

Evaluation of Out-of-School Education and Training Institutions in Ningxia Province, China Amid the 'Double Reduction' Policy

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Abstract

In recent years, the promulgation and implementation of the Double Reduction Policy have imposed many restrictions on the development of the education and training industry. This has led to layoffs, closures, and a hidden slowdown in industry growth. Studies indicate that the policy has resulted in a decrease in share prices of off-campus education and training institutions, leading to significant talent loss. However, there has been an expansion in the types of business within the industry. This study aims to examine the effects of share prices, business types, and talent changes on the development of out-of-school education and training institutions after the implementation of the Double Reduction Policy. A sample of 201 managers was recruited using convenient sampling through online surveys distributed on the Questionnaire Star platform. The data was analyzed using SPSS software, including Pearson correlation analysis and multiple linear regression analyses. The results show that share price and talent change have a significant negative impact on the development of out-of-school education and training institutions, while business types have a significant positive impact. To improve their quality, value, and competitiveness, education and training institutions should focus on increasing share prices and expanding future business development.

Keywords: Double Reduction Policy, Education and Training Institutions, Share Prices, Business Types, Change of Talent, Quality of Education

INTRODUCTION

The Double Reduction Policy, introduced by the Chinese government, aims to alleviate the heavy homework burden and reduce the reliance on out-of-school training for students in compulsory education (Zhang, 2023). This policy seeks to address the academic pressure on students and recentralize the focus of education within the school system (Zhao et al., 2024). Since its implementation, the policy has posed significant challenges to out-of-school education and training institutions, including bankruptcies, layoffs, and declines in stock values (Zhou 2023).

The rise of the industry of out-of-school education and training institutions has led to the uneven quality of training, non-standard charging standards, and to a certain extent encroached on some functions of compulsory education schools, alienating the teaching, and educating functions of compulsory education schools (Yu 2022). Given the various problems caused by extracurricular tutoring in out-of-school education and training institutions, the government departments have gradually increased the strength and intensity of their governance (Liu 2021). Compulsory education schools should fully take up the responsibility of educating people, and the construction of the "school-government-society" linkage system at the stage of compulsory education is an urgent problem to be solved in current compulsory education (Duan 2022) especially to improve the quality of education as per SDG 4's objective to "ensure inclusive and equitable quality education for all" (United Nations [UN], 2015, Target 4.1).

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Despite the policy's significant impact, there is a notable gap in the literature concerning its effects on out-of-school education and training institutions. Existing studies primarily focus on regulatory policies and government interventions, without offering a comprehensive theoretical framework or conceptual model specifically related to the Double Reduction Policy (Fan 2022; Yu 2022; Zhang 2023). These studies tend to analyze the impact of policy changes on institutional practices, enrollment rates, market structure, or business strategies (Ortagus, Kelchen, Rosinger et al., 2020).

This quantitative study aims to fill this research gap by examining the effects of share prices, business types, and changes in talent on the development of out-of-school education and training institutions post-implementation of the Double Reduction Policy. Understanding these impacts is crucial for proposing effective reform paths and providing references for the development of compulsory and healthy growth of students in China.

LITERATURE REVIEW

According to Dai (2023), the implementation of the Double Reduction policy has been seen as a far-reaching educational revolution in China. Introduced in July 2021, the policy aims to return educational equity and alleviate academic anxiety by reducing both the homework burden and the burden of after-school training. The policy also aims to address the broader social issue of educational involution, where intense competition for educational resources drives families to invest excessively in their children's education. By regulating off-campus tutoring and reducing the academic burden, the policy seeks to create a more balanced and equitable educational environment, which can help reduce societal pressures and improve the overall well-being of families (Zhu, 2023). This reduction in academic workload can improve students' mental and physical health, as they gain more time to pursue personal interests and develop holistically (Liu, 2023). Moreover, the promotion of quality education and the focus on holistic student development can lead to more well-rounded individuals who are better prepared for the future. This shift in educational focus can enhance social attitudes toward education and encourage a more balanced approach to learning and personal growth (Chen, 2023).

However, the implementation of the policy has had complex impacts on the education sector. The policy has dramatically changed the landscape of shadow education in China, reducing stress for students but also increasing the workload for teachers and leading to substantial financial challenges for tutoring institutions (Kong, 2023; Zhou, 2023). Additionally, it has exacerbated educational imbalances as wealthier families continue to seek private tutoring, thereby highlighting the need for equitable resource allocation and comprehensive student development (Xue, 2023; Zhang, 2023). In Huicheng District, interviews and surveys with primary and secondary school students and their families revealed mixed reactions. While many parents support the policy for increasing their children's free time and opportunities to engage in outdoor activities (Zhao et al., 2024), some parents expressed concerns about their ability to tutor their children and their children's self-control (Dai, 2023). Additionally, Yin (2023) highlights that the lack of family education responsibilities has become more apparent, as parents rely heavily on school education to meet their children's academic needs (Yin, 2023). According to Zhou (2023), the policy has led to increased anxiety among parents who now feel the need to supplement their children's education through private tutoring, despite the policy's restrictions. Zhou (2023) emphasizes the importance of setting rational expectations and providing emotional support to mitigate these negative impacts (Zhou, 2023).

Ling Zhang (2023) states that teachers now have to carefully design assignments to be fewer but more precise and scientifically efficient. This demand for high-quality, efficient assignments adds to the teachers' workload, requiring them to invest more time and energy into their lesson planning and after-school programs (Zhang, 2023). However, in the long run, the policy aims to create a more balanced and equitable education system by reducing the academic burden on students and standardizing educational services, which can contribute to the overall socio-economic development of China (Zhang, 2023). One strategy to balance the increased workload on teachers while maintaining educational quality is to provide teachers with higher pay and ensure good living standards as incentives to cope with increased pressure (Liang, 2023). Increasing teacher subsidies and providing financial incentives can help relieve some financial burdens and enhance teacher motivation (Yin, 2023). Additionally, professional development programs focused on efficient assignment design and innovative

teaching methods can equip teachers with the necessary skills to meet the new demands (Zhang, 2023). Xiong (2023) emphasizes the importance of training programs that enhance rural teachers' professional identity and address their work and psychological pressures (Xiong, 2023).

According to Nordin et al. (2023), tele-collaboration enhanced pre-service teachers' language abilities and teaching effectiveness. This indicates that online platforms could be beneficial for Ningxia's training programs. The study emphasizes implicit teaching techniques and communicative methods, which can inform the development of effective training strategies for educators in Ningxia. Feedback from participants underscores the advantages of tele-collaboration and cultural exchange, highlighting the need for collaborative and feedback-driven approaches to foster engaging learning environments (Nordin et al., 2023).

Providing adequate resources and support for after-school programs is essential, as this can help balance the increased workload. Moreover, Fostering a collaborative environment where teachers can share best practices and strategies can promote more effective policy implementation (Zhou, 2023). Additionally, this collaboration can alleviate individual workloads and create a supportive teaching environment (Tianfu & Hongyuan, 2022).

Liang (2023) highlights the need for better communication between schools and parents to share information and exchange ideas, which can alleviate some of the pressure on teachers (Liang, 2023). A study by Sagadavan and John (2019) on Malaysian tertiary students reveals substantial role of family in students' educational and career decision-making processes. Approximately 70.3% of students reported that their family plays a major role in their future planning, highlighting the importance of familial support and influence in educational outcomes. This finding is particularly relevant for Ningxia, where family involvement might similarly impact students' engagement with educational policies.

Technology solutions, such as Academic Management Systems (AMS), can streamline administrative tasks and free up more time for teachers to focus on teaching (Karuppusamy et al., 2023). Technology can support the Double Reduction policy by enhancing educational quality and reducing administrative burdens. An Academic Management System (AMS), as described by Karuppusamy et al. (2023), can streamline academic operations by managing student details, attendance, grades, and course content, thus freeing up teachers to focus more on teaching and less on administrative tasks (Karuppusamy et al., 2023). Additionally, Decision Support Systems (DSS) utilizing AI and knowledge management can assist in making informed decisions about student admissions, performance monitoring, and resource allocation, as highlighted by Mercier-Laurent and Haddad (2019). Implementing such systems can ensure that educational institutions operate efficiently and effectively, aligning with the goals of the Double Reduction policy. In a study conducted on Malaysian university students, Ng (2021) found that the formative use of Learning Management Systems (LMS) and multiple-choice questions (MCQs) with multiple attempts encourages deeper understanding and self-regulation. Previous research indicates positive student attitudes towards formative MCQs, which can support self-directed learning by fostering self-teaching and critical thinking (Ng, 2021). To address resource management issues, China can encourage students to engage in self-teaching while guiding teachers to support self-directed learning, thereby optimizing educational resources and enhancing learning efficiency. Yu et al. (2024) highlight that organizational factors are critical predictors of operational efficiency in educational institutions, suggesting that structured instructional strategies and effective management practices are essential to enhance performance and mitigate inefficiencies.

The Double Reduction policy has imposed strict regulations on off-campus training institutions, leading to significant financial challenges. The policy has caused a substantial reduction in financial income, the closure of listing channels, and increased unemployment among training personnel (Tao, 2023). Consequently, institutions are compelled to transform their business models to comply with the new regulatory environment. Tao (2023) also discusses broader economic effects, including changes in expenditure distribution and potential impacts on future economic growth. This economic shift has prompted a need for transformation within the industry, with a potential pivot towards non-academic skills training and diversified educational services. A study published by Yu (2023) in the SHS Web of Conferences (2023) suggests that these institutions should focus on talent management and strategic transformation to mitigate the financial impact of the policy.

Wu's (2021) paper on "Research on the Impact of China's "Double Reduction" Policy on Out of School Real Classes" revealed that after the implementation of the Double Reduction Policy, the share price of New Oriental Education Group in 2021-had dropped from the highest point of 19.97 to the lowest point of 1.68. TAL Education Group announced the repurchase of convertible priority notes due in 2026 in response to the decline in stock prices. Wu also notes a dramatic reduction in Gaotu Education Group's market value, dropped from 40 billion to 800 million US dollars, emphasizing the close relationship between share prices and off-campus education and training institutions.

Chen (2022) discusses how the policy has led to significant declines in stock prices for companies like New Oriental, which faced a prohibition on K-9 business and negative impacts on high school and preschool segments. This situation has prompted teacher resignations and necessitated strategic business model shifts (Zhong & Park, 2023). Additionally, Lin's (2022) research on the impact of the Double Reduction Policy on education enterprises revealed that New Oriental and TAL Education Group have made changes to future business development, focusing on high-quality education, vocational education, and intelligent education to cultivate students' comprehensive development. The reduced financial income and increased regulatory scrutiny have forced many institutions to adapt their business models, leading to diversification into non-academic skills training and online learning platforms (Tao, 2023). This shift in business types can potentially create new economic opportunities within the education sector, promoting innovation and the development of new educational services.

However, the policy has also resulted in increased unemployment among training personnel, highlighting the need for strategic talent management and re-skilling initiatives (Yin, 2023). Chen (2022) further explores the negative consequences of the policy, highlighting the massive job losses among teachers and the difficulties faced by undergraduates in finding employment. The prohibition on new tutoring institutions and extracurricular classes has led to the bankruptcy of several education companies (Liang & Ye, 2021). This decrease in demand for teachers has increased unemployment, causing social problems such as decreased national production, loss of human capital, and a rise in government subsidies for unemployed teachers and graduates. Additionally, the policy has economic implications for families. The closure and regulation of many private tutoring centers have disrupted the supplementary education industry, leading to job losses and financial instability for many families involved in this sector (Kong, 2023).

Sheng, Wei, Z., and Yan's (2022) paper "The Issues of Overview: The Analysis and Outlook of Double Reduction Policy" is based on the development of education enterprises under the Double Reduction Policy. The authors stated students' personalities and creativity will be encouraged and cultivated as schools will offer more out-of-campus courses and training for students to engage in social practice. Hence, the competition for quality training may further strengthen in line with the adaptation to the direction of social progress. However, the capitalization and commercialization trend of education groups may be suppressed.

Tony Bush's (2020) political model of education management emphasizes the importance of understanding the political context in which educational institutions operate. Bush (2020) believes that education management is not only about the efficient operation of educational institutions, but also about the politics that affect education policies and practices. The goals and objectives of educational institutions are not only determined by educational leaders, but also influenced by external political factors such as government policies, social norms, and public opinion (Longoria et al., 2021). Just like the double reduction policy issued by the country, if education and training institutions want to develop in the long run, education managers must understand different stakeholders and their interests to make effective decisions.

One relevant case study is South Korea's 7.30 Educational Reform Measure, which is similar to China's Double Reduction policy. This reform aimed to reduce students' academic burdens and regulate private tutoring. Yu (2023) compared the Double Reduction policy with South Korea's reform, noting that both initiatives seek to alleviate student stress and reduce reliance on private education. The comparison suggests that continuous improvement in public education quality, maintaining the public-service nature of education, and building a robust supervision system are critical for the success of such policies (Yu, 2023). Similarly, Kong (2023)

discusses Japan's education reforms as a precedent for predicting the potential effects and improvement options for China's Double Reduction policy (Kong, 2023).

Poland's education reforms, implemented in 1999, have also been highly successful. These reforms increased instructional hours and delayed vocational tracking, leading to significant improvements in student performance on international assessments (Mahfooz & Hovde, 2010). Australia's "Learning to Learn" initiative, which began in 1999, used systems thinking and learning theory to transform schooling. This approach emphasized a co-developmental strategy involving all stakeholders and was guided by principles of complex systems theory, resulting in successful reform (Goldspink, 2007). Successful education reforms in countries such as South Korea, Poland, and Australia offer valuable lessons for China.

As such, the researcher proposed the following hypotheses to guide the study based on the evidence reviewed:

H1: There is a negative and significant effect of the share price on the development of out-of-school education and training institutions after the "double reduction" policy is implemented.

H2: There is a positive and significant effect of business types on the development of out-of-school education and training institutions after the "double reduction" policy is implemented.

H3: There is a negative and significant effect of change of talent on the development of out-of-school education and training institutions after the "double reduction" policy is implemented.

METHODOLOGY

Research Design and Sample

This study is mainly quantitative analysis. Based on relevant theories and in combination with the actual situation of out-of-school educational institutions, a cross-sectional design questionnaire was used to collect information about out-of-school training institutions.

The sample of this study was out-of-school training institutions in Ningxia Province. This study has three independent variables. According to the sample size estimation of $G * Power$, the optimal sample size required for this study was determined to be 119. Therefore, this study determined the managers of 119 out-of-school education and training institutions as the required sample size.

The used of convenient sampling to fill in the questionnaire online, to facilitate the respondents of out-of-school training institutions to fill in, to diversify the sample. By collecting and analyzing the data on these three influencing factors, we could measure the impact of the double-reduction policy on out-of-school educational institutions.

Research Procedure

The online questionnaire created by the Questionnaire Star online survey platform was used for online data collection. It was mainly spread through social messaging applications (such as WeChat and Microblog) for links and applets. This questionnaire was non-probability sampling distributed and participated voluntarily.

Data Analysis

Descriptive analysis of the collected data was carried out through data statistics (SPSS). Using frequency distribution analysis, correlation analysis, and multiple regression analysis to test whether changes in share prices, and talent change under the "double reduction" policy significantly negatively effect of education and training institutions.

RESULTS

Demographic Information

The sample consists of 201 participants, including 106 males and 95 females. The age range of the respondents was recorded as over 26 years old, with a total of five age groups represented by 1-5, with an average age of around 35 years old ($M=2.39$, $SD=1.187$). In terms of educational level, most participants have a bachelor's

degree. The respondents' work experience in the education industry was concentrated in 1-3 years, with the majority being frontline managers (47.3%), most of whom are from extracurricular education and training institutions targeting junior high school students. The complete demographic information of the participants in this study is shown in Table 1.

Table 1. Demographic information of participants (N=201).

	Frequency (%)	Mean	SD	Min	Max
Age		2.39	1.187	1	5
26-30	56 (27.9%)				
31-35	60 (29.9%)				
36-40	48 (23.9%)				
41-45	25 (12.4%)				
Above 46	12 (6.0%)				
Gender					
Male	106 (52.7%)				
Female	95 (47.3%)				
Education level					
Junior college	59 (29.4%)				
Undergraduate	98 (28.8%)				
Master	27 (13.4%)				
Doctor	17 (8.5%)				
Experience					
1-3 year	86 (42.8%)				
4-7 year	52 (25.9%)				
8-10 year	42 (20.9%)				
Above 10 years	21 (10.4%)				
Stage					
Primary school	68 (33.8%)				
Junior high school	92 (45.8%)				
High school	41 (20.4%)				
Position					
First-line manager	95 (47.3%)				
Middle manager	75 (37.3%)				
Top manager	31 (15.4%)				

Note: SD: Standard Deviation; Min: Minimum value; Max: Maximum value.

Frequency Distribution of Variables

Table 2 shows the frequency distribution of share prices, business types, change of talent, and the development of out-of-school education and training institutions.

Table 2. Frequency distribution of variables (N = 201)

Variables	Mean	SD	Min	Max
Share price	3.3470	0.99526	1.50	5.00
Business types	3.2965	0.95249	1.40	5.00
Change of talent	3.4657	0.95837	1.60	5.00
Development	3.3383	0.98741	1.50	

Note: SD = Standard Deviation; Min = Minimum; Max = Maximum.

Pilot Test

This study selected 30 managers of out-of-school education and training institutions through convenient sampling to test each question in 18 questionnaires. The reliability coefficient value was 0.924, the KMO value was 0.638, p value was 0, indicating that the questionnaire used for research has high reliability and average validity. The data could be used for further data analysis.

Correlational Analysis

RQ1 What are the effects of share price on the development of out-of-school education and training institutions after “double reduction” policy implemented?

Based on the Table 3, the p value of correlation was less than 0.01. Especially the coefficient between share price and development is -.386. Therefore, there was a negative and significant effect of share price on the development of out-of-schol education and training institutions after “double reduction” policy implemented.

Table 3. Correlation analysis of share price and development (N = 201).

Correlations		Development			
Share price	Pearson Correlation	-.386**			
	Sig. (2-tailed)	0.000			
	N	201			
		Development 1	Development 2	Development 3	Development 4
Share price 1	Pearson Correlation	-.211**	-.271**	-.331**	-.225**
	Sig. (2-tailed)	.003	.000	.000	.001
	N	201	201	201	201
Share price 2	Pearson Correlation	-.284**	-.261**	-.314**	-.266**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	201	201	201	201
Share price 3	Pearson Correlation	-.266**	-.297**	-.296**	-.252**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	201	201	201	201
Share price 4	Pearson Correlation	-.267**	-.295**	-.307**	-.259**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	201	201	201	201

Note: ** Correlation is significant at the 0.01 level (2-tailed).

RQ2 What are the effects of business types on the development of out-of-school education and training institutions after “double reduction” policy implemented?

Based on the Table 4, the p value of correlation was less than 0.01. Especially the coefficient between business types and development was .404. Therefore, there was a positive and significant effect of business types on the development of out-of-school education and training institutions after “double reduction” policy implemented.

Table 4. Correlation analysis of business types and development (N = 201)

Correlations		Development			
Business types	Pearson Correlation	0.404**			
	Sig. (2-tailed)	0.000			
	N	201			
		Development 1	Development 2	Development 3	Development 4
Business types 1	Pearson Correlation	.269**	.279**	.285**	.311**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	201	201	201	201
Business types 2	Pearson Correlation	.295**	.293**	.263**	.371**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	201	201	201	201
Business types 3	Pearson Correlation	.204**	.176*	.277**	.278**
	Sig. (2-tailed)	.004	.013	.000	.000
	N	201	201	201	201
Business types 4	Pearson Correlation	.267**	.288**	.265**	.270**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	201	201	201	201
Business types 5	Pearson Correlation	.302**	.357**	.260**	.361**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	201	201	201	201

Note: ** Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

RQ3 What are the effects of change of talent on the development of out-of-school education and training institutions after “double reduction” policy implemented?

Based on the Table 5, the p value of correlation was less than 0.01. Especially the coefficient between change of talent and development was -.401. Therefore, there was a negative and significant effect of change of talent on the development of out-of-school education and training institutions after “double reduction” policy implemented.

Table 5. Correlation analysis of change of talent and development (N = 201).

Correlations		Development			
Change of talent	Pearson Correlation	-.401**			
	Sig. (2-tailed)	.000			
	N	201			
Change of talent 1	Pearson Correlation	Development 1	Development 2	Development 3	Development 4
	Sig. (2-tailed)	-.244**	-.302**	-.314**	-.250**
	N	.000	.000	.000	.000
Change of talent 2	Pearson Correlation	-.219**	-.298**	-.340**	-.214**
	Sig. (2-tailed)	.002	.000	.000	.002
	N	201	201	201	201
Change of talent 3	Pearson Correlation	-.240**	-.344**	-.296**	-.297**
	Sig. (2-tailed)	.001	.000	.000	.000
	N	201	201	201	201
Change of talent 4	Pearson Correlation	-.242**	-.308**	-.304**	-.294**
	Sig. (2-tailed)	.001	.000	.000	.000
	N	201	201	201	201
Change of talent 5	Pearson Correlation	-.217**	-.342**	-.311**	-.274**
	Sig. (2-tailed)	.002	.000	.000	.000
	N	201	201	201	201

Note: ** Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Analysis

Multiple regression analysis was used to test whether share prices, business types, and change of talent significantly predict the development of out-of-school education and training institutions. Based on the table 6, the share price significantly predicts the development of out-of-school education and training institutions ($\beta = -.207, p < 0.005$), business types ($\beta = .220, p < 0.005$), change of talent ($\beta = -.226, p < 0.005$) was also the same. Share prices and change of talent negatively predict the development of out-of-school education and training institutions, while business types positively predict the development of out-of-school education and training institutions. The VIF of share price was 1.291, the VIF of business types was 1.356, and the VIF of change of talent was 1.317. This shown that the VIF values of the three independent variables were less than 5, indicating that there was no multicollinearity between variables. The results indicate that it was consistent with the hypothesis.

The model formula is $DETI = 3.722 - 0.206 * SP + 0.228 * BT - 0.232 * COT$

Table 6. ANOVA statistics between share price, business types, change of talent.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.540	3	16.847	22.975	.000 ^b
	Residual	144.455	197	.733		
	Total	194.995	200			

Note: a. Predictors: (Constant), Share price, Business types, Change of talent

b. Dependent Variable: Development and development

Table 7. Multiple regression analysis of share price, business types, and change of talent in predicting development.

Model		Coefficients ^a			t	Sig.	Collinearity Statistics	
		Unstandardized Coefficients	Standardized Coefficients				Tolerance	VIF
	B	Std. Error	Beta					
1	(Constant)	3.722	0.412		9.029	0		
	Share price	-0.206	0.069	-0.207	-2.974	0.003	0.774	1.291
	Business types	0.228	0.074	0.22	3.074	0.002	0.737	1.356
	Change of talent	-0.232	0.072	-0.226	-3.205	0.002	0.759	1.317

Note: Dependent Variable: Development

After statistical analysis, this study found that the hypotheses, IV and DV were supported as below.

Table 8. Summary of the Results.

IV predictor of DV in order of priority	Dependent Variable (DV)
Supported	Share Price
Supported	Business Types
Supported	Change of Talent

Discussion

The findings of this study show that after the implementation of the Double Reduction Policy, share price, business types and change of talent have a significant impact on the development of out-of-school education and training institutions. The share price and change of talent have a negative impact on the development of out-of-school education and training institutions, while the business types have a positive impact on the development of out-of-school education and training institutions. In a word, the implementation of the Double Reduction Policy has a significant impact on the development of out-of-school education and training institutions.

As the literature review discussed, it is found that the existing literature on the effect of the Double Reduction Policy on out-of-school education and training institutions is consistent with the results of this study, indicated that share price, business types, and change of talent have a significant effect on out-of-school education and training institutions. The results indicated that after the implementation of the "double reduction" policy, the share price has a significant impact on the development of out-of-school education and training institutions. This result was supported by past literature (Wu 2021). The share price of the three major education and training institutions, New Oriental, TAL, and Gaotu, have each experienced varying degrees of decline. The results indicated that after the implementation of the "double reduction" policy, the impact of business types on the development of out-of-school education and training institutions is significant. This corresponds to previous literature (Lin 2022). Some education and training institutions have made changes and expanded their future business development, mainly developing high-quality education, vocational education, smart education, online education, etc. The results indicated that after the implementation of the "double reduction" policy, the impact of change of talent on the development of out-of-school education and training institutions is significant. This is supported by Chen (2022). The demand for teachers and educators from educational and training institutions may decrease. Causing teacher unemployment, thereby increasing the unemployment rate.

Meanwhile, this study filled the literature gap under the background of the Double Reduction Policy. Because this was a new policy implemented in the past two years, there was a lack of relevant research. This study could be representative in the context of the implementation of the Double Reduction Policy and serve as a reference for researchers interested in this research field in the future. This study also provided a theoretical framework and conceptual model related to education. Quantitative research methods were used. Detailed data analysis and sufficient sample support were provided regarding questionnaire design, survey questions, sample size, sampling methods, data collection procedures, or data analysis techniques used in research. Therefore, the results of this study could provide reference for future researchers.

Limitation

One limitation was that this study has regional limitations. The participants were all from Ningxia Province, China and cannot represent the entire country. Due to different local policy implementation standards in different cities, the results may vary.

Another limitation was to select the variables that were most suitable for the model in this study. The three independent variables used in this study were only partial factors that affect the development of out-of-school education and training institutions. However, there were many factors that affect the development of out-of-school education and training institutions, which were not included in this study.

Recommendations for Future Research

Future researchers could target more diverse sampling and include managers, teachers, or parents from education and training institutions in different cities as participants in future research. It may help researchers eliminate biased results, rather than just managers in a particular region. In addition, it was recommended that researchers increase the sample size to make the data more representative of the entire population.

Meanwhile, future research could include other relevant variables, such as market demand, operating costs, and their impact on the development of the education industry. Different variables may have varying degrees of relationship with the dependent variable or other independent variables (Ortagus et al. 2020). In addition, it was recommended that researchers adopt different theoretical models of education management for research, as different theoretical frameworks provide different directions, which was of great significance for future theoretical development.

CONCLUSION

This study set out to examine the impact of share prices, business types, and changes in talent on the development of out-of-school education and training institutions following the implementation of the Double Reduction Policy. The findings reveal that the policy has significantly influenced these institutions in multiple ways.

Firstly, the results indicate that changes in share prices have a negative and significant impact on the development of out-of-school education and training institutions. This aligns with the observed declines in the stock prices of major education and training companies, reflecting the financial challenges faced by the industry post-policy implementation.

Secondly, the analysis shows that business types have a positive and significant impact on the development of these institutions. This suggests that diversification and the adoptions of new models, such as high-quality education, vocational training, and smart education, can help institutions adapt to the new regulatory environment and sustain their growth.

Thirdly, the study finds that changes in talent, particularly the loss of skilled educators, have a negative and significant impact on the development of out-of-school education and training institutions. This highlights the need for effective talent management strategies to mitigate the adverse effects of the policy on employment and institutional development.

These findings provide valuable insight for policymakers and stakeholders in the education sector. To navigate the challenges posed by the Double Reduction Policy, education and training institutions should focus on improving their quality of education offerings, increasing their value, and enhancing their competitiveness. Additionally, diversifying business types and investing in talent management can help institutions better adapt to the new regulatory landscape.

REFERENCES

- Bush, T. (2020). Theories of educational leadership and management. *Theories of Educational Leadership and Management*, pp.1-208.
- Chen, X. (2022, March). The Impact of Chinese “Double Reduction” Policy on Listed Educational Tutoring Institutions. In 2022 7th International Conference on Financial Innovation and Economic Development (ICFIED 2022). Atlantis Press, pp.1986-1991.
- Chen, Z. (2023). A study on the promotion of quality education in primary and secondary schools in China under the "Double Reduction" policy. *Lecture Notes in Education Psychology and Public Media*. <https://lnep.ewapublishing.org/article/9e29b64b31ea4d5c88c7172c3e942673>
- Dai, Z. (2023). Research on the Double Reduction Policy taking Huicheng District of Huizhou City as an example. *Lecture Notes in Education Psychology and Public Media*. <https://doi.org/10.54254/2753-7048/7/20220700>
- Duan, W. (2022). Research on the management and reform path of subject education and training institutions under the background of the “double reduction” policy. *Advances in Education*, 12(09), pp.3311–3316. <https://doi.org/10.12677/ae.2022.129507>

- Fan, Z. (2022). A Study on the Impact of the 'Double Reduction' Policy on the Parenting Styles and Anxiety Levels of Parents of Grade 5-6 Students in Guangdong, China (Doctoral dissertation, University of Oxford).
- Goldspink, C. (2007). Transforming education: Evidential support for a complex systems approach. *Emergence: Complexity and Organization*, 9(1-2), 77-92. <https://eco.emergentpublications.com/Author/CHRIS%20GOLDSPINK>
- Han, L. (2023). The relationship between double reduction policy and secondary school students' learning anxiety—the mediating role of academic burden. *International Journal of New Developments in Education* (5). doi:10.25236/IJNDE.2023.050507.
- Karuppusamy, Dr.S. et al. (2023a). Academic Management System. *International Scientific Journal of Engineering and Management*, 02(04). doi:10.55041/isjem00220
- Kong, Y. (2023). The impact of double reduction policy on the China's education system. *Journal of Education, Humanities and Social Sciences*, 10, pp. 231–236. doi:10.54097/ehss.v10i.7024
- Liang, Y., & Ye, S. (2021). Shuangjian zhengce xia, yingyu peixun jigou weihe pinpin chuju? [under the “double reduction” policy, why English tutoring institutions are out one by one?]. *Southern Metropolis Daily*. http://epaper.oeeee.com/epaper/G/html/2021-08/24/content_17005.htm
- Liang, Z. (2023). Schools and teachers under the Double Reduction Policy: Challenges and strategies. *Lecture Notes in Education Psychology and Public Media*. <https://lnep.ewapublishing.org/article/9e29b64b31ea4d5c88c7172c3e942673>
- Lin, L. (2022, July). The impact of double reduction policy on K12 education and training enterprises: Case studies of new oriental and tomorrow advancing life. In *2022 2nd International Conference on Enterprise Management and Economic Development (ICEMED 2022)*. Atlantis Press. pp.1281-1286.
- Liu, T. (2023). Society under the newly issued double-reduction policy: A review of the short- and long-term social, economic, educational, and livelihood impacts and the comparisons with the similar educational policies in South Korea. *Journal of Education, Humanities and Social Sciences*, 7, pp. 106–114. doi:10.54097/ehss.v7i.4071
- Liu, Y. (2021). The transformation trend and a new wind of the education and training industry under the double reduction policy. *China Business Journal* (09), pp.32-33.
- Longoria, L. C., López-Forniés, I., Sáenz, D. C., & Sierra-Pérez, J. (2021). Promoting sustainable consumption in Higher Education Institutions through integrative co-creative processes involving relevant stakeholders. *Sustainable Production and Consumption*, 28, 445-458. <https://doi.org/10.1016/j.spc.2021.06.009>
- Mahfooz, S. B., & Hovde, K. (2012). Successful Education Reform: Lessons from Poland. World Bank, Washington, DC. Retrieved from <https://neuaxis.mod.gov.my/neuaxis/Record/okr-10986-10147/Similar>
- Mercier-Laurent, E. and Haddad, R. (2019). Decision support systems aiming in reducing globalization burdens in education. 5th International Conference on Higher Education Advances (HEAd'19) [Preprint]. doi:10.4995/head19.2019.9431
- Nordin, M. N., Abet, M., Maying, D., Moi, T. H., & Abbas, M. S. (2023). Preparing Future Teachers for the Classroom Via Global Tele-collaboration. *Journal for Re Attach Therapy and Developmental Diversities*, 6(3s), 21-30. Retrieved from <https://jrtd.com/index.php/journal/article/view/317/248>
- Ortagus, J. C., Kelchen, R., Rosinger, K., and Voorhees, N. (2020). Performance-based funding in American higher education: A systematic synthesis of the intended and unintended consequences. *Educational Evaluation and Policy Analysis*, 42(4), pp.520-550.
- Revathi Sagadavan and Shiney John. (2019). Learning Preferences Transformation in Tertiary Education. *International Journal of Recent Technology and Engineering (IJRTE)*, Volume-8 Issue-2S, July 2019.
- Sheng, H., Wei, Z. and Yan, Y. (2022). The issues of overeducation. *Proceedings of the 2022 7th International Conference on Financial Innovation and Economic Development (ICFIED 2022)* [Preprint]. doi:10.2991/aebmr.k.220307.008
- Tao, M. (2023). Economic impacts of China's double reduction policy. *BCP Business & Management*. Retrieved from <https://bcpublishing.org/index.php/BM/article/view/4219>
- Tianfu, Y. and Hongyuan, W. (2022). The professional development of English teachers in training institutions from the perspective of “Double reduction policy”—a case study on S institution. *Journal of Curriculum and Teaching*, 11(4), p. 62. doi:10.5430/jct.v11n4p62
- United Nations (2015). Transforming our world: The 2030 agenda for sustainable development. *New York: United Nations, Department of Economic and Social Affairs*.
- Wu, B. (2021, December). Research on the impact of China's “double reduction” policy on out-of-school remedial classes. In *Proceedings of the 2021 3rd International Conference on Economic Management and Cultural Industry (ICEMCI 2021)* (pp. 548-552). Atlantis Press. <https://doi.org/10.2991/icemci-21.2021.109>
- Xiong, Z. (2023). The current situation and training countermeasures of Chinese rural teachers' professional identity in the context of “Double Reduction”. *SHS Web of Conferences*. Retrieved from https://www.shs-conferences.org/articles/shsconf/pdf/2023/07/shsconf_icpahd2023_02013.pdf
- Xue, R. (2023). Social reproduction and out-of-school tutoring institutions in China: A critical exploration of the issue. *Journal of Advanced Research in Education*. <https://doi.org/10.56397/jare.2023.05.06>
- Yin, Y. (2023). The Dilemmas and Causes of After-School Tutoring Under China's Double Reduction Policy. *Lecture Notes in Education Psychology and Public Media*. 7. 338-344. doi:10.54254/2753-7048/7/20220875

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- Yu, J., Wider, W., Lajuma, S., Ahmad Khadri, M. W., Chan, C. K., & Maidin, S. S. (2024). China's education sector: Investigating factors to improve business operational efficiency in a highly competitive environment. *International Journal of Management and Sustainability*, 13(1), 1-13. <https://doi.org/10.18488/11.v13i1.3561>
- Yu, Q. (2023). Exploring Chinese “double reduction” policy based on Chrono-political comparative view: Comparing with South Korean 7.30 educational reform measure. *BCP Business & Management*, 41, pp. 140–144. doi:10.54691/bcpbm.v41i.4421
- Yu, S. (2023). How should off-campus training react to the “double reduction” policy? *SHS Web of Conferences*, 171, p. 02001. doi:10.1051/shsconf/202317102001
- Yu, Z. (2022). Implications of the Double Reduction Policy in China for the Providers of Shadow Education.
- Zhang, A. (2023). Primary school mathematics teaching and improvement strategies based on double reduction policy. *Frontiers in Educational Research* (14). doi:10.25236/FER.2023.061410
- Zhang, L. (2023). The impact of the double reduction policy on school education. *BCP Business & Management*, 41, pp. 236–240. doi:10.54691/bcpbm.v41i.4437
- Zhao, N., Shi, C., & Wang, C. (2024). Effects of the “double reduction” policy on the commercial tutoring sector in China. *International Journal of Educational Development*, 105, 102989. <https://doi.org/10.1016/j.ijedudev.2024.102989>
- Zhong, K. and Park, J. (2023). The double reduction policy and education development in China. *International Journal of Comparative Education and Development*, 25, (3/4), 137-152. <https://doi.org/10.1108/IJCED-09-2022-0063>
- Zhou, K. (2023). The impact and future of the implementation of “double reduction” policy. *BCP Business & Management*, 41, pp. 196–200. doi:10.54691/bcpbm.v41i.4430
- Zhou, Y. (2023). After-school delayed service in primary and secondary schools under the "double reduction" policy: Status quo, dilemma and strategy. *Journal of Educational Research and Policies* (4). doi:10.53469/JERP.2023.05(04).25
- Zhu, H. (2023). Discussion on how to realize educational equity in China from the perspective of double reduction policy. *Journal of Education, Humanities and Social Sciences*, 8, pp. 1817–1821. doi:10.54097/ehss.v8i.4590