It is found that in terms of self-development regulation, preschool teachers aged 31-35 are significantly superior to those aged 21-25, and preschool teachers aged above 41 are significantly superior to those aged 21-25 and 26-30. More attention needs to be given to young teachers.
- 5.2.3 Profession has a significant impact on preschool teachers' self-development awareness. Preschool teachers of preschool education major are significantly superior to those of non-preschool education

majors in terms of self-development awareness.

5.2.4 Professional title has a significant impact on preschool teachers' self-development regulation. It is found that in terms of self-development regulation, preschool teachers with intermediate professional titles are significantly superior to the unrated, junior preschool teachers. (5) Educational age has a significant impact on preschool teachers' independent study. It is found that in terms of self-development action, preschool teachers with a educational age of 5-10 years, 11-15 years and over 20 years are significantly superior to those with a educational age of 15-10 years, 11-15 years, and over 20 years are significantly superior to those with a educational age of 15-10 years, 11-15 years, and over 20 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 5-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of 15-10 years are significantly superior to those with a educational age of

- 5.2.5 Kindergarten type has a significant impact on preschool teachers' self-development regulation. Public kindergarten teachers are significantly superior to private kindergarten teachers in terms of self-development regulation.
- 5.2.6 Regional factors have a significant impact on preschool teachers' self-development planning. It is found that in terms of self-development planning, rural preschool teachers are significantly superior to urban preschool teachers.
- 5.3 Growth need, leadership style, study atmosphere, social recognition, and interpersonal support are the main factors affecting preschool teachers' independent study. Where, growth need has the greatest impact on preschool teachers' independent study. In addition, the three factors of growth need, study atmosphere, and interpersonal support have a direct effect on preschool teachers' independent study. Social recognition and leadership style mainly indirectly affect the overall level of preschool teachers' independent study by influencing growth need, study atmosphere, and interpersonal support.

This study explores the current status of independent study among preschool teachers in Guizhou minority areas from variables including gender, age, ethnicity, education, profession, professional title, educational age, identity, and region, and analyzes the five influencing factors, including growth need, leadership style, study atmosphere, social recognition, and interpersonal support. In addition, factors such as professional identity, self-efficacy, and self-esteem are also important reasons that affect preschool teachers' independent study, which needs further research. At the same time, the research mainly selects

preschool teachers in Guizhou minority areas as the research objects. The researcher collects the questionnaire through the Internet, so the questionnaire reliability and validity still need to be improved. Future research also needs to strengthen comparative research on independent study of preschool teachers in the east, central and western regions, and then find out effective strategies to improve preschool teachers' independent study in a targeted manner.

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