



The Impact of the “Double Reduction Policy” on Private Supplementary Tutoring in Academic Disciplines: A Mixed Study

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Abstract

This study investigates the impact of the "Double Reduction" policy on the demand for private supplementary tutoring in academic disciplines in China. The policy, implemented to reduce the academic burden on students, has significantly regulated private supplementary tutoring institutions. However, it remains unclear whether the policy has diminished the demand for such tutoring. Using a mixed-methods approach, including a nationwide survey and interviews with parents and educators, this research explores parents' attitudes towards the policy and their continued reliance on tutoring to support their children's education. Findings reveal that while the policy has reduced the availability of tutoring services, demand persists, particularly among urban and higher-educated parents, due to persistent concerns about academic competition and educational inequality.

Keywords: Double Reduction policy, Private supplementary tutoring, Bounded rationality, Supply and demand

1 Introduction

In July 2021, the Ministry of Education (2021) issued the "Opinions on Further Reducing the Burden of Homework and Private Supplementary Tutoring for Students in Compulsory Education" (referred to as the "Double Reduction" policy), which imposed strict regulations on the private tutoring industry. As this governance continues, significant progress has been made in reducing the capital, industrialization, and scale of these tutoring institutions. However, covert tutoring services persist. There remains a gap between national policies and some parents' insistence on academic tutoring.

Chinese parents commonly associate education with their children's future development. A nationwide survey conducted in September 2021 revealed that 84.1% of parents believe that "a well-rounded education is an effective means to cope with social competition," 82.1% think "whether their child can attend a good primary or secondary school is critical to their development," and 54.6% believe that "their children should be provided with the best

possible conditions and should not fall behind other children" (Wang, 2021). Driven by high expectations and a strong sense of responsibility, many parents have turned to private tutoring as a regular strategy to support their children's academic progress.

Therefore, this study explores these questions.

While the "Double Reduction" policy has significantly reduced the supply side of tutoring services, what changes will occur on the demand side?

Can the "Double Reduction" policy eliminate the demand for academic tutoring? If not, why?

1. Literature Review

1.1 Need for Private Supplementary Tutoring

Since the mid-20th century, the concept of "parentocracy" has gained traction, indicating that children's educational opportunities increasingly depend on the resources and commitment of their parents (Brown, 1990). While contemporary society emphasizes education as a collective responsibility of the nation, many parents have recognized their vital role in integrating educational resources. Consequently, they bear substantial responsibility for their children's academic development (Doherty & Dooley, 2018; Liu & Bray, 2022). Influenced by ideas such as "economic freedom," "parental choice," and "standards of excellence," many affluent parents seek competitive advantages for their children in education (Brown, 1990).

In Chinese society, education has traditionally been a highly valued asset. Following the economic boom of the 1990s, education has become increasingly critical for social mobility (Shi & Wang, 2021). Parents have intensified their investment in educational resources to provide their children with academic advantages, absorbing economic, social, and cultural resources to enhance their children's growth (Liu, 2016; Shen, 2020; Shi & Wang, 2021).

The globalization and marketization of education have led to a rapid expansion of private supplementary tutoring, whereby parents seek additional educational services outside the school system (Bray, 2017; Zhang, 2021). In China, although private tutoring emerged later than in other countries, its rapid growth has paralleled developments in Japan and Korea, achieving results in just thirty years that took those countries much longer to attain. (Zhang, 2021; Liu, 2021).

1.2 Bounded Rationality Model

Compared to formal school education, private supplementary tutoring offers more choices, and parents need to consider many factors when selecting the services (Liu & Bray, 2020; Park, 2012). Parents have greater freedom in selecting and adjusting tutoring services. Understanding how parents make and adjust these choices is key to deepening the research on private supplementary tutoring demand.

Under the wave of neoliberalism, the privatization and marketization of education have transformed parts of education into private goods consumed by parents (Ball & Youdell, 2008). Private supplementary tutoring reflects this trend (Chan & Bray, 2014), and parents are the consumers of services (Tan, 2017). As a result, the theory of consumer choice has been introduced into the field of private supplementary tutoring to study parental decision-making.

The theory of consumer choice examines how consumers select a combination of goods within budget constraints to maximize their total utility (Varian, 2009). Consumers rank goods based on their preferences, and utility is the tool used to describe these preferences

(Dominick, 2003). In the context of private supplementary tutoring, parents' preferences involve ranking tutoring services based on their effectiveness in supporting their children's academic progress. These preferences are influenced by factors like parental responsibility, expectations, children's academic performance, developmental needs, school conditions, and policy regulations. Budget constraints refer to the consumer's ability to pay within the limits of their income and the price of the goods (Dominick, 2003; Mankiw, 2006). For private supplementary tutoring, budget constraints include not only family income and tutoring costs but also the child's available free time. Ultimately, parents' decisions in tutoring are based on factors like responsibility and academic performance, choosing whether to purchase services and adjusting these choices based on the utility, the child's time, and the family's financial situation (Liu & Bray, 2020).

However, after the 1950s, it became clear that this rational decision-making model was an idealized concept and could not guide real-life decisions. In response, Simon (1955) criticized the full rationality model and introduced the bounded rationality model. According to the model, when facing uncertainty, people are unable to grasp all available options, and have limited computational capacity to evaluate the consequences of each option, making the optimal choice becomes impossible. As a result, people tend to make satisfactory decisions rather than optimal ones. In this decision-making process, individuals set basic requirements, assess the available options, and stop searching once they find an option that meets their criteria (Simon, 1997). The process of children's educational development is long, complex, and filled with uncertainties. When supporting their children's educational growth, parents cannot be fully rational; instead, their decision to choose private supplementary tutoring is driven by a sense of responsibility and is made within the bounds of limited rationality. Changes in supply and demand in a market can lead to market adjustments, ultimately reaching a new equilibrium (Varian, 2009). Under the "Double Reduction" policy, the government has focused on regulating the supply of private supplementary tutoring by reducing the number of institutions and limiting tutoring hours, which has sharply reduced supply. This paper will analyse whether the "Double Reduction" policy affects parents' assessment of the utility of private supplementary tutoring, thereby influencing their demand through the lens of bounded rationality.

2. Method

This study adopts an explanatory sequential mixed-method design, which begins with quantitative research followed by qualitative research to interpret and deepen the quantitative findings (Creswell, 2015). To address the research questions, a nationwide survey was conducted to collect data from parents of students in compulsory education, aiming to understand their attitudes towards the governance of private supplementary tutoring under the "Double Reduction" policy and any adjustments they made to tutoring arrangements. Subsequently, purposive sampling was used to select a subset of parents who participated in the interview for semi-structured interviews. The interview data were then used to further explain and refine the analysis of the questionnaire results.

2.1 Questionnaire

The questionnaire was designed with 18 multiple-choice questions to explore parents' understanding of the "Double Reduction" policy, their attitudes towards the governance measures, their views on the necessity of private supplementary tutoring, and any adjustments they made to their children's tutoring arrangements, along with basic demographic information. Two experts were invited to review the questionnaire, confirming its validity.

Subsequently, 9 parents from different regions were invited to participate in a pilot survey. Among them, parents had children currently enrolled in tutoring, 2 had never enrolled their children in tutoring, and 1 had previously enrolled their child but had since stopped. To estimate the reliability of the questionnaire, the order of questions was randomly shuffled, and these 9 parents were asked to complete the survey twice within three days to check for consistency. The results indicated good reliability. After the pilot survey, cognitive interviews were conducted with the parents to identify any potential issues of questionnaire.

Based on the results from the pilot survey and cognitive interviews, the questionnaire was revised and improved. In addition to adjusting some wording, a new option was added to the question on tutoring arrangements: "The child is not currently enrolled in any tutoring classes, but plans to enrol soon," to ensure coverage of all possible situations. Additionally, an open-ended question was added to solicit parents' opinions or suggestions regarding the "Double Reduction" policy. The final questionnaire consisted of 18 multiple-choice questions and one open-ended question.

The questionnaire was distributed to parents via the Wenjuanxing platform, and 3,633 valid responses were collected from 28 provinces (excluding Tibet, Qinghai, and Ningxia). The sample covered parents from different types of schools, various grade levels of their children, and a range of educational backgrounds in both urban and rural areas (shown in Table 1). The data were analysed using SPSS.

Table 1. Statistical description of basic information of participants

Items		Percentage (%)	Items		Percentage (%)
<i>Grade of Children</i>	Grade 1	10.8	Area	Capital	40.0
	Grade 2	10.0		City	10.9
	Grade 3	14.2		County	31.2
	Grade 4	14.6		Township	17.9
	Grade 5	15.2	Education Background of Parents	Middle School and below	9.3
	Grade 6	8.0		High School or Secondary Vocational School	15.9
	Grade 7	10.1		College	20.9
	Grade 8	7.3		Bachelor	39.2
	Grade 9	9.9		Master and PhD	14.8
Style of School	Public	81.0	Total	3633	
	Private	15.4			
	International	3.6			

2.2 Interview

Face-to-face or online one-on-one semi-structured interviews were conducted with 27 parents of elementary and middle school students in 10 cities, including Beijing, Shanghai, Guangzhou, Hangzhou, Nanjing, Dalian, Zhenjiang, Wenzhou, Wuhu, and Lanzhou. Eight of these parents participated in multiple follow-up interviews, with each session lasting from 30 minutes to 2 hours. The interview content covered parents' understanding of the "Double Reduction" initiative, their views on the governance of private supplementary tutoring

institutions, the motivations for enrolling their children in tutoring before the policy, and any adjustments or plans they made for tutoring after the policy was implemented.

Online discussions were also held with principals from 9 schools in Shenzhen and 5 schools in Beijing. These discussions focused on changes in school educational arrangements and students' participation in private supplementary tutoring under the "Double Reduction" policy. The results from these discussions were used to triangulate the data collected from parents.

All interview and discussion transcripts were analysed using NVivo software, following a three-stage coding process. Open coding was used to identify as many concepts as possible. In the axial coding stage, relationships between these concepts were established, leading to the formation of six main categories: workload reduction, educational equity, entrance exams, parental responsibility, the utility of private supplementary tutoring, and tutoring demand. In the selective coding stage, the utility of private supplementary tutoring was chosen as the core category, linking the other categories together to create a logically coherent and explanatory framework for understanding the changes or persistence in the demand for private supplementary tutoring under the "Double Reduction" policy.

3. Results and Discussion

Before the implementation of the "double reduction" policy, the government had repeatedly banned private supplementary tutoring. This is because it not only increases students' academic burden and affects their physical and mental health, but also empirical data shows that off-campus training has no significant positive effect on improving academic performance, and may even have a negative impact (Lee, 2013; Zhang & Liu, 2016). According to Bounded Rationality Model, parents are often unable to make optimal choices for their children's educational development, so they tend to choose the most satisfactory options within their means. Influenced by the concept of quality education, as well as the implementation of policies promoting balanced educational opportunities (such as nearby school enrolment) and curriculum reforms aimed at reducing the burden on students, many parents grew concerned that school education alone might not fully meet their expectations for their children's growth. Amid these uncertainties, choosing private supplementary tutoring became an affordable and satisfactory option for supporting their children's academic development (Liu & Bray, 2022).

Different motivations have varying levels of persistence. In the context of the new "Double Reduction" policy, certain demands—such as those for after-school care, daily academic support, and filling academic gaps—may decrease as schools enhance and expand their after-school services. However, personalized demands, such as those driven by school admission, cultivating academic advantages, and preparing for future development, are harder to absorb or reduce.

3.1 Parents' Attitudes and Choices

As the private supplementary tutoring market expanded, it was accompanied by various issues, which parents became aware of through personal experience or media reports. Consequently, there was a growing expectation for stricter regulation. Most of the measures in the "Double Reduction" policy aimed at regulating private supplementary tutoring were welcomed by parents, though opinions varied on certain aspects. For example, the policy stipulates that private supplementary tutoring in academic disciplines is not allowed during national holidays, weekends, or summer and winter vacations (General Offices of the CPC Central Committee and the State Council, 2021), which significantly impacted students'

opportunities to participate in academic tutoring. According to this study's source, 49.7% of parents supported this restriction, 14.8% were neutral, and 35.4% opposed it.

Looking at specific groups, the higher the grade level of the child, the higher the proportion of parents opposing the restriction. Urban parents showed significantly more opposition than rural parents, and parents in provincial capital cities were more likely to oppose the restriction compared to those in prefecture-level or county-level cities. Additionally, the higher the parents' level of education, the greater their opposition to this policy. Previous experience with private supplementary tutoring also significantly affected attitudes. Parents whose children attended tutoring in the six months before the "Double Reduction" policy showed a much higher rate of opposition than parents whose children had not. Among parents whose children participated in both academic and non-academic tutoring, more than half (51.4%) opposed this restriction. The details are shown in Table 2.

Table 2. The proportion of parents who oppose the restrictions on private supplementary tutoring in academic disciplines

Items		Percentage (%)	p-value
<i>Attitude towards restrictions</i>	Support	49.7	/
	Oppose	35.4	
	Neutral	14.8	
<i>Grade of Children</i>	Grade 1-3	34.4	.001***
	Grade 4-6	36.7	
	Grade 7-9	40.6	
<i>Area</i>	Capital	39.3	.000***
	City	33.0	
	County	29.6	
	Township	22.5	
<i>Education Background of Parents</i>	Middle School and below	19.3	.000***
	High School or Secondary Vocational School	23.4	
	College	28.9	
	Bachelor	44.0	
	Master and PhD	45.1	
<i>Private Supplementary Tutoring Experience in the Past Half Year</i>	Academic Tutoring	39.2	.000***
	Non-academic Tutoring	21.7	
	Both	51.4	
	None	166.5	

*** $p < 0.001$, ** $p < 0.01$

The "Double Reduction" policy implemented various measures to reduce the burden of private supplementary tutoring on students, particularly in academic disciplines. The survey asked parents how they adjusted their children's academic tutoring arrangements under the "Double Reduction" policy. According to the results, 39.3% of parents indicated that they would reduce or cancel tutoring, 28.2% said they would continue with the existing tutoring, and 9.5% planned to enroll their children in additional tutoring. The persistence of demand, as shown in Table 3, is evident. In particular, urban parents were more likely than rural parents to maintain their demand for academic tutoring. Furthermore, the demand persistence increased progressively from parents living in county to those in cities and provincial capitals. Parents with higher levels of education were also more likely to continue academic tutoring. Among the group of parents who had already arranged both academic and non-academic tutoring for their children before the "Double Reduction" policy, demand

persistence was the highest, with over half (56.6%) indicating that they would either continue with their existing tutoring or enroll in more academic tutoring.

Table 3. Parents' persistence on private supplementary tutoring in academic disciplines under the "double reduction" policy

Items		Continue or add new Academic Tutoring			Secretly Seek Academic Tutoring	
		Continue (%)	Add (%)	p-value	Percentage (%)	p-value
		28.2	9.5	/	14.6	/
Grade of Children	Grade 1-3	28.1	10.7	.058	15.0	.029
	Grade 4-6	30.6	8.6		13.3	
	Grade 7-9	31.3	9.1		15.8	
Area	Capital	31.8	10.4	.000***	17.3	.000***
	City	26.1	9.0		14.4	
	County	22.1	9.6		11.1	
	Township	21.8	5.4		6.3	
Education Background of Parents	Middle School and below	11.3	5.0	.000***	3.9	.000***
	High School or Secondary Vocational School	20.2	5.4		5.9	
	College	24.0	6.9		9.0	
	Bachelor	33.9	10.7		19.1	
	Master and PhD	38.4	17.2		26.9	
Private Supplementary Tutoring Experience in the Past Half Year	Academic Tutoring	31.5	9.4	.000***	18.0	.000***
	Non-academic Tutoring	25.6	8.6		6.4	
	Both	41.7	14.9		23.2	
	None	/	/		2.9	

*** $p < 0.001$

When parents were further asked, "If all private supplementary tutoring in academic disciplines were banned, what would you do?", 61.7% of parents responded that they would rely on their children to self-study, 48.1% said they would ask school teachers for additional help, but 14.6% indicated that they would still secretly seek private supplementary tutoring in academic disciplines. Regionally, parents in provincial capital cities were the most likely to consider tutoring secretly. Additionally, the higher the parents' educational level, the more likely they were to persist in seeking tutoring. Parents whose children had been enrolled in both academic and non-academic tutoring before the "Double Reduction" policy were also more inclined to continue secretly seeking academic tutoring.

3.2 Reasons Why Parents Insist on Private Supplementary Tutoring in Academic Disciplines

The "Double Reduction" policy strengthens school education while strictly regulating private supplementary tutoring, to make it unnecessary for students and families, thereby promoting students' healthy development. However, this study indicates that, under the "Double Reduction" policy, some parents remain persistent in their demand for academic tutoring. During discussions with school principals, many acknowledged that the policy has indeed partially suppressed the demand for private supplementary tutoring, but the effects vary across different groups. The suppression is more pronounced among parents who passively participated in tutoring rather than actively sought it, particularly those who relied on tutoring primarily for after-school care or daily academic support. However, some parents' demand for private supplementary tutoring remains unchanged.

3.2.1 The Two Major Contradictions Faced by Students in Their Educational Development Are Important Sources of the Effectiveness of Private supplementary Tutoring

Many parents expressed similar sentiments during the interviews: "I support the 'Double Reduction' policy, but the current environment doesn't allow me to fully comply." When asked for further explanation, many parents mentioned that their educational anxiety had not been alleviated by the policy. The deeper reasons include the desire for their children to attend good schools, expectations for success, competition in academics and society, concerns over educational equity, the pressure to reduce academic workload, the stress of high school and college entrance exams, fears of their children being left behind, and their sense of responsibility as parents.

Once children reach age of enrolling on school, parents face a conflict between their desire for their child to attend a prestigious school and the reality that their child may end up in a normal school. This desire for a good school stem from the key school policy. In the early years of the People's Republic of China, educational resources were scarce, and the government introduced several policies to cultivate talent, including the "Opinions on Establishing Key Secondary and Teacher Training Schools" (1952), the "Notice on Establishing a Batch of Full-Time Key Primary and Secondary Schools" (1962), and the "Trial Plan for Establishing a Group of Key Primary and Secondary Schools" (1978). These policies led to the creation of many key primary and secondary schools across the country, which were given priority in terms of teaching staff, funding, and student enrollment (Wang, 2008). As a result, the quality of education in key schools improved significantly, and the proportion of graduates advancing to higher-level key schools increased, which in turn attracted better students. This further widened the gap between key schools and normal schools (Wang, 2008).

As the education sector developed, the issue of inequality in compulsory education became a widespread concern. In 1997, a policy was introduced to address this, explicitly stating that "key schools, key classes, and fast-track classes are not allowed during the compulsory education stage" (National Education Commission, 1997). However, despite the formal elimination of the term "key school" in official documents, local governments remained enthusiastic about establishing "model schools" and "experimental schools," and terms like "prestigious schools," "good schools," and "high-quality schools" continued to have a significant influence (Wang, 2008). Additionally, with the commercialization of education, private schools—with their autonomy in admissions and financial incentives—were able to attract top teachers, further widening the gap between schools.

Advancement to the next level of education is a critical juncture in a child's academic journey. In the past, entrance exams were the primary means of advancing to the next stage, but as compulsory education has become more equitable, entrance exams for preschool-to-primary and primary-to-middle schools have been eliminated, and a policy of nearby enrolment has been implemented. This has blocked the traditional path of getting into a prestigious school based on grades, leading children to be placed in local, often normal schools. The gap between parents' desire for a prestigious school and the reality of nearby enrolment has resulted in school-choice motivations (Nicholson, 2023). Private supplementary tutoring plays a role in enhancing children's academic performance, helping them to stand out and gain entry to better schools through merit-based or specialized admissions (Xiong, 2014). Many parents highly value the utility of private supplementary tutoring and are willing to pay for it in order to secure better educational opportunities and resources for their children in an uncertain academic environment.

Once children enter school, both they and their parents face the contradiction between reduced academic pressure in school and the fierce competition of high school and college entrance exams. The "Double Reduction" policy represents another effort to alleviate this pressure, but parents are no strangers to such policies, which have now been extended from within schools to the realm of private supplementary tutoring. As early as 1955, the Ministry of Education issued the first policy to reduce academic burdens, "Directive on Reducing the Excessive Burden on Primary and Secondary School Students." Since then, both national and local governments have continuously rolled out policies to reduce the burden, usually by limiting homework, exams, and class hours. For example, the "Burden Reduction Measures for Primary and Secondary Students" in 2018 severely restricted the number of standardized exams in elementary schools and limited the hours of concentrated study in primary and middle schools. The "Double Reduction" policy once again emphasizes reducing the burden of homework, strictly controlling the quantity assigned. Although the policy calls for improving the quality of homework, controlling the quantity is easier than improving quality, and the results have been less than ideal. Despite the continuous tightening of burden-reduction policies, their effectiveness has been limited, and instead, they have increased parental anxiety.

Under the "Double Reduction" policy, parents' anxiety is their concern that reduced school pressure may not meet their children's academic needs. "Without homework and short-term assessments, how can we tell if students are mastering the material? Without a solid foundation, how can a tall building stand?" (Parent C). For these anxious parents, private supplementary tutoring offers a way to supplement what schools might not provide, and they are willing to pay for it. Based on bounded rationality, parents view private supplementary tutoring as a satisfactory solution to compensate for the reduction in academic workload in schools.

The root of parental anxiety lies in the competitive nature of high school entrance exams (Zhongkao) and college entrance exams (Gaokao). From prestigious universities and key academic disciplines to the "Project 211," "Project 985," and the current "Double First-Class" initiative, the stratification among universities has become increasingly pronounced. Despite ongoing reforms in the college entrance examination system, scores remain the key factor determining what level of university a student can attend and which major they can pursue, which in turn affects future employment opportunities and life prospects. As a result, countless students and families strive to succeed in this competitive selection process.

Zhongkao is similarly competitive. One of its key elements is the division between general and vocational education. For example, in 2020, the enrolment ratio between general high schools and vocational schools was 6:4 (Department of Development Planning, Ministry of Education, 2021). This division was proposed as early as 1985, to equalize admissions between vocational schools and general high schools within five years (CPC Central Committee, 1985). Although the division between general and vocational education aligns with individual development needs and labour market demands, many parents don't recognize vocational education due to the discrimination based on academic qualifications in the job market and the limited upward mobility in vocational education. They view enrolling in vocational schools as a last resort for students who fail to get into general high schools. Even students who enter general high schools, still face significant differences between key high schools and normal ones. As a result, the competition for Zhongkao is even more intense than for Gaokao, placing enormous pressure on both students and parents.

Parents often weigh the immediate enjoyment of their children against their long-term development, typically choosing the latter. While burden reduction may make their children's

current learning experience easier, parents are unwilling to fully embrace this reduction given the harsh selection process of the Zhongkao and Gaokao, as well as the differentiated futures that result from these exams. In their bounded rationality, parents see private supplementary tutoring as an effective way to supplement the reduction in school pressure and help their children succeed in these crucial exams. Thus, they actively seek tutoring services, expanding the burden reduction measures from within the school to the realm of private supplementary tutoring. The "Double Reduction" policy, therefore, cannot garner the full support of all parents.

3.2.2 Choosing Private Supplementary Tutoring is a Decision Made by Parents Based on Bounded Rationality

Parents have a deep understanding of the importance and fierce competition of high school and college entrance examinations through modern social media. Out of a sense of responsibility for their children's education and growth, they mobilize family resources for support (Shen, 2020). Compared with housing in a school district, choosing private supplementary tutoring is a simpler and more affordable way for most parents, so it is widely in demand.

The "Double Reduction" policy emphasizes strengthening school education and promoting high-quality and balanced development of compulsory education, aiming to reduce disparities between urban and rural areas, regions, and schools. The policy only outlines directional goals and lacks specific measures and investment, making it difficult to substantially close the gap between prestigious and normal schools in the short term. Additionally, the "Double Reduction" policy does not address compulsory education enrollment policies, leaving parents anxious about the contradiction between school admission and the reality of the education system. As a result, private supplementary tutoring is still viewed as an effective way to help children gain access to better schools.

When making educational choices, parents focus on differences between individual schools rather than regional balance. The uncertainty about when and how the gap between nearby schools and desired schools will close makes it difficult for parents to make informed decisions. As a result, under the "Double Reduction" policy, many parents continue to invest in private supplementary tutoring to compensate for their dissatisfaction with schools or to improve their children's chances of school admission, even though this may not be the optimal decision.

"Of course, there are differences between schools, but we can't afford a house in a prestigious school district, nor do we have the social connections. My child didn't get into a key school and is attending a normal primary school nearby. I often feel guilty for her... I enrolled her in private supplementary tutoring to try to make up for this gap. The tutoring class groups students by performance, and she's in the innovation class, which has the best students and the best teachers. Now, with 'Double Reduction' policy, the resource gap between schools remains, but tutoring is not allowed on weekends and holidays. This is unfair to children like me. We're looking for ways to continue." (Parent D)

Key schools tend to be concentrated in cities, and compared to rural parents, urban parents are more aware of the differences between normal and prestigious schools. The better the development of the city, the more prestigious schools, making parents' dissatisfaction with their current schools and their motivation for school choice even stronger. As a result, private supplementary tutoring becomes more effective in meeting demands related to school admission, academic support, and skill development, further reinforcing the persistence of demand from rural parents to city parents under the "Double Reduction" policy.

On the other hand, although the "Double Reduction" policy touches upon the high school entrance exam (Zhongkao) may alleviate competition to some extent. However, parents are well aware that competition still exists because high-quality high-school resources are always limited.

"High school isn't part of compulsory education, so not every student can enroll. Even if high school becomes compulsory, the competition for key high schools will remain. No matter how much schools reduce the burden or promote 'happy learning,' the Zhongkao and Gaokao are still selective, and the competition is fierce. Not everyone can attend a key school." (Parent E)

The competition for the Zhongkao and Gaokao remains intense, and the burden-reduction measures in education cannot significantly relieve the academic pressure on students or the anxiety of parents. For many students, the burden is simply shifting from within schools to private supplementary tutoring.

"The pressure to get into a key school is still there, so there's no way to relieve parental anxiety. It just shifts the pressure elsewhere... Without balancing the quality of educational resources or improving normal schools, the 'Double Reduction' policy is just pointless." (Parent H)

"The early division between vocational and general education in Zhongkao, and the unchanged difficulty of Gaokao, makes 'Double Reduction' policy a case of attending to trifles and neglecting the essentials." (Parent A)

"'Double Reduction' won't truly reduce the burden on students and parents. Which parent can accept their child not entering college without knowing how well they're doing in school? There's no testing or ranking in elementary school, but what about Zhongkao and Gaokao? The 'Double Reduction' policy was rolled out hastily without adequate preparation, which has only increased the pressure and confusion for parents and children." (Parent F)

Although the division after Zhongkao between general and vocational education, as well as the tiered structure of higher education, aligns with the needs of human resource development, parents generally believe that compared to the path of "high school, university, job". Entering the vocational education system too early increases uncertainty regarding their children's future employment and development. Based on bounded rationality, parents prefer their children to follow a relatively stable path with better prospects, even if it is not the optimal choice. This path offers parents more peace of mind in the present. Therefore, in the absence of significant changes to Zhongkao and Gaokao, or notable improvements in school education, parents' sense of responsibility and anxiety about their children's education will not diminish. Private supplementary tutoring continues to be seen as an effective way to support their children's academic development.

"As long as the Zhongkao and Gaokao exist, there's no way to truly reduce the burden. No parent wants their child to attend a vocational school and live without dignity in the future. You can talk about reducing the burden all you want, but I just want my child to go to the best schools, to eventually attend Peking or Tsinghua University. If my child is willing to study harder and we parents are willing to pay, why can't they attend private supplementary tutoring?" (Parent G)

For middle-class families, the "Double Reduction" policy restricts one of their primary means of gaining an advantage in the school admission competition—private supplementary tutoring—rather than through privilege, wealth, or other methods. In response, under the "Double Reduction" policy, these families either adjust tutoring times to weekday evenings or seek tutoring services covertly. As a result, after the implementation of "Double

Reduction," illegal tutoring has emerged under new forms, such as changing the subject names, service formats, or locations to circumvent the regulations. This shift is not only a survival strategy for tutoring institutions but also a reflection of the strong demand from parents. Despite the Ministry of Education issuing a notice in September 2021 to crack down on covert academic tutoring, some parents have not given up, and the methods have become more secretive. For example, parent B mentioned forming a group with other parents to hire a tutor at a high cost, while parent H used personal relations to arrange paid tutoring from a teacher at a prestigious public school.

3.2.3 Supply and Demand Changes of Private Supplementary Tutoring

During the adjustment process, the supply of training has dropped sharply, the search costs of parents have increased, the time and energy costs of finding courses, trial courses, and changing courses have increased sharply, and the price of training has risen. In the interviews, parents generally reflected that after "double reduction" policy, private supplementary tutoring is difficult to find and more expensive, and the financial burden has increased. "Before the 'double reduction', there were many choices for tutoring, and the prices in large institutions were also cheap. Now that many institutions have closed, parents have to find private supplementary tutoring for their children everywhere, especially during the summer vacation. Parents are very anxious because their children have not had any tutoring for such a long time. Now most teachers only teach one-on-one, or at most one-on-two. Many children need to take classes and the teachers have limited time, so their classes are fully scheduled and difficult to sign up for. The prices are also very high. 300 yuan per hour is the general price. I have heard that some charge more than 1,000 yuan per hour. What exactly did the 'double reduction' policy reduce? Anyway, parents spend more." (Parent G)

The demand is strong but the supply in the formal market is insufficient. Training teachers need to spend energy to avoid law enforcement inspections, and lack professional support, resulting in a decline in the quality of tutoring. The lower cost-effectiveness of parents' investment in private supplementary tutoring may exacerbate their dissatisfaction with the "double reduction" policy.

"Now I spend more money, but the quality is not as good as before. Before the 'double reduction' policy, large institutions generally had professional teaching and research teams, and professional teachers were responsible for marking homework and giving feedback. Now teachers have to take on multiple roles, and homework marking and feedback are hasty. Without the support of the teaching and research team, although they can still rely on their previous experience, in one or two years, the teaching quality of this wave of teachers will be worrying." (Parent F)

The increase in the price of private supplementary tutoring has tightened the budget of some families. Although the effectiveness of tutoring has not decreased, they are unable to continue to buy it, resulting in a decrease in the overall amount of tutoring consumption. Students' opportunities to obtain private supplementary tutoring are increasingly dependent on the family's relationship network and economic situation, which has exacerbated parents' anxiety about unequal educational opportunities. Parent F states that "The 'double reduction' policy will lead to more serious polarization. The family with high socioeconomics situation (SES) will hire private tutors, and the family with low SES can only let their children fend for themselves". "Parents who can afford it find private tutors, and families with low SES are even more out of reach. This is unfair" (Parent H). This suppressed demand for tutoring and

the accompanying dissatisfaction may become an obstacle to the governance of private supplementary tutoring.

4. Conclusion

The "Double Reduction" policy represents a significant step in China's efforts to alleviate the academic burden on students by regulating the private tutoring market. While the policy has led to a reduction in the availability of tutoring services, this study reveals that demand for such services remains strong, particularly among parents with higher socioeconomic status and in urban areas. These findings align with the concept of "parentocracy," where parents' resources and willingness play a critical role in shaping their children's educational opportunities (Brown, 1990). Despite the policy's aim to reduce reliance on tutoring, many parents continue to seek it as a means to provide their children with a competitive advantage in an educational system still marked by intense competition, especially for entrance into prestigious schools and universities (Liu & Bray, 2020; Zhang, 2021). Policymakers need to consider the underlying anxieties that drive parents to seek out tutoring services, primarily rooted in concerns about educational inequality and competition for access to prestigious schools. To address these concerns, reforms could focus on enhancing the quality of education in public schools, particularly in underserved areas, to diminish the perceived necessity of supplementary tutoring. This could involve investing in teacher training, improving curriculum standards, and providing resources that support diverse learning needs.

The persistence of demand can be explained through the bounded rationality model (Simon, 1955), where parents, unable to make fully optimal choices due to limited information and uncertainty about their children's future educational success, opt for satisfactory decisions that include tutoring. This study shows that parents continue to view tutoring as a necessary supplement to formal schooling, particularly in the face of ongoing competition for limited high-quality educational resources (Liu, 2016).

The findings suggest that while the "Double Reduction" policy has succeeded in curbing the scale of private tutoring, it has not eliminated the underlying motivations driving demand. Parents' anxieties about their children's prospects, shaped by competitive entrance exams and disparities in school quality, continue to fuel the demand for supplementary education (Yi Binbin, 2020; Shen Hongcheng, 2020). Thus, without addressing these deeper structural issues, such as educational inequality and the pressures of high-stakes exams, policies like the "Double Reduction" may only shift the academic burden without fully alleviating it.

The study's findings on the persistent demand for private supplementary tutoring, even after the implementation of the "Double Reduction" policy, underscore significant implications for education policy and systemic reform in China. Firstly, policymakers at all levels are called upon to take into account the anxieties driving parents towards tutoring services—a concerns linked especially with educational inequalities and competition in access to selective schools. Reforms in this direction may focus on raising the quality of education within public schools, especially in less privileged areas, so as not to create perceived needs for supplementary tutoring. It could involve investing in teacher training, improving curriculum standards, and providing resources to support diverse learning needs.

Moreover, the equalization of educational resources is another dimension of systemic reforms. The most important policy to promote would be an assurance of school admissions, effectively closing the gap between educational opportunities available for schoolchildren in urban and rural areas while paying greater attention to families in less privileged backgrounds. After-school supplementary education and community-based educational

resources can further grow to give students other forms of support in pursuit of the goals specified within the "Double Reduction" policy.

The policymakers will have to engage in a collaborative framework with the parents and educators to take away their concerns about education without reverting to private tutoring. It may involve a public awareness campaign on the benefit of quality public education and guidance for parents in navigating choices regarding education. The goal of depeaking the academic load for students, while addressing root causes of competition that lead to the ongoing demand for private tutoring in a manner ensuring equitable quality education for all children, could be achieved by adopting an approach that holistically links immediate policy responses with long-term systemic reform.

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