

Reliability and Validity of the PBI scale and the self-administered MHQ questionnaire in the application to primary school students in grades 4-6

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Abstracts

Parents are the first and lifelong teachers of children, and families are the first and lifelong schools of children. It can be seen that family education, especially parents' Parenting styles, is extremely important to children's behavior. Therefore, this paper investigates the parents' Parenting styles and five aspects of habits of senior primary school students. **Objective:** To examine the reliability and validity of the Parenting Style Inventory (PSI) and the self-administered Mipale Habits of Parenting Questionnaire (MHQ) in upper elementary school students. **Methods:** The PSI and MHQ were administered to 305 elementary school students in grades 4-6, and the data collected were used to test the reliability and validity of the Parenting Styles Inventory and the Mipale Parenting Habits Questionnaire. Internal consistency was tested and exploratory factor analysis was conducted. **Results:** The reliability and validity of the Parenting Style Inventory (PSI), the father's version of the scale, and the mother's version of the scale were good; the reliability and validity of the Mipale Habits of Parenting Questionnaire and its five subscales were good. **Conclusion:** The reliability and validity of the PSI and MHQ meet the measurement requirements and can be used to assess the influence of family environmental factors on the habits of upper elementary school students.

Keywords: Reliability and Validity; The PBI scale and the Self-Administered; MHQ questionnaire

Introduction

The notice of the National Training Program for Teachers explicitly proposes to add home-school cooperation training to the training content, so that teachers can guide parents in family education and guide them to pay attention to life education and gratitude education in the family (the Ministry of Education of the People's Republic of China [MEPRC], 2020: 31-39). The Third Session of the Thirteenth Political Consultative Committee of the People's Republic of China proposes to open family education-related majors in colleges and universities, strengthen the construction of family education-related courses, and train professional talents. (National Committee of the Chinese People's Political Consultative Conference [CPPCC], 2020). The draft outline of the 14th Five-Year Plan of the People's Republic of China for the first time proposes to open a special section on family education, emphasizing the importance of building family civilization, inheriting and carrying forward good family traditions, adopting scientific and reasonable family education, and accelerating the progress of promoting family education legislation, fully reflecting General Secretary Xi Jinping's emphasis on "focus on the construction of family, family education, and family style" ("14th Five-Year Plan", 2021) (Wang Chunxia & Wu Sujin, 2021: 03-07). During the National

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Two Conference of the People's Congress of the People's Republic of China and the National Committee of the Chinese People's Political Consultative Conference, many delegates made different suggestions for family education issues (2021): for example, Zhao Donghua, a member of the Standing Committee of the CPPCC, suggested that we should summarize our experience and strengthen the construction of community parent schools to solve the problems of lack of resources and lack of professional guidance in existing community parent schools ([CPPCC],2021) (Yang Yifan, 2021:3). The Thirty-first Meeting of the Standing Committee of the Thirteenth National People's Congress (2021) voted to adopt the Law of the People's Republic of China on the Promotion of Family Education, which is the first special legislation on family education in China([Law on the Promotion of Family Education],2021). The Law on the Promotion of Family Education, which came into effect on January 1, 2022, proposes that parents are the first and lifelong teachers of their children, and that the family is the first and lifelong school for children ([LPFE], 2022). This shows that family education, especially the parenting style, is extremely important to children's behavior and habits. Therefore, this paper investigates the parenting style and five aspects of the habits of students in the upper elementary school.

The research objective is to test the reliability and validity of the parental Parenting styles scale (PBI) and the self-designed "five parenting" habits questionnaire (MHQ) in the application of senior primary school students, and to provide tool support for the formal implementation of my doctoral dissertation research.

The Parental Parenting Style Inventory (PBI) and the self-developed "Five Education" Habits Questionnaire (MHQ) in this article are mainly used among senior primary school students, specifically students in grades 4 to 6 of a primary school in Ganzhou City, Jiangxi Province. If the reliability and validity of the test results are high, they can be appropriately extended to senior students in other primary schools.

Body

1. Parenting Style Inventory (PSI)

The Parenting Style Inventory used in this survey was based on the Chinese version of the PSI (Parental Style Instrument) scale (Jiang Z. et al., 2009: 193-195), which was revised by scholars Jiang Z. et al. Foreign studies have shown that this scale has good reliability and validity in a variety of populations (Boyd P. & Gullone E., 2004:369 373.). This scale is divided into two parts, a father's version and a mother's version, both with 23 identical questions. The scale classifies parenting styles into four dimensions: "caring" "indifferent or rejecting" "encouraging autonomy" "controlling", the scale is based on a 4-point Likert scale, with 4 points for "very consistent", 3 points for "relatively consistent", 2 points for "relatively incompatible", and 1 points for "very incompatible". Among the positively described questions, a score of 4 is the highest score, and a score of 1 is the lowest score. The score for the reverse described questions is the opposite of the score for the positively described questions. For more details of the scale, please refer to the annex of this paper.

Table 2-1 Basic information of parenting style scale

Category	Factor	Items
Father	Caring	1, 5, 6, 11, 15, 16
	Indifference or rejection	2, 4, 12, 14, 22
	Encourage autonomy	3, 7, 13, 19, 20, 23
	Control	8, 9, 10, 17, 18, 21
Mother	Care	1, 5, 6, 11, 15, 16
	Indifference or rejection	2, 4, 12, 14, 22
	Encourage autonomy	3, 7, 13, 19, 20, 23
	Control	8, 9, 10, 17, 18, 21

2.2 Mipale Habits Questionnaire (MHQ)

2.2.1 Mipale-h Explanation

The mipale in this questionnaire are the initials of the English words: **moral, intellectual, physical, aesthetic, labor; education**. The first five words combined with the sixth word respectively are **moral education, intellectual education, physical education, aesthetic education, and labor education**, which are referred to as moral, intellectual, physical, aesthetic, and labor education—— “five education” . The word "Habits" combined with the “Five Education” as to the “Five Education Habits”. In China, “Five Education” is an important part of socialist education, and is also the basic content of comprehensive development education.

2.2.2 Introduction to “Five Education”

(1) Moral education is to cultivate students' correct outlook on life, worldview and values, to make students have good moral and political qualities, to form a correct ideological approach and a strong sense of social responsibility.

(2) Intellectual education is the education that grants students systematic scientific and cultural knowledge and skills, and develops their intelligence and non-cognitive factors related to learning.

(3) Physical education is an education that gives students knowledge and skills about health, develops their physical strength, enhances their awareness of self-care and physical fitness, develops their need and habit to participate in physical activities, and strengthens their willpower.

(4) Aesthetic education is an education that cultivates students' healthy aesthetics, develops students' ability to appreciate beauty and create beauty, and cultivates students' noble sentiments and civilized qualities.

(5) Labor education is an education that enables students to establish a correct view of labor and labor dynamics, love labor and working people, and develop labor habits. Students will develop the habit of working and the quality of being proud of working and ashamed of being lazy. At the same time, the students will resist the influence of vices such as good and bad work, greed for enjoyment, gain without work, luxury and waste.

2.2.3 “Five Education” Habits

The “five education” are interrelated and independent of each other, that is to say, they have the characteristic of interpenetration in activities. In the practice of education, “five education” complement each other, insist on making students develop in moral, intellectual, physical, aesthetic and labor aspects, prevent and overcome the one-sidedness of emphasizing one over the other and losing one over the other, and adhere to the quality concept of comprehensive development of education. Therefore, teachers should be good at combining various educational tasks and promoting the development of students in all aspects of organic together, with some focus and some balance, to promote students to develop good five education habits.

2.2.4 Mipale Habits Questionnaire (MHQ)

On the basis of collecting data from previous studies, this study used the self-prepared "Primary School Students' Five Education Habits Questionnaire", which includes 5 sub-questionnaires with 65 questions, namely: Primary School Students' Moral Education Habits Questionnaire with 13 items; Primary School Students' Study Habits Questionnaire with 13 items; Primary School Students' Physical Education Habits Questionnaire with 14 items; Primary School Students' Aesthetic Education Habits Questionnaire with 10 items; Primary School Students' Labor Habits with 15 items. For more details, please refer to the annex at the end of the article.

2.2.5 Participants

This study conducted a questionnaire survey in elementary school G in Ganzhou City, Jiangxi Province, China. The elementary school G is an affiliated elementary school of a university, and many parents of students are university staff with relatively high education level. However, due to the increase in the number of children of migrant workers in the city and the adjustment of enrollment policies, the educational background of some students' parents is also relatively low. After reviewing the literature and on-site survey research, it was found that students in grades 1, 2, and 3 were not suitable for questionnaires due to their low knowledge level, so this study took an anonymous approach to issue questionnaires to students in grades 4 to 6 of G elementary school through the Questionnaire Star platform on the internet.

2.2.6 Procedures

The questionnaire was used to collect data from students in grades 4 to 6 in the elementary school of G Primary School in Ganzhou, Jiangxi Province, China, and was administered to students using the Parenting Style Inventory (PSI) and the Five Parenting Habits Questionnaire with five sub-questionnaires. In addition, six basic information questions were added to the Parenting Style Inventory: the student's gender, grade level, whether the student was an only child, whether their parents were divorced, and the father's and mother's educational level.

2.2.7 Results

A total of 305 valid questionnaires were received. The collected samples were collated and detailed information is shown in table 2-2. The collected data were analyzed using SPSS22.0 and AMOS22.0 software.

Table 2-2: Basic information table of survey respondents

Item Category	Number of people	Percentage (%)
Student gender		
Male	153	50.2
Female	152	49.8
Student Grade		
Fourth Grade	96	31.5
Fifth grade	142	46.6
Sixth grade	67	22.0
Only child or not		
Yes	19	6.2
No	286	93.8
Whether parents are divorced		
Yes	16	5.2
No	289	94.8
Father's educational level		
Junior high school and below	163	53.4
High school or secondary school	77	25.2
University (college or bachelor's degree)	57	18.7
Graduate student (Master or PhD)	8	2.6
Mother's educational level		
Junior high school and below	183	60.0
High school or secondary school	57	18.7
University (college or bachelor's degree)	56	18.4
Graduate student (Master or PhD)	9	3.0

2.2.8 Reliability test of survey scales and questionnaires

(1) Reliability test of the Parenting Style Inventory

Before statistical analysis of the collected data, the reliability of the scale needs to be tested, which is the degree of reliability, and if there is stability and consistency between the administered results, the scale has relatively high reliability (Qiu, Haozheng, 2013:12). In this paper, the homogeneity reliability (alpha coefficient) is used to assess the reliability of the Parenting Style Scale. For detailed information, refer to Tables 2-3.

Table 2-3: Homogeneous reliability of the Parenting Style Inventory

Dimension		Number of items (N)	Homogeneity reliability (alpha coefficient)
Father			
Care	6		0.893
Indifference or rejection	5		0.321
Encourage autonomy	6		0.818
Control	6		0.730
Total	23		0.857
Mother			
Care	6		0.867
Indifference/rejection	5		0.396
Encourage autonomy	6		0.792
Control	6		0.720
Total	23		0.833

As seen in Tables 2-3 above, the alpha coefficient of homogeneity reliability for the full scale of the father's version of the Parenting Style Inventory was 0.857, and the alpha coefficients of the other three dimensions exceeded 0.7, except for the alpha coefficient of homogeneity reliability for the indifference or rejection dimension, which was low, and the alpha coefficients of the care dimension and the encouragement of autonomy dimension were above 0.8. The alpha coefficient of the mother's version of the Parenting Style Inventory was 0.833, and except for the homogeneous reliability alpha coefficient of the indifference or rejection dimension, the alpha coefficients of the other three dimensions were above 0.7, and the alpha coefficient of the caring dimension was above 0.8. From the above data, we can learn that the reliability of the Parenting Style Inventory is good overall, and the administration effect of the father version is slightly better than that of the mother version.

(2) Validity test of the Parenting Style Inventory

The validity of a scale is the accuracy of the scale, which refers to the ability of the measure to truly and effectively measure what the measurer wants to measure. The validity of a scale can be divided into content validity, structural validity, and calibration correlation validity (empirical validity). In this paper, content validity and structural validity are used to test the validity of the Parenting Style Inventory.

①Content validity

The content validity of the scale is also called the logical validity of the scale, which refers to the judgment of whether the test questions can represent and cover the content to be measured. The Parenting Style Inventory used in this study is based on the Chinese version of the PSI scale revised by Yang Hongjun et al. The PSI scale has been tested and revised by previous authors and has good content validity. Therefore, it can be said that the Parenting Style Scale used in this study has good content validity.

② Structural validity

The structural validity of a scale refers to the ability of the measurement results to effectively explain the theoretical structure of the test scale. The questions of the scale are structured according to the dimensions studied by the designer. If the correspondence of the study variables of the measurement results matches the theoretical structure of the design, then the scale has better structural validity (Ning, Hong, 2018:7). In this study, exploratory

factor analysis was used to test the validity of the Parenting Style Scale. Before exploratory factor analysis, it is necessary to identify whether the scale is suitable for factor analysis, and the identification is done by Bartlett's test and Kaiser-Meyer-Olkin (KMO) test, if the KMO value is greater than 0.6, then the scale is suitable for factor analysis. The results of Bartlett's test and KMO test for the father's version and mother's version of the parenting style scale were examined, and detailed information is shown in Tables 2-4 and 2-5.

Table 2-4: KMO and Bartlett's test for the fathering style scale

Kaiser-Meyer-Olkin metric of sampling adequacy	0.914
Bartlett's test of sphericity Approximate chi-square χ^2	3376.219
Degrees of freedom (df)	253
Significance level (sig.)	0.000

Table 2-5: KMO and Bartlett's test for the mothering style scale

Kaiser-Meyer-Olkin metric for sampling adequacy	0.887
Bartlett's test of sphericity Approximate chi-square χ^2	3033.312
Degrees of freedom (df)	253
Significance level (sig.)	0.000

As seen in Tables 2-4 and 2-5, the Bartlett's sphericity test for the father's version of the Parenting Style Inventory has an approximate chi-square χ^2 value of 3376.219, with a significance level of 0.000, less than 0.05, and a KMO value of 0.914, greater than 0.6; the Bartlett's sphericity test for the mother's version of the Parenting Style Inventory has an approximate chi-square χ value of 3033.312, with a significance level of 0.000, less than 0.05, and a KMO value of 0.854, greater than 0.6. Sphericity test approximate chi-square χ^2 value of 3033.312, significance level of 0.000, less than 0.05, reached the significant level, KMO value of 0.854, greater than 0.6. Therefore, the Parenting Style Inventory is suitable for factor analysis.

Thus, this study used SPSS 22.0 software to extract factors and perform factor analysis on the collected data. In addition, factors were selected based on four criteria: first, factors with eigenvalues greater than 1 were selected; second, factors with factor loading ratios greater than 0.4 were selected in the rotation matrix; third, the number of factors could be judged based on significant changes in the steep slope graph in the steep slope test; and fourth, factors explained at least 4% of the variance of the variables before rotation (Wu, M.L., 2010:7). Statistical analysis of the data was conducted based on the above screening conditions to obtain the total variance explained by the father's version and mother's version of the parenting style scale, with detailed information referring to Table 2-6 and Table 2-7; as shown in Figure 2-1 and Figure 2-2; Table 2-8 and Table 2-9.

Table 2-6: Total variance interpretation for the father style sub-scale

Component	Initial eigenvalue			Rotational load sum of squares		
	Eigenvalue	Extraction (%)	Cumulative variation (%)	Eigenvalue	Extraction (%)	Cumulative variation (%)
1	7.908	34.384	34.384	6.542	28.444	28.444
2	3.209	13.951	48.335	2.767	12.032	40.476
3	1.510	6.565	54.900	2.535	11.021	51.497
4	1.039	4.516	59.416	1.821	7.919	59.416

Table 2-7: Explanation of total variance for the mother parenting style sub-scale

Component	Initial eigenvalue			Rotational load sum of squares		
	Eigenvalue	Extraction (%)	Cumulative variation (%)	Eigenvalue	Extraction (%)	Cumulative variation (%)
1	7.188	31.253	31.253	6.128	26.644	26.644
2	3.184	13.844	45.098	2.639	11.475	38.119
3	1.513	6.579	51.677	2.429	10.559	48.678
4	1.137	4.942	56.619	1.826	7.941	56.619

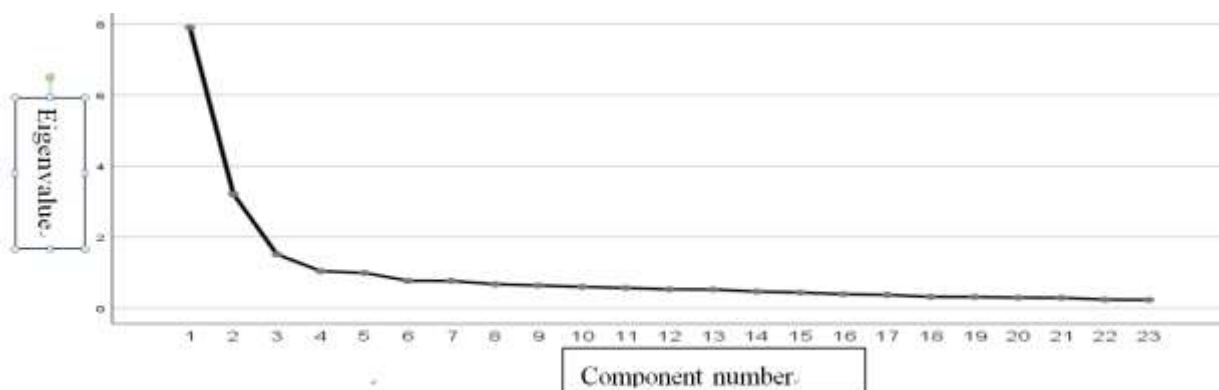


Figure 2-1: Fathers' parenting style scale gravel diagram

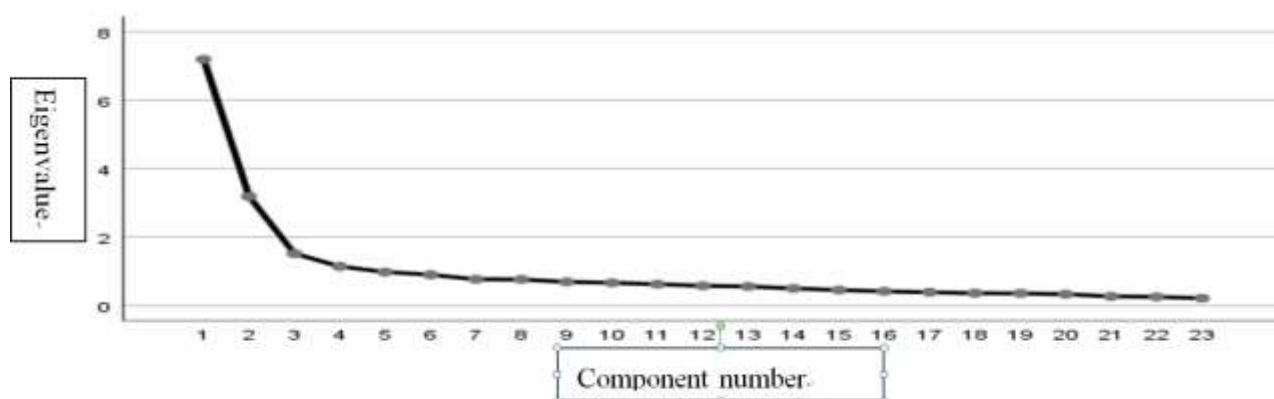


Figure 2-2: Mothers' parenting style scale gravel diagram

Table 2-8: Rotated Component Matrix of the Paternal Parenting Style Scale (continued on next

page)

Title Description Ingredients

	1	2	3	4
1. Speak to me in a gentle and friendly tone.			0.759	
5. To understand my problems and concerns.			0.783	
6. Loving to me.	0.781			
11. Smile at me often.	0.718			
15. It can make me feel better when I am in a bad mood.				0.725
16. Rarely talk to me.	0.748			
3. Allow me to do what I like.			0.731	
7. Like to let me make up my own mind.			0.692	
13. Let me decide my own things.			0.566	
19. Give me enough freedom.			0.758	
20. Allow me to go out freely.			0.732	
23. Allow me to dress by my own choice.			0.648	
8. Don't want me to grow up.			0.536	
9. Trying to control everything I do.			0.695	
10. Invade my privacy.			0.744	
17. Trying to make me feel like I can't leave her/him.				0.786
18. Feel that I can't take care of myself without her (him) around.				0.702
21. Overprotective of me.			0.395	
2. Not enough help was given to me.				0.774
4. appear emotionally cold to me.				0.634
12. Don't seem to understand what I need and what I want.				0.702
14. Makes me feel dispensable.			-0.140	
22. Never compliment me.				0.552

Table 2-9: Rotated Component Matrix of the Fatherhood Approach Scale

Title Description Ingredients

	1	2	3	4
1. Speak to me in a gentle and friendly tone.				0.694
5. Understand my problems and concerns.				0.766
6. Loving to me.	0.784			
11. Smile at me often.	0.726			
15. It can make me feel better when I am in a bad mood.				0.702
16. Rarely talk to me.	0.733			
3. Allow me to do what I like.			0.744	
7. Like to let me make up my own mind.			0.692	
13. Let me decide my own things.			0.564	
19. Give me enough freedom.			0.782	
20. Allow me to go out freely.			0.705	
23. Allow me to dress as I choose.			0.635	

8. Don't want me to grow up.	0.585	
9. Trying to control everything I do.	0.638	
10. Invade my privacy.	0.786	
17. Trying to make me feel like I can't leave her/him.		0.783
18. Feeling that I can't take care of myself without her(him) around.		0.686
21. Overprotective of me.	0.649	
2. Not enough help was given to me.		0.756
4. Appear emotionally cold to me.		0.631
12. Don't seem to understand what I need and what I want.		0.656
14. Makes me feel dispensable.	0.749	
22. Never compliment me.	0.509	

As seen in Tables 2-6 and 2-7, there were four factors with eigenvalues larger than 1 in both the father's and mother's versions of the scale. As seen in the two gravel plots in Figure 2-1 and Figure 2-2, there is a sharp change in eigenvalues starting with factor 1, with a significant steep slope, and after factor 4, the change in eigenvalues leveled off and no more representative factors could be extracted. This suggests that both the father's and mother's versions of the parenting style scales contain four factors. Further, from the two rotated component matrices in Table 6-8 and Table 6-9, it can be seen that in the first component of both the father's and mother's version of the scale, there are six factor loadings greater than 0.4, indicating that both components contain six questions: 1, 5, 6, 11, 15, and 16 questions. By looking at the descriptions of the questions, it is clear that they are all narratives about parents' care for their children. Therefore, they can be categorized as Factor 1 - the "caring factor". In the second component of the father's and mother's version of the scale, there were six factor loadings greater than 0.4, indicating that both components contained six questions: 3, 7, 13, 19, 20, and 23. By looking at the descriptions of the questions, it is clear that they all describe parental encouragement and the power of children to make their own decisions. Therefore, they can be unified under Factor 2 - "Encouraging Autonomy Factor". In the third component of the father's and mother's version of the scale, there are five and six factor loadings greater than 0.4, respectively, with question 18 of the father's version of the scale having a factor loading of 0.395, which is very close to 0.4. It can also be indicated that both components contain six questions: 8, 9, 10, 17, 18, and 21. By looking at the descriptions of the questions, we can learn that they all describe parental control over their children, so they can be grouped into factor three - the "control factor". In the fourth component of the father's and mother's version of the scale, the factor load of question 14 of the father's version of the scale is less than zero, which means that the question is scored in the reverse direction, and the variable should be recalculated and changed to the positive direction when analyzing the scale, so that the factor load of the fourth component of both scales is greater than 0.4 in five, that is, both components contain five questions: 2, 4, 12, 14, and 22 questions. By looking at the descriptions of the questions, we can see that they all describe parental indifference and neglect towards their children. Therefore, they can be grouped together as Factor 4 - "Indifference Rejection Factor". The above analysis shows that the theoretical structure of the Parenting Style Inventory is consistent with the correspondence of the research variables of the measurement results. It indicates that the Parenting Style Scale has good structural validity.

In a nutshell, this paper classifies parenting styles into four types - caring, indifferent and rejecting, encouraging and controlling. Generally speaking, parents with caring parenting style

are willing to communicate with their children, pay more attention to their children's life, study and emotions, and actively listen to their children's opinions and ideas. Parents with an indifferent rejectionist parenting style show little concern for their children, lack proper supervision of their children, and do not make too many demands, let their children go, and even neglect to reject their children's requests. Parents who encourage autonomy are willing to give their children some degree of autonomy, not to restrict them too much, to allow them to make their own decisions, and to encourage their children to be independent. Parents with a controlling parenting style prefer to use their power to overpower their children, forcing them to follow their parents' ideas, leaving everything up to them, and being overprotective of their children.

(3) Reliability test of the "Five Habits of Education" questionnaire

In this paper, we still use homogeneous reliability to test the reliability of the "Five Habits of Education Questionnaire", and the results of statistical analysis of the data Refer to Table 2-10 for detailed information.

Table 2-10: Homogeneous reliability of the Five Habits of Education Questionnaire

Questionnaire name	Number of items (N)	Homogeneity reliability (alpha coefficient)
Moral Habits Scale	13	0.870
Study Habit Scale	13	0.939
Physical Education Habit Scale	14	0.931
Aesthetic Habits Scale	10	0.894
Labor habit scale	15	0.951
Total table of "five education"	65	0.972

From Tables 2-10, the alpha coefficients of homogeneity of the subscales of the Five Habits of Education Questionnaire range from 0.870 to 0.951, and the alpha coefficient of homogeneity of the full scale reaches 0.972. The alpha coefficients of the five subscales and the total scale are all higher than 0.8, which meets the significance level according to the criteria suggested by Mark. The coefficients of the five subscales and the total scale were all higher than 0.8, which met the significance level and the statistical requirements of the correlation coefficient according to the criteria suggested by Mark (Mark J.B., 2007:163-171). This indicates that the reliability of the "Five Habits of Parenting Questionnaire" is good.

(4) Validity test of the "Five Habits of Education Questionnaire

In this paper, the validity of the Five Habits of Education Questionnaire was tested using the same structural validity test. The Bartlett's test and KMO test were conducted on the "Five Habits of Education Questionnaire", and the details are shown in Table 2-11. It can be seen that the chi-square value of the Bartlett's test χ^2 is 16324.996.174, and the significance level is 0.000, which is less than 0.05, and the KMO value is 0.946, which is greater than 0.8. Therefore, the "Five Parenting Habits Questionnaire" is suitable for exploratory factor analysis.

Table 2-11: KMO and Bartlett's test for the total "five parenting" table

Kaiser-Meyer-Olkin metric of sampling adequacy	0.946
Bartlett's test of sphericity	Approximate chi-square χ^2 16324.996
	Degree of freedom (df) 2080
	Significance level (sig.) 0.000

By doing exploratory factor analysis on the Five Habits of Education Questionnaire, the explained total variance and gravel plot details of the Five Habits of Education Questionnaire are shown in Table 2-12 and Figure 3.

Table 2-12: Explanation of total variance for the "Five Parenting" scale

Component	Initial eigenvalue		Rotational load sum of squares		
	Eigenvalue	Extraction (%)	Cumulative variation (%)	Eigenvalue	Extraction (%)
1	25.187	38.749	38.749	9.091	13.986
2	4.746	7.301	46.050	8.912	13.711
3	3.603	5.544	51.594	8.665	13.331
4	2.667	4.103	55.696	4.701	6.263
5	1.749	2.690	58.387	3.591	5.524

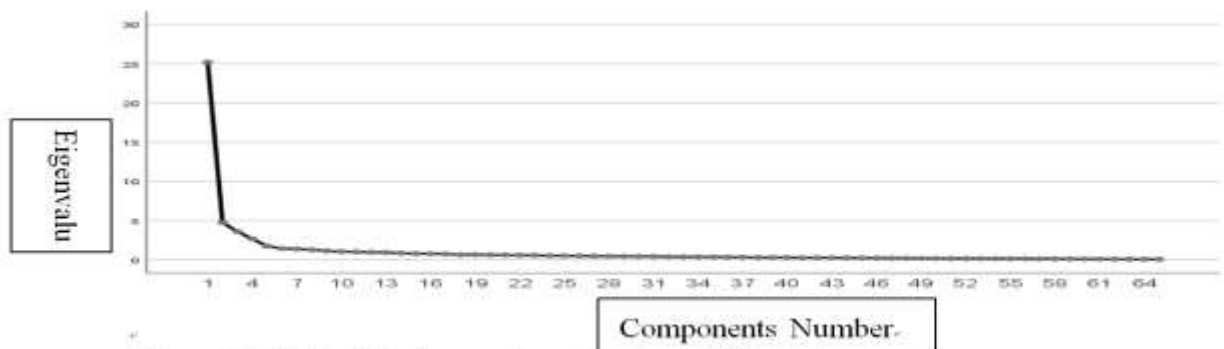


Figure 2-3: The Mipale questionnaire gravel diagram.

Table 2-12 shows that there are 5 factors with eigenvalues greater than 1. Figure 2-3 shows that the first four factors have a steep slope, and the fifth factor tends to level off, indicating that the Five Habits of Education Questionnaire consists of five factors, i.e., five subscales. This indicates that the Five Habits Questionnaire consists of five factors, i.e., five subscales. The analysis shows that the correspondence of the research variables of the measurement results is consistent with the theoretical structure of the Five Habits Questionnaire, which indicates that the scale has good validity.

3. Conclusion

The reliability and validity of the Parental Bonding Instrument (PSI) cited in this survey were good; the reliability and validity of the self-administered Mipale Habits Questionnaire (MHQ) were good. The reliability and validity of the self-administered Mipale Habits Questionnaire (MHQ) are very good. The reliability and validity of both the Parenting Style Inventory and the MIPALE Habits Questionnaire meet the measurement requirements and can be used to assess the influence of family environmental factors on the habits of upper elementary school students.

(1) Restating research questions

The main problem of this study is to test the reliability and validity of the parental Parenting styles scale (PBI) and the self-designed "five parenting" habits questionnaire (MHQ) in the application of senior primary school students, and see whether the test results of the scale meet the statistical requirements in terms of consistency, reliability and effectiveness.

(2) Summarize key findings

The key finding of this article is that the self-made 'Five Habits Questionnaire' (MHQ) has good reliability and validity.

(3) Interpret results related to previous results in a positive and negative manner; Explain why it is different or the same, as well as its contribution to the research field and explanation of the research results

The test results of parents' Parenting styles scale (PBI) are basically consistent with the research results of "the factor definition of parents' Parenting styles scale (PBI) and its related research progress" published by Sun Min and others in the Journal of Education Theory and Psychology, and Ji Hongyan's master's Thesis "The impact of parents' Parenting styles on primary school students' homework habits - taking S Primary School in Shijiazhuang City as an example". One of the main reasons is that the Parenting styles inventory (PBI) is a relatively mature scale; The second is that the age of the research subjects is basically the same. Due to the fact that the "Five Education" Habits Questionnaire (MHQ) in this article is self compiled, it is not comparable to previous research results. The contribution of this article to the research field is the development of a "Five Education" Habits Questionnaire (MHQ) with high reliability and validity, which can be promoted within a certain range. The results of this study show that the reliability and validity of the Parenting styles inventory (PBI) and the self-designed "five parenting" habits questionnaire (MHQ) meet the requirements of the scale in statistics.

(4) Acknowledging limitations

The main limitation of this article is that the representativeness of sampling is not strong, and the sample size is not very large. Because the sample is only from grades 4 to 6 of a primary school, the total number of participants is only 305.

(5) Suggestions for implementation and future research

In view of the limitations of this paper, the suggestions for future research are: sample in different regions and schools, increase the total number of subjects, so as to enhance the representativeness of the sample, and improve the External validity of the scale and questionnaire.

Finally (6) provide a conclusive summary.

The reliability and validity of the Parenting styles inventory (PBI) and the self-designed "five parenting" habits questionnaire (MHQ) meet the requirements of Surveying. It is applicable to senior primary school students and can be used to assess the impact of family environment factors on their habits to a certain extent.

4. Research recommendations

The main suggestions of this study are: on the one hand, expand the sample size, increase the representativeness of the sample, and improve the External validity of the scale and questionnaire; On the other hand, we also need to conduct item analysis on the Parenting styles scale (PBI) and the self-designed "five parenting" habits questionnaire (MHQ).

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