

Can the Implementation of the “Double Reduction” Policy Improve the Satisfaction of Parents of Students at the Compulsory Education Stage in Ethnic Minority Areas?

Analysis of Intermediary Effect based on Social Capital

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Keywords: “Double Reduction” Policy, Social Capital, Parents' Satisfaction, OLS Linear Regression Model, Structural Equation Model.


Abstract: To explore the impact of the “Double reduction” policy on the satisfaction of parents of compulsory education students in ethnic minority areas, and the mediating role of social capital in the impact of the “Double reduction” policy on the satisfaction of parents of compulsory education students in ethnic minority areas. It uses OLS linear regression model and structural equation model to make an empirical analysis of the relationship between the implementation of the "Double reduction" policy in the stage of compulsory education in ethnic minority areas and social capital, parents' satisfaction. The results showed that the satisfaction of parents of compulsory education students in ethnic areas was higher, but there was a group difference, and the implementation of the “Double reduction” policy could directly improve the satisfaction of parents of compulsory education students in ethnic areas Social capital mediates the effect of the “Double reduction” policy on the satisfaction of compulsory education parents in ethnic minority areas.

1 INTRODUCTION

For a long time, rat race's growing involvement in education has not only increased children's academic burden, but also created vicious competition in the field of education. To 2021 this situation, the Central Committee of the Communist Party of China (CPC) and the state council have issued the "Opinions on further reducing the workload of compulsory education students and the burden of off-campus training"(hereinafter referred to as the "Double reduction" policy). The policy put forward the working goal of "reducing students' excessive homework burden and off-campus training burden, family education expenditure and parents' corresponding energy burden within one year, achieving remarkable results within three years, and significantly improving people's education satisfaction". At present, the "Double reduction" policy has been implemented for a year, the local

governments, compulsory education schools have responded, so that the burden reduction has a positive effect, and parents' satisfaction has been rising. But can the implementation of the "Double reduction" policy improve the satisfaction of parents in ethnic minority areas? Due to the natural, social and historical reasons, the development of ethnic education has many problems, such as high complexity and difficulty, as a result, parents of compulsory education students in ethnic areas are less satisfied with the "Double reduction" policy. Therefore, to explore whether the implementation of the "Double reduction" policy can effectively improve the satisfaction of parents of students receiving compulsory education in ethnic minority areas is helpful to understand whether the "Double reduction" policy is "Acclimatization" in ethnic minority areas.

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2 THEORETICAL BASIS AND RESEARCH HYPOTHESIS

2.1 The Relationship and Hypothesis of "Double Reduction" Policy, Parental Satisfaction and Social Capital

2.1.1 The "Double Reduction" Policy Promotes the Satisfaction of Parents in Ethnic Minority Areas

The implementation of the "Double reduction" policy is beneficial to comprehensively improve the quality of education in compulsory education schools, giving full play to the main function of teaching and educating people in schools, and thus enhancing the satisfaction of parents. According to the working objectives of the "Double-reduction" policy, the existing research on the impact of the "Double-reduction" policy on the satisfaction of parents can be divided into four aspects: First, the "Double reduction" policy promotes parent's satisfaction in ethnic minority areas by reducing students' excessive homework burden (Zhao 2022). Second, the "Double reduction" policy promotes the satisfaction of parents in ethnic areas by improving the level of after-school services. Third, the "Double reduction" policy can improve parents' satisfaction in minority areas by comprehensively regulating out-of-school training behavior (Xue 2021). Fourth, the "Double reduction" policy promotes the satisfaction of parents in ethnic areas by improving the quality of school education and the level of service (Xiang 2022). To sum up, the "Double-reduction" policy on the ethnic areas of student satisfaction with parents has an enhanced role.

Based on this, we propose hypothesis 1: "Double reduction" policy can improve the satisfaction of parents in ethnic areas.

2.1.2 The "Double Reduction" Policy Enhances the Social Capital Content

The impact of "Double reduction" policy on parents' social capital is mainly studied from three dimensions: social participation, social trust and mutual benefit. In terms of social participation, the "Double reduction" policy stresses the need to improve the mechanism of home-school-community collaboration during the compulsory education stage, we can create a good social participation platform for parents from different levels. In terms of Social Trust, Social Trust is one of the prerequisites for the

formation of social capital (Zhang 2022). In the process of building the community, parents can cooperate with the school and social education platform to establish a solid trust relationship, and finally enhance the level of trust in the "Double reduction" policy (Lu 2022). In terms of mutual benefit, in order to enhance the quality of education and teaching in schools, and to protect the basic rights and interests of students, parents and schools, parents and society should cooperate with each other to urge the implementation of the "Double reduction" policy to effectively reduce the pressure of children's academic. (Li 2022, Zhang 2022) to sum up, the "Double-reduction" policy for the parents of students to enhance the capital content.

The second hypothesis is that the policy of "Double reduction" can improve the social capital of parents.

2.1.3 The Accumulation of Social Capital Contributes to the Improvement of the Satisfaction of Parents of Students in Ethnic Minority Areas

Social capital is an important social resource, which can improve the satisfaction of parents in ethnic areas. According to the different subjects connected by social capital, we can divide the ways of improving the satisfaction of students' parents into three basic types. The first line of thinking is that parents transmit educational expectations to their children through a network of relationships within the family (Xie 2017). The second way of thinking is that social communication between parents and schools can promote parents' understanding of schools and teachers, and thus improve the satisfaction of students' parents (Chu 2021, Zhou 2006). The third approach concerns the role of social networks within communities (Teachman 1997).

Based on this, this paper proposes hypothesis 3: social capital helps to improve the satisfaction of parents in ethnic areas.

Further, we propose hypothesis 4: social capital mediates the effect of "Double-reduction" policy on parents' satisfaction in ethnic areas.

3 RESEARCH DESIGN

3.1 Theoretical Model

Through the mathematical theory of the above literature, according to the research purposes, a theoretical model is put forward. Based on the above literature review and research purposes, a multiple

linear regression model is proposed:

$$Y = \beta_1x_1 + \beta_2x_2 + \dots + \beta_px_p + \varepsilon \quad (1)$$

Among them, $\beta_1, \beta_2, \dots, \beta_p$ is P unknowns, called regression coefficient. Y is called dependent variable (interpreted variable), while x_1, x_2, \dots, x_p are p general variables that can be accurately measured and controlled, called independent variable (interpreted variable). Formula (1) is called multivariate linear regression model, ε is random error term, we often assume the random error term

$$\begin{cases} E(\varepsilon) = 0 \\ \text{VAR}(\varepsilon) = R^2 \end{cases} \quad (2)$$

$$E(y) = \beta_1x_1 + \beta_2x_2 + \dots + \beta_px_p + \varepsilon \quad (3)$$

is called a theoretical regression model.

On the basis of controlling the demographic and socioeconomic variables, the influence mechanism of "Double-reduction" policy and parents' satisfaction (hypothesis 1), "Double-reduction" policy and social capital (hypothesis 2), social capital and parents' satisfaction (hypothesis 3) were analyzed.

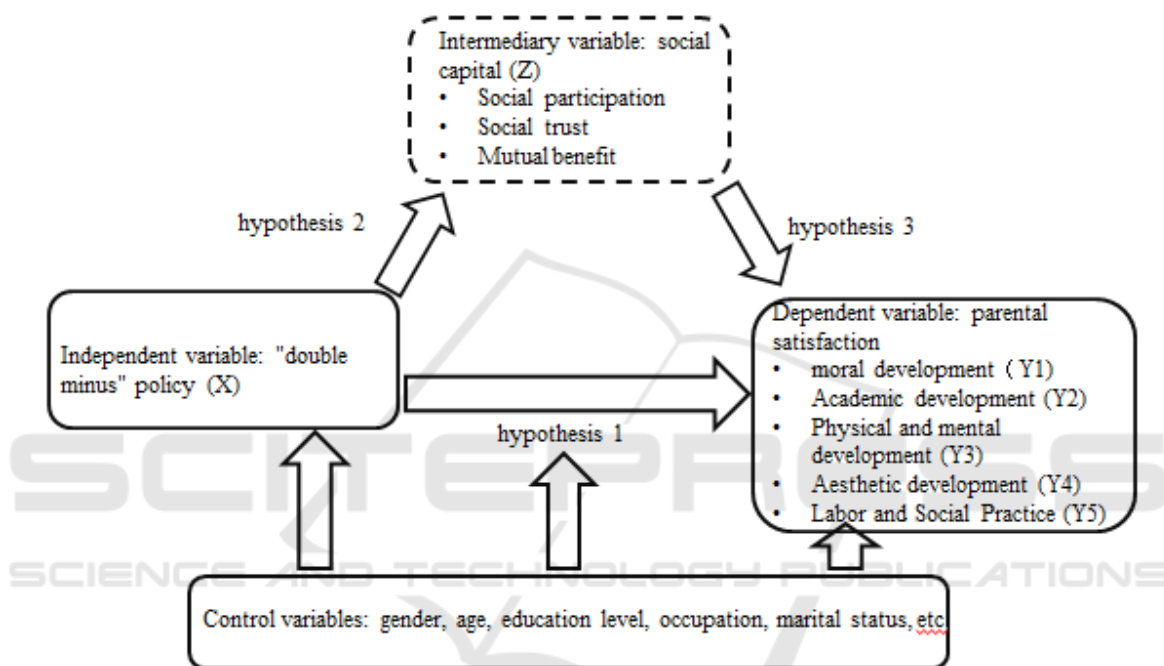


Figure 1: Research theory diagram.

3.2 Sample Selection and Data Sources

This paper selected Sanzhou area in Sichuan province as a typical case to carry out a questionnaire survey, questionnaires were distributed to the parents of students at the primary, junior and senior secondary levels in 37 counties where Ganzi Tibetan Autonomous Prefecture, Aba Tibetan and Qiang Autonomous Prefecture, Liangshan Yi Autonomous Prefecture ethnic minorities live through on-the-spot research and online distribution. In this paper, 13658 valid samples were finally analyzed.

4 DATA RESULTS AND ANALYSIS

4.1 The Relationship Between the "Double Reduction" Policy, Social Capital and Parents' Satisfaction

In this study, standardized mean scores were used to measure the "Average parent satisfaction score," Cronbach's α coefficient of the scale was 0.967, and the KMO of the whole data was 0.974 by exploratory factor analysis, which indicated that the scale had good reliability and validity.

After the primary analysis of the main variables, the study hypotheses were tested one by one using OLS multiple linear regression. The results of all the

regression model tests show that the VIF values of all independent and control variables are between 1 and 3, indicating that there is no Multicollinearity problem between these variables.

4.1.1 The Effect of "Double Reduction" Policy on Parents' Satisfaction

According to Table 1, the satisfaction of parents after

the implementation of the "Double reduction" policy was 6.16, 7.45, 6.79, 7.65 and 7.62 units higher than that before the implementation of the "Double reduction" policy. This fully shows that the implementation of the "Double reduction" policy can indeed improve the satisfaction of parents of students in the compulsory education stage in ethnic minority areas. Hypothesis 1 has been verified.

Table 1 Analysis results of the impact of "Double reduction" policy on parents' satisfaction in ethnic minority areas.

variable	M1	M2	M3	M4	M5
	Y1	Y2	Y3	Y4	Y5
Policy	6.16***	7.45***	6.79***	7.65***	7.62***
Gender (1)	1.74*	1.77*	1.75*	1.81*	1.81*
Age	-0.58	-0.54	-0.57	-0.48	-0.56
Edu	4.92***	5.00***	5.13***	5.06***	5.14***
Marriage	-0.31	-0.33	-0.26	-0.26	-0.24
Work	1.41	1.40	1.42	1.41	1.39
Income	4.27***	4.28***	4.25***	4.25***	4.22
Gender (2)	-1.03	-1.01	-1.01	-1.00	-1.01
Only child	25.87***	25.83***	25.96***	25.86***	25.89***
Boarding system	-11.72***	-11.66***	-11.66*	-11.61***	-11.65***
Left-behind	-47.17***	-47.18***	-47.10***	-47.16***	-47.19***
Healthy	44.28***	44.18***	44.19***	44.22***	44.16***
Constant	32.04***	32.36***	31.94***	32.65***	32.09***
Sample	13654	13654	13654	13654	13654
R ²	0.896	0.897	0.896	0.896	0.897

Note: *** represents P<0.001, ** represents P<0.05, and * represents P<0.1.

4.1.2 The Impact of the "Double Reduction" Policy on Social Capital

As shown in Figure 1, The social capital of parents after the implementation of the "Double reduction" policy was 1.98 higher than that before the implementation of the "Double reduction" policy. This shows that the implementation of the "Double reduction" policy can improve the social capital content of the parents of students in the compulsory education stage in ethnic areas. Hypothesis 2 has been verified.

Table 2 Analysis Results of the Impact of the "Double Reduction" Policy on Social Capital.

variable	M6
	Social capital
Policy	6.88***

Gender (1)	2.95**
Age	-2.95**
Edu	4.51***
Marriage	2.27*
Work	4.12***
Income	4.62***
Gender(2)	-1.56
Only child	27.42***
Boarding system	-13.44***
Left-behind	-113.58***
Healthy	2.56**
Constant	85.83***
Sample	13654
R ²	0.8340

Note: *** represents P<0.001, ** represents P<0.05, and * represents P<0.1.

4.1.3 The Effect of Social Capital on Parents' Satisfaction

According to Table 3, Social capital has a significant positive effect on all dimensions of parents' satisfaction. To be specific: for every unit increase in social capital, the scores of the five dimensions

increased by 14.90,15.16,14.41,14.54,15.10 units respectively in the compulsory education stage of ethnic minority areas. To sum up, social capital can help to improve the satisfaction of parents of compulsory education students in ethnic areas, hypothesis 3 is verified.

Table 3 Analysis Results of the Impact of Social Capital on Parents' Satisfaction in Ethnic Areas.

variable	M7	M8	M9	M10	M11
	Y1	Y2	Y3	Y4	Y5
Social capital	14.90***	15.16***	14.41***	14.54***	15.10***
Gender (1)	-8.59***	-8.48***	-8.59***	-8.44***	-8.42***
Age	3.55***	3.71***	3.69***	3.84***	3.72***
Edu	16.52***	16.76***	16.95***	16.78***	16.94***
Marriage	3.53***	3.58***	3.64***	3.70***	3.75***
Work	-4.74***	-4.77***	-4.64***	-4.72***	-4.70***
Income	3.24**	3.21**	3.17**	3.21**	3.15**
Gender (2)	0.78	0.87	0.83	0.95	0.91
Only child	-3.21**	-3.30**	-3.06**	-3.31**	-3.24**
Boarding system	-2.14**	-1.99**	-1.99**	-1.90*	-1.98**
Left-behind	10.55***	10.74***	10.81***	10.91***	10.62***
Healthy	10.23***	10.12***	10.19***	10.28***	10.11***
Constant	-16.72***	-16.73***	-16.40***	-16.18***	-16.63***
Sample	13654	13654	13654	13654	13654
R ²	0.0694	0.0693	0.0675	0.0668	0.0683

Note: *** represents P<0.001, ** represents P<0.05, and * represents P<0.1.

4.2 The Mediating Effect of Social Capital in the Effect of “Double-Reduction” Policy on Parents' Satisfaction

This paper chooses structural equation model to further analyze the intermediary effect of social capital in the impact of “Double reduction” policy on parental satisfaction. The analysis results are shown in Table 4.

The coefficients of the indirect effects of the five dimensions of parents' satisfaction were all significant at the 1% level, the indirect effects of the five dependent variables were 36.4%, 17.8%, 36.4%, 12.9%, 36.4% respectively. This suggests that social capital does have a significant mediating effect between the “Double reduction” policy and parental satisfaction at the compulsory education stage in ethnic minority areas.

Table 4 Analysis results of intermediary effect of social capital.

	dependent variable				
	Y1	Y2	Y3	Y4	Y5
Total	0.022*	0.045*	0.022	0.062*	0.022
Direct	-0.014	0.053**	0.030*	0.070**	0.030
Indirect	0.008*	0.008*	0.008*	0.008*	0.008**
Proportion of indirect	36.4	17.8	36.4	12.9	36.4

Note: *** represents P<0.001, ** represents P<0.05, and * represents P<0.1.

5 CONCLUSION

As an important part of the compulsory education reform, the “Double reduction” policy is an effective means to enhance the satisfaction of parents of students in ethnic minority areas at the compulsory education stage. The main conclusions of this study are as follows:

(1) the satisfaction of parents of compulsory education students in ethnic areas is generally high; But there are group differences: Middle aged, college educated, married, non fixed occupation, non only child families, girls as children, non boarding children, non left behind children, and very healthy children have higher parental satisfaction.

(2) the implementation of the “Double reduction” policy can significantly improve the satisfaction of parents of compulsory education students in ethnic minority areas. Through OLS regression, it is found that after adding control variables, the “Double reduction” policy has a very significant effect on the improvement of parental satisfaction, and the five dimensions of parental satisfaction and the OLS coefficient of the average score of parental satisfaction are all positive significant. This shows that the implementation of the “Double reduction” policy is an effective means to improve the satisfaction of students' parents at the compulsory education stage in ethnic areas.

The implementation of the “Double reduction” policy can improve the social capital of parental satisfaction, and the social capital can significantly improve parental satisfaction. The results of structural equation model intermediary effect analysis show that when the “Double reduction” policy improves parental satisfaction, the indirect effect of social capital is significant at the level of 1%, indicating that it is an important intermediary variable in the relationship between the two.

Based on the above conclusions, in the policy aspect, it is suggested that: continue to promote the implementation of the “Double reduction” policy in ethnic minority areas, using the “Double reduction” policy as an important means to enhance the satisfaction of parents of students at the compulsory education stage in ethnic minority areas, and making use of the home-school-community coordination mechanism to further clarify the responsibilities of home-school education and foster closer home-school communication, to enhance the enthusiasm of parents for social participation, Foster Social Trust, mutual benefit, harmonious and mutually supportive social relations, and increase the social capital of parents of students at the compulsory education stage

in ethnic minority areas, to further enhance the satisfaction of parents.

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