The Current Situation and Training Countermeasures of Chinese Rural Teachers' Professional Identity in the Context of "Double Reduction"

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Abstract. This research sought to investigate Chinese rural teachers' professional identity in the context of "double reduction", analyze deficiencies and causes, and explore reasonable training countermeasures to enhance rural teachers' professional identity in order to contribute to promote rural education. A sample of 306 Chinese rural teachers voluntarily participated in this study. To explore the the status quo, questionnaire survey and interview were used. Results revealed that the overall level of professional identity of rural teachers in Chinese primary and secondary schools was relatively high. In addition, it was important to notice that the level of role values is the lowest among the four factors. Besides, research showed that teacher professional identity was related to a number of individual factors, including gender, length of teaching experience, and subject taught, and the double reduction policy brought rural teachers work and psychological pressure. Therefore, we can take some measures to deal with it.

1 Introduction

Over the past decades, with the Chinese government's increased investment in education and support of education policies, the level of education in rural areas has improved significantly. However, rural areas in China still lag behind and have lower education levels, especially when compared to urban areas. The college enrollment rate for rural students is 1%, compared to 14% for urban students [1]. The "double reduction" policy has put forward new ideas and opportunities for the revitalization of rural education, but at the same time, it has put forward new requirements for compulsory education teachers, which inevitably brings the risk of increasing the workload of teachers and may affect the professional identity of rural teachers to a certain extent, making it difficult to solve the real problems of rural teachers who "can't get down", "can't stay" and "can't teach well". Therefore, this study is to analyze the problems and causes by investigating the professional identity of rural teachers in the context of "double reduction", and try to explore reasonable countermeasures to improve the professional identity of rural teachers and promote high-quality development of rural education.

2 Literature review

2.1 Teachers' professional identity

Teacher identity, as a form of identity, has been defined differently [2]. From the perspective of the formation of teachers' professional identity, some claim that professional identity is formed through the constant human-environment interaction, and is a continuous process of experience interpretation and reinterpretation as people and experiences change constantly [3]. Alternatively, teacher professional identity is linked to self-concept and subjective perception. Professional identity is defined as an individual's attitude and sense of dedication to the profession, reflected in their willingness to continue in work and the degree of love for it [4]. In general, it isn't easy to get a widely accepted definition because people have different understandings of the concept of teacher professional identity. However, there are some commonalities. Generally speaking, teacher professional identity mostly points to the integration of individual teachers and their profession and is in dynamic development.

Teacher professional identity evolves through the interaction between teachers and the outside world, and is affected by multiple internal and external factors. The internal factors include gender, age, teaching age and so on. For example, Liu Yaowu and Yu Huilong found that female teachers had higher levels of the professional identity than male teachers on nine dimensions, with highly significant differences in professional meaning, professional characteristics, and identification with colleagues [5]. Bloom declared with age, many teachers tend to lose motivation and commitment, and after serving students for many years, teachers may lose dedication and no longer take serving students seriously [6]. Additionally, social, school, family, and other external factors will also affect teachers' professional identity. As Reynolds claimed that school, as a work field, is associated with teachers' identity through cultural scripts that prescribe how they think and do [7].
A great deal of research has been conducted on the current state of teachers’ professional identity. Much recent literature have shown that there are a number of shortcomings in the current state of rural teachers’ professional identity in China. For instance, Li Zhuangcheng found that rural primary and secondary school teachers in Sichuan province had a strong sense of professional responsibility, but their professional identity was not high, and there were significant differences in gender, age, education background and teaching subjects \[9\]. Focusing on new rural teachers, Jiang pointed out the current status of their professional identity crisis, including social system identity, ideal belief identity, value identity, and cultural attributes. In addition, there is a substantial gap between urban and rural teachers’ professional identities \[9\]. The overall professional identity of rural teachers was lower than that of urban teachers, especially in terms of material security, environmental support and professional behavior \[10\], while the case of teachers’ professional identity has received increasing attention from educators and researchers, relevant studies are scattered, lacking in theory and practice, and are not systematic and in-depth. In terms of research methods, most of them choose qualitative research methods, while the use of quantitative methods is less, and the combination of qualitative and quantitative research methods is not enough. It is worth noting that less attention has been paid to rural teachers’ professional identity in terms of research objects.

2.2 Professional identity of rural teachers under "double reduction"

The "double reduction" policy places new demands on compulsory education teachers regarding the level of extra-curricular services, the quality of classroom teaching and teachers’ participation in extra-curricular services, which inevitably poses the risk of an increased workload for teachers, and may affect the professional identity of rural teachers to a certain extent. Based on risk management theory, Yu Chuan and Yang Lile point out that teachers face risks such as increased extended work hours, unstable rotation and mobility, and accentuated work-life conflicts under the double reduction policy \[11\]. Through a study of after-school services in primary and secondary schools across Jiangsu province, Yu Mingya found that some teachers are prone to burnout and dissatisfaction in the context of the double reduction \[12\]. Xue Eryong et al. were concerned that after-school services for teachers in boarding schools did not receive the same work allowance as the additional services for teachers in non-boarding schools, leading to mood swings \[13\].

In the last decade, teachers’ professional identity has emerged as a separate research area and considerable attention has been given to it. However, there are fewer studies on the professional identity of rural teachers under the 'double reduction' policy. Current research on the topic of 'double reduction' is mostly empirical. The research is more comprehensive, but still lacks in-depth and systematic research on teachers as the main subjects of policy implementation and interest. The current status of teachers’ professional identity in rural China in the context of the 'double reduction' policy is still unclear. It was based on this backdrop that this research investigated Chinese rural teachers' professional identity in the context of "double reduction", analyzed deficiencies and causes, and explored reasonable training countermeasures to enhance rural teachers' professional identity in order to contribute to promote rural education.

3 Method

3.1 Participants

The participants consist of compulsory education teachers in rural areas of China. They come from a population of differing seniority and school level. Sample is randomly selected, including 187 males and 119 females. In terms of age distribution, there were 272 teachers with more than 10 years of teaching experience and 34 teachers with less than 10 years of teaching experience. In terms of subject distribution, there were 204 teachers teaching languages, mathematics and English, and 102 teachers teaching other subjects.

3.2 Measures

This research adopts the methods of questionnaire survey and interview. In the choice of the questionnaire, this study made appropriate modifications to the Professional Identity Scale for Primary and Secondary School Teachers developed by Wei Shuhua on the basis of ensuring reliability and validity \[14\]. The scale uses a five-point Likert scale, and the higher the score is, the more the subjects agree with the content described in this dimension, which consists of four dimensions (18 items in total): professional values (4 items), that is, teachers’ positive recognition and evaluation of the meaning and role of teachers’ profession. Role values (6 items): teachers’ positive recognition and evaluation of the importance of the "teacher role" for themselves. Professional belonging (3 items), i.e., individual teachers’ awareness that they belong to the teacher community and often have the emotional experience of sharing in the suffering of the profession. Professional behavioral tendency consists of demanding behavioral tendency (3 items) and additional behavioral tendency (2 items). Demanding behavioral tendency refers to the tendency of teachers to adopt behaviors necessary to accomplish their work tasks and fulfill professional responsibilities. Additional behavioral tendency refers to the tendency of individual teachers to engage in behaviors that are not clearly defined in professional responsibilities but that contribute to professional productivity.

In terms of interviews, this study compiled the "Outline of Interview On the Current Professional Identity of Primary and Secondary School Teachers" and conduct in-depth interviews with teachers to understand the deep situation and reasons for the professional
identity of rural teachers in the context of "double reduction", so as to make up for the shortcomings of questionnaire survey.

3.3 Procedures

This study investigates rural compulsory education teachers in China through questionnaires and interviews. To collect accurate and valid data, the questionnaire is anonymous so that the respondents could feel at ease answering it. After collecting the questionnaire, invalid questionnaires were excluded, and the data were processed and analyzed using SPSS statistical software.

4 Result

4.1 Overall situation of professional identity

Table 1. Rural teachers' professional identity overall and by factor scores

<table>
<thead>
<tr>
<th></th>
<th>Female M</th>
<th>Male M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role values</td>
<td>2.85</td>
<td>2.79</td>
<td>0.70</td>
</tr>
<tr>
<td>Professional behavioral tendency</td>
<td>4.09</td>
<td>3.97</td>
<td>1.37</td>
</tr>
<tr>
<td>Professional values</td>
<td>3.95</td>
<td>3.86</td>
<td>1.18</td>
</tr>
<tr>
<td>Professional belonging</td>
<td>3.45</td>
<td>3.10</td>
<td>3.55***</td>
</tr>
<tr>
<td>Professional identity</td>
<td>3.59</td>
<td>3.43</td>
<td>3.19**</td>
</tr>
</tbody>
</table>

Note. *p < 0.05, **p <0.01, ***p < 0.001 The same superscript means the difference is not significant.

As can be seen from Table 1, with a maximum score of 5, the professional identity of rural teachers was generally at a medium to high level (M=3.53). Among the factors of teachers' professional identity, the scores in descending order were: professional behavioral tendency, professional values, professional belonging, and role values.

4.2 Individual Differences in Professional Identity

4.2.1 Gender Differences

Table 2. Differences of professional identity between different genders

<table>
<thead>
<tr>
<th>Role values</th>
<th>Professional behavioral tendency</th>
<th>Professional values</th>
<th>Professional belonging</th>
<th>Professional identity</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>2.82</td>
<td>4.04</td>
<td>3.92</td>
<td>3.31</td>
</tr>
<tr>
<td>SD</td>
<td>0.85</td>
<td>0.74</td>
<td>0.70</td>
<td>0.88</td>
</tr>
</tbody>
</table>

Note: M is the mean, SD is the standard deviation, the same below.

The data in Table 2 shows that there are gender differences in teachers' professional identity, with female teachers having a higher level of professional identity than their male counterparts. In terms of the dimensions, female teachers scored significantly higher than male teachers in terms of their sense of belonging to their profession. In other dimensions, the differences were not significant.

4.2.2 Differences of Teaching Age

Table 3. Differences of professional identity under different teaching age

<table>
<thead>
<tr>
<th></th>
<th>Less than 10 years M</th>
<th>More than 10 years M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role values</td>
<td>2.92</td>
<td>2.81</td>
<td>1.84</td>
</tr>
<tr>
<td>Professional behavioral tendency</td>
<td>3.40</td>
<td>4.13</td>
<td>-16.10***</td>
</tr>
<tr>
<td>Professional values</td>
<td>3.75</td>
<td>3.94</td>
<td>-3.00**</td>
</tr>
<tr>
<td>Professional belonging</td>
<td>2.83</td>
<td>3.38</td>
<td>-8.66***</td>
</tr>
<tr>
<td>Professional identity</td>
<td>3.23</td>
<td>3.56</td>
<td>-9.24***</td>
</tr>
</tbody>
</table>

Table 3 showed that there was significant difference in professional identity between different teaching ages. Teachers with more than ten years of teaching experience scored higher than those with less than ten years. In terms of the dimensions, there were significant differences in professional behavioral tendencies, professional values and sense of belonging among teachers of different teaching ages, and teachers with more than 10 years of teaching experience all scored higher than those with less than 10 years of teaching experience.

4.2.3 Differences in Teaching Subjects

Table 4. Differences of professional identity in different teaching subjects

<table>
<thead>
<tr>
<th></th>
<th>Chinese/Mathematics/English M</th>
<th>Others M</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role values</td>
<td>3.36</td>
<td>2.56</td>
<td>8.68***</td>
</tr>
<tr>
<td>Professional behavioral tendency</td>
<td>4.05</td>
<td>4.03</td>
<td>0.20</td>
</tr>
<tr>
<td>Professional values</td>
<td>4.25</td>
<td>3.75</td>
<td>6.07***</td>
</tr>
<tr>
<td>Professional belonging</td>
<td>3.67</td>
<td>3.14</td>
<td>4.96***</td>
</tr>
<tr>
<td>Professional identity</td>
<td>3.83</td>
<td>3.37</td>
<td>8.93***</td>
</tr>
</tbody>
</table>

The data in Table 4 shows that there are also differences between teachers' professional identity and the subjects they teach. In terms of the dimensions, language, mathematics and foreign language teachers scored significantly higher than other teachers in terms of role values, professional values and sense of professional belonging. In terms of professional behavioral tendencies, the differences were not significant for either.
5 Discussion

5.1 The Overall Situation of the Professional Identity of Rural Teachers

On the whole, rural teachers have a higher sense of professional identity relatively high. With the implementation of the rural revitalization strategy, governments at all levels have introduced a series of policies aimed at improving the construction of rural teachers, and has made all-round efforts in recent years to source, treat, train and evaluate the titles of rural teachers, which has achieved better results.

As for four factors of professional identity, the average values were: professional behavior tendency > professional values > professional belonging > role values. The level of four factors of teachers' professional identity is not balanced.

Among the factors of professional identity, the tendency factor for professional behaviour scored the highest, indicating that rural teachers are better able to perform their work tasks, fulfill the necessary professional responsibilities, as well as those behaviors that are not explicitly stated in their professional responsibilities but are beneficial to improving professional work effectiveness. However, during the interviews, a number of teachers also pointed out that, to some extent, the scope of teachers’ work has been expanding and their workload has increased due to the implementation of the double reduction policy. Some teachers pointed out that the requirement to carry out “diversified services” meant that I had to take on several "jobs" and have "liberal arts teaching" and "liberal arts education. This has undoubtedly brought new challenges and mental pressure to me, who has shortcomings and "blind spots" in the specialized curriculum such as audio, physical education and aesthetics". Some teachers also pointed out that "we don't have the equipment and staff, so our after-school service activities only turn into new lessons and cultural lessons". This has inevitably increased the workload of rural teachers. The "double reduction" policy has placed new demands on teachers in terms of optimizing assignment management and improving teaching quality. Teachers are not only required to design homework in different levels, but also to strictly control the total amount of homework and improve the quality of homework design. In rural schools, where safeguards are not yet in place, it is easy for rural teachers to work overtime and overload.

Professional values scores were also high, indicating that the subject teachers held a high level of identification with the values of the profession they were engaged in. This is because there is a consensus in society that the work of teachers plays a decisive and important role in the continuation of human civilization and in the growth and development of individuals. In terms of specific question items, teachers highly agree that the teaching profession can be of great value to the growth of students and the development of society, but the level of agreement on realizing the value of teachers' personal lives is relatively low. As one teacher mentioned in the interview, "If I were to use a word to describe teachers, I think the word that comes to mind is candle, and the rural teaching profession is entirely about serving students. Our job is to light ourselves up and then bloom others." When asked whether the rural teaching profession could realize self-worth, the teacher said, "I think the rural teaching profession to realize the value of life is still too far away for me at the moment, as a male teacher, I am not sure how long I can work in the teaching profession, whether my value of life can be reflected through this, I'm not really sure."

On the dimension of sense of belonging, teachers scored moderately low on their sense of belonging to their own group. Primary and secondary school teachers have their own family lives, and many are parents themselves, with children of their own to care for and educate. In reality, some schools and social authorities do not take into account the legitimate rights and interests of teachers as ordinary workers and parents, and demand more from teachers to overcome difficulties and dedication to their work, which tends to trigger teachers’ dissatisfaction. At the same time, the number of parents working outside the home in rural areas is high. Many of them treat their children's education as a matter for the school and teachers, and there are even some parents who find that their child's grades are not satisfactory when they return home for the holidays, blaming the school and teachers for not educating them properly, making the psychological burden of rural teachers grow every day. The research found that all teachers are required to join the "double reduction" campaign, but teachers who are older, have long commuting distances, or have special people at home (the elderly, the sick, the disabled and the pregnant) to take care of are physically unable to cope with their family life, which affects their physical health and family harmony as well as their sense of belonging and belief in their profession in the long run.

Role values scored the lowest. The majority of respondents felt that they were not always respected by others as rural teachers, had difficulty taking pride in their profession and were reluctant to mention their profession. They felt that it was difficult to realize the value of the profession. Although teachers have enviable titles, such as "engineer of the human soul" and "hard-working gardener", their actual social status is still low, and they are jokingly referred to as "teaching on their knees". As a result, rural teachers do not receive the respect they deserve from society, and lack self-identification with the teaching profession as a result of the unmet need for respect in the hierarchy of needs theory. In addition, rural education remains a weak point in education system, with poor infrastructure in remote rural areas, a relative lack of material conditions and a polarization of economic treatment between urban and rural areas. The conflict between materialism and consciousness tends to blur teachers’ values and interferes with their further self-fulfilment.
5.2. Individual Differences in the Professional Identity of Rural Teachers

The survey data shows that there are significant differences in the professional identity of teachers in terms of gender, years of teaching experience and subjects taught.

Compared to men, women exhibited a higher level of professional identification. Women are more likely than men to seek career stability, and teacher is a more steady career than other professions. In addition, female teachers are more patient than their male counterparts, making them better suited to the profession. A male teacher who participated in the interviews claimed that each time he went to a class reunion, he was made fun of.

In terms of teaching experience, teachers with more than ten years of teaching experience have a higher level of professional recognition than those with less than ten years of teaching experience, while rural secondary teachers with one to three years of teaching experience are still in a period of professional adaptation, lacking work experience and need to improve their teaching skills. On the other hand, young teachers with 1-3 years of teaching experience often uncertain about whether they will stick to their jobs due to the urban-rural gap caused by the dualistic social structure, the isolated geographic location of rural areas, their backward economic and cultural environment, as well as the low social recognition of rural teachers. Due to burnout, teachers with 4 to 10 years of experience are more likely to decide to "job hop" to change their status. Compared to instructors with less than 10 years of teaching experience, rural teachers with more than 10 years of experience have solid job skills, are more stable in their employment, are more at peace with themselves, and have a more upbeat outlook.

In terms of the subjects they teach, teachers of Chinese, mathematics and foreign language subjects are more likely to believe that the teaching profession can fulfill their values and have a higher professional identity. This is related to the fact that language, mathematics and foreign language subjects are given more importance in rural primary and secondary schools. Teachers of other subjects said in interviews: Our headmasters only focus on Chinese, mathematics and foreign language subjects taught.

More than ten years of teaching experience often have a more upbeat outlook. Teachers with one to three years of teaching experience often uncertain about whether they will stick to their jobs due to the urban-rural gap caused by the dualistic social structure, the isolated geographic location of rural areas, their backward economic and cultural environment, as well as the low social recognition of rural teachers. Due to burnout, teachers with 4 to 10 years of experience are more likely to decide to "job hop" to change their status. Compared to instructors with less than 10 years of teaching experience, rural teachers with more than 10 years of experience have solid job skills, are more stable in their employment, are more at peace with themselves, and have a more upbeat outlook.

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6 Limitation and implication

The study of professional identity is of great significance to rural education and the professional development of rural teachers in China. In the new context, this research topic has much room for development and exploration. Due to the constraints of time, space and one's own ability, the sample size of this study is small and may not be sufficient to represent the true level of professional identity of rural teachers. While ensuring a more even sampling, the sample size could be increased to support and expand the findings in subsequent studies.

Secondly, the research still needs to be further supplemented. Due to the large number of demographic variables of teachers' professional identity and the author's limited capacity, only three factors were considered in the scale design. The research findings in this area could be enriched by adding new variables.

Finally, the study population still needs further refinement. In this study, a questionnaire was used to survey rural teachers in primary and secondary schools nationwide. In terms of sample coverage, the age of teaching and the subjects taught were not reasonable, and the study did not take into account different geographical differences. Therefore, further expansion of the sample size could be considered in subsequent studies. The sample size could be further expanded to provide more comprehensive coverage and to collect valid sample data from different regions of the country.

7 Conclusion

In conclusion, the current study reveals that the overall level of professional identity of rural teachers in Chinese primary and secondary schools is relatively high. In addition, it is important to notice that the level of role values is the lowest among the four factors. Besides, research has shown that teacher professional identity is related to a number of individual factors, including gender, length of teaching experience, and subject taught.

To address the problems and causes of the current professional identity of rural teachers, there is an urgent need to prescribe the right remedy. Firstly, in response to the increased workload and mental stress of teachers brought about by the double reduction policy, the government, education administrations, schools and parents need to take on their respective responsibilities and form a synergy in governance. The government should work to promote the development of a high-quality rural teaching force in the new era and widely involve social forces, such as returning university student volunteers, in after-school services to reduce the excessive workload of teachers. Education administrations and schools should improve the existing teacher evaluation mechanism. After-school services and homework guidance could be incorporated into teachers' performance appraisal criteria, thereby promoting teachers' professionalism and motivation. Since its promulgation, the "double reduction" policy has received widespread attention from the community, and many parents are worried that their children's performance will not improve after the burden of schoolwork and extracurricular training has been reduced, and are eagerly expecting schools and teachers to provide their children with a better education. This in turn leads to rural teachers being trapped in a circle where their workload is only increasing. It is important to guide the right educational attitudes, such as establishing parent committees and organizing regular home-school exchanges; helping parents to establish the right educational attitudes.
Research has found that rural teachers are less satisfied with social respect, which to a certain extent affects their professional identity. On the one hand, the social status of rural teachers should be raised, public opinion should be strengthened, and a positive image of rural teachers should be actively promoted to create a social atmosphere of respect for teachers in rural areas. On the other hand, the professional status of rural teachers should be raised, a platform should be built for their professional growth, the overall level of professional development should be raised, and the professional prejudice of society that rural teachers are considered to be less competent and less qualified should be eliminated.

For rural teachers, treatment is a material guarantee for the successful advancement of their professional development. In order to improve the welfare of rural teachers in general, we must take into account the impact of the infrastructure and environment of rural schools on teachers, and adopt the principle of "fair compensation" to eliminate the negative impact of these factors. The principle of 'fair compensation' should be applied to eliminate the negative effects of these factors. In addition, it is necessary to improve the living conditions of rural teachers to meet their physical needs, while at the same time enhancing their sense of professional honour and strengthening the values that lead them to enjoy the satisfaction and happiness of their profession.

References

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