



Effects of Pressure Reduction Policy on Primary School Children in Wuxi, China

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Abstract. Reducing pressure has become a major topic for recent Chinese education. New policies aimed to further relieve students from schoolwork burden were enacted and implemented in 2021. After one year of implementation, the result is yet to be calculated. Contrary to traditional Chinese education ideologies, the policy imposes uniform and strict regulations on school actions. Some of the controversial terms stated in the policy may obstruct students from improving grades with extensive extra effort. Subsequently, school conditions are different and the policy is confronted with potential reluctance. The research mainly adopts questionnaire studies on primary school students in Wuxi, China. The result has revealed the uneven implementation of the regulation among different schools and the common negligence of high-grade students in pressure-reduction activities. Further, from students' responses, it is suggested that school actions require specified regulations.

Keywords: Education, Pressure, Primary School, Double-reduction Policy, Pressure-reduction Policy, After-school Institution, Extra-curricular Activity.

1 Introduction

On May the 21st 2021, China passed the law to further reduce students' homework burden and off-campus training burden in the stage of compulsory education. Three main parts are mainly covered in the policy, respectively: homework deduction, extended curriculum, and extra institution regulations. The first part aims to conduct a direct regulation on homework timing. The second part serves to provide a diverse curriculum, which may, in turn, make school life less tedious and more interesting. The third part focuses on ensuring that afterschool life is not disturbed by extra academic courses. If the policy is implemented appropriately, students should be able to finish homework in time with less burden. Students at certain grades shall not receive homework. The repercussion of added school activities should be discerned. In addition, students should have fewer academic courses after school. More time should be spent on non-academic courses [1]. The pressure reduction policy is controversial because Chinese schools impose a comparably heavy burden on schoolchildren in pursuit of better grades [2]. For schools, a regulation on homework may lower students' grades because they cannot offer students adequate practice opportunities [3]. For students, pressure

relief has both sides. On the one hand, they can receive relaxation under pressure. On the other hand, their personal grades might be affected with fewer exercises practiced and more time spent on non-academic activities. The ban on after-school institutions may deprive them of opportunities to study after class. The policy is confronted with potential reluctance from both schools and students. After-school institutions are out of schools' reach. They are a major source of pressure for primary students [4], so they need to be regulated as well. Also, differences among schools have enlarged the gap between resources and students' experiences [5]. For a policy, the implementer needs to achieve a balance among all the participants [6]. The Education Bureau of Wuxi has implemented the policy since February 2021 [7]. School policies are enacted and implemented after a tentative period and many schools have started the official trial in the winter semester in September [8]. Over one school year, the effects need to be calculated. The three aspects mentioned before, namely the homework deduction, extended curriculum, and extra institution regulations, can be quantitatively measured as testaments to the effect of the policy. Questionnaires are designed for primary schoolchildren and distributed to selected schools.

2 Methodology

2.1 Research Goal

The research is conducted to scrutinize the effects of the pressure reduction policy. Further, the research aims to determine whether students have reduced their pressure. If the policy is implemented properly, a data analysis will be included to find out to what extent the pressure has been reduced. If the first-part survey shows that the policy is implemented inappropriately or inadequately, the research will investigate why reluctance retains after one year's implementation. Concluded suggestions will be given to schools and institutions to further implement the policy regulations.

2.2 Research Participants

The research primarily uses questionnaires as an approach to collect data for analysis. The participants are students from three primary schools in Wuxi. Participants cover all grades and ages in each school. The schools are represented using alphabetical characters from A to C.

School A: 12 classes for each grade. Grade 6 tutors refused to participate in the study because of junior high school admission test preparation. Grade 1 tutors also refused to cooperate because of scheduling conflicts. (Grade 1 students are required to take a rest at lunch breaks).

School B: 6 classes for each grade.

School C: 10 classes for each grade.

2.3 Research Design

The study concerns whether the policy is implemented as original plans. Three types of questionnaires are distributed to the participants. Each corresponds with the three individual parts stated on previous pages. The questionnaires are given out in the form of printed paper. Each participant receives three questionnaires and each questionnaire is from a different type. Students are informed to take the questionnaire voluntarily. All questionnaires are distributed after lunch in the classroom. During lunch breaks, the students have comparably more spare time for taking the survey. In addition, little disturbance will be made to the students' study plans. Furthermore, all students will be present in the classroom after lunch, minimizing the potential errors made in participant selection.

All questions are written using direct Mandarin language. According to the compulsory education curriculum program and Notice of Curriculum Standards, students from grade one to grade two are required to recognize 1,600 common Chinese characters while 2500 common characters are listed in the Basic Vocabulary Table of Modern Chinese Characters [9]. In order to avoid misunderstandings created by illiteracy, students are told to raise their hands when they have questions about the questionnaire. The homeroom teacher and the researcher who gives out the paper will come and read the characters to the students.

The research took place between May 17th, 2022, and June 22nd, 2022 from Monday to Friday during the lunch break. For schools A and B, questionnaires are given to class tutors and distributed to each class. Questionnaires are completed according to identical instructions.

The First Type of Questionnaire.

The first type of questionnaire focuses on afterschool institutions. The four questions ask about the changes in attended extra courses of participants. The questions are listed below:

Which grade are you in?

- (1) Do you attend extra after-school classes?
- (2) Did you attend extra after-school classes before this school year?
- (3) What classes do you attend after school?

The questions are straightforward in order to let primary students better understand the survey. Choices of common subjects are given in the answer box for further statistical analysis.

The Second Type of Questionnaire.

The second type of questionnaire asks about curricular and activity differences. The total number of asked questions is four. The questions are respectively listed below:

- (1) Which grade are you in?
- (2) From last September, after the pressure reduction policy was implemented, what changes have been made to your school curriculum and classes? Are there any interesting activities newly added, such as clubs, art, and scientific exploration activities?

(3) Does your school have afternoon classes newly added? If so, when does the new class take place?

(4) What do you do in the added afternoon class?

For question two, the time period of the newly added class is asked to be included in the answer. The whole question consists of two parts: curriculum and activities. The parts are not divided into two individual questions because the answers might overlap. Activities can be added to the curriculum. For question three, the policy encourages schools to guide students to voluntarily participate in after-school services. The end time of after-school service shall not be earlier than the local off-duty time; For students with special needs, the school shall provide extended custody services. Extended classes also bring the potential to provide extra exercises and academic course hours. The question is set to examine the effects of the lengthened school hours.

The answers for questions 2 and 3 are possibly fixed because school policies for activities and afternoon courses should be fixed. However, in order to survey a fair, objective result, students' experiences are given more credit. The authentic situation might not resemble what school policies are said to be. For example, activities might only be conducted very few times, but they are still said to be conducted. Teachers have the potential to give extra academic lectures during the afternoon courses and prolong class time.

The Third Type of Questionnaire.

The third type of questionnaire is about homework regulation. In a study conducted in 2014 by researchers from the Journal of The Chinese Society of Education, the amount of homework and repeated academic exercises are significant components of student pressure. Further than ineffectiveness, homework and tests make schoolwork burdensome. After the policy implementation, schools should scientifically control the amount of homework and the test frequency. The questionnaire comprises 5 questions:

(1) Which grade are you in?

(2) During the last school year you had, what is the average time you spend on homework each day? Review days of midterm exams and final exams are exclusive.

(3) During this school year, what is the average time you spend on homework each day? Review days of midterm exams and final exams are exclusive.

(4) During the last school year you had, what subjects do you have tests on? How often do you receive each of the tests?

(5) In this school year, what subjects do you have tests on? How often do you receive each of the tests?

As shown above, two pairs of the five questions work as a comparison of study conditions between the current school year and the year before, which reveals the direct quantitative difference. Also, the questions excluded the review days in order to rule out the especially full-scheduled days for planned exam preparation.

3 Result and Analysis

It can be seen from Table 2 that students participate in a variety of given educational subjects. In the “Others” category, 52 of the 68 students wrote “Go”. The subjects of “Others” include Humanities, Science, and Reading. Most contents included in the “Others” category are re-categorized. For example, yacht sailing is re-categorized into Sports, Chinese Romanization (Pin Yin) is categorized into Chinese because it is included in the primary school curriculum [9], and Papercutting is re-categorized into Fine Art. No students participated in either Chemistry or Physics. Chemistry and Physics are the subjects of junior high. The fact indicates that the students of all grades are focusing on primary school educational subjects.

Table 1. Overall Distribution of Questionnaire 1.

Questionnaire 1	Total questionnaires distributed	Total questionnaires collected	Total valid questionnaires	Total invalid questionnaires	Ratio of validity
Number	1250	1178	1133	45	90.6%

Table 2. Students’ Participation in Each Subject.

Subjects of afterschool institutions	Number of student participation	Ratio of student participation
Chinese	238	21%
Mathematics	340	30%
English	329	29%
Sports	295	26%
Fine Art	419	37%
Computer Science	181	16%
Performance Art	170	15%
Music	363	32%
Physics	0	0%
Chemistry	0	0%
Others	68	6%

Table 3. Type of Students Who Participated in the Survey.

Type of students	Number	Ratio
Students who participated in afterschool institutions both in the past and at present	581	51%
Students who never participate in afterschool institutions	521	46%
Students who did not participate in afterschool institutions until this school year	8	0.7%
Students who give up after-school institutions in this school year	23	2%

Questionnaire 1 is distributed to students in grade 1 to grade 6. According to Table 3, only 23 of the 1133 students give up participating in extra institutions after the implementation of the policy. Half of the students have additional courses before and now, while the other half never participated in other curricula. One of the three main aspects of the pressure reduction policy is to regulate extra courses. However, from the initial macroscopic statistics, the effect that can be observed is little. Still, many students participate in academic subjects. Very few give up the courses.

The second part of the survey is about extra-curricular activities.

Table 4. Overall Distribution of Questionnaire 2.

Questionnaire 2	Total questionnaires distributed	Total questionnaires collected	Total valid questionnaires	Total invalid questionnaires	Ratio of validity
Number	1250	1220	1207	13	96.6%

From Table 4, it can be seen that Questionnaire 2 has a relatively high ratio of validity, possibly because of the simpler questions.

Table 5. Schedule of the Afternoon Course in Each School.

Afternoon course period for grade 2 students at School A	15:30 – 17:00
Afternoon course period for grade 3-4 students at School A	15:30 – 17:15
Afternoon course period for grade 5 students at School A	15:30 – 17:30
Afternoon course period for all students at School B	16:30 – 17:30 (usually ends 10 minutes earlier)
Afternoon course period for all students at School C	16:30 – 17:20

Students' replies to the questionnaire in Table 5 confirmed the authenticity of the timetable given by school tutors. 83% of the students wrote down identical answers to the schedule given by school tutors. Nearly all of the remaining students (14%) wrote similar answers to "I don't clearly know" or "I do not attend afternoon classes" (seen in Table 6).

Table 6. Students' Response to the Afternoon Course Timetable.

Students who give identical answers to the schedule	83%
Students who do not clearly know the schedule	3%
Students who indicated that they do not attend the afternoon class	14%
Students who give answers different from the schedule	0.3%

According to Table 6, most students indicated that the courses are for individual studies. One class in grade 4, School B with a total of 34 students in specially indicated that their homeroom teacher will chat with them as they studied in the afternoon class, making the class ambiance much happier.

Table 7. Students' Response to Afternoon Course Arrangement in Class.

Students who indicated that new academic courses are given in the afternoon class	16%
Students who indicated that they have individual studies in the afternoon class	99%
Students who indicated that extra-curricular activities are given in the afternoon class	6%

Table 7 indicates that schools primarily give afternoon classes for individual studies. The students still give other answers erratically possibly because activities and lectures are given very infrequently. Most students consider them to be negligible.

In terms of questions on test frequencies, the survey failed to yield reliable results. Many students from grades 1-3 did not fully understand the question. Students from identical classes gave very various results. For students in grade 4 to 6, results are still in a state of over-diversity. Individual students have different understandings of the term "test." Consequently, no reliable data table is yielded.

For new activities, each school has a different policy. After concluding the results from the questionnaires, the students' answers are listed below.

Table 8. School Implementation of Extracurricular Activities.

School A	Rope jumping activities are held for students in grade 1.
School B	Grade 1 and 2 students exercise on the playground once a week in afternoon classes. Grade 3 and 4 students plant flowers in the corridors. Club activities are held once in two weeks for students in grade 1 to 5.
School C	Extended reading is recommended.

From Table 8, it can be learned that the variety of activities is limited. Most activities are for younger students. The plan of activities varied from school to school. School B has a relatively diverse series of activities newly added. However, grade 6 students have completely no activities added. For the other two schools, activities are prepared but not diverse.

The third part of the survey concerns homework conditions. The results are affected as school A refused to conduct the questionnaire survey because of final exam preparation. Grade 1 students only answered how much time they spend on homework this year because this is their first year at primary school.

Table 9. Overall Distribution of Questionnaire 3.

Questionnaire 3	Total questionnaires distributed	Total questionnaires collected	Total valid questionnaires	Total invalid questionnaires	Ratio of validity
Number	750	716	652	64	86.9%

According to Table 9, Questionnaire 3 has a relatively low ratio of validity. Students are required to write down the approximate time spent on their homework on normal school days.

Many answers are considered invalid. For instance, some students indicated that they spent over 14 hours a day on homework, which exceeds the time of the day besides schooling courses and sleeping. A few students did not answer the questions possibly because of time limitations.

Table 10. Average Time of Homework Completion.

Average time spent on homework when grade 2 students were in grade 1	115.1 minutes
Average time spent on homework this year for grade 1 students	92.4 minutes
Average time spent on homework when grade 3 students were in grade 2	127.1 minutes
Average time spent on homework this year for grade 2 students	124.7 minutes

Average time spent on homework when grade 4 students were in grade 3	124.9 minutes
Average time spent on homework this year for grade 3 students	131.0 minutes
Average time spent on homework when grade 5 students were in grade 4	125.1 minutes
Average time spent on homework this year for grade 4 students	144.1 minutes
Average time spent on homework when grade 6 students were in grade 5	140.2 minutes
Average time spent on homework this year for grade 5 students	147.3 minutes

As shown in Table 10, there is a 22.7-minute decline in the average time spent on homework for grade 1 students this year. The effect is moderate and observable, although homework should not be assigned to students of the grade based on the policy. For grade 2 students, the time spent on homework slightly declined. The overall average time remains at approximately two hours. However, homework should not be assigned to students of this grade according to the policy. For grade 3 students, the effect of homework reduction is still little. Students still spend about 2 hours on homework. There is a small-scale increase in homework completion time for grade 4 students and the same for grade 5 students.

4 Suggestions for Further Implementation

Firstly, the policy only regulates the time spent on homework without giving a clear approach to schools. Schools still assign regular homework. Supervision is difficult because it is impractical to set a timer for each of the students. Schools assign homework according to the teaching progress without scientific estimation. Deliberation in making tasks easier cannot persist for long-term studies. The suggestion is to create a uniform homework platform that gives each school identical teaching tasks. A collection of practice questions shall be made and the completion time for each section should be assessed. Schools are allowed to give regulated homework questions in order to relieve students from homework pressure.

Secondly, teaching tasks in schools should be limited to some extent. Online courses on each of the subjects should be published in order to give more alternative study opportunities other than after-school institutions. The courses given can be combined with the homework platform in order to form a class teaching system. When students have acquired the knowledge and build their skills from targeted exercises, their abilities will improve [10].

Thirdly, a scheduled timetable for school activities should be enacted. The policy still recommends schools to hold activities, but without official guidance. There are no clear regulations on the frequency and diversity of the held activities. The suggestion is to make official guidance and regulate when and how often each activity is held for each school according to their conditions.

5 Conclusion

Schools have different methods in response to the pressure reduction policy. They varied greatly depending on school conditions. Treatment among different grades is addi-

tionally unequal. High-grade students received little or no relief from the policy compared to younger students. Activity addition is scarce overall. Added entertainment and academic activities are infrequent and not properly scheduled. Homework still accumulates high time expenditure. No grades except for grade one received an observable decreased time spent on homework. Students participate in various subjects in after-school institutions. Academic subjects are still major constituents of after-school schedules. Afternoon extended courses are held in each of the investigated schools. However, most of the time the course is merely for individual studies. Occasionally there might be activities and tutoring lectures. Still, the main disadvantage of the research lies in planning. Students are not informed earlier about the research and some of them are very confused initially, especially the younger students. One of the questions yielded totally invalid results. Therefore, more time could be spent on explaining the questions clearly to the students in future research.

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