

## **A STUDY ON STUDENTS PERCEIVED PSYCHOLOGICAL QUALITY AT EXPERIMENTAL MIDDLE SCHOOL IN PINGDINGSHAN CITY, HENAN PROVINCE, CHINA**

**Zhiwei Zhang**<sup>1\*</sup>

**Yanan Yang**<sup>2</sup>

<sup>1</sup> Master Candidate in Educational Administration, Stamford International University of Thailand

<sup>2</sup> Lecturer, Stamford International University, Thailand, xiaoyarain@hotmail.com

\* Corresponding Author, E-mail: 282888308@qq.com

**Abstract:** This study mainly aimed to understand the middle school students perceived psychological quality and to analyse the differences with demographic background variables. Through the form of questionnaire survey, a total of 301 students in Pingdingshan Experimental Middle School in Henan Province, China were quantitatively studied, 292 valid questionnaires collected were analyzed by descriptive analysis, independent samples t-test, and one-way ANOVA. The results showed that the overall psychological quality level perceived by middle school students was high; There was no significant differences in students perceived psychological quality with different genders; There are significant differences in students perceived psychological quality with different grades; The psychological quality perceived by urban students was lower than that of rural students; The psychological quality perceived by the only child was lower than that with siblings. Based on the research results, recommendations were made to carry out activities such as improving cognitive quality, identifying personality quality, and improving adaptability, so that the school can do a good job in student management to improve the psychological quality of middle school students.

**Keywords:** Psychological Quality Level ,Middle School Students, Pingdingshan Experimental Middle School

### **Introduction**

In recent years, under the multiple influences of rapid economic development, changes in the world's population and social environment, and the epidemic situation, the psychological quality of young people, as an important protective factor in the management of young students, should be mentioned in important topics. In Japan, the rapid development of psychological quality education began with the visit of the American education delegation to Japan after World War II, which mainly includes five aspects: self-seeking, self-thinking, self-understanding, stress coping methods, and social

communication methods (Wu, 2017).

In the United States, to improve the level of psychological quality education, designate schools to carry out psychological counseling, and make a systematic evaluation plan for psychological quality education are all funded by the National Defense Education Act. Some states also use the form of legislation to ensure the implementation of psychological quality education, which provides important guarantee and support for the development of psychological quality education. In addition, the strength of social support for psychological quality education has also attracted the attention of foreign researchers. For example, in Japan, some schools and communities have provided psychological counseling services for students and carried out a series of beneficial psychological quality education activities, which have been widely recognized and supported in society. These social support measures have played a vital role in promoting the practice and promotion of psychological quality education (Beland, 2017). Education that provides comprehensive quality education for the young generation and lays the foundation for their future life and development has been incorporated into the national system, which not only helps students grow healthily, but also is an inevitable prerequisite for promoting student management (Qiu, 2018). China's economic development is rapidly changing, people's living standards and social pressure are rising, and the resulting psychological quality problems have attracted much attention from the society. At the same time, the emergence of students' psychological problems also affects their learning and development. Therefore, from the perspective of students' personal development needs and national policy support, the implementation of psychological quality education has become urgent (Song, 2017).

According to the results of the 2019 survey on the psychological quality status of Chinese adolescents, about 60% of secondary school students have different degrees of psychological problems, such as school bullying, addiction to the Internet, low self-esteem and so on. These problems seriously affect the study, life, and future development of secondary school students. Therefore, the perception of students' psychological quality is of great significance to the comprehensive development of students and the sustainable development of society. Students are the hope of the country, and the strengthening of students' quality education, the construction of teachers' team of psychological quality education in schools and the competence of teachers are important measures and guarantees to improve the level of students' management in schools. At the same time as the pace of social development continues to accelerate, the requirement of personal quality is also constantly improving, the school quality.

The perceived psychological quality of secondary school students is an important element in the development of modern school education student management in Henan Province, China. With the deepening reform of basic education reform in Henan Province, students perceived psychological quality is getting more and more attention. Now, the education department of Henan Province recognizes the situation of the perceived psychological quality level of young people, especially middle

school students, and schools also recognize that the development of psychological quality education is an important guarantee to change the status quo of the psychological quality level of middle school students and to improve the level of the psychological quality of middle school students. The development of psychological quality education started relatively late in China, and there are many problems in the process of development. The goal, content, method, and evaluation system of school psychological quality education management have not yet been standardized and unified. In short, there are still many problems to be explored in Henan Province in terms of the perceived level of psychological quality of secondary school students and the management of students' health (Peng & Wang, 2017).

Thus, the current situation of psychological quality perceived by secondary school students has sounded an alarm, and as educators and student managers have the responsibility to take up this burden and start trying to solve these problems, so that psychological quality education can play a greater role in the practice of student management. To grasp the psychological quality education of secondary school students is an important guarantee for cultivating qualified talents in the twenty-first century (Zhang & Liu, 2019).

Against this background, this study first described the importance of the perceived level of psychological quality of secondary school students, then analyzed the causes of the psychological quality problems of secondary school students, and finally proposed targeted recommendations for the study of the perceived level of psychological quality in student management.

### **Research Objectives**

Based on the research questions, the research objectives of this study include as follows:

- 1) To identify the students' demographic background variables, in Experimental Middle School, Pingdingshan, Henan Province.
- 2) To assess the middle school students perceived psychological quality level at Pingdingshan Experimental Middle School in Henan Province.
- 3) To analyse the differences in the middle school students perceived psychological quality at Pingdingshan Experimental Middle School, in Henan Province, with different demographic background variables.

### **Literature Review**

Related previous studies revealed that the psychological differences between boys and girls are mainly reflected in the following aspects: men's brains are relatively developed, and their hormone levels were high. These factors would affect men's self-cognition and emotional expression ability. Girls generally prefer to express their emotions through verbal and nonverbal ways, while men pay more

attention to action and problem solving. Boys pay more attention to logic and practicality when making decisions, while girls take more emotional factors into consideration when making decisions. Girls are usually more likely to feel whether they are loved and accepted, while men pay more attention to their abilities and achievements. Girls are more likely to release their emotions through crying, talking and other ways, while boys are more likely to release their emotions through silence, sports and other ways. Girls are more likely to be influenced by others' evaluation, while men are more likely to maintain self-confidence and self-esteem. Girls usually pay more attention to details and emotional factors, while men pay more attention to practicality and efficiency (Jamal, 2021). This shows that the perceived psychological quality of junior high school students should pay attention to gender differences in education, strengthen the research on gender psychological characteristics, and guide individuals to overcome individual weaknesses and improve overall quality. Of course, they will also encounter different psychological quality problems with the growth of grades (Zhang, Su & Wang, 2019).

In general, there is no significant difference in the perception of psychological quality between urban and rural junior high school students, but there are significant differences in some items. The results of this survey show that urban middle school students' learning anxiety, anxiety to people and sensitivity to physical symptoms are significantly higher than those of rural middle school students, which may be mainly related to factors such as family education concepts and school education methods. It is the common mentality of parents today to "expect their children to succeed". In terms of family education, relatively speaking, parents with higher knowledge and cultural backgrounds tend to have higher expectations of their children and pay more attention to school education for their children's performance in learning. Urban middle schools, especially key middle schools, have higher entrance rate than rural middle schools if their collective development goals have test scores, and the schoolwork burden is heavy, Students' study time in school greatly exceeds the teaching plan issued by the state, and some urban middle schools even completely cancel their rest days (Zhang, Ling & Xiao, 2019).

It can reflect that the psychological pressure of urban middle school students in learning is greater than that of rural middle school students. In terms of the speed of physiological development, urban middle school students are earlier than rural students, so the psychological conflict caused by the unsynchronized physical and mental development is stronger, and they are particularly sensitive to the stimulation of the outside world, especially their own body changes. On the other hand, in terms of self-confidence and social fear, rural students are significantly higher than urban students. This may be related to their different living environment. Self-distrust means not knowing the good or bad of what you have done, often worrying and melancholy, and even going to extremes to produce self-contempt and fear of what you have done. Due to the great difference between the quality of life and the spiritual life, rural students have fewer opportunities to be concerned and loved than urban students (Luo, 2014).

On the contrary, they are often severely disciplined by their parents or bear the pressure of life

prematurely. It is difficult to meet the emotional needs of their parents, which may lead to an aversion, dissatisfaction, or hostility. Fundamentally speaking, lack of self-confidence is a manifestation of covering up dissatisfaction and hostility (Chen, 2020). In terms of only children, only children are no more selfish than non-only children. A study from a New Zealand psychologist found that after fully integrating into society, only children and non-only children have no significant difference in quality and character. They used an economic experimental method called "trust game" to test people's trust and gratitude to strangers. The results showed that both the only child and the non-only child showed similar trust and gratitude in the game. The only child is no more withdrawn than the non-only child.

A study from a Chinese psychologist found that there is no significant difference in social behavior between the only child and the non-only child. They used a sociological method called "social network analysis" to measure the social relations and social activities among college students. The results show that there is no difference in their position, role, influence, and participation in social networks whether they are only children or non-only children. The study also found that the most important factors affecting the social behavior of middle school students are their personal interests and personality. If a person has a wide range of hobbies and has an open and outgoing personality, then he is more likely to have a rich social life. These interests and personalities do not depend on whether a person is an only child, but on a person's talent and choice. Only children have their own advantages and disadvantages. Although research shows that there is no significant difference between only children and non-only children in personality traits and social behavior, this does not mean that they are the same. Everyone has his own unique characteristics, advantages, and disadvantages (Zou, 2022).

In short, a complex group cannot be defined with a simple label. Middle school students are just ordinary people with their own strengths and weaknesses, dreams, and puzzles. We should treat them with an equal and respectful attitude and give them understanding and help. It is necessary to adopt appropriate educational strategies from family to school, from parents to teachers, and strive to strengthen the cultivation and improvement of their psychological quality to improve the level of student management (Earles & James, 2019).

## **Methodology**

The questionnaire used in this research was in the form of electronic questionnaire, and the middle school students in Pingdingshan Experimental Middle School, Henan Province, China are taken as the research objects. There are three grades in the middle school, with a total of 1405 people in the study, and 301 people were selected as the survey sample according to the Krejcie and Morgan (1970) scale. Therefore, to facilitate sampling, the researcher distributed 301 questionnaires among students for investigation. The questionnaires were distributed and collected through the class WeChat group push questionnaire link in the experimental middle school in the form of electronic questionnaires. With

the help of all teachers in the teaching office of the experimental middle school, 292 valid questionnaires were collected, with a return rate of 97%, and data analysis was conducted for the effective data.

The questionnaire of this study mainly adopts the content of Wang et al. (2017) in the Revision of the Concise Mental Quality Scale for Middle School Students (Health Edition) and the Research on the Reliability and Validity. Based on it, the question of demographic background information is added, which forms the research questionnaire of this paper. All these scales had Cronbach  $\alpha$  coefficient over 0.952, the KMO value was 0.958, thus, the reliability and validity were at a good level.

## Results

### *Demographic Analysis of Questionnaire Participants*

The demographic background of the participants in the questionnaire is shown in Table 4.1. The gender distribution of the respondents was 46.5% boys and 53.5% girls, with boys slightly lower than girls. In addition, parents are willing to provide the best learning platform for their children. It is true that the teachers in township schools are not as well qualified as those in the city, and the hardware facilities are not as good as those in the city. Therefore, parents will try to choose a better school for their children. Nevertheless, due to some policy constraints, the proportion of rural students in the school is not very large, only 23.63%, which has a negative impact on the growth of some students, many of whom are studying outside the home, without family care and warmth, their physical and mental development and learning life will also have a certain impact.

### *Differences in students perceived psychological quality with different genders*

According to the study hypothesis, it is necessary to compare the differences of psychological quality perceived by middle school students of different genders. Here, independent samples t-test is used to test this hypothesis. The test results are shown in Table 1. In the process of comparing the differences of perceived psychological quality of middle school students of different genders, the cognitive quality, personality quality and adaptability of sig were 0.697, 0.709 and 0.693 respectively, which were higher than the standard of 0.05. Therefore, it can be determined that this study hypothesis is not tenable, that is, there was no significant difference in the psychological quality perceived by middle school students of different genders. Specific details are shown in the Table below:

**Table 1:** Differences in Students Perceived Psychological Qualities with Different Genders

Dimension	Gender	N	Mean	SD	T	P
Cognitive Quality	Male	136	3.77	1.962	-0.39	0.697
	Female	156	3.82	2.627		
Personalized Quality	Male	136	3.77	0.441	-0.374	0.709
	Female	156	3.82	0.651		
Adaptability	Male	136	3.77	1.75	-0.395	0.693
	Female	156	3.83	1.21		



***Differences in students perceived psychological quality with different grades.***

According to the study hypothesis, it is necessary to compare the differences of psychological quality perceived by middle school students of different grades. Here, since there are three grades in the experimental middle school, the method of one-way ANOVA was used to test this hypothesis. The test results are shown in Table 2. In the process of comparing the differences of psychological quality of middle school students in different grades, because p-value is analyzed by F-test, the cognitive quality, personality quality and adaptability were 0.000, 0.000 and 0.000 respectively, which were significantly less than 0.05, it can be confirmed that this study hypothesis is valid, that is, middle school students in different grades, there were significant differences in their perceived psychological quality.

Moreover, according to the results of multiple comparisons, middle school students in grade, grade one is greater than grade three, and the level of perceived psychological quality of middle school students in grade three is higher than grade two. According to this result, the perceived psychological quality of middle school students in Grade 2 is lower than that of Grade 1 and Grade 3, which may be because this group has not yet felt the tension of the entrance examination and is still immersed in the knowledge system taught by the school, so the demand for improvement is not so obvious.

The Post Hoc multiple comparison results in Table 2 also show the perceived psychological quality of middle school students, based on the multiple comparison results in hypothesis. Specific details are shown in the table below:

**Table 2:** Differences in Students Perceived Psychological Qualities with Different Grades

Dimension	Grade	N	Mean	SD	F	P
Cognitive Quality	Grade 1	104	2.28	2.56	3.738	0.000
	Grade 2	96	4.23	1.97		
	Grade 3	92	4.31	1.98		
Personalized Quality	Grade 1	104	2.16	1.88	1.478	0.000
	Grade 2	96	4.31	1.1		
	Grade 3	92	4.28	1.09		
Adaptability	Grade 1	104	2.09	2.49	2.096	0.000
	Grade 2	96	4.27	1.4		
	Grade 3	92	4.34	1.17		

***Differences in students perceived psychological quality with different home locations.***

According to the study hypothesis, it is necessary to compare the differences of psychological quality perceived by rural and urban middle school students. Here, because the urban and rural situation of middle school students in the questionnaire is divided into urban and rural levels, the single factor analysis of variance method is also used to test this hypothesis. The test results are shown in Table 3. In the process of comparing the differences in perceived psychological quality of rural and urban middle school students, because p value under the F-test analysis, the overall cognitive quality, personality quality and adaptability were 0.000, or even less than 0.01, it can be confirmed that this study hypothesis

was established, that is, rural and urban middle school students, there are significant differences in their perceived psychological quality.

**Table 3:** Differences in Students Perceived Psychological Qualities with Different Home Locations

Dimension	Home Location	N	Mean	SD	F	P
Cognitive Quality	Urban	69	4.34	1.31	2.169	0.000
	Rual	223	3.55	1.25		
Personalized Quality	Urban	69	4.32	1.17	2.131	0.000
	Rual	223	3.56	1.99		
Adaptability	Urban	69	3.63	1.29	3.769	0.000
	Rual	223	3.54	1.48		

From the results of multiple comparisons in Table 3, it can be seen that the perceived psychological qualities of secondary school students from rural areas were higher in terms of cognitive qualities, personality qualities and adaptive abilities than those perceived by secondary school students from urban areas.

***Differences in students perceived psychological quality with different only child status.***

According to the study hypothesis, it is necessary to compare the differences in the perceived psychological quality of middle school students with only children and non-only children. Here, because the only child status of middle school students in the questionnaire is divided into two levels: only child and non-only child, the single factor analysis of variance method is also used to test this hypothesis. The test results are shown in Table 4.

In the process of comparing the differences in the perceived psychological quality of middle school students with only child and non-only child, because p value under F-test analysis, cognitive quality, personality quality and adaptability are 0.000, or even less than 0.01, it can be confirmed that this study hypothesis is valid, that is, for middle school students with only child and non-only child, there are significant differences in their perceived psychological quality.

According to the above difference analysis results, there are significant differences in cognitive quality, personality quality and adaptability of perceived psychological quality between only child and non-only child middle school students. Through multiple comparisons, it can be seen that the level of psychological quality perceived by only children is lower than that of non-only children.

**Table 4:** Differences in Students Perceived Psychological Qualities with Different Only Child Status

Dimensions	Group	N	Mean	SD	F	P
Cognitive Quality	Yes	123	3.12	1.44	1.172	0.000
	No	169	4.02	1.92		
Personalized Quality	Yes	123	2.98	1.75	2.743	0.000
	No	169	4.32	1.10		
Adaptability	Yes	123	3.14	1.88	3.439	0.000
	No	169	3.82	1.15		



## Conclusions

A study of the current level of perceived psychological qualities of middle school students at Experimental Middle School in Pingdingshan City, Henan Province, China, included the following.

1. In this study, the respondents were students of the school, of which the proportion of male students is slightly lower than that of female students; the number of surveyed secondary school students in all grades does not differ much; the proportion of rural students in the school is not very large, only 23.63%, and the proportion of only-children is increasing with the development of the society, reaching 42.12%.

2. The total mean score and the mean scores of the three dimensions of the perceived psychological quality of secondary school students are above the theoretical median of 2.5, which indicates that the overall psychological quality of secondary school students is good.

3. Comparison of differences in perceived psychological qualities among secondary school students of different genders, grades, urban and rural areas, and only-child status.

1) There was no significant difference in the overall psychological quality between boys and girls in junior high school. Girls were better than boys in two dimensions and factors of cognitive quality and personality quality, while boys were better than girls in adaptability. There was no significant difference between boys and girls in other factors. This showed that men and women have their own characteristics of perceived psychological quality.

2) There were significant differences in the overall psychological quality between urban and rural secondary school students. Rural secondary school students were better than urban secondary school students in terms of adaptability and personality qualities, but there was no significant difference between urban and rural secondary school students in other factors.

3) There were significant differences in the overall perceived psychological quality of middle school students in different grades. Take grade as grouping variable, and take the total average score of psychological quality, three dimensions and 36 factors as dependent variables for one-way ANOVA. The results showed that there are significant differences in the overall psychological quality perception level and various factors of middle school students in different grades. In general, the perceived psychological quality and its own performance of middle school students in Grade 1 are higher than those in Grade 2 and Grade 3, while Grade 3 was better than Grade 2. This meant that the overall development of psychological quality perceived by middle school students presents a grade development trend of Grade 1>Grade 3>Grade 2.

4) There were significant differences in the perceived psychological qualities of only children and non-only children. There was no significant difference between only children and non-only children in terms of cognitive qualities and personality qualities, but they were lower than non-only children in terms of adaptability.

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