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ARTICLE

The Influence of Parent-Child Relationship on Pupils' Learning Motivation: The Mediating Role of Teacher-Student Relationship

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Abstract: Objective: The study is to analyze the influence of parent-child relationship on pupils' learning motivation, and to explore the mediating mechanism of teacher-student relationship in parent-child relationship and learning motivation. **Method:** This study conducted a questionnaire survey on 213 pupils in Grades 5 and 6 in two schools in Beijing using Pianta's teacher-student relationship scale revised by Qu, Dornbush's parent-child intimacy scale revised by Zhang and the learning motivation scale adapted by Hu. **Results:** Gender, grade, whether they are the only child and to be a class cadre or not show significant differences in some dimensions of parent-child relationship, teacher-student relationship and learning motivation. The total scores of parent-child relationship, teacher-student relationship and learning motivation are positively correlated, and some sub dimensions are also significantly correlated. Parent-child relationship and teacher-student relationship have a significant positive predictive effect on learning motivation, and parent-child relationship has a significant positive predictive effect on teacher-student relationship. Teacher-student relationship plays a mediating role in the influence of parent-child relationship on learning motivation. **Conclusions:** Parent-child relationship can promote the relationship between teachers and students, and then enhance pupils' learning motivation.

Keywords: Parent-Child relationship; Teacher-Student relationship; Learning motivation; Pupil

1. Introduction

Learning motivation is the inner strength that drives individuals to consciously engage in learning, to understand and transform the world and gain future development. Learning motivation can be divided into intrinsic motivation and extrinsic motivation, which is determined by the nature of learning. Learning motivation is mainly influenced by learners' own mental state, which is a tendency of power [1]. Stimulating students' learning enthusiasm through motivation can promote students to achieve their academic goals [2-4]. Learning motivation is the motivation shown in learning and related activities. Sun (2012) believes that there is a close relationship between learning motivation and learning power, which directly affects whether students can study independently

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and their enthusiasm for learning [4]. Li (2007) thinks that learning motivation is an internal initiating mechanism, which stimulates students' autonomous learning and supports students to achieve specific educational goals [5]. The survey on the learning and development of primary school students conducted by Huang (2021) shows that only 8.4% of the pupils want to go to school and are willing to learn [6]. Therefore, it is necessary to study the influencing factors of learning motivation.

Family exerts an imperceptible influence on the growth of children. The home environment is the children's first school and parents are their first teachers. Therefore, parents' behavior and intimate relationships affect their children's whole life [7]. Parent-child relationship has the most direct impact on students' learning motivation, self-efficacy and whether they are tired of learning. A good parent-child relationship can promote the harmonious coexistence between parents and children. It includes not only the attitude and behavior towards themselves and others, but also the emotions and values recognized by both parents and children [8]. Children who grow up in families with a good atmosphere and close parent-child intimacy will have more opportunities to express their opinions clearly and communicate with their parents equally [9]. However, when the family environment is unpleasant or full of conflicts, children will be rebellious: dissatisfied with their parents' criticism, punishment and the over protection of the mother, etc. If there is less communication and understanding between parents and children, or parents even do not know children's interests and friendships, it will lead to poor learning [10]. Therefore, how to improve and cultivate the parent-child relationship has become one of the concerns of the academic world.

Meanwhile, parent-child attachment plays an important role in teacher-student relationship and school adaptation. Parent-child communication has a mediating effect between teacher-student relationship, peer relationship and school adaptability, which is the mediator variable of the three [11].

Campus environment is one of the important places for students' learning and teacher-student relationship is significant in the basic social relationship of students. If the relationship between teachers and students changes, students' learning motivation will change accordingly. There is a close relationship between learning motivation and teacher-student relationship. Building up a good teacher-student relationship can bring a harmonious classroom atmosphere, make students more willing to accept new knowledge and have a stronger desire for knowledge. How to build a democratic, equal and mutual trust teaching atmosphere has become one of the concerns of educators. A good teacher-student relationship can effectively stimulate and maintain students' learning motivation, which will affect their academic performance. From the perspective of the relationship between teacher-student relationship and academic performance, the relationship will have a significant impact on students' emotion and further affect their academic performance [12]. Building a new relationship between teachers and students is an undeniable psychological phenomenon that needs to be established in reality. What we need to do now is to actively guide teachers and students in a healthy direction [13].

In this paper, a questionnaire survey was used to study the relationship between parent-child relationship, teacher-student relationship and learning motivation, in order to explore the influence of the relationships on pupils' learning motivation.

2. Materials and Methods

2.1 Participants

This study investigated 217 primary school students in Beijing. 217 questionnaires were distributed and collected in two primary schools. After screening, 4 incomplete questionnaires were eliminated, and 213 valid questionnaires were obtained.

Among them, 97 are male, accounting for 45.54%; 116 are girls, accounting for 54.46%. 109 students are in Grade 5, accounting for 51.17%; 104 students are in Grade 6, accounting for 48.83%. 114 pupils are single-child, accounting for 53.52%; 99 pupils are non-single-child, accounting for 46.48%. 119 are class cadres, accounting for 55.87%; 94 are not class cadres, accounting for 44.13%.

2.2 Methods

This study adopts the method of questionnaire. The parent-child intimacy scale, teacher-student relationship scale and learning motivation scale were distributed to two primary schools in Beijing. The pupils filled in the questionnaires by themselves, and then returned the questionnaires.

2.3 Materials

2.3.1 Student-Teacher Relationships Scale

This study adopts the teacher-student relationship scale adapted by Qu and revised according to Pianta's Student-Teacher Relationships Scale (STRS) [14]. The scale measures the teacher-student relationship in a self-report way. Positive teacher-student relationship includes 7 intimacy questions, such as "The relationship between me and my teacher is close and warm.", which are 1, 10, 12,

13, 15, 18 and 23; 4 supporting questions, such as "As long as I make progress, the teacher will praise me.", which are 3, 5, 11 and 20; 5 satisfaction questions, such as "My present relationship with my teacher is exactly what I hope.", which are 8, 16, 19, 21 and 22. The negative teacher-student relationship includes 7 conflicting questions, such as "The teacher and I always seem to struggle with each other.", which are 2, 4, 6, 7, 9, 14 and 17. The Likert 4-point scale was used, from 1 "Strongly Disagree" to 4 "Strongly Agree". The inner consistency of the scale was greater than 0.80.

2.3.2 Parent-Child Intimacy Scale

The parent-child intimacy scale adopts Dornbusch's scale revised by Zhang [15]. The scale is divided into two dimensions: the relationship between father and child, and the relationship between mother and child, with 9 questions each, such as "When you express your feelings to your father, you feel comfortable." or "When you express your feelings to your mother, you feel comfortable.". The Likert 5-point scale was used, which was 1 "never", 2 "rarely", 3 "sometimes", 4 "often" and 5 "very often". The inner consistency of the scale was greater than 0.90.

2.3.3 Learning Motivation Scale

This study adopts Hu's learning motivation scale [16]. There are 24 questions in the scale, which is divided into two dimensions: intrinsic motivation and extrinsic motivation. Among them, 1, 2, 3, 5, 7, 9, 13, 15, 19, 20, 21 and 23 are 12 items about intrinsic motivation, such as "I like learning very much and I am very involved in learning."; and 4, 6, 8, 10, 11, 12, 14, 16, 17, 18, 22 and 24 are 12 items about extrinsic motivation, such as "In order to achieve good academic performance, I will study hard even if I don't like the courses.". The Likert 6-point scale was used, from 1 "Strongly Disagree" to 6 "Strongly Agree". The inner consistency of the scale was 0.83, and the test-retest reliability was 0.81.

2.4 Statistical Method

SPSS 26.0 was used to conduct independent sample t-test, correlation analysis, regression analysis and mediating effect analysis.

3. Results

3.1 Variance Test of Demographic Variables in Parent-Child Relationship, Teacher-Student Relationship and Learning Motivation

Variance analysis was performed to show the differences of parent-child relationship, teacher-student relationship and learning motivation among students of different genders. In terms of scores of father-child intimacy, boys are significantly higher than girls.

Variance analysis was performed to show the differences of parent-child relationship, teacher-student relationship and learning motivation among students of different grades. The total scores of teacher-student relationship and learning motivation in Grade 5 were significantly lower than that in Grade 6.

Variance analysis was performed to show the differences of parent-child relationship, teacher-student relationship and learning motivation between single-child and non-single child. In terms of total score of parent-child relationship and the supporting score of teacher-student relationship, the single-child is significantly higher than the non-single child.

Variance analysis was performed to show the differences of parent-child relationship, teacher-student relationship and learning motivation among students to be a class cadre or not. In terms of total score of teacher-student relationship, intrinsic motivation score of learning motivation, and the total score of learning motivation, the scores of students who are class cadres are all significantly higher than those who are not class cadres.

3.2 Common Method Biases

The data are from the participants' self-report, so the Harman's single-factor test is used to test the common method biases. The results showed that the variance expounded by the first factor was 21.04% (<40%). That is, there was no serious common method bias.

3.3 Correlation between Parent-Child Relationship and Teacher-Student Relationship

Table 2 shows a significant correlation between all indicators (p<0.01). There was a significant negative correlation between conflicting and each indicator (p<0.01), and there was a significant positive correlation among other indicators (p<0.01).

3.4 Correlation between Parent-Child Relationship and Learning Motivation

The results in Table 3 show that except that no correlation exists between father-child intimacy and extrinsic motivation, there is a significant positive correlation among other indicators (p<0.05).

3.5 Correlation between Student-Teacher Relationship and Learning Motivation

The results in Table 4 show that except that extrinsic

Table 1. Variance test of demographic variables in parent-child relationship, teacher-student relationship and learning motivation

	Gender			Grade			The only child or not			Class cadre or not		
	Male (N=97)	Female (N=116)	*t*	Grade 5 (N=109)	Grade 6 (N=104)	*t*	single-child (N=114)	non-single-child (N=99)	*t*	class cadre (N=119)	not class cadre (N=94)	*t*
Father-child intimacy	32.67 (7.40)	29.99 (9.08)	2.370*	30.39 (7.46)	32.07 (9.33)	–1.440	32.36 (8.73)	29.89 (7.95)	2.150*	31.82 (7.86)	30.44 (9.12)	1.170
Mother-child intimacy	35.91 (6.96)	35.48 (7.81)	0.420	34.81 (6.88)	36.59 (7.88)	–1.760	36.67 (6.90)	34.54 (7.86)	2.090*	35.55 (7.49)	35.83 (7.37)	–0.270
Total score of parent-child relationship	68.58 (12.53)	65.47 (14.57)	1.650	65.20 (12.42)	68.65 (14.84)	–1.840	69.03 (13.70)	64.42 (13.43)	2.490*	67.38 (13.48)	66.27 (14.11)	0.590
Intimacy	20.44 (4.38)	20.01 (4.13)	0.740	18.85 (3.72)	21.63 (4.31)	–5.020***	20.60 (4.35)	19.76 (4.08)	1.440	21.11 (3.93)	19.06 (4.36)	3.590***
Conflicting	9.90 (3.77)	9.62 (3.20)	0.580	10.27 (3.93)	9.20 (2.82)	2.280*	9.75 (3.56)	9.75 (3.38)	–0.004	9.34 (2.76)	10.27 (4.15)	–1.870
Supporting	13.45 (2.31)	13.09 (2.52)	1.076	12.79 (2.30)	13.75 (2.47)	–2.940**	13.61 (2.29)	12.85 (2.52)	2.320*	13.58 (2.26)	12.85 (2.57)	2.200*
Satisfaction	15.79 (2.47)	15.72 (2.34)	0.211	15.26 (2.55)	16.28 (2.11)	–3.190**	16.04 (2.37)	15.42 (2.39)	1.900	16.24 (2.09)	15.15 (2.62)	3.280***
Total score of teacher-student relationship	74.79 (10.48)	74.21 (9.68)	0.424	71.63 (10.03)	77.45 (9.17)	–4.410***	75.51 (10.22)	73.28 (9.72)	1.620	76.59 (8.48)	71.80 (11.19)	3.550***
Intrinsic motivation	52.35 (7.12)	51.33 (6.50)	1.095	50.61 (7.21)	53.04 (6.12)	–2.650**	51.98 (6.82)	51.58 (6.79)	0.440	53.31 (5.27)	49.87 (7.95)	3.610***
Extrinsic motivation	50.13 (9.21)	49.72 (7.83)	0.358	47.96 (8.42)	51.94 (8.07)	–3.520***	49.90 (8.30)	49.91 (8.71)	–0.010	49.99 (8.11)	49.80 (8.94)	0.170
Total score of learning motivation	102.48 (13.91)	101.04 (11.25)	0.836	98.57 (12.37)	104.98 (11.88)	–3.860***	101.89 (12.07)	101.48 (13.08)	0.230	103.30 (10.56)	99.67 (14.44)	2.050*

Note: *p<0.05, **p<0.01, ***p<0.001.

Table 2. Correlation between parent-child relationship and teacher-student relationship

	1	2	3	4	5	6	7	8
1.Father-child intimacy	1							
2.Mother-child intimacy	0.496**	1						
3.Total score of parent-child relationship	0.883**	0.846**	1					
4.Intimacy	0.345**	0.467**	0.464**	1				
5.Conflicting	–0.241**	–0.231**	–0.273**	–0.427**	1			
6.Supporting	0.307**	0.346**	0.376**	0.571**	–0.539**	1		
7.Satisfaction	0.272**	0.268**	0.313**	0.520**	–0.476**	0.622**	1	
8.Total score of teacher-student relationship	0.368**	0.425**	0.456**	0.832**	–0.770**	0.818**	0.773**	1

Note: *p<0.05, **p<0.01.

Table 3. Correlation between parent-child relationship and learning motivation

	1	2	3	4	5	6
1.Father-child intimacy	1					
2.Mother-child intimacy	0.496**	1				
3.Total score of parent-child relationship	0.883**	0.846**	1			
4.Intrinsic motivation	0.234**	0.222**	0.264**	1		
5.Extrinsic motivation	0.094	0.168*	0.149*	0.339**	1	
6.Total score of learning motivation	0.191**	0.234**	0.244**	0.772**	0.860**	1

Note: *p<0.05, **p<0.01.

motivation has no significant correlation with conflicting, supporting, satisfaction, and the total score of teacher-student relationship, and conflicting has no significant correlation with the total score of learning motivation, other indicators all have significant correlation (p<0.05). There was a significant negative correlation between conflicting and intimacy, supporting, satisfaction, total score of student-teacher relationship and intrinsic motivation (p<0.01), and there was a significant positive correlation among other indicators (p<0.01).

3.6 The Influence of Parent-Child Relationship on Learning Motivation: Test for the Mediating Effect of Teacher-Student Relationship

Results in Table 5 show that in Equation 1, parent-child relationship positively predicts learning motivation (β=0.222, p<0.001). In Equation 2, parent-child relationship positively predicts student-teacher relationship (β=0.333, p<0.001). In Equation 3, student-teacher relationship positively predicts learning motivation (β=0.297, p<0.001), and the influence of parent-child relationship was marginal (β=0.123, p<0.067).

The main results of mediating effect analyzed by "process" plug-in [17] are shown in Table 6. The Bootstrap 95% confidence interval of indirect effect does not contain 0, which indicates that the mediating effect is established. That is, the teacher-student relationship is the mediating variable of parent-child relationship affecting learning motivation. Since the Bootstrap 95% confidence interval of the direct effect contains 0, this mediating effect is a complete mediating effect.

Table 4. Correlation between student-teacher relationship and learning motivation

	1	2	3	4	5	6	7	8
1.Intimacy	1							
2.Conflicting	–0.427**	1						
3.Supporting	0.571**	–0.539**	1					
4.Satisfaction	0.520**	–0.476**	0.622**	1				
5.Total score of student-teacher relationship	0.832**	–0.770**	0.818**	0.773**	1			
6.Intrinsic motivation	0.416**	–0.269**	0.271**	0.353**	0.418**	1		
7.Extrinsic motivation	0.172*	0.034	0.115	0.079	0.108	0.339**	1	
8.Total score of learning motivation	0.342**	–0.123	0.225**	0.245**	0.300**	0.772**	0.860**	1

Note: *p<0.05, **p<0.01.

Table 5. Mediating model analysis

	Equation 1: learning motivation		Equation 2: student-teacher relationship		Equation 3: learning motivation	
	β	t	β	t	β	t
Parent-child relationship	0.222	3.650***	0.333	7.441***	0.123	1.843
Student-teacher relationship					0.297	3.245***
R^2	0.059***		0.208***		0.104***	
ΔR^2	0.055***		0.204***		0.096***	

Table 6. Test for the mediating effect

	Effect	Boot SE	Boot LLCI	Boot ULCI
Total effect	0.222	0.065	0.095	0.350
Direct effect	0.123	0.079	–0.032	0.278
Indirect effect	0.099	0.045	0.019	0.201

4. Discussion

4.1 Differences of Demographic Variables in Various Indicators

The father-child intimacy scores of boys are significantly higher than that of girls. Because the participants of the survey are in Grade 5 and Grade 6, as the senior students in primary school, boys tend to communicate more with their father on topics that men are more concerned about. Therefore, boys show a closer relationship with their father than girls.

The total scores of teacher-student relationship and learning motivation in Grade 5 were significantly lower than that in Grade 6. The Grade 6 is about to be promoted to the junior high school. With the expectation of academic performance, the learning motivation will be improved.

In terms of total score of parent-child relationship and the supporting score of teacher-student relationship, the single child is significantly higher than the non-single child. The only child gets all the love from his parents, and the parent-child relationship is relatively good, which may affect their perception of teachers' support.

In terms of total score of teacher-student relationship, intrinsic motivation score of learning motivation, and the total score of learning motivation, the scores of students who are class cadres are all significantly higher than those who are not class cadres. Students who are class cadres get more attention from teachers, so the teacher-student relationship and learning motivation are significantly higher than those who are not class cadres. In the primary schools, teachers can let more students serve as class cadres and provide positive guidance in order to promote the relationship between teachers and students and enhance students' learning motivation.

4.2 Correlations among Parent-Child Relationship, Teacher-Student Relationship and Learning Motivation

There was a significant correlation between parent-child relationship and teacher-student relationship ($p<0.01$): a significant negative correlation between conflicting and other indicators ($p<0.01$), and a significant positive correlation among other indicators ($p<0.01$). Pupils show consistency in their relationships with their parents and teachers.

In the relationship between parent-child relationship and learning motivation, except that there was no correlation between parent-child intimacy and external motivation, there was a significant positive correlation among other indicators ($p<0.05$). Father-child relationship was significantly correlated with internal motivation ($p<0.01$), but not with external motivation; Compared with the correlation with external motivation ($p<0.05$), the correlation between the mother-child relationship, total score of parent-child relationship and internal motivation are higher ($p<0.01$). In general, the better the parent-child relationship, the higher the learning motivation and vice versa.

In the relationship between student-teacher relationship and learning motivation, except that extrinsic motivation has no significant correlation with conflicting, supporting, satisfaction, and the total score of teacher-student relationship, and conflicting has no significant correlation with the total score of learning motivation, other indicators all have significant correlation ($p<0.05$). There was a significant negative correlation between conflicting and intimacy, supporting, satisfaction, total score of student-teacher relationship and intrinsic motivation ($p<0.01$), and there was a significant positive correlation among other indicators ($p<0.01$). From the results, there is a significant positive correlation between the teacher-student relationship and intrinsic motivation, the total score of motivation; Except the intimacy is significantly related to external motivation ($p<0.05$), other dimensions and total scores of teacher-student relationship are not related to external motivation. In general, the better the teacher-student relationship, the higher the motivation and vice versa.

4.3 The Influence of Parent-Child Relationship on Learning Motivation: The Mediating Role of Teacher-Student Relationship

Regression analysis shows that parent-child relationship significantly has a positive predictive effect on learning motivation and teacher-student relationship, and teacher-student relationship has a positive predictive effect on learning motivation. The communication and cooperation between family and school can enhance the parent-child intimacy, and effectively promote teacher-student relationship and learning motivation. At the same time, by improving the relationship between teachers and students, the learning motivation can be enhanced.

The mediating effect analysis shows that the teacher-student relationship plays a complete mediating role in the influence of parent-child relationship on learning motivation. Parent-child relationship affects the learning mo-

tivation by influencing the relationship between teachers and students. From this point, it is important to enhance the parent-child intimacy.

The relationship between family and school is one of the most basic and important social relationships in building a harmonious teacher-student relationship, and exerts an imperceptible influence on students. If parents have any complaint of teachers, it will directly or indirectly affect the formation of pupils' target-orientation motivation [18]. Therefore, schools need to build a good communication mechanism to enhance parent-child relationship and stimulate students' learning motivation. For teachers, in addition to the "hard power" of teaching ability, it's essential to pay attention to "soft power" of establishing a good teacher-student relationship and effectively avoiding the conflict between teachers and students, which have a great impact on the growth and development of primary school students.

4.4 Research Limitations and Prospects

The proportion of single-child in this study is 53.52%. In terms of the total score of parent-child relationship and the supporting score of teacher-student relationship, single-child is significantly higher than non-single-child. After the abolition of the single-child policy in China, as well as in countries that have not implemented the single-child policy in the world, it is necessary to conduct further research in order to test the similarities and differences of the research results.

The specific function direction of parent-child relationship and teacher-student relationship is also a subject worthy of further study. The following can be discussed by cross-lag analysis.

5. Conclusions

Through the research on the relationship between parent-child relationship, teacher-student relationship and learning motivation of pupils, the following conclusions can be drawn:

(1) The parent-child relationship of primary school students has a significant positive predictive effect on learning motivation.

(2) The teacher-student relationship of primary school students has a significant positive predictive effect on learning motivation.

(3) Parent-child relationship can promote the relationship between teachers and students, and then enhance pupils' learning motivation.

Declaration

We confirm that neither the manuscript nor any significant part of it is under consideration for publication elsewhere or has appeared elsewhere in a manner that could be construed as a prior or duplication of the same work.

Conflict of Interest

There is no conflict of interest.

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Contributorship

Yuzhu Ren: Responsible for literature review, data collection, data analysis and thesis writing.

Shixiang Liu: Responsible for overall design and thesis writing.

Informed Consent

We confirm that written consent was obtained from all participants prior to the study.

References

[1] Chu, D.S., 2017. Pay attention to motivation: stimulate students' internal drive in mathematics learning. Primary School Teaching Research. (4), 16-19.

[2] Kelly, R., 2010. Using Microlectures to Improve Your Online Courses. Online Classroom. 3, 1-5.

[3] Xu, X.J., 2006. The advantages, present situation and Countermeasures of multimedia teaching. China Science and Technology Information. (1), 267, 271.

[4] Sun, L.L., 2012. Research on the present situation and Countermeasures of pupils' mathematics learning motivation. Changchun: Northeast Normal University.
DOI: https://doi.org/CNKI:CDMD:2.1013.142988

[5] Li, Y.X., 2007. Reliability and validity of learning motivation scale among junior middle school students. Changsha: Hunan Normal University.
DOI: https://doi.org/10.7666/d.y1310208

[6] Huang, A.H., 2021. The practice of stimulating pupils' learning motivation. Guangxi Education. (17), 11-12.

[7] Guo, Q.Q., 2020. The relationship between parental education and learning motivation of primary school children. Fuzhou: Fujian Normal University. DOI: https://doi.org/10.27019/d.cnki.gfjsu.2020.001755

[8] Chen, J.Y., 2018. The relationship between parent-child relationship and school adaptability of left behind children: the intermediary role of psychological elasticity. Changsha: Hunan Normal University. DOI: https://doi.org/CNKI:CDMD:2.1018.164405

[9] Ding, X., 2020. Research on the relationship between problem behaviors of high-level primary school students and parental rearing patterns and parent-child relationships. Chongqing: Southwest University. DOI: https://doi.org/10.27684/d.cnki.gxndx.2020.004368

[10] Chen, X.N., 2009. Study on primary school students' learning burnout and its relationship with parent-child relationship. Suzhou: Suzhou University. DOI: https://doi.org/10.7666/d.y1467668

[11] Tian, H.X., 2020. The relationship between teacher-student relationship, peer relationship and school adaptation of junior middle school students. Chengdu: Sichuan Normal University. DOI: https://doi.org/10.27347/d.cnki.gssdu.2020.000753

[12] Ma, Q.Y., 2017. The influence of teacher-student relationship on pupils' learning delay: the mediating effect of learning emotion. Ningbo: Ningbo University. DOI: https://doi.org/CNKI:CDMD:2.1017.871450

[13] Liu, H.Y., 2021. Research on the construction of a new type of teacher-student relationship in Health Vocational Colleges -- Based on the perspective of positive psychology. Journal of Hubei Open Vocational College. 34(11), 52-53.

[14] Qu, Zh.Y., 2002. Characteristics of class environment in primary and secondary schools and its relationship with students' school adaptation. Beijing: Beijing Normal University. (In Chinese).

[15] Buchanan, C.M., Maccoby, E.E., Dornbusch, S.M., 1991. Caught between parents: adolescents' experience in divorced homes. Child Development. 62(5), 1008-1029.

[16] Hu, Y.Zh., 2018. Research on the influence of iPad panoramic classroom teaching on pupils' learning motivation, peer relationship and academic performance. Shenzhen: Shenzhen University. DOI: https://doi.org/10.27321/d.cnki.gszdu.2018.000006

[17] Qu, M.M., 2020. The relationship between parents' academic expectation perception, teachers' expectation perception, achievement goal orientation and academic possible self of middle school students and its educational implications. Kaifeng: Henan University. DOI: https://doi.org/10.27114/d.cnki.ghnau.2020.000579

[18] Alyagon, M., 2011. Adolescents' subtypes of attachment security with fathers and mothers and self-perceptions of socio-emotional adjustment. Psychology. 2(4), 291-299.