

Article

The Impact of Job Resources and Teaching Self-Efficacy on Rural Teachers' Agency

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Abstract

Against the backdrop of uneven educational development and structural constraints in rural Mainland China, teacher agency is critical for driving professional growth and instructional improvement. Rural educators face distinct challenges—limited resources, isolated work contexts, and systemic pressures—that shape their capacity to enact change. While scholarship has documented the roles of contextual resources and individual beliefs in shaping teacher agency, less is known about the mediating mechanisms linking job resources and self-efficacy to agency within China's rural educational landscape. This study examines how perceived job resources (teaching resources, administrative support, colleague support, parental support) and teaching self-efficacy collectively shape rural teachers' agency, to inform policy and practice for strengthening their professional capacity. Drawing on a quantitative survey of 625 rural teachers, we employ a two-stage analytical approach: first, descriptive statistics, *t*-tests, ANOVA, and Pearson correlations to map baseline variable relationships; second, Hayes' PROCESS macro (Model 4) with bootstrapping to test the mediating role of teaching self-efficacy between job resources and teacher agency. Findings reveal the following: (1) Rural teachers report moderate agency ($M = 3.53/5$), indicating room for growth; (2) All four job resource dimensions significantly and positively predict agency ($\beta = 0.099\text{--}0.163$); (3) Teaching self-efficacy is a robust predictor of agency ($\beta = 0.785\text{--}0.822$, $p < 0.001$) after controlling for resources; (4) Self-efficacy partially mediates the links between each job resource and agency, with indirect effects ranging from 0.269 (teaching resources) to 0.451 (colleague support), highlighting its central role in translating contextual resources into agentic action. We conclude that fostering rural teacher agency requires a holistic approach addressing both external job resources and internal self-efficacy. Policymakers and administrators should prioritize investments in teaching resources, collaborative support structures, and professional development to build educators' confidence and competence. Limitations include self-report bias, cross-sectional design constraints on causal inference, and limited generalizability. Future research should use longitudinal designs and broader samples to deepen understandings of agency in structurally constrained educational settings.

Keywords: teacher agency; job resources; teaching self-efficacy; rural teachers; teacher development

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1. Introduction

Teacher agency refers to the capacity of teachers to actively and purposefully make decisions, take actions, and exert influence within their professional roles, in order to positively impact their teaching practice, student learning outcomes, and the overall educational environment (Cong-Lem, 2021; Sancar et al., 2021). It emphasizes the importance of recognizing and supporting teachers as active agents in the educational process, capable of shaping their professional identities and influencing student outcomes (Molla & Nolan, 2020). In the aftermath of the COVID-19 pandemic, the modern educational landscape has become increasingly complex, with diverse student needs, technological advancements, and evolving teaching methods, posing challenges to teacher agency's development. As a result, education departments at all levels and school administrators are highly concerned about teacher agency, prompting scholars to intensify their research on how to enhance teacher agency.

While research on teacher agency has predominantly focused on urban and well-resourced school settings, there is a compelling need to shift the spotlight towards rural areas, where unique challenges and opportunities exist for teachers (Shen et al., 2024). Rural areas, especially in Mainland China, often face distinct educational challenges, including limited resources, isolation, and disparities in access to professional development opportunities (Zhao et al., 2019). In these contexts, teachers in rural schools are frequently required to wear multiple hats, taking on diverse roles beyond their primary teaching duties to meet the needs of their students and communities. Given the critical role that teachers play in rural education settings, it is imperative to examine the concept of teacher agency within the context of rural schools. Understanding the unique challenges and opportunities that shape teacher agency in rural settings is essential for developing targeted interventions and support mechanisms that empower rural teachers to thrive in their roles and create positive learning experiences for their students.

Understanding the factors and pathways that influence teacher agency is crucial for ensuring high-quality education for all rural learners. One key factor that has gained attention in educational research is the perceived job support that teachers receive in their work environment. This support includes emotional, informational, and instrumental assistance from colleagues, administrators, and the broader school community (Kristy et al., 2016). Additionally, teacher's self-efficacy refers to their inner beliefs and attitudes toward their teaching (Gibson & Dembo, 1984), it has a close connection with the teacher agency, as self-efficacy plays a significant role in empowering teachers to take control of their professional practice and make meaningful decisions in the classroom (Gibson & Dembo, 1984). However, few studies have examined how self-efficacy mediates the relationship between job resources and teacher agency, particularly in the context of rural China. This gap is significant because rural teachers in China often face unique challenges, such as limited resources and professional isolation, which may differentially impact their agency compared to their urban counterparts.

This study aims to address this gap by investigating how perceived job resources and self-efficacy influence teacher agency in rural China. Specifically, it explores the mediating role of self-efficacy in the relationship between job resources and teacher agency, providing a deeper understanding of the mechanisms that empower rural teachers. By examining these relationships, the research seeks to generate evidence-based insights for developing targeted educational policies and practices that enhance teacher agency, ultimately contributing to improved teaching quality and student outcomes in underserved rural areas of Mainland China.

2. Literature Review

2.1. Teacher Agency and Its Predictors

The concept of teacher agency refers to the ability of teachers to make decisions and take actions to bring about changes (Raymond & Gabriel, 2023). Teachers are seen as active participants who can adapt to or even challenge policies, rather than passive recipients. This idea has been explored in previous study by Chaaban and Sawalhi (2020).

However, previous studies vary in how they define and approach the examination of teacher agency. Teachers were found to enact their professional agency differently across educational contexts and even among teachers within the same contexts (Bao et al., 2020). Teacher agency in interpersonal relationships includes abilities such as cooperation, negotiation and knowledge integration (den Brok et al., 2023). Teacher agency from the perspective of Bourdieu sociology includes curiosity, negotiation, recognition, response, morality, etc. Teacher agency in the context of vocational education reform includes teaching investment, reform investment and identity construction, etc. (Imants & Van der Wal, 2020). Teacher agency focusing on teaching includes active beliefs, active practices and active tendencies (Ruan, 2020). Therefore, the content of teacher agency is often determined by what researchers focus on.

Overall, previous scholars sought to understand teacher agency by categorizing it into mainly four types of its manifestations or approaches. Firstly, teacher agency can be characterized as adoption orientation, with teachers following and executing new policies as directed. Secondly, teacher agency may be seen as adaptation orientation, with teachers proactively making adjustments to align with local circumstances (Willis et al., 2019). Thirdly, in transformation orientation, teachers are inclined to develop novel teaching strategies or materials. Lastly, resistance in teacher agency is demonstrated when teachers ignore policies or simply go through the motions without true engagement. However, increasingly, researchers are integrating the above four orientations into utilizing external resources and tapping into potential to achieve professional development goals (Sang & Huang, 2023). In this vein, teacher agency is increasingly understood as a dynamic and contextually situated construct, co-shaped by individual capacities, structural conditions, and teachers' situated enactment in practice, emerging through ongoing interactions with material and social environments that may enable or constrain its realization (Emans et al., 2025). Accordingly, this study conceptualizes teacher agency as teachers' contextually embedded capacity to make informed pedagogical choices and enact purposeful actions by mobilizing available resources, as manifested in adoption, adaptation, transformation, and resistance in response to policy and instructional changes.

These studies examined various factors that influence teachers' ability to exercise their agency, which can be categorized into two main groups: personal and social/relational factors. Specifically, personal factors encompass individual beliefs, values, and emotions (Benesch, 2018), while social factors include relationships with colleagues and students, and the mode of agency enactment (Lennert da Silva & Mølsted, 2020), school culture (X. Li & Li, 2021), and organizational structure (X. Liu, 2020). These multifaceted factors interact dynamically to ultimately determine how teacher agency is manifested and its outcomes. Further analysis reveals that factors at the individual level mainly stem from a psychological perspective, while factors at the social level primarily arise from the relationships with others. Furthermore, based on the organizational support theory, organizations offer support to employees to help them feel supported, thus enhancing their work motivation and performance, leading to a positive impact on the long-term development of both the organization and its employees. In conclusion, this study will select job support and self-efficacy as individual and social-level variables respectively to investigate the mechanisms influencing teacher agency in the rural context, with teaching self-

efficacy conceptualized as a mediating pathway linking job resources to teachers' agentic practices.

2.2. Job Resources and Its Role

Job resources, a central concept in the Job Demands-Resources (JD-R) model (Lesener et al., 2019), refer to the physical, psychological, social, or organizational aspects of a job that help employees achieve their goals, reduce stress, and promote well-being. Specifically, job resources can mitigate the negative effects of job demands, facilitate goal achievement, and stimulate personal growth and development (Stan & Vîrgă, 2021). While the JD-R model has been widely applied in educational settings, some studies have highlighted its limitations. For example, research by Bakker, A. B., & de Vries found that certain job resources, such as excessive administrative support, can inadvertently increase workload and stress, contradicting the model's assumption that resources are universally beneficial (A. B. Bakker & de Vries, 2021). Additionally, the impact of job resources may vary depending on cultural and contextual factors, suggesting the need for a more nuanced application of the model in diverse educational settings (Glasgow Caledonian University United Kingdom, 2024). Therefore, within the Chinese context, whether all job resources facilitate teacher agency remains to be examined.

In this study, job resources are categorized into three levels: (1) contextual-level resources (e.g., support from parents), (2) interpersonal-level resources (e.g., support from administrators and colleagues), and (3) organizational-level resources (e.g., teaching materials and infrastructure). These resources may have varying impacts on teacher agency. For example, interpersonal support from colleagues may foster collaboration and innovation, while organizational resources such as teaching materials may directly enhance instructional effectiveness. The present study includes job resources at the contextual level (support from parents), the interpersonal level (support from administration and colleagues), and the organizational level (teaching resources). By examining these distinct types of job resources, this study aims to provide a more detailed and nuanced understanding of how different job resources influence teacher agency.

Job resources serve as dual motivators, influencing employees intrinsically and extrinsically. Intrinsic motivators, such as autonomy, competence, and opportunities for growth, fulfill individuals' psychological needs and drive internal satisfaction. Self-efficacy is also an intrinsic psychological state of individuals. Thus, job resources may positively predict self-efficacy as well. On the other hand, job resources can also act as external motivators. In supportive work environments with resources like feedback and peer support, employees are more likely to succeed in their tasks and reach their professional goals. As previously discussed, teacher agency shows one's active deal with working challenges, so job resources may positively predict self-efficacy as well.

2.3. Teaching Self-Efficacy and Its Role

The concept self-efficacy was introduced by Bandura (Bandura, 1997). Self-efficacy develops as individuals interact with their surroundings and become more familiar with their ability to overcome challenging tasks. Self-efficacy can be categorized into two types: general self-efficacy and task-specific self-efficacy. General self-efficacy refers to an individual's ability to perform across various situations, while task-specific self-efficacy is linked to an individual's ability to perform in specific situations. In this article, the focus is on teacher agency, which involves studying teachers as the subject within their work context. Therefore, the self-efficacy in the present study refers to the belief that teachers hold about their instructional capabilities, namely teaching self-efficacy.

Teaching self-efficacy, a key construct in psychology, can play a dual role in research studies. It can serve as an independent variable, influencing behaviors and actions of individuals, such as teachers teaching behaviors (Zee et al., 2018). On the other hand, self-efficacy can also be seen as a dependent variable, personal and contextual factors also play a role in the development of teaching self-efficacy (Morris, 2017), such as teaching experience, teaching context, instructional leadership, and distributed leadership impacted self-efficacy (Wray et al., 2022). Based on previous research findings that external factors may influence self-efficacy and self-efficacy may in turn affect teacher behaviors, it can be reasonably inferred that teaching self-efficacy likely mediates the relationship between job resources and teacher agency.

2.4. Conceptual Framework

Drawing on the above-mentioned literature and the research gap presented in the Introduction section, the present study investigates the effect of job resources on teacher agency and explores the role of teaching self-efficacy. This study tests the following hypotheses.

Hypothesis 1. *Job resources is significantly positively related to teacher agency. Specifically, teaching resources, administrative support, colleague support, parental support are positively related to teacher agency respectively when controlling for other variables.*

Hypothesis 2. *Teaching self-efficacy is significantly positively related to teacher agency.*

Hypothesis 3. *Teaching self-efficacy mediates the relationship between the variables of job resources and teacher agency. Specifically, when other variables are controlled for, teaching self-efficacy plays a mediating role in the relationship between teaching resources, administrative support, colleague support, support from parents and teacher agency.*

3. Materials and Methods

To examine the relationship between job resources and teacher agency, and the role of teaching self-efficacy in this relationship, the researchers utilized the survey method to gather data from rural school teachers as it allows for the efficient collection of a large quantity of data.

3.1. Participants

A total of 650 junior high school teachers from H Province in Central China participated in the survey of questionnaire. After excluding 25 questionnaires that did not answer or had obvious bias, 625 valid questionnaires were obtained, with a 96.15% response rate. Based on recent guidelines for sample size justification (M. Bakker et al., 2022), a sample size of $N = 625$ is sufficient to detect a small effect size ($d = 0.2$) with a significance level of $\alpha = 0.05$ and statistical power of $1 - \beta = 0.8$. Of the total sample, there are 80 male teachers (12.80%) and 545 female teachers (87.20%); 89 unmarried teachers (14.24%) and 536 married teachers (85.76%); 455 teachers without management positions (69.28%), 88 subject group leaders (14.08%), 87 middle-level managers (13.92%), and 17 principals (2.72%). The distribution of participants across these categories broadly reflects the structure of the target population within the sampled region. However, as the data were collected from a single province, caution is warranted when generalizing the findings beyond this context.

3.2. Measures

In addition to collecting socio-demographic data and data related to some of the control variables, the questionnaire contained three main sub-scales.

Teacher agency. Teacher agency was measured using the Teacher Sense of Agency Scale (Merchie et al., 2018). This measure consists of 13 items, assessed along a 5-point continuum with anchors at 1—Extremely challenging, 2—Partially attainable, 3—Feasible to some extent, 4—Essentially achievable, and 5—Fully attainable. Sample items include, “I seek to understand each student’s specific learning style and needs and rationalize my lesson plans accordingly.” “I try to use a variety of teaching strategies for the different types of students in my class.” In this study, Cronbach’s α is 0.957.

Teaching self-efficacy. Teachers’ sense of teaching efficacy was measured by adapting the Teacher Sense of Efficacy Scale (previously called the Ohio State Teacher Efficacy Scale) (Burgueño et al., 2019). This measure consists of 12 items, assessed along a 5-point continuum with anchors at 1—Nothing, 3—Very little, 5—Some influence, 7—Quite a bit, and 9—A great deal. Teaching self-efficacy includes efficacy for instructional strategies, efficacy for classroom management, efficacy for student engagement etc. Sample items include: “I can provide an alternative explanation or example when students are confused” “I can control disruptive behavior in the classroom.” “I can motivate students who show low interest in schoolwork.” Cronbach’s α for the overall scale is 0.945.

Job resources. Job resources are measured by adapting Teacher Support Scale developed by Tschannen-Moran & Hoy (Van Mieghem et al., 2022). Participants were asked to rate the quality of the support they had received in five areas: teaching resources, interpersonal support provided by the administration of their school, interpersonal support provided by colleagues, parental support and involvement in their classrooms. This measure consisted of 12 items, assessed along a 5-point continuum with anchors at 1—Nonexistent, 2—Poor, 3—Adequate, 4—Good, and 5—Excellent. Sample items include, “The school will provide teachers with the necessary material resources for teaching as much as possible, such as phonetic cards, recorders, etc.” “My colleagues will encourage me when facing teaching pressure.” Cronbach’s α for the four dimensions and the overall scale ranged from 0.873 to 0.936.

3.3. Data Collection and Analysis

With the help of an electronic questionnaire platform, questionnaires were distributed to a rural teacher online community. Teachers were requested to voluntarily finish the questionnaires. After the questionnaire was collected, SPSS. 20 was used for the following two stages of analysis. In the first stage, descriptive statistics analyses, including T-tests, ANOVA, and Pearson correlations, were performed on all predictor, control, and outcome variables. In the second stage the mediation model was tested using Hayes’ PROCESS macro Model 4 and bootstrapping approaches (Abu-Bader & Jones, 2021).

4. Results

4.1. Descriptive Statistics and Group Difference Analysis

The means, standard deviations, and correlations between all continuous variables are presented in Table 1. It can be seen that the mean teacher agency score is 3.53, which is between 3—Feasible to some extent, and 4—Essentially achievable, ranging from 3.46 to 3.59 from the aspect of 95% confidence interval. All of the significant relationships between the variables are in the expected direction, teaching self-efficacy ($r = 0.663, p < 0.001$), teaching resources ($r = 0.428, p < 0.001$), administrative support ($r = 0.406, p < 0.001$), colleague support ($r = 0.434, p < 0.001$), and parental support ($r = 0.478, p < 0.001$) is strongly positively related to teacher agency.

Table 1. Means, standard deviations, and bi-variate correlations among key variables (N = 625).

Variables	M ± SD	1	2	3	4	5	6
1 Teacher agency	3.53 ± 0.83	1					
2 Teaching self-efficacy	3.85 ± 0.61	0.663 **	1				
3 Teaching resources	3.75 ± 0.79	0.428 **	0.446 **	1			
4 Administrative support	3.91 ± 0.76	0.406 **	0.432 **	0.767 **	1		
5 Colleague support	4.15 ± 0.64	0.434 **	0.568 **	0.544 **	0.614 **	1	
6 Parental support	3.94 ± 0.34	0.478 **	0.544 **	0.578 **	0.583 **	0.655 **	1

Note. ** Represents $p < 0.01$.

Differences in teacher agency among the subgroups are shown in Table 2. Although there are certain differences in teacher agency among different subgroups, the differences among are not significantly in terms of statistics. ($p > 0.05$). Specifically, there is no substantial difference in the scores of teacher agency among subgroups distinguished by gender, marital status, age, educational qualification, title, and position. Additionally, the agency of countryside teachers ($M = 3.42$) is significantly lower than that of teachers from the outskirts of town ($M = 3.50$) and peri-urban areas ($M = 3.63$). Furthermore, the agency of teachers from the outskirts of town is significantly lower than that of teachers from peri-urban areas. These findings suggest that as the distance from the main city increases, teachers' agency tends to decrease.

Table 2. Between-group differences in participants' level of teacher agency.

Description	N	Mean	SD	t/F
Gender	Male	80	3.64	0.90
	Female	545	3.51	0.81
Marital status	Unmarried	89	3.49	0.85
	Married	536	3.53	0.82
Age	Under 30	156	3.46	0.80
	30–40	254	3.48	0.82
	40–50	144	3.62	0.86
	Over 50	68	3.59	0.82
Educational qualification	Junior college and below	41	3.42	0.87
	Undergraduate	570	3.53	0.82
	Graduate	14	3.50	0.94
Title	Unidentified	57	3.60	0.92
	Second grade	270	3.44	0.83
	Senior	235	3.61	0.79
	Advanced	63	3.49	0.82
Position	Without management positions	433	3.50	0.83
	Subject group leaders	88	3.58	0.79
	Middle-level managers	87	3.65	0.83
	Principals	17	3.25	0.94
School location	Peri-urban area	277	3.63	0.86
	Outskirts of town	89	3.50	0.81
	Countryside	259	3.42	0.78

Note. * Represents $p < 0.05$.

4.2. The Mediation Model

Before commencing the regression analysis, Harman's one-factor analysis was conducted to check whether the common method bias was severe (Howard & Henderson,

2023), because all variables were measured by self-reported scales. EFA of all measures showed that the extracted first component accounted for 38% of the total variance, suggesting that common method bias is unlikely to be a serious concern in the present study.

Regression models are conducted by The PROCESS macro Model 4. After controlling for demographic variables, gender, age, marital status, educational qualification, title, position and school location, the result firstly indicates that teaching resources ($\beta = 0.163$, $p < 0.001$), administrative support ($\beta = 0.150$, $p < 0.001$), colleague support ($\beta = 0.099$, $p < 0.05$), parental support ($\beta = 0.163$, $p < 0.001$) has a significant positive predictive effect on teacher agency, respectively. Hypothesis 1 is verified.

Secondly, teaching resources ($\beta = 0.331$, $p < 0.001$), administrative support ($\beta = 0.346$, $p < 0.001$), colleague support ($\beta = 0.533$, $p < 0.001$), and parental support ($\beta = 0.385$, $p < 0.001$) have a significant positive predictive effect on teaching self-efficacy. Additionally, teaching self-efficacy can predict teacher agency significantly when teaching resources, administrative support, colleague support, and administrative support is controlled respectively, and beta value is 0.810 ($p < 0.001$), 0.822 ($p < 0.001$), 0.822 ($p < 0.001$), and 0.785 ($p < 0.001$) accordingly. Hypothesis 2 is verified.

Thirdly, the PROCESS macro Model 4 examined the mediation model (see Table 3). A 95% confidence interval was calculated by repeatedly sampling for 5000 times with the help of the Bootstrap method to verify the mediating role of teaching self-efficacy between job resources and teacher agency. According to (Y. Liu et al., 2017), if the 95% CIs do not include zero, the indirect effect is considered significant. The results are presented in Table 3. It can be seen that teaching self-efficacy mediates significantly the relationship between teaching resources (SE = 0.033, Boot 95% CI [0.206, 0.336]), administrative support (SE = 0.034, Boot 95% CI [0.221, 0.354]), colleague support (SE = 0.045, [0.369, 0.547]), parental support (SE = 0.029, [0.247, 0.362]) and teacher agency, the indirect effect are 0.269, 0.284, 0.451, 0.302 respectively, and accordingly the effect size ratio is 62.27%, 65.44%, 82.00% and 64.95%. It shows that different dimensions of job resources are not only significantly associated with teacher agency, but are also indirectly associated with teacher agency through teaching self-efficacy. Hypothesis 3 is verified.

Table 3. Mediation effect test table.

Independent Variable	Path Effect	Parameter Estimate	SE	Bias-Corrected 95% CI	Effect Size Ratio
Teaching resources	Total effect	0.432	0.039	[0.355, 0.507]	
	Direct effect	0.163	0.035	[0.094, 0.231]	37.73%
	Indirect effect	0.269	0.033	[0.206, 0.336]	62.27%
Administrative support	Total effect	0.434	0.041	[0.355, 0.514]	
	Direct effect	0.150	0.037	[0.078, 0.222]	34.56%
	Indirect effect	0.284	0.034	[0.221, 0.354]	65.44%
Colleague support	Total effect	0.550	0.048	[0.456, 0.644]	
	Direct effect	0.099	0.048	[0.004, 0.193]	18.00%
	Indirect effect	0.451	0.045	[0.369, 0.547]	82.00%
Parental support	Total effect	0.465	0.036	[0.395, 0.535]	
	Direct effect	0.163	0.036	[0.093, 0.232]	35.05%
	Indirect effect	0.302	0.029	[0.247, 0.362]	64.95%

5. Discussion and Implications

The present study verified the direct and indirect effects of teaching resources, administrative support, colleague support, parental support on teacher agency, contributing

theoretically to the research of teacher agency and giving hints to modern school governance. Based on the main findings in the present article and previous research, the following implications and recommendations can be drawn.

5.1. Rural Teachers' Agency Should Be Promoted Urgently

The average score for rural teacher professional development agency is 3.53/5, with an equivalent to 63.25/100, indicating significant room for improvement in rural teachers' professional development initiative and autonomy. (X. Wang et al., 2018) found that rural teachers agency is 4.01/6, which is equivalent to 60.2/100, and the scores are basically consistent, which corroborates the generality of low rural teacher agency across different research contexts in China. However, the study by (Qi et al., 2020) found that urban teachers agency is 6.79/9, which is equivalent to 72.38/100, far higher than that of rural teachers—a gap that reflects the unbalanced development of teacher agency between urban and rural regions, echoing the global discourse on educational equity and teacher professionalization. Moreover, it is found that there was statistically significant differences in teacher agency among rural teachers whose school locations are different. The rural teachers whose school location are further away from the main city have lower agency, which means school location attributes rather than demographic attributes are important factors affecting teacher agency, which highlights that school location attributes, rather than demographic factors, are a key determinant of rural teacher agency—an observation that enriches the existing literature on the contextual factors influencing teacher agency.

As discussed above, teacher agency in China's rural areas urgently needs attention. The problem of unbalanced quality of education between urban and rural areas in China is still prominent, and teachers in urban and rural areas have a large gap in their teaching ability and motivation for development (D. Wang et al., 2017)—a phenomenon that is not unique to China but also exists in rural contexts globally, as noted in international studies on rural education, which emphasize that rural teachers often face more structural constraints in exercising their agency compared to their urban counterparts. Rural education in China and the development of its teacher agency are in need of sustained and in-depth attention. Firstly, when drawing on the experience of promoting teacher agency in urban areas, policymakers need to deeply understand the particularity of rural teachers (e.g., limited access to professional development resources, heavier workloads, and weaker support systems) and formulate targeted measures instead of mechanically copying urban experience—a critical reflection on the limitations of “one-size-fits-all” education policies in addressing rural-urban disparities. Secondly, the education authority needs to deepen the urban–rural teacher co-development mechanism. With the help of renowned schools, teachers and experts, establish long-term and stable cooperation systems through urban–rural school alliances, teacher exchanges, research workshops, and peer mentoring programs—initiatives that align with global best practices in rural teacher professional development, which emphasize the importance of contextualized support and collaborative learning to enhance teacher agency.

5.2. Job Resources Are to Be Provided to Improve Rural Teachers' Agency

From the regression analysis and mediating model, it is evident that variables from the perspective of job resources serve as significant positive factors in enhancing rural teachers' agency—an finding that aligns with, yet extends, the job demands-resources (JD-R) model which posits job resources as key enablers of work-related agency and well-being (Q. Li et al., 2018). After controlling for demographic variables (e.g., gender, teaching experience, educational background), the standardized regression coefficients between teaching resources, administrative support, colleague support, parental support and teacher agency are 0.163, 0.150, 0.099, and 0.163 respectively. This indicates that for

every one standard deviation increase in each job resources variable, rural teachers' agency will increase by at least 0.09 standard deviation, with teaching resources and parental support exerting the strongest predictive effects—a result that contrasts with some global studies conducted in urban contexts, where administrative support often emerges as the most influential job resource.

Specifically, teaching resources are positively associated with Teacher Agency (Hsieh et al., 2025). Beyond serving as material supports, they function as enabling conditions that shape teachers' perceptions of their professional capacity. Adequate teaching resources may enhance teachers' flexibility and confidence in lesson planning and classroom implementation, which is associated with higher levels of teacher agency. As a result, teachers are more likely to experiment with new strategies, respond to diverse student needs, and engage proactively in their teaching practices. Administrative support (such as principal support) is positively correlated with the development of teachers' professional capabilities by providing them with autonomy space (Y. Wang & Zhang, 2021). In a supportive school environment, teachers are more likely to feel trusted and empowered, thus demonstrating a stronger sense of initiative, actively adjusting teaching methods. As a socially embedded dimension of job resources, colleague support facilitates collaboration, knowledge sharing, and emotional encouragement, which help teachers interpret classroom challenges more constructively and strengthen their professional competence and confidence (Y. Li et al., 2023). Through ongoing communication and feedback, colleague support is also associated with enhanced Teaching Self-Efficacy. Consequently, teachers who perceive higher levels of colleague support are more likely to adopt innovative teaching strategies, respond to diverse student needs, and engage in collaborative problem-solving, all of which are closely related to the enactment of Teacher Agency. As an external dimension of Job Resources, parental support provides not only practical assistance but also relational resources such as trust, recognition, and emotional affirmation. Research on parent–teacher interactions suggests that such interactions are often accompanied by a certain degree of emotional labor, requiring teachers to regulate their emotions while maintaining constructive communication (Zhai & Guo, 2025). When these interactions are predominantly supportive, the emotional burden on teachers may be alleviated, thereby creating favorable conditions for more active engagement in professional practice.

Job resources have been widely recognized in global educational literature as critical external motivations to stimulate teacher development and agency, particularly in resource-constrained contexts. However, a critical interpretation of existing research reveals that most studies on job resources and teacher agency focus on urban or suburban settings, with limited attention to rural contexts—where structural barriers (e.g., inadequate infrastructure, geographic isolation) may amplify the impact of job resources on teachers' capacity to exercise agency. Our findings address this research gap by confirming that job resources (i.e., teaching resources, administrative support, colleague support, parental support) are equally vital for rural teachers' agency, while highlighting the unique salience of teaching resources and parental support in rural settings—likely due to the relative scarcity of formal support mechanisms in rural areas compared to urban counterparts.

Therefore, targeted provision of these four job resources is imperative to enhance rural teachers' agency, with strategies tailored to the specific needs of rural educational contexts (rather than direct replication of urban models. Firstly, rural school managers should strengthen hardware and organizational construction to provide high-quality, context-appropriate teaching facilities for teachers—such as digital teaching tools adapted to rural internet conditions and teaching materials aligned with local cultural contexts, rather than merely equipping schools with standardized resources that may not address

rural teaching realities. Secondly, rural school management teams should build a collaborative interpersonal network between managers and teachers, establishing regular communication channels (e.g., monthly feedback sessions, peer mentoring programs) to ensure that every teacher can access timely help and support when facing work-related challenges—a measure that complements global best practices in teacher support while accounting for the close-knit nature of rural communities.

5.3. Teaching Self-Efficacy Is to Be Enhanced to Improve Rural Teachers' Agency

It is seen that teaching self-efficacy is significantly and positively associated with teacher agency (β values ranging from 0.785 to 0.822, $p < 0.001$), which is consistent with the study by Salari and Farahian (2023). Notably, this finding aligns with the broader global consensus that self-efficacy serves as a pivotal psychological antecedent of teacher agency across diverse educational contexts—from developed Western nations to developing regions—where higher self-efficacy empowers teachers to navigate challenges, exercise professional autonomy, and drive instructional improvement. It also plays a partial mediating role between teaching resources, administrative support, colleague support, parental support and teacher agency, which reveals the internal mechanism in which job resources affect teacher agency. This mediating role is particularly critical in rural settings, as it highlights that job resources do not directly translate to enhanced agency but must be filtered through teachers' perceived self-efficacy—a nuance often overlooked in global research focusing on urban-centric teacher development.

The overall living conditions of rural teachers are generally similar due to the unified economic backwardness, often reflected in the difficulties in material conditions, as well as the lack of social capital, cultural capital, economic capital, and professional capital (Chen, 2022). While economic backwardness is a common constraint for rural educators globally, the specific constellation of capital deficits (e.g., limited professional development opportunities and weak social recognition) in our context distinguishes it from rural contexts in high-income countries, where rural teachers may face fewer structural barriers to self-efficacy building. Compared to urban teachers, rural teachers tend to have relatively lower teaching self-efficacy. Therefore, to enhance job resources for rural teachers, elevate their social status, the authority should create a social atmosphere that respects rural teachers, and thus strengthen the teaching self-efficacy of rural teachers. Critically, such policy interventions must be contextually tailored rather than adopting a one-size-fits-all approach, as global evidence suggests that effective self-efficacy enhancement strategies for rural teachers must address the unique structural and cultural challenges of their specific settings. Additionally, rural teachers should comprehensively and objectively assess the educational environment they are in and their personal teaching abilities, always striving to improve their teaching skills with a positive attitude, thereby nurturing and enhancing their teaching self-efficacy, as a terminal result of improving teacher agency. This personal initiative is not merely an individual responsibility but a complementary component to systemic support, as global research consistently emphasizes the interdependence between contextual support and individual effort in fostering teacher self-efficacy and agency.

As discussed above, policymakers should design targeted strategies for rural contexts, avoiding direct replication of urban models, and deepen urban–rural collaboration through teacher exchanges, mentoring, and joint programs. This emphasis on context-specificity echoes global best practices, which caution against the uncritical transfer of urban educational policies to rural areas—an approach that has frequently failed to address the unique needs of rural teachers and undermine self-efficacy building in previous international studies. Schools should enhance infrastructure and build supportive networks between administrators and teachers to ensure adequate resources and assistance. Such

school-level support is a cornerstone of self-efficacy enhancement, as global literature highlights that a supportive institutional environment reduces teacher burnout, reinforces their sense of competence, and ultimately boosts their agency. Teachers should actively assess their teaching environments and abilities while continuously improving their skills with a positive attitude. Additionally, society should work to elevate the social status of rural teachers and foster a culture of respect, thereby strengthening their self-efficacy and agency. Enhancing societal respect for rural teachers is not only a local imperative but also aligns with global efforts to value rural education as a cornerstone of equitable educational systems, as studies worldwide have linked public recognition of rural teachers to higher self-efficacy and sustained professional engagement.

6. Conclusions

Based on the data from Mainland China's rural teacher, the study explores the relationship among job resources variables, teaching self-efficacy and teacher agency. Through descriptive analysis, the agency of rural teachers in Mainland China is 3.53/5, with great room for improvement. And from regression analysis and bootstrapping approaches, it is revealed that firstly job resources including teaching resources, administrative support, colleague support, parental support are positively related to teacher agency respectively when controlling for other variables, secondly that teaching self-efficacy can significantly positively related to teacher agency, and thirdly that teaching self-efficacy plays a partial mediating role between teaching resources, administrative support, support from colleagues, parental support and teacher agency respectively. Therefore, rural teachers' agency should be promoted urgently by taking comprehensive measures from the perspective of job resources and teaching self-efficacy.

It must be acknowledged that this study has limitations, including its reliance on cross-sectional data, which hinders causal inferences between job resources and teacher agency, which limits its ability to capture the dynamic nature of Teacher Agency, Teaching Self-Efficacy, and Job Resources. These constructs are not static; rather, they may evolve over time in response to professional experiences and contextual changes, such as policy shifts or institutional reforms, especially in rural settings, and its geographically restricted sample from secondary schools in H Province, Central China, limiting generalizability. Additionally, self-reported agency measures may introduce biases. Future research should adopt longitudinal designs to explore causal mechanisms, expand samples to include primary schools and diverse regions or countries, and incorporate alternative data sources, such as observational or peer assessments, to enhance validity and generalizability. These steps would provide deeper insights into the dynamics of teacher agency.

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