

Research on the influencing factors and transmission mechanism of rural teachers' retention

© 2024

Yu Haiying*¹, Doctor of Sciences (Education), Professor,
Dean of the School of Education Science, tutor of master students

Peng Jingxuan², graduate student

Yu Shan³, graduate student

Yu Ying⁴, graduate student

Song Yang⁵, graduate student

Mudanjiang Normal University, Mudanjiang (China)

*E-mail: 0701008@mdjnu.edu.cn,
yuhaiying0304@163.com

¹ORCID: <https://orcid.org/0000-0003-0157-4631>

²ORCID: <https://orcid.org/0009-0001-7717-9868>

³ORCID: <https://orcid.org/0009-0004-6816-0382>

⁴ORCID: <https://orcid.org/0009-0004-2586-3467>

⁵ORCID: <https://orcid.org/0009-0008-1303-6965>

Received 02.04.2024

Accepted 16.05.2024

Abstract: To solve the problem of rural teacher retention, it is necessary to systematically explore its influencing factors from the perspectives of theory, policy and technology, find the realistic starting point for improvement, and put forward the optimization path for the operation of retention strategy. Based on 4,746 data collected from 10 regions in Heilongjiang province of China, this paper makes an in-depth study on the influencing factors, and transmission mechanism of rural teacher retention. The results show that: (1) There is a significant correlation between teachers' professional quality, organizational commitment, matching degree and compensation intensity, and rural teachers' retention, and organizational commitment is the most influential factor. (2) The professional quality of teachers significantly affects the retention of rural teachers through the mediating effect of organizational commitment, and matching degree. (3) Compensation intensity plays a significant moderating role in the influence of teachers' professional quality on organizational commitment, matching degree and retention of rural teachers, and the positive moderating effect of low compensation intensity is stronger. In order to retain rural teachers better, it is necessary to provide strong support conditions, and enhance the level of teachers' organizational commitment. Enhance the matching degree between teachers and rural environment in multiple dimensions. The data system of rural teachers' human resources should be established, and appropriate compensation policies should be formulated.

Keywords: rural teachers; retention; the influencing factors of rural teachers' retention; mechanism of rural teachers' retention regulating effect.

Acknowledgments: Fund project: National general education project of National social science fund in 2021: Study on the retention mechanism of rural teachers (Grant No. BHA210137).

For citation: Yu Haiying, Peng Jingxuan, Yu Shan, Yu Ying, Song Yang. Research on the influencing factors and transmission mechanism of rural teachers' retention. *Evidence-based education studies*, 2024, no. 2, pp. 35-49. DOI: 10.18323/3034-2996-2024-2-35-49.

INTRODUCTION

The reasons for the study

For rural school teachers, they may choose to leave due to challenges such as lower income, smaller school size and remote geographical location, cultural mismatch, and lack of resources. However, according to statistics, a considerable number of teachers in China still stay in rural schools every year. According to the data of China Education Statistics Yearbook, the retention rate of rural junior middle school teachers in 2019 was 99.1 %, and the retention rate in 2020 was 99.6 %. In 2019, the retention rate of rural primary school teachers was 97.93 %, and the retention rate in 2020 was 97.90 %. Understanding the reasons why teachers stay in rural schools cannot be based on what we know about the reasons why teachers leave rural schools.

Literature review

From the current literature research, the construction of rural teachers has been identified as a priority concern in many countries. Scholars at home and abroad mainly elaborated, and studied the construction of rural teachers from the perspectives of 'job attractiveness', 'loss' and 'retention'. Specifically, it can be seen from the dimensions of weak job attractiveness of rural teachers, high loss rate of rural teachers and low retention rate of rural teachers.

Rural teachers' job attraction is not strong. Due to the lack of supporting incentive mechanism for rural schools to teach in the teacher allocation policy, the teacher allocation in the compulsory education stage shows the characteristics of the city. In India, the initial allocation of teachers' salary structure cannot effectively motivate teachers to work in rural schools, and the number of new teachers in urban areas is much higher than that in rural areas.

Many countries and regions pay more attention to recruiting teachers rather than retaining teachers [1]. Many rural teachers in school districts in U.S. states typically stay for only three to four years [2]. Research shows that teachers use the teaching of rural school districts as a springboard to find jobs in suburban and urban school districts [3]. For experienced teachers, government departments recruit and retain teachers by adopting strategies that address the specific needs of local rural education [4].

Rural teacher turnover rate is high. The problem of teacher turnover in rural schools in the United States is much larger than that in inner-city schools and suburban schools combined. The teacher turnover rate in rural school districts reaches 30 to 50 % [5]. The loss of teachers in rural primary and secondary schools in China is serious [6; 7], which has become an unavoidable practical problem in the development of education, and shows a gradual upward trend [8]. The high turnover rate of teachers has led to a shortage of high-quality teachers, which has a negative impact on classroom teaching [9]. Schools with higher teacher turnover rates will correspondingly bear higher costs associated with teacher turnover [10]. In terms of fairness, the loss of rural teachers has its own rationality, but there are also social reasons, historical reasons, economic reasons and personal reasons that lead to the loss of rural teachers [11; 12]. Only relying on economic compensation measures, has been difficult to effectively retain the younger generation of rural teachers [13].

The retention rate of rural teachers needs to be improved. The willingness of rural teachers to stay is affected by many factors. Heavy workloads, lack of planning time, lack of administrative support and lack of induction guidance, affect the retention intention for beginning teachers; also school management style is an important factor affecting teacher retention [14]. Age and geography are the key factors influencing the retention of special post teachers [15]. In order to retain rural teachers, countries have tried to adopt financial support and incentives [16], rural teachers housing supply and assistance programs [17], professional development support [18], a variety of ways to increase the supply of rural teachers [19]; improve the school's culture and working conditions [20], formulate supporting measures and other measures [21]. These policies have played an irreplaceable role in improving the retention rate for rural teachers. Although not all policies have the same degree of success as described, policies of this nature can sometimes produce the expected results. However, the problem is that there does not seem to be a systematic integration of rural teacher retention measures into a coordinated plan.

Based on the comprehensive analysis of the existing research, there are many studies on the teacher allocation, professional growth and development, training, loss and supplement of the construction of rural teachers, but there are few in-depth studies on the retention of rural teachers. Therefore, there are still theoretical and practical problems of rural teachers' retention, that need to be further clarified and explored. This study attempts to investigate the countryside. To find a realistic starting point for the practice and policy improvement of rural teachers' retention; it will be from the theoretical, policy and technical level.

Theoretical analysis and research hypothesis

Teachers' professional quality and rural teachers' retention. High-quality teachers can cope with the challenge of multiple educational choices in a culturally rich society. When entering the education workplace, teachers master the necessary knowledge, ability and skills to meet the needs of education and teaching, and obtain the resulting sense of professional self-efficacy and job satisfaction. The ability of professional integration into teaching and career satisfaction can affect teachers' career choice and decision-making. When teachers accumulate human capital and professional capital in their field, and can withstand appropriate pressure, they are more likely to stay in a school. Through logical extension, when teachers' professional practice and workload are ignored, their own preconceptions will lead them to feel professional isolation and job dissatisfaction. Regardless of the size of rural schools, low-quality teachers may face the challenge of enormous pressure from teaching and a professionally irresistible sense of isolation [22]. At this time, they tend to use protective factors to alleviate or change this adversity, increasing their opportunities to decide to change their positions. From the perspective of economic labor theory, when the teaching profession is considered to be the most attractive job, teachers will stay in the industry; from the perspective of human capital, the cost and benefit of entering the teaching profession is the first thing that teachers should consider and evaluate [23]. The relative ease of teachers' entry into this field affects the durability of the profession, especially when the opportunity cost of teachers depends on the fact that they can earn more wages and income in positions other than rural school teaching. As teachers gain more valuable work experience and higher self-efficacy and teaching skills, they are more likely to leave rural schools and find jobs in other areas [24].

Hypothesis 1: teachers' professional quality affects the willingness of rural teachers to stay.

The mediating role of organizational commitment. Organizational commitment is usually understood as an individual's identification, or attachment, to a specific organization and the willingness to support organizational goals. It is a thinking tendency that connects individuals with organizations and leads to support organizational behavior. Its core essence is to give stable strength to individual behavior direction [25]. Different levels of organizational commitment will show different specific organizational behaviors, such as reducing absenteeism, working hard or continuing to stay. The goal consistency between teachers and schools with high organizational commitment is high, and they are committed to social justice goals such as student development, which makes organizational commitment, and teachers' professional quality fundamentally interrelated.

As an experience of consistency and identity, organizational commitment focuses on the consistency or identity of individual and organizational goals, values and practices, and the resulting attachment experience to the organization [26]. If a teacher with such emotional commitment has a strong commitment to educational equity with the school, they will feel a strong connection with the school, which should greatly enhance the willingness and behavior of teachers to stay.

Organizational commitment shows the individual's perception of the benefits, and turnover costs brought by staying in the organization from the perspective of quantification [27]. Individuals are aware of the balance between the costs and benefits of having organizational membership, so organizational commitment is fundamentally related to the decision of teacher retention; there are two zones in the individual's demand for the organization, which will change according to the induced relationship (interests), and the required contribution or cost (requirements for individuals). The degree and direction of change depend on the degree to which the interests exceed the burden and sacrifice of the individual's attachment to the organization.

Individuals believe that it is the 'right thing' to stay in the organization due to moral imperatives. Therefore, teachers with normative commitment are more likely to stay in their positions. This may be due to a sense of loyalty to the organization, but it may also reflect other obligations and responsibilities. When teachers are dissatisfied with their work or workplace, they show low emotional or low quantitative commitment to the organization. However, due to the lack of feasible alternatives, individuals are still linked to the organization [28]. Such alienated commitment will also affect teachers' willingness and behavior to stay.

Hypothesis 2: organizational commitment plays an intermediary role between teachers' professional quality and rural teachers' willingness to stay.

The mediating role of matching degree. The good match between teachers' professional quality and rural environment is the basis of rural teachers' retention. A good match is to find a suitable meeting point between the rural education environment and teachers' qualifications and preferences, to achieve an educational culture match, and to ensure that the professional quality of teachers is compatible with the values and beliefs related to education and teaching in the rural education environment. This compatibility allows teachers to feel familiar, safe and comfortable, which is important for improving teacher job satisfaction and solving teacher retention problems. When the professional quality of teachers is misaligned with the rural education environment, teachers who teach in rural areas will find that their actual classroom responsibilities are very different from their educational ideals, and their established concepts, knowledge and skills about school, education, teaching and student development will be impacted to varying degrees. They also feel more isolated and overwhelmed. Therefore, a stronger sense of match to the rural educational environment seems to be a major factor when teachers decide to stay [29].

From the perspective of teachers, accepting the post of rural teacher means that they have chosen the rural lifestyle, can adapt to the rural community environment, and have the opportunity to invest in the relationship between rural students and parents, and enjoy the rural life. Teachers who have not lived in rural communities do not understand the social culture, customs and expectations of the entire rural community, and live in an environment that is very different from their own culture and may even run counter to the way they were brought up. This mismatch is detrimental to the life and development of teachers in rural areas, which may make teachers feel unadapted and dissatisfied with the life in rural communities and choose to leave. Teachers who remain in rural areas are more likely to be

teachers who grew up in rural communities, or who are committed to adapting to life in rural areas.

Hypothesis 3: matching degree plays a mediating effect between teachers' professional quality and rural teachers' retention intention.

The regulating effect of compensation intensity. Compensation, which generally includes salary, benefits and other economic incentives, is important for attracting and retaining rural teachers [30]. Because of the geographical teacher shortage, policymakers often resort to compensatory measures such as monetary incentives because they are manageable. Lower salaries and inadequate benefits in rural schools have had a negative impact on teacher retention. How to design and implement compensation measures will affect rural teachers' willingness to stay.

When the compensation is insufficient, teachers are dissatisfied because the compensation is difficult to offset the problems caused by the "bad" conditions in rural areas, which may result from the compromise orientation attached to the compensation [31]. Taking into account the difficulties of working and living in rural schools, the educational opportunities for children may be lost by working in rural communities, and the extra income obtained by part-time teaching, inadequate compensation is considered to be negligible by rural teachers, especially for teachers high professional quality. Of course, enticing teachers to stay in rural schools with more compensation could be costly and politically unsustainable. An overemphasis on compensation may ultimately undermine the public service ethic of the teaching profession or weaken organizational commitment, leading to less focus on educational goals for student development [32]. The retention of rural teachers is not only a question of compensation, but an important factor to effectively retain rural teachers. Different rural schools may face some different challenges, and compensation should be adapted to the local reality of rural schools.

Hypothesis 4: compensation intensity plays a regulating role in the relationship between teachers' professional quality and organizational commitment.

Hypothesis 5: compensation intensity plays a regulating role in the relationship between teachers' professional quality and rural teachers' retention intention.

Hypothesis 6: the degree of compensation plays a regulating role between the professional quality of teachers and the degree of matching.

The purpose of this study

The purpose of this study is to explore why teachers choose to stay in rural schools, to verify and analyze the influencing factors and transmission mechanism of rural teachers' retention, and to try to make a reasonable explanation for it, so as to provide valuable suggestions for solving the problem of rural teachers' retention.

RESEARCH DESIGN

Variable design and questionnaire quality

Through literature review and theoretical analysis, in addition to the basic information of the subjects, the questionnaire in this study was designed with five dimensions, including gender, age, marital status, school location, the school from which the first degree was obtained,

the type of major with the first degree (normal and non-normal), the educational background at the time of employment after graduation, the teaching period, and the working time in rural schools.

The first dimension is the independent variable: teacher's professional quality, including professional concept, professional knowledge and professional ability. The second dimension is mediating variable 1: organizational commitment, including emotional commitment, ideal commitment and normative commitment. The third dimension is intermediate variable 2: matching degree, including matching degree with teaching environment and living environment around rural schools. The fourth dimension is the moderating variable: compensation intensity, including compensation intensity such as salary, bonus, welfare and financial incentive. The fifth dimension is the dependent variable: the retention intention of rural teachers.

In addition to the basic information part, all items of other dimensions in the questionnaire adopted a five-level Likert option design, with values of 1–5 respectively, and 6 indicating the gradual weakening of the degree (variable settings and descriptive statistics are shown in Table 1).

This study investigated rural school teachers in 10 regions of Heilongjiang province of China. By stratified sampling method, 500 questionnaires were distributed to rural schools in each district, with a total of 5,000 questionnaires, 4,746 of which were valid, and the effective rate was 94.92%. In this study, SPSS 20.0 and AMOS 22.0 were used for data analysis and processing. The model fitting index of the questionnaire was RMSEA=0.052; SRMR=0.065; NFI=0.921; RFI=0.916; FI=0.926; TLI=0.922; CFI=0.926. The overall structural model fitting index of the questionnaire is as follows: RMSEA=0.046; NFI=0.918; RFI=0.914; IFI=0.924; TLI=0.921; CFI=0.924; SRMR=0.0669. The fitting index of the model reached the recommended value, and the fitting degree of the questionnaire model was good.

Methods

In order to study the influencing factors of rural teacher retention, SPSS 20.0 was used for correlation analysis to explore the correlation between rural teacher retention and different variables. Considering the characteristics of different rural schools, different variables may have different effects on the retention intention of rural teachers. Teachers' professional quality, organizational commitment, matching degree and compensation intensity are put into the regression model as independent variables, and rural teachers' retention intention is put into the dependent variable, and the significance of different characteristics of schools is analyzed by step-based regression.

In order to verify whether organizational commitment and matching degree play a mediating effect between teachers' professional quality, and rural teachers' retention intention, Model 4 in PROCESS V 3.0 was used for analysis. Two mediating variables, organizational commitment and matching degree, were put into the model at the same time, and the mediating effect estimate, BootSE and 95% confidence interval were obtained by Bootstrapping method, so as to judge the significance of the mediating effect.

Because different compensation levels bring different satisfaction to rural teachers, it may have different impacts on organizational commitment, matching degree and rural

teachers' willingness to stay. Therefore, this paper takes the teachers' age, gender, marital status, working hours of rural schools, location of rural schools, teaching section, educational background at employment, school graduating from the first degree, and major type of the first degree as the control variables, and the compensation intensity as the moderating variable, and puts them into the multi-intermediary model. Model 8 in PROCESS V 3.0 was used to test the mediated effect. Further, a simple slope analysis method is used to obtain the adjustment trend of compensation strength.

RESULTS

Factors related to the retention of rural teachers

Table 2 is the correlation matrix of rural teachers' retention, which shows the relevant factors, mean value and standard deviation affecting rural teachers' retention intention. The data results show that the professional quality of teachers, and the retention intention of rural teachers are relatively high, and the mean value is less than 2, which is between very good and relatively good. The state of organizational commitment and matching degree is slightly better, with an average value between 2–2.3, which is between good and average. Compensation is relatively poor, with an average of 3.691, between average and not too great. There was significant positive correlation between rural teachers' retention intention, and teachers' professional quality, organizational commitment, matching degree and compensation intensity (p values were all less than 0.001). There is a moderate correlation between rural teachers' retention intention, and teachers' professional quality, organizational commitment and matching degree, and a low correlation with compensation intensity, which indicates that these variables are important factors affecting rural teachers' retention intention.

Regression analysis of factors affecting rural teachers' retention intention under different characteristics

Table 3 statistical results show that in the case of the full sample, the explanatory power of organizational commitment for rural teachers' retention intention is 54.8%, the explanatory power of matching degree is 3.0%, the explanatory power of compensation is 0.1%, and the explanatory power of teachers' professional quality is too small, which is excluded from the model (see Model 1). The statistical data from different rural school working time, rural school location, teaching section, educational background at employment, age, gender, marital status, school graduating from the first degree, and major type of the first degree show that organizational commitment is the most influential variable in all cases, with explanatory power ranging from 48.2–74.4%. Although teachers' professional quality, matching degree and compensation strength have different explanatory power under different characteristics, they are not very high, and are all below 4.1% (see Models 2–10).

Multiple intermediary tests on the influence of teachers' professional quality on rural teachers' retention intention

In Table 4, all the mediating effects in the model are significant, while the direct effects are significant. The 95% confidence interval of mediating effect, total mediating effect, direct effect and total effect does not contain 0, and all

Table 1. Variable settings and their descriptive statistics
Таблица 1. Параметры переменных и их описательная статистика

Variable	Variable dimensions and problems		Min	Max	Mean	Standard deviation
Independent variable: professional quality of teachers	Professional concept	To understand the significance of teachers’ work to social development and talent training	1	5	1.70	0.914
		Be able to actively collaborate and communicate with teachers, parents, communities, etc.	1	5	1.64	0.878
	Professional knowledge	Able to master the basic principles and main methods of education	1	5	1.61	0.813
		Able to master the curriculum standards of the subject taught	1	5	1.58	0.794
		Be able to master the methods and strategies of subject teaching and research learning	1	5	1.71	0.828
		Be able to master the corresponding knowledge of natural sciences and humanities and social sciences	1	5	1.76	0.857
	Professional competence	Be able to rationally use teaching resources and methods to design teaching process	1	5	1.64	0.810
		Teaching can be effectively implemented in a variety of ways	1	5	1.66	0.825
		It can trigger independent thinking and active exploration of middle school students, and develop students’ innovative ability	1	5	1.73	0.850
		Be able to integrate modern educational technology into teaching	1	5	1.75	0.852
		It can establish a good teacher-student relationship and help middle school students establish a good peer relationship	1	5	1.62	0.817
		Can guide students ideal, psychological, academic and other aspects of development	1	5	1.69	0.842
		Be able to use evaluation tools, master multiple evaluation methods, multi-perspective, whole-process evaluation of student development	1	5	1.76	0.871
		Be able to self-evaluate the teaching effect, adjust and improve the teaching work in time	1	5	1.70	0.836
Mediating variable 1: organization bearing	Emotional commitment	He didn't leave even when the school wasn't doing well	1	5	2.15	1.172
		Deep feelings for the unit	1	5	1.94	1.067
		I would like to contribute all my efforts	1	5	1.90	1.054
		Willing to contribute spare time efforts	1	5	1.93	1.055
	Normative commitment	Have obligations to the unit	1	5	1.86	1.014
		Job-hopping is immoral	1	5	2.33	1.284
		Be loyal to your unit	1	5	1.93	1.077
		Dedicated to the unit	1	5	1.73	0.966
	Ideal commitment	Many opportunities for further study	1	5	2.83	1.270
		Working in your present position brings both challenges and difficulties	1	5	2.22	1.081

Continue of table 1

Variable	Variable dimensions and problems		Min	Max	Mean	Standard deviation
Mediator variable 2: degree of match	Teaching environment matching	The teaching philosophy is the same as other teachers in the school	1	5	2.11	0.968
		What I have learned in school can solve practical problems in rural schools well	1	5	2.18	1.017
		Able to accept the management style of rural schools	1	5	2.11	1.004
		Teaching ability can fully cope with the situation of rural school education	1	5	1.87	0.926
	Living environment matching	Very suitable for the current working environment	1	5	2.16	1.026
		The living environment now is very similar to the environment in my hometown	1	5	2.46	1.177
		Get along well with colleagues	1	5	1.69	0.891
Moderating variable: compensation strength	There is more merit pay for teachers in schools		1	5	3.59	1.291
	There is no difference between rural and urban teachers' salaries		1	5	3.27	1.376
	There are more housing subsidies for rural teachers		1	5	3.76	1.326
	There are more transportation subsidies for rural teachers		1	5	3.82	1.378
	There are more salary subsidies for rural teachers		1	5	3.64	1.345
	There are more benefits for rural teachers		1	5	3.83	1.334
	There are more extra bonuses for rural teachers		1	5	3.95	1.318
	Teachers who teach in rural areas have more opportunities for promotion		1	5	3.66	1.388
Dependent variable: rural teachers' retention intention	I intend to continue teaching at my present school		1	5	1.91	1.106
	The present working environment is very adaptable		1	5	1.97	1.068
	Willing to work with current colleagues		1	5	1.80	0.973
	I feel comfortable with my current students		1	5	1.92	1.055

Table 2. Analysis of factors related to retention intention of rural teachers
Таблица 2. Анализ факторов, связанных с намерением сельских учителей сохранить работу

	M	SD	1	2	3	4
1. Teachers' professional quality	1.6820	0.736	–			
2. Organizational commitment	2.0815	0.871	0.540***	–		
3. Matching degree	2.0897	0.788	0.604***	0.717***	–	
4. Compensation efforts	3.6910	1.137	0.013ns	0.243***	0.241***	–
5. Retention intention of rural teachers	1.9001	0.949	0.481***	0.740***	0.652***	0.112***

Note. *** $p > 0.05$, ns is the correlation was not significant.
 Примечание. *** $p > 0,05$, ns – корреляция незначительна.

Table 3. Regression analysis coefficient of determination (R²) of influencing factors of rural teachers' retention intention under different characteristics
Таблица 3. Коэффициент детерминации регрессионного анализа (R²) факторов, влияющих на намерение сельских учителей сохранить работу

		Teachers' professional quality	Organizational commitment	Matching degree	Compensation strength	Total value
Model 1: Total sample		–	0.548	0.030	0.001	0.579
Model 2: Rural school working hours	Over 16 years	–	0.529	0.034	0.012	0.575
	13–15 years	–	0.482	0.024	–	0.506
	10–12 years	–	0.559	–	–	0.559
	7–9 years	–	0.619	0.033	–	0.652
	4–6 years	–	0.573	0.014	–	0.587
	0–3 years	0.003	0.588	0.036	–	0.627
Model 3: Location of the village school	Outskirts of a town	0.007	0.597	0.014	–	0.618
	Town	–	0.533	0.035	0.009	0.577
	Village	–	0.540	0.034	0.012	0.586
Model 4: The teaching section	Primary school	–	0.556	0.032	0.007	0.595
	Junior high	–	0.533	0.027	0.009	0.569
Model 5: When employed Education	Graduate student or above	–	0.677	–	–	0.677
	Regular college course	0.001	0.564	0.023	0.004	0.592
	Bachelor degree or below	0.002	0.530	0.038	0.010	0.580
Model 6: Age	21–30 years old	–	0.651	0.017	–	0.668
	31–40 years old	–	0.549	0.041	0.006	0.596
	41–50 years old	0.001	0.540	0.038	0.005	0.584
	Over 51 years old	–	0.503	0.026	0.023	0.552
Model 7: Gender	Male	–	0.534	0.022	0.009	0.565
	Female	–	0.555	0.033	0.007	0.595
Model 8: Marital status	Wedlock	–	0.539	0.030	0.008	0.577
	Single	–	0.601	0.033	0.004	0.638
Model 9: First degree graduate school	Key undergraduate	–	0.744	–	0.026	0.770
	General undergraduate	–	0.599	0.026	0.002	0.627
	Secondary specialized schools	–	0.522	0.034	0.009	0.565
Model 10: The first degree professional type	Teachers professional	–	0.550	0.030	0.008	0.588
	Non-normal majors	0.009	0.541	0.027	0.005	0.582

Note. Dependent variable is rural teachers' retention intention; independent variable is teacher professional quality, organizational commitment, matching degree, compensation strength.

Примечание. Зависимая переменная – намерение сельских учителей сохранить работу; независимая переменная – уровень профессионализма учителя, приверженность организации, степень соответствия между учителями и сельской средой, размер вознаграждения.

Table 4. Analysis of the multiple mediating effects of teacher professional quality on rural teachers' retention intention
Таблица 4. Промежуточный эффект уровня профессионализма сельских учителей на их намерения сохранить работу

Effect	Estimated value	BootSE	95 % confidence interval	
			Lower limit	Upper limit
M1	0.106	0.004	0.097	0.115
M2	0.051	0.004	0.043	0.059
M1+M2	0.157	0.005	0.148	0.166
c'	0.022	0.004 (S.E)	0.014	0.031
Total	0.179	0.005 (S.E)	0.170	0.188

Note. M1 is the mediating effect of organizational commitment; M2 is the mediating effect of matching degree; M1+M2 is the total mediating effect; c' is the direct effect; Total is the total effect.

Примечание. M1 – опосредующий эффект приверженности организации; M2 – опосредующий эффект степени соответствия между учителями и сельской средой; M1+M2 – общий опосредующий эффект; c' – прямой эффект; Total – общий эффект.

reach the significant level. The estimated mediating effect of organizational commitment (M1) was 0.106, the estimated mediating effect of matching degree (M2) was 0.051, the estimated total mediating effect (M1+M2) was 0.157, and the estimated direct effect was 0.022. Organizational commitment (M1) accounted for 67.52 % of the total mediating effect. The matching degree (M2) accounted for 32.48 % of the total mediation effect. Organizational commitment (M1) accounted for 59.22 % of the total effect, matching degree (M2) accounted for 28.49 % of the total effect, total intermediary effect (M1+M2) accounted for 87.71 % of the total effect, and direct effect (c') accounted for 12.29 % of the total effect.

Analysis of the moderating effect of compensation intensity in multiple intermediary models

The data in Table 5 show that in equation 1, teacher professional quality significantly predicts organizational commitment in a positive way ($\beta_x=0.449, p<0.001$), while the interaction terms of teacher professional quality, and compensation strength negatively predict organizational commitment ($\beta_{xw1}=-0.005, p<0.001$). In equation 2, teachers' professional quality positively predicted the matching degree ($\beta_x=0.318, p<0.001$), and the interaction terms of teachers' professional quality and compensation strength negatively predicted the matching degree ($\beta_{xw1}=-0.002, p<0.001$). In Equation 3, teacher professional quality significantly positively predicted rural teacher retention ($\beta_x=0.015, p<0.01$), and organizational commitment, and matching degree also significantly positively predicted rural teacher retention ($\beta_{M1}=0.237, p<0.001; \beta_{M2}=0.170, p<0.001$), the interaction terms of teacher professional quality and compensation intensity showed a negative significant effect on the prediction of rural teachers' retention intention ($\beta_{xw1}=-0.001, p<0.05$).

Further, a simple slope analysis method is used to obtain the adjustment trend of compensation intensity: in equation 1, when the compensation intensity is one standard deviation above or below the mean value, the regulation effect is significant. When the compensation intensity in-

creased by one unit, the slope of teacher professional quality to organizational commitment decreased by 0.005 units ($\beta_{high}=0.407, \beta_{low}=0.491, p<0.001$). This indicates that compensation intensity has an enhanced moderating effect, on the positive impact of teacher professional quality on organizational commitment, but the moderating effect of low compensation intensity is stronger (Fig. 1). In equation 2, when the compensation intensity is one standard deviation above or below the mean, the regulation effect is significant. When the compensation intensity increased by one unit, the slope of teacher professional quality to match degree decreased by 0.002 units ($\beta_{high}=0.297, \beta_{low}=0.340, p<0.001$). This indicates that compensation intensity has an enhanced moderating effect on the positive influence of teachers' professional quality on the matching degree, but the moderating effect of low compensation intensity is stronger (Fig. 2). In equation 3, the regulation effect is significant only when the compensation intensity is one standard deviation below the mean value. When the compensation intensity increased by one unit, the slope of teacher professional quality on rural teachers' retention intention decreased by 0.001 units ($\beta_{high}=0.007, p>0.05; \beta_{low}=0.023, p<0.001$). This indicates that only low compensation intensity has an enhanced moderating effect on the positive impact of teacher professional quality on rural teachers' retention intention, while the moderating effect of high compensation intensity is not significant (Fig. 3).

DISCUSSION

Organizational commitment is the most important factor affecting the retention of rural teachers

Through the above correlation factor analysis and regression analysis data under different characteristics, it can be seen that teachers' professional quality, organizational commitment, matching degree and compensation intensity are significantly correlated with rural teachers' retention intention. Organizational commitment has a strong influence on the retention intention of rural teachers.

Table 5. The moderating effect of compensation intensity on teachers’ professional quality, organizational commitment, matching degree, and teachers’ willingness to stay
Таблица 5. Смягчающий эффект размера вознаграждения на профессиональные качества учителей, приверженность организации, степень приспособленности учителей к сельской среде и готовность учителей сохранить работу

Predictor	Equation 1: M1			Equation 2: M2			Equation 3: Y		
	β	SE	T	β	SE	T	β	SE	T
X	0.449	0.010	45.617***	0.318	0.006	53.610***	0.015	0.004	3.331**
W1	0.221	0.011	19.500***	0.142	0.007	20.802***	-0.034	0.004	-8.222***
XW1	-0.005	0.001	-4.574***	-0.002	0.001	-3.966***	-0.001	0.000	-2.495*
M1							0.237	0.006	39.713***
M2							0.170	0.010	17.153***
R ²	0.373			0.432			0.604		
F	234.329***			299.574***			514.587***		

Note. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

X is the professional quality of teachers; W1 is the compensation intensity; XW1 is compensation for teachers’ professional quality; M1 is organizational commitment; M2 is the matching degree; Y indicates the retention intention of rural teachers.

Примечание. * $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$.

X – уровень профессионализма учителей; W1 – размер вознаграждения; XW1 – вознаграждение за уровень профессионализма учителей; M1 – приверженность организации; M2 – степень соответствия между учителями и сельской средой; Y – намерение сельских учителей сохранить работу.

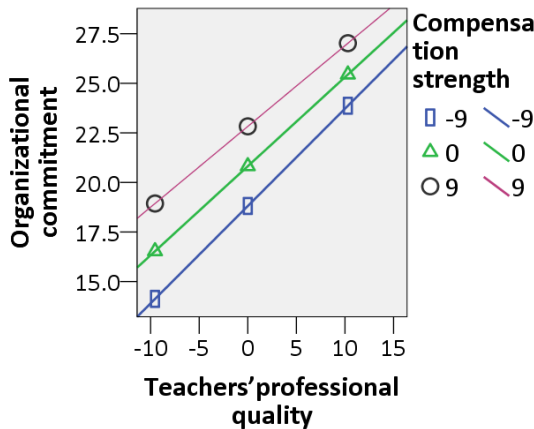


Fig. 1. Moderating effect of compensation strength 1
Рис. 1. Смягчающий эффект величины вознаграждения 1

With the improvement of organizational commitment level, the retention intention of rural teachers is increasing. Secondly, in many cases, the matching degree and compensation intensity also have a certain impact on the retention intention of rural teachers. The higher the matching degree and compensation intensity, the stronger the retention intention of rural teachers. In addition, although

the professional quality of teachers is also a factor affecting the retention intention of rural teachers in some situations, the influence is relatively weak. This shows that teachers’ professional quality, organizational commitment, matching degree and compensation intensity are all factors that should be paid attention to when considering the retention of rural teachers.

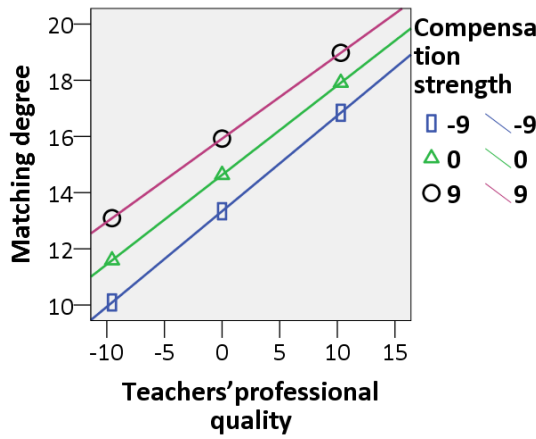


Fig. 2. The regulating effect of compensation strength 2
 Рис. 2. Регулирующий эффект величины вознаграждения 2

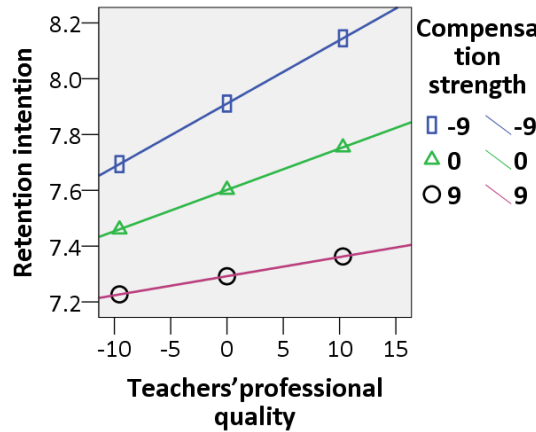


Fig. 3. The regulating effect of compensation strength 3
 Рис. 3. Регулирующий эффект величины вознаграждения 3

Organizational commitment and matching degree have significant mediating effect between teachers’ professional quality and rural teachers’ retention

According to the previous multiple intermediary effect analysis data, the two intermediary variables of organizational commitment and matching degree in the model play a significant intermediary effect on the relationship between teachers’ professional quality and rural teachers’ retention intention. In the case of the participation of the two mediating variables, the direct influence of teacher professional quality on the retention intention of rural teachers is significant. Among all the effects of teachers’ professional quality on rural teachers’ retention intention, only 12.29 % are caused by the direct effect of teachers’ professional quality, and 87.71 % are caused by the two intermediary variables of organizational commitment and matching degree, of which 59.22 % are caused by organizational commitment. 28.49 % of the effect is through the degree of matching. The above data verify the validity of hypothesis 1–3.

It can be inferred that organizational commitment and matching degree are two important mediating variables in the process of influencing rural teachers’ retention, through teachers’ professional quality. The higher the level of teachers’ organizational commitment, the stronger the mediating effect; the higher the degree of matching, the stronger the mediating effect. Compared with the two mediating variables, there are significant differences between them, and the mediating effect of organizational commitment plays a larger role.

The adjustment effect of compensation intensity is significant

According to the data of moderating effect analysis, it can be seen that compensation intensity has a significant moderating effect on the influence of teachers’ professional quality, on organizational commitment, rural teachers’ retention willingness and matching degree. The hypothesis 4–6 is verified.

The relationship between teachers' professional quality and organizational commitment, rural teachers' retention willingness to stay, and the degree of matching depends on the size of compensation. Compared with high compensation, low compensation can significantly enhance the positive impact of teachers' professional quality on organizational commitment, rural teachers' retention willingness to stay and matching degree. Therefore, it can be inferred that under the condition of teachers' existing professional quality, the adjustment effect of compensation intensity on organizational commitment, matching degree and rural teachers' retention willingness to stay can effectively promote the retention of rural teachers, and the positive adjustment effect of low compensation intensity is more obvious.

Practical recommendations

Provide strong support conditions to enhance the level of organizational commitment of teachers. Organizational commitment is the most important factor affecting the retention of rural teachers. To solve the problem of rural teachers' retention, we should first pay attention to the level of organizational commitment. Relevant factor analysis data show that organizational commitment is moderately correlated with teachers' professional quality. Further regression analysis shows that teachers' professional quality explains 29.1 % of organizational commitment. An effective strong support system can promote the improvement of teachers' professional quality, and can solve the anxiety and pressure sources caused by teachers' uncertainty about work and lack of teaching knowledge. It is expected to bridge the gap between the community's lack of sympathy for teachers and the need to support their continuous development. This investment in teachers' career support can be a decisive factor in teachers' overall satisfaction, allowing teachers to accept and identify with the school's goals and values, thereby enhancing their commitment to the organization.

Strengthen the effectiveness of professional support. Due to the particularity and complexity of rural schools in terms of community background, culture and class management, on the basis of monitoring the continuous and changing career development needs of rural teachers, the leaders of education departments should create dynamic spiral training and development support projects, to promote the type design, and content selection of support systems, to meet the different needs of rural teachers. After the implementation of the support system, the overall evaluation of the project quality is carried out, and the support system project is adjusted in time according to the feedback information, so as to provide targeted and effective professional support for rural teachers at different stages of development.

Create a positive and guiding rural school culture. Rural school leaders should create a school cultural environment with common beliefs and values, enhance the consistency of rural teachers' recognition of goals, and promote cultural-oriented behaviors composed of best interests, which helps to develop stronger organizational commitment; providing specific working conditions consistent with school culture, is not only conducive to the formation and development of teachers' professional cooperation spirit and culture, but also can realize the structural support for teachers' teaching activities. It is satisfactory for teachers to fundamentally conceptualize their working conditions, which contributes to the retention of teachers.

Provide multi-dimensional administrative support for improving teaching and promoting teacher development. Teachers supported by administrators are more likely to remain even in harsh environments [33]. School leaders can actively create conditions to guide teachers to participate in the major decisions of the school, so that they can perceive that they have greater autonomy, and have a more direct impact on school policy and development, and provide appropriate opportunities and time for cooperation between teachers, and their own professional development; provide different types of assistance for teachers at different stages of development, and actively solve the problems of teachers' education, and teaching concerns and pressures. Teachers will be more committed to staying in their teaching positions when they get recognition, encouragement, feedback, trust and participation in decision-making opportunities.

Multi-dimensional enhancement of the matching degree between teachers and rural environment. Teachers are more likely to stay in rural schools when they are familiar with rural culture and have the ability to face the challenges of rural education environment [34]. The proper matching of teachers' professional quality with rural life and working environment can increase teachers' comfort, overcome their sense of isolation and have a positive impact on teachers' staying in teaching posts. Pre-service teachers trained by colleges and universities are not suitable for all schools, so pre-service teachers should be provided with cross-cultural immersion experience in rural communities to enable them to accept knowledge related to rural situations [35]. By setting courses related to rural education and teaching, we can go to rural schools to carry out educational probation and educational practice activities; we can provide pre-service guidance and on-the-job training to help teachers better understand the uniqueness of rural schools, better adapt to the rural environment, and play an important role in preparing teachers for teaching in rural schools for a long time.

Improve the recruitment system. Decentralization of recruitment, involving rural school principals in the recruitment process, participating in the review of the formulation of recruitment contracts, giving principals the power and opportunity to recruit the most suitable candidates for specific rural schools in order to recruit as close as possible to the school; enriching recruitment information, teachers' decisions about where to work often depend on the school information they obtain. Every effort should be made to increase employment preview opportunities, including school visits, online and offline communication with rural school teachers, leaders, and even interaction with rural community members, which will help teachers make a preliminary judgment on the value and goals of rural schools. Creating an online database with school characteristics, providing relevant information such as class size, induction policies, professional development projects, and daily school teaching work, can more clearly explain the full picture of the school's situation, so that teacher candidates can judge their 'fit' potential and make informed decisions on where to teach.

The establishment of rural teachers' human resources data system, formulate appropriate and reasonable compensation policy. Few people go to rural schools to teach in order to get rich. The motivation of rural teachers' retention to stay in office is to love, to impart knowledge, and help rural students grow up. If the problem

of teacher turnover is rooted in differences in economic capacity in different regions, then a certain degree of compensation policy may help improve the retention rate of teachers in rural schools [36]. The administrative department should establish a coherent regional rural teacher human resource data system, for the replacement of rural teachers at the school level, which should be applied to give priority to the job and staffing needs of high-replacement schools. Based on the reliable teacher turnover data obtained, we will focus on building the ability of rural schools to attract and retain teachers, and implement remedial measures such as early recruitment, compensation, and induction guidance; secondly, we should regularly analyze and report the changing trend of replacement data, and explore the characteristics of teacher turnover and retention in different schools according to the characteristics of all school teachers' data. Finally, the bottom line of the total turnover rate and retention rate of rural teachers in a region is determined as a reference for formulating a comprehensive plan to prioritize the retention system of teachers.

In theory, the disadvantages of rural schools can be offset by means of higher wages or better welfare, or both. The compensation policy, is the preferred strategy for many policy makers to attract and retain rural teachers' retention, but the compensation is not, the more the better. If teachers clearly know that compensation is of little value in easing the difficulties of rural schools, they may refuse to stay in rural schools, especially when a more ideal location can earn higher wages; excessive compensation is politically unsustainable. As mentioned above, excessive compensation may ultimately undermine teachers' professional ethics and public service ethics. The government should take full account of the different realities of rural areas based on the information of the rural teachers' human resource data system, and the compensation measures must be strategically targeted at teachers who are willing to teach in the places where they are most needed (high-poverty schools, remote areas or subject areas with severe shortage of teachers); secondly, according to the needs of rural teachers, we should tailor, and provide the most attractive and appropriate compensation policy to alleviate or make up for the difficulties and disadvantages they have experienced in rural schools.

CONCLUSIONS

1. Organizational commitment is the most important influencing factor of rural teachers' retention. To solve the problem of rural teachers' retention, we should first pay attention to the level of organizational commitment.

2. The appropriate matching of teachers' professional quality and rural living and working environment can increase teachers' comfort. To solve the problem of rural teachers' retention, the matching degree between pre-service and post-service teachers and rural environment should be enhanced in multiple dimensions. Increasing the content of rural education can enhance the matching degree between teachers and rural schools, thus helping to retain teachers to teach in rural schools.

3. The compensation intensity has a significant moderating effect on the influence of teachers' professional quality on organizational commitment, rural teachers' retention

willingness to stay, and the degree of matching, and the formulation of appropriate and reasonable compensation policies, should be formulated to solve the problem of rural teachers' retention.

REFERENCES

1. Yu Haiying, Chen Min. A Study on the Policy of Teacher Quality Monitoring of Elementary Education in India. *Foreign Primary & Secondary Schooling Abroad*, 2017, no. 8, pp. 42–48. DOI: [10.3969/j.issn.1007-8495.2017.08.006](https://doi.org/10.3969/j.issn.1007-8495.2017.08.006).
2. Stone D. Recruiting and retaining teachers in rural schools. *Far West Laboratory Knowledge Brief*, 1990, no. 1, pp. 2–5.
3. Klassen R.M., Usher E.L., Bong M. Teachers' Collective Efficacy, Job Satisfaction, and Job Stress in Cross-cultural Context. *The Journal of Experimental Education*, 2010, vol. 78, no. 4, pp. 464–486. DOI: [10.1080/00220970903292975](https://doi.org/10.1080/00220970903292975).
4. Xin Z. Enhancing Rural Teachers' Professional Attraction in Minority Regions Ideas and Routes of Practice. *Educational Research*, 2019, no. 1, pp. 131–140.
5. Jeremy W. An Exploration of Teacher Retention in Rural School Districts in Eastern Kentucky. *Uknowledge: open scholarship, data, and Creative works*. DOI: [10.13023/ETD.2016.212](https://doi.org/10.13023/ETD.2016.212).
6. Lin Haifeng, Wang Mengxia. How the sense of acquisition of young rural teachers affects their willingness to stay on the job the intermediary effect of life satisfaction. *Journal of Educational Science, Hunan Normal University*, 2022, no. 2, pp. 59–75. DOI: [10.19503/j.cnki.1671-6124.2022.02.007](https://doi.org/10.19503/j.cnki.1671-6124.2022.02.007).
7. Yang Liu, Zhang Xu. Reflection on the Dilemma of Rural Teachers Preparation. *Research in Educational Development*, 2016, vol. 36, no. 2, pp. 24–30. DOI: [10.14121/j.cnki.1008-3855.2016.z2.006](https://doi.org/10.14121/j.cnki.1008-3855.2016.z2.006).
8. Meihong X. On the rationality of the loss of rural teachers – based on the theoretical perspective of fairness. *Journal of Shanghai Educational Research*, 2016, no. 2, pp. 10–13.
9. Brown K.M., Schainker S.A. Doing all the right things: Teacher retention issues. *Journal of Cases in Educational Leadership*, 2008, vol. 11, no. 1, pp. 10–17. DOI: [10.1177/1555458908325045](https://doi.org/10.1177/1555458908325045).
10. Brown K.M., Wynn S.R. Teacher retention issues: How some principals are supporting and keeping new teachers. *Journal of School Leadership*, 2007, vol. 17, no. 6, pp. 664–698. DOI: [10.1177/105268460701700601](https://doi.org/10.1177/105268460701700601).
11. Mao Chunfeng. Review and Reflection on the Research on the Loss of Rural Teachers – The Introduction of Social Work System. *Hubei Social Sciences*, 2009, no. 2, pp. 162–165. DOI: [10.3969/j.issn.1003-8477.2009.02.046](https://doi.org/10.3969/j.issn.1003-8477.2009.02.046).
12. Wang Yanling, Li Huiqin. Empirical Analysis of Rural Teachers' Intention of Turnover: Based on the Survey in Yunnan Province. *Journal of East China Normal University (Educational Sciences)*, 2017, no. 3, pp. 134–141. DOI: [10.16382/j.cnki.1000-5560.2017.03.014](https://doi.org/10.16382/j.cnki.1000-5560.2017.03.014).
13. Yu Haiying, Tian Chunyan, Yuan Xinlei. Research On Social Support of Enhancing the Willingness of Rural Teachers' Retention. *Contemporary Education Sciences*, 2023, no. 9, pp. 71–80. DOI: [10.3969/j.issn.1672-2221.2023.09.009](https://doi.org/10.3969/j.issn.1672-2221.2023.09.009).

14. Billingsley B.S., Cross L.H. Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *The Journal of Special Education*, 1992, no. 1, pp. 453–471. DOI: [10.1177/002246699202500404](https://doi.org/10.1177/002246699202500404).
15. Yipeng Tang, Heng Wang. How to Retain Rural Teachers? An Empirical Study Based on a Survey of Special-Post Teachers in G Province. *Educational Research in China*, 2019, no. 4, pp. 134–143. DOI: [10.1007/978-981-16-1520-7_17](https://doi.org/10.1007/978-981-16-1520-7_17).
16. Davis M.S. Teacher retention and small rural school districts in Montana. *Rural Educator*, 2002, no. 2, pp. 45–52.
17. Darling-Hammond L. Keeping Good Teachers: Why It Matters, What Leaders Can Do. *Educational Leadership*, 2003, no. 8, pp. 6–13.
18. Haar J.M. Retaining experienced, qualified teachers: The principal's role. *The Rural Educator*, 2007, vol. 28, no. 2, pp. 28–34. DOI: [10.35608/ruraled.v28i2.483](https://doi.org/10.35608/ruraled.v28i2.483).
19. Nieto S. What keeps teachers going? *Educational Leadership*, 2003, no. 1, pp. 6–18.
20. Guilin Y. The construction of rural school teachers needs institutional guarantee and institutional innovation. *Journal of East China Normal University (Educational Sciences)*, 2018, no. 4, pp. 30–32.
21. Kelly N., Reushle S., Chakrabarty S., Kinnane A. Beginning teacher support in Australia: Towards an online community to augment current support. *Australian Journal of Teacher Education*, 2014, vol. 39, no. 4, pp. 68–82. DOI: [10.14221/ajte.2014v39n4.6](https://doi.org/10.14221/ajte.2014v39n4.6).
22. Wang Yanling, Wen Zhengmei, Zhang Hui. Empirical analysis of rural teachers' resignation intention – Based on a survey of 5,342 rural teachers in Yunnan Province. *Research on teacher education*, 2022, no. 5, pp. 98–107. DOI: [10.13445/j.cnki.t.e.r.2022.05.007](https://doi.org/10.13445/j.cnki.t.e.r.2022.05.007).
23. Liu Zongnan, Lu Huixing, Pu Zhang, Yang Xingfang. Rural teacher selection: human capital, social capital and psychological capital – Based on a survey of more than 12,000 newly employed rural teachers. *Monthly Academic Journal of Education*, 2022, no. 10, pp. 97–105. DOI: [10.16477/j.cnki.issn1674-2311.2022.10.012](https://doi.org/10.16477/j.cnki.issn1674-2311.2022.10.012).
24. Liu Min, Shi Yabing. Analysis of the dynamic mechanism of rural teachers and training of rural teachers – On the life history of post-80s special teachers. *Contemporary Educational Science*, 2016, no. 6, pp. 15–19. DOI: [10.3969/j.issn.1672-2221.2016.06.004](https://doi.org/10.3969/j.issn.1672-2221.2016.06.004).
25. Cheng Gang, Dong Binyi, Jiang Yuchen. Impact of faculty organization commitment on job satisfaction - Based on the mediation effect of career depletion. *Basic Education*, 2022, no. 5, pp. 33–50. DOI: [10.3969/j.issn.1005-2232.2022.05.003](https://doi.org/10.3969/j.issn.1005-2232.2022.05.003).
26. Zhao Mingren, Meng Ling. Research on the implementation effect of rural teachers 'walking teaching mode - Based on the perspective of teachers' organization commitment. *Journal of Educational Science, Hunan Normal University*, 2020, vol. 19, no. 6, pp. 50–58. DOI: [10.19503/j.cnki.1671-6124.2020.06.006](https://doi.org/10.19503/j.cnki.1671-6124.2020.06.006).
27. Yu Haiying. Can the More Possibility to Retain Rural Teachers by Providing More Economic Compensation- Empirical Study Based on the Mediation Effects of Organizational Commitment. *Contemporary Education Forum*, 2022, no. 2, pp. 109–115. DOI: [10.13694/j.cnki.ddjylt.20211125.001](https://doi.org/10.13694/j.cnki.ddjylt.20211125.001).
28. Penley L.E., Gould S. Etzioni's model of organizational involvement: A perspective for understanding commitment to organizations. *Journal of Organizational Behavior*, 1988, no. 1, pp. 43–59. DOI: [10.1002/job.4030090105](https://doi.org/10.1002/job.4030090105).
29. Wang Yubiao, Li Baomin. Study on the influencing factors of rural teachers' job satisfaction from the perspective of individual-organization matching. *Basic Education*, 2023, no. 2, pp. 16–27. DOI: [10.3969/j.issn.1005-2232.2023.02.002](https://doi.org/10.3969/j.issn.1005-2232.2023.02.002).
30. Zhou Xiaojiao, Zhang Tianxue. Game Analysis and Solution to the Retention Dilemma of Rural High-quality Teachers. *Research in Educational Development*, 2020, no. 15-16, pp. 71–77. DOI: [10.14121/j.cnki.1008-3855.2020.z2.012](https://doi.org/10.14121/j.cnki.1008-3855.2020.z2.012).
31. Mwenda D.B., Mgomzulu V.Y. Impact of monetary incentives on teacher retention in and attraction to rural primary schools: Case of the rural allowance in Salima District of Malawi. *African Educational Research Journal*, 2018, vol. 6, no. 3, pp. 120–129. DOI: [10.30918/AERJ.63.18.028](https://doi.org/10.30918/AERJ.63.18.028).
32. Maranto R., Shuls J.V. How do we get them on the farm? Efforts to improve rural teacher recruitment and retention in Arkansas. *Rural Educator*, 2012, vol. 34, no. 1, pp. 20–28. DOI: [10.35608/ruraled.v34i1.406](https://doi.org/10.35608/ruraled.v34i1.406).
33. Yu Haiying, Cui Yushan, Fu Haifan. Study on the influence of social support on the effect of science education in rural primary schools. *Science Vector of Togliatti State University. Series: Pedagogy, psychology*, 2023, no. 3, pp. 37–49. DOI: [10.18323/3034-2996-2023-3-37-49](https://doi.org/10.18323/3034-2996-2023-3-37-49).
34. Patricia C.H., Hughes G., McClure C., Reeves C., Salgado D. *Rural teacher recruitment and retention practices: A review of the research literature, national survey of rural superintendents, and case studies of programs in Virginia*. Nashville, Edvantia Publ., 2005. 106 p. DOI: [10.2307/1498063](https://doi.org/10.2307/1498063).
35. Munsch T.R., Roylan C.R. Can a Week Make a Difference? Changing Perceptions about Teaching and Living in Rural Alaska. *The Rural Educator*, 2008, vol. 29, no. 2, pp. 14–23. DOI: [10.35608/ruraled.v29i2.469](https://doi.org/10.35608/ruraled.v29i2.469).
36. David H.M. Recruiting and Retaining High-Quality Teachers in Rural Areas. *The Future of Children*, 2007, vol. 17, no. 1, pp. 155–174. DOI: [10.1353/foc.2007.0009](https://doi.org/10.1353/foc.2007.0009).

СПИСОК ЛИТЕРАТУРЫ

1. Yu Haiying, Chen Min. A Study on the Policy of Teacher Quality Monitoring of Elementary Education in India // Foreign Primary & Secondary Schooling Abroad. 2017. № 8. P. 42–48. DOI: [10.3969/j.issn.1007-8495.2017.08.006](https://doi.org/10.3969/j.issn.1007-8495.2017.08.006).
2. Stone D. Recruiting and retaining teachers in rural schools // Far West Laboratory Knowledge Brief. 1990. № 1. P. 2–5.
3. Klassen R.M., Usher E.L., Bong M. Teachers' Collective Efficacy, Job Satisfaction, and Job Stress in Cross-cultural Context // The Journal of Experimental Education. 2010. Vol. 78. № 4. P. 464–486. DOI: [10.1080/00220970903292975](https://doi.org/10.1080/00220970903292975).
4. Xin Z. Enhancing Rural Teachers' Professional Attraction in Minority Regions Ideas and Routes of Practice // Educational Research. 2019. № 1. P. 131–140.

5. Jeremy W. An Exploration of Teacher Retention in Rural School Districts in Eastern Kentucky // *Uknowledge: open scholarship, data, and Creative works*. DOI: [10.13023/ETD.2016.212](https://doi.org/10.13023/ETD.2016.212).
6. Lin Haifeng, Wang Mengxia. How the sense of acquisition of young rural teachers affects their willingness to stay on the job the intermediary effect of life satisfaction // *Journal of Educational Science, Hunan Normal University*. 2022. № 2. P. 59–75. DOI: [10.19503/j.cnki.1671-6124.2022.02.007](https://doi.org/10.19503/j.cnki.1671-6124.2022.02.007).
7. Yang Liu, Zhang Xu. Reflection on the Dilemma of Rural Teachers Preparation // *Research in Educational Development*. 2016. Vol. 36. № 2. P. 24–30. DOI: [10.14121/j.cnki.1008-3855.2016.z2.006](https://doi.org/10.14121/j.cnki.1008-3855.2016.z2.006).
8. Meihong X. On the rationality of the loss of rural teachers – based on the theoretical perspective of fairness // *Journal of Shanghai Educational Research*. 2016. № 2. P. 10–13.
9. Brown K.M., Schainker S.A. Doing all the right things: Teacher retention issues // *Journal of Cases in Educational Leadership*. 2008. Vol. 11. № 1. P. 10–17. DOI: [10.1177/1555458908325045](https://doi.org/10.1177/1555458908325045).
10. Brown K.M., Wynn S.R. Teacher retention issues: How some principals are supporting and keeping new teachers // *Journal of School Leadership*. 2007. Vol. 17. № 6. P. 664–698. DOI: [10.1177/105268460701700601](https://doi.org/10.1177/105268460701700601).
11. Mao Chunfeng. Review and Reflection on the Research on the Loss of Rural Teachers - The Introduction of Social Work System // *Hubei Social Sciences*. 2009. № 2. P. 162–165. DOI: [10.3969/j.issn.1003-8477.2009.02.046](https://doi.org/10.3969/j.issn.1003-8477.2009.02.046).
12. Yanling W., Huiqin L. An Empirical Analysis of Rural Teachers' Intention of Turnover: Based on the Survey in Yunnan Province // *Journal of East China Normal University (Educational Sciences)*. 2017. № 3. P. 134–141. DOI: [10.16382/j.cnki.1000-5560.2017.03.014](https://doi.org/10.16382/j.cnki.1000-5560.2017.03.014).
13. Yu Haiying, Tian Chunyan, Yuan Xinlei. On Social Support of Enhancing the Willingness of Rural Teachers' Retention // *Contemporary Education Sciences*. 2023. № 9. P. 71–80. DOI: [10.3969/j.issn.1672-2221.2023.09.009](https://doi.org/10.3969/j.issn.1672-2221.2023.09.009).
14. Billingsley B.S., Cross L.H. Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators // *The Journal of Special Education*. 1992. № 1. P. 453–471. DOI: [10.1177/002246699202500404](https://doi.org/10.1177/002246699202500404).
15. Tang Yipeng, Wang Heng. How to Retain Rural Teachers? An Empirical Study Based on a Survey of Special-Post Teachers in G Province // *Educational Research in China*. 2019. № 4. P. 134–143. DOI: [10.1007/978-981-16-1520-7_17](https://doi.org/10.1007/978-981-16-1520-7_17).
16. Davis M.S. Teacher retention and small rural school districts in Montana // *Rural Educator*. 2002. № 2. P. 45–52.
17. Darling-Hammond L. Keeping Good Teachers: Why It Matters, What Leaders Can Do // *Educational Leadership*. 2003. № 8. P. 6–13.
18. Haar J.M. Retaining experienced, qualified teachers: The principal's role // *The Rural Educator*. 2007. Vol. 28. № 2. P. 28–34. DOI: [10.35608/ruraled.v28i2.483](https://doi.org/10.35608/ruraled.v28i2.483).
19. Nieto S. What keeps teachers going? // *Educational Leadership*. 2003. № 1. P. 6–18.
20. Guilin Y. The construction of rural school teachers needs institutional guarantee and institutional innovation // *Journal of East China Normal University (Educational Sciences)*. 2018. № 4. P. 30–32.
21. Kelly N., Reushle S., Chakrabarty S., Kinnane A. Beginning teacher support in Australia: Towards an online community to augment current support // *Australian Journal of Teacher Education*. 2014. Vol. 39. № 4. P. 68–82. DOI: [10.14221/ajte.2014v39n4.6](https://doi.org/10.14221/ajte.2014v39n4.6).
22. Wang Yanling, Wen Zhengmei, Zhang Hui. Empirical analysis of rural teachers' resignation intention – Based on a survey of 5,342 rural teachers in Yunnan Province // *Research on teacher education*. 2022. № 5. P. 98–107. DOI: [10.13445/j.cnki.t.e.r.2022.05.007](https://doi.org/10.13445/j.cnki.t.e.r.2022.05.007).
23. Liu Zongnan, Lu Huixing, Pu Zhang, Yang Xingfang. Rural teacher selection: human capital, social capital and psychological capital – Based on a survey of more than 12,000 newly employed rural teachers // *Monthly Academic Journal of Education*. 2022. № 10. P. 97–105. DOI: [10.16477/j.cnki.issn1674-2311.2022.10.012](https://doi.org/10.16477/j.cnki.issn1674-2311.2022.10.012).
24. Liu Min, Shi Yabing. Analysis of the dynamic mechanism of rural teachers and training of rural teachers – On the life history of post-80s special teachers // *Contemporary Educational Science*. 2016. № 6. P. 15–19. DOI: [10.3969/j.issn.1672-2221.2016.06.004](https://doi.org/10.3969/j.issn.1672-2221.2016.06.004).
25. Cheng Gang, Dong Binyi, Jiang Yuchen. Impact of faculty organization commitment on job satisfaction – Based on the mediation effect of career depletion // *Basic Education*. 2022. № 5. P. 33–50. DOI: [10.3969/j.issn.1005-2232.2022.05.003](https://doi.org/10.3969/j.issn.1005-2232.2022.05.003).
26. Zhao Mingren, Meng Ling. Research on the implementation effect of rural teachers 'walking teaching mode – Based on the perspective of teachers' organization commitment // *Journal of Educational Science, Hunan Normal University*. 2020. Vol. 19. № 6. P. 50–58. DOI: [10.19503/j.cnki.1671-6124.2020.06.006](https://doi.org/10.19503/j.cnki.1671-6124.2020.06.006).
27. Yu Haiying. Can the More Possibility to Retain Rural Teachers by Providing More Economic Compensation- Empirical Study Based on the Mediation Effects of Organizational Commitment // *Contemporary Education Forum*. 2022. № 2. P. 109–115. DOI: [10.13694/j.cnki.ddjyjt.20211125.001](https://doi.org/10.13694/j.cnki.ddjyjt.20211125.001).
28. Penley L.E., Gould S. Etzioni's model of organizational involvement: A perspective for understanding commitment to organizations // *Journal of Organizational Behavior*. 1988. № 1. P. 43–59. DOI: [10.1002/job.4030090105](https://doi.org/10.1002/job.4030090105).
29. Wang Yubiao, Li Baomin. Study on the influencing factors of rural teachers' job satisfaction from the perspective of individual-organization matching // *Basic Education*. 2023. № 2. P. 16–27. DOI: [10.3969/j.issn.1005-2232.2023.02.002](https://doi.org/10.3969/j.issn.1005-2232.2023.02.002).
30. Zhou Xiaojiao, Zhang Tianxue. Game Analysis and Solution to the Retention Dilemma of Rural High-quality Teachers // *Research in Educational Development*. 2020. № 15-16. P. 71–77. DOI: [10.14121/j.cnki.1008-3855.2020.z2.012](https://doi.org/10.14121/j.cnki.1008-3855.2020.z2.012).
31. Mwenda D.B., Mgomzulu V.Y. Impact of monetary incentives on teacher retention in and attraction to rural primary schools: Case of the rural allowance in Salima District of Malawi // *African Educational Research Journal*. 2018. Vol. 6. № 3. P. 120–129. DOI: [10.30918/AERJ.63.18.028](https://doi.org/10.30918/AERJ.63.18.028).
32. Maranto R., Shuls J.V. How do we get them on the farm? Efforts to improve rural teacher recruitment

- and retention in Arkansas // Rural Educator. 2012. Vol. 34. № 1. P. 20–28. DOI: [10.35608/ruraled.v34i1.406](https://doi.org/10.35608/ruraled.v34i1.406).
33. Yu Haiying, Cui Yushan, Fu Haifan. Study on the influence of social support on the effect of science education in rural primary schools // Science Vector of Togliatti State University. Series: Pedagogy, psychology. 2023. № 3. P. 37–49. DOI: [10.18323/3034-2996-2023-3-37-49](https://doi.org/10.18323/3034-2996-2023-3-37-49).
34. Patricia C.H., Hughes G., McClure C., Reeves C., Salgado D. Rural teacher recruitment and retention practices: A review of the research literature, national survey of rural superintendents, and case studies of programs in Virginia. Nashville: Edvantia, 2005. 106 p. DOI: [10.2307/1498063](https://doi.org/10.2307/1498063).
35. Munsch T.R., Roylan C.R. Can a Week Make a Difference? Changing Perceptions about Teaching and Living in Rural Alaska // The Rural Educator. 2008. Vol. 29. № 2. P. 14–23. DOI: [10.35608/ruraled.v29i2.469](https://doi.org/10.35608/ruraled.v29i2.469).
36. David H.M. Recruiting and Retaining High-Quality Teachers in Rural Areas // The Future of Children. 2007. Vol. 17. № 1. P. 155–174. DOI: [10.1353/foc.2007.0009](https://doi.org/10.1353/foc.2007.0009).

Исследование факторов и механизма удержания сельских учителей

© 2024

Юй Хайин¹, доктор педагогических наук, профессор,
декан факультета педагогики, научный руководитель студентов магистратуры
Пэн Цзинсюань², аспирант
Юй Шань³, аспирант
Юй Ин⁴, аспирант
Сун Ян⁵, аспирант

Муданьцзянский педагогический университет, Муданьцзян (Китай)

*E-mail: 0701008@mdjnu.edu.cn,
yuhaiying0304@163.com

¹ORCID: <https://orcid.org/0000-0003-0157-4631>

²ORCID: <https://orcid.org/0009-0001-7717-9868>

³ORCID: <https://orcid.org/0009-0004-6816-0382>

⁴ORCID: <https://orcid.org/0009-0004-2586-3467>

⁵ORCID: <https://orcid.org/0009-0008-1303-6965>

Поступила в редакцию 02.04.2024

Принята к публикации 16.05.2024

Аннотация: Для решения проблемы удержания сельских учителей необходимо систематически исследовать влияющие на него факторы с точки зрения теории, политики и технологий, найти реалистичную отправную точку для улучшения ситуации и предложить направление оптимизации стратегии удержания. На основе 4 746 анкет, собранных в 10 регионах китайской провинции Хэйлуцзян, проведено углубленное исследование факторов и механизма удержания сельских учителей. Выявлена значительная корреляция между уровнем профессионализма учителей, приверженностью организации, степенью приспособленности учителей к сельской среде, размером вознаграждения и готовностью учителей остаться в сельской школе. Наиболее влиятельным фактором является приверженность организации. Уровень профессионализма оказывает существенное влияние на удержание сельских учителей; приверженность организации и степень приспособленности учителей к сельской среде влияют опосредованно. Размер заработной платы влияет на профессиональные качества учителей, на приверженность организации, соответствие требованиям и удержание сельских учителей на рабочем месте и оказывает значительное регулирующее воздействие, которое снижается при понижении заработной платы. Для эффективного удержания сельских учителей необходимо обеспечить им сильную поддержку и повысить уровень приверженности организации; повысить степень приспособленности учителей к сельской среде в различных направлениях; создать базу человеческих ресурсов сельских учителей и сформулировать соответствующую политику оплаты труда.

Ключевые слова: сельские учителя; удержание; факторы, влияющие на удержание сельских учителей; механизма удержания сельских учителей; регулирующий эффект.

Благодарности: Финансирование проекта: Национальный проект по общему образованию Национального фонда гуманитарных наук в 2021 году: Исследование механизма удержания сельских учителей (грант № ВНА210137).

Для цитирования: Юй Хайин, Пэн Цзинсюань, Юй Шань, Юй Ин, Сун Ян. Исследование факторов и механизма удержания сельских учителей // Доказательная педагогика и психология. 2024. № 2. С. 35-49. DOI: 10.18323/3034-2996-2024-2-35-49.