Exploring the Effects of China's Double Reduction Policy on Students Within the Framework of Educational Ecological System Theory

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Abstract: This essay mainly discussed the impact of China's "Double Reduction" policy on students from the perspective of educational ecosystem theory. The "Double Reduction" policy aims to reduce students' excessive homework burden and the burden of out-of-school training, so as to alleviate students' pressure. This paper first introduces the concepts of educational ecosystem theory, such as microsystem, mesosystem and exosystem. It then discusses how the "Double Reduction" policy has changed the educational ecosystem, especially at the macrosystem level. The paper also discusses how the implementation of the "double-decrease" policy affects students through various system levels. In general, the "double-decrease" policy has helped to reduce the pressure on students' development, but it has also brought uncertainty to academic performance and career development. This paper adopts a qualitative research methodology by interviewing students and parents to explore their attitudes towards the "double-decrease" policy and its perceived impacts. It also concludes that if China's unique education system does not change accordingly, the effects of the double-minus policy will be greatly weakened by society, and the long-term impact will be more uncertain.

Keywords: Gaokao, Double Reduction Policy, Educational Ecological System

1. Introduction

In recent years, China has witnessed significant shifts in its educational policies, aiming to address the mounting concerns related to academic pressure and mental well-being among students. One such policy that has garnered substantial attention is the "Double Reduction" policy, introduced as a part of China's broader education reform efforts. The Double Reduction policy, announced by the Chinese government [1], represents a response to the widespread concerns over students' excessive academic workload and the resulting adverse impact on their mental health. The policy primarily targets the reduction of excessive homework and off-campus tutoring, aiming to alleviate students' stress levels and foster a more balanced educational experience. This policy aims to strike a balance between academic rigor and students' holistic development. As China's education system operates within a complex web of interconnected factors, it becomes crucial to analyze the implications of the Double Reduction policy on students within the context of the educational ecological system theory. While

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initial reactions to the policy were mixed, with proponents lauding its potential to relieve students from stress, critics raised concerns about the potential consequences on the quality of education.

This literature review seeks to examine the existing research on the effects of the Double Reduction policy while also delving into the framework of educational ecological system theory, thereby providing a comprehensive understanding of the intricate relationship between policy changes, student well-being, and the larger educational ecosystem. Firstly, the Educational Ecological System is the key concept we need to understand. The educational, ecological system theory provides a comprehensive framework to understand the multifaceted influences on education. Proposed by Bronfenbrenner [2], this theory originally viewed the environment as a continuous nested system from the micro to the macro, but now it also focuses on the "biopsychological characteristics" of individuals when they are involved into the development of the system. According to the explanation provided by Sincero [3], this theory underscores the interplay between various systems, such as microsystems (individual interactions) which are who have direct contact with you, like parents and friends, included in this microsystems; mesosystems (interactions between microsystems) which is the relation happened between a individual's each microsystems, like your parents may dislike some of your friends and that may directly affect your interaction with that friend and the effect usually is negative; exosystems (external factors affecting microsystems) just like when your parents can't come home for work reasons and you can't finish the homework you need their help with, the work reasons in this case are external factors which included in exosystems that have nothing to do with "you" as the subject of the ecosystem; and macrosystems, it is made up of the cultural and social context in which an individual grows throughout his/her life, for example, a Chinese kid may believe that "Gaokao (the National College Entrance Examination of China)" [4] is the most important thing before they entering society; the final system is the chronosystem which is time, it represents the transitions and changes in an individual's lifespan, also the historical social context that might influence an individual may be included in chronosystem. When applied to the context of the Double Reduction policy, this theory helps in analyzing how changes at the policy level cascade through various levels of the educational ecosystem and impact students' experiences.

Now we know, one reason that Chinese government implemented Double Reduction Policy is because of the excessive academic pressure which students are burdened. Numerous studies have examined the effects of academic pressure on students' mental health and overall well-being. The research from Subramani [5] suggest that pressure has a direct negative impact on people's mental health in general and on students in particular. Excessive academic stress can inhibit the ability of students to participate in and increase their school activities and lead to a decline in academic performance. High levels of stress, anxiety, and depression have been linked to rigorous educational environments. Under the current Chinese educational context, Gaokao and Zhongkao are two important points that cannot be avoided and are major sources of educational stress before entering university for most students, schools and parents alike [6]. Gaokao, the national college entrance exam (NCEE), is a curriculum-based exam for testing students' mastery of the subjects taught in high school and is perceived as a "high-stakes test", and It is also the only opportunity for the majority of students from the working and lower classes to enter university and achieve social class reproduction [4]. However, before Gaokao, Chinese students have to face another challenge called Zhongkao. Zhongkao is similar to Gaokao, except that it becomes a gateway to high school entrance and Zhongkao cannot accept retakes like Gaokao. What's more, China has another educational policy that corresponds to the Zhongkao, the Vocational-Population Segregation Policy [7], which means that close to half of all secondary school graduates will be assigned to vocational schools and will not be able to continue their high school studies. The Vocational-Population Segregation Policy has led to a further downward shift of pressure on Chinese students to pursue higher education to the primary and secondary school student groups. Therefore, the implementation of the "double-decrease" policy is

therefore urgent, and by reducing the academic burden, it is expected to have a positive impact on the mental health of students. However, questions remain as to whether the lowering of academic requirements will hinder students' academic performance and their readiness for higher education or employment.

Having familiarised ourselves with the key concepts involved, we will then look at the role of the Educational Ecological Theory in this Double Reduction Policy and interpret the Double Reduction Policy through the lens of the Educational Ecological System Theory. Firstly, the most obvious effect that Double Reduction Policy plays in this theory is the direct change to the macrosystem. The previous research from Zhang [8] indicated that China as a socialist country its ideological and economic demands of different periods largely determine the direction of national education development. In this case, while it can be said that the Double Reduction Policy has changed the educational environment of society as a whole, it can also be argued that the Double Reduction Policy was introduced due to overall social and political demands. Furthermore, we notice about the influence of exosystems on policy Implementation. In the realm of education, policy changes are often influenced by external factors like parental expectations, socio-economic conditions, and cultural norms. The Double Reduction policy, as it alters the balance between academic demands and student well-being, interacts with these ecosystems. Furthermore, the policy's success heavily relies on effective collaboration between schools and parents to ensure its goals align with students' holistic development. As follows, the impact continues to be passed on to the mesosystem. The implementation of the Double Reduction policy operates within the mesosystem of the classroom, where interactions between teachers, students, and curriculum shape the educational experience. Teachers' adaptability to the new policy and their pedagogical approaches play a pivotal role in achieving the policy's objectives. On the other hind, Chinese scholars Li, Li(xuqing), Shi and Yang [9] argued that he strong interrelationship between out-school tuition providers and parents has been weakened by the Double Reduction Policy. The reason for this is that prior to the enactment of the Double Reduction Policy, the relative scarcity of high-education outcome schools and the large population led to an uneven distribution of education resources, so competition for the relatively scarce number of enrolment places triggered a high parental demand out-school tutoring providers, resulting in a high degree of bundling of students' families with out-school tutoring providers. Nonetheless, since the promulgation of the policy, the Chinese government has standardised all subject-based training providers, such as New Oriental Education and Technology Group, and eliminated explicitly private out-school tuition providers, that resulted in a large weakening of the relationship between parents and out-school tutoring providers.

2. Research Design

Since the subject of this study is difficult to achieve a quantitative result on the impact of the Double Reduction policy on students' learning outcomes, this study mainly adopts a qualitative research method. In this qualitative research due to time and resources constraints, only five families, both parents and children, were interviewed. Interviews conducted around following question: what are the noticeable changes in life before and after the double reduction? These five families include primary student to high school student, and their parents' careers include teachers, civil servants and entrepreneurs in various industries, which is across almost every social class.

3. Findings

Interviews with these five groups of families revealed that, with the exception of one high school student, the other four students demonstrated a clear supportive attitude towards the double-decrease policy, whereas the parents, while expressing their neutral stance, spoke almost uniformly in favour

of the opposing side. This paper's finding examines the impact of the Double Reduction policy on its ecosystem first from the students' perspective and then from the parents' perspective. Three of the five students in this interview were in primary school before and after the implementation of the Double Reduction Policy, while one of them is now preparing to enter secondary middle school and the other two have just finished their first year of secondary middle school. These three students clearly expressed their support for the Double Reduction policy and made clear in their interviews the significant impact of the Double Reduction policy on primary education. Based on the remarks of the three, it was learnt that there was a significant reduction in the amount of homework and lessons during primary school, and that the school no longer had a related system that was clearly similar to the ranking of grades. In this case, their microsystem changed immediately, because more free time allowing students enhance their friendship with each other, and their family may have less education pressure before they move into middle school, which means they may have more harmonious family time. However, according to the statements provided by two of the students who had just finished their first year of secondary school, their secondary middle schools did not find any obvious signs of being affected by the double reduction policy, apart from the fact that teachers in the schools were no longer carrying out after-school tuition on a large scale. While in-school learning tasks and pressures were reduced in primary schools, more out-of-school time led to increased pressure for out-of-school training for these three students.

Furthermore, the fourth student is a middle school student, but she felt nothing has changed since she was already in middle school when the Double Reduction policy has been published. Therefore, the high level of promotion pressure and the amount of school work is the main reason why she supports the Double Reduction policy. Nevertheless, the last interviewed high school student showed opposition to the Double Reduction policy. He thinks that the amount of coursework is reasonable now, and under the enormous pressure of competition in the Gaokao, the implementation of the double-decrease policy and then the reduction of the amount of coursework is unfair to the majority of candidates. Moreover, the Double Reduction policy makes it difficult to find large-scale out-school tutoring but only expensive one-on-one lessons are relatively easy to find, that forcing parents to bear higher education costs than before the Double Reduction policy. Yet this is a point of concern shared by almost all parents interviewed.

All parents were almost unanimous in expressing the neutrality they held towards the Double Reduction policy. Parents expressed agreement with the State's desire to use the Double Reduction policy to reduce educational stress for individual families and students. However, they are also not optimistic about the effectiveness of the Double Reduction policy, because the current Chinese education system has not been reformed along with the Double Reduction policy. This is because there has been no essential change in the system of Zhongkao and Gaokao, resulting in the pressure on Chinese students to go on to higher education remaining enormous. The conflict between this pressure and the Double Reduction policy has resulted in a situation mentioned by one high school student interviewee, in which the difficulty of accessing inexpensive educational resources has forced families to seek more expensive and scarce educational resources. One of the parents mentioned that before they were looking for extracurricular tuition classes for their daughters, they might only need to pay 100 to 200 rmb per lesson for a large class with many students, but now they need to spend 500 rmb or even more for one-on-one tuition classes, and it's not even easy to find a teacher. Therefore, an important economic concept, the grey market, has to be mentioned here. The phrase "grey market" refers to market activity and transactions that are neither totally legal nor unlawful. The underground economy and completely legal commercial practises are on either side of the grey market. According to news released by China's Ministry of Education [10], the grid-based comprehensive management mechanism should be well utilized to prevent illegal off-campus tutoring from disguising itself as home services, summer camps and other anomalous behaviors. The various disguises mentioned in

this story fall into the grey market. The emergence of the grey market is due to policy constraints that prevent large-scale legal extracurricular tuition from being carried out as well as the high demand for tuition services from parents brought about by the pressure of further studies. At the same time the double threshold of scarcity of resources and high prices brought about by low supply and high demand makes it more difficult for most ordinary families to enjoy this educational resource than higher social class families, further exacerbating the differentiation in the competitiveness of children of different classes. Ultimately leading to the weakening of the education-centred reproduction capacity of the social class.

4. Conclusion

In conclusion, this review has analyzed research on China's Double Reduction policy through the lens of educational ecological systems theory. The policy aims to alleviate excessive academic pressure on students by reducing homework and off-campus tutoring. However, it interacts with various components of the educational ecosystem. At the macro-level, the policy represents changing sociopolitical demands. Its implementation is also shaped by factors like parental expectations and cultural norms at the exosystem level. Within classroom microsystems, teachers play a key role in achieving policy goals.

While the policy has reduced schoolwork in primary grades, high academic pressure persists in high school due to exam systems like Gaokao. This has sustained demand for off-campus tutoring, despite restrictions. The rise of an illegal "gray market" for costly private tutoring has made access to these services more inequitable. More affluent families can afford one-on-one tutoring, exacerbating class reproduction differences.

In sum, the Double Reduction policy has had a complex, mixed impact. It has alleviated some academic burden, but systemic exam pressures continue driving the shadow education market. Fundamental reforms to exam systems, university admissions, and cultural attitudes to education are likely needed to achieve more holistic improvements to student well-being. The ecological systems perspective provides a valuable framework for analyzing the multifaceted effects of education policies and their interactions with the broader ecosystem. Further research should continue examining the evolving impacts of China's education reforms.

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