A Study on the Current Problems and Countermeasures of Home Online Education on Parent-child Relationship of Junior High School Students

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Abstract

Parent-child relationship issues of middle school students are important issues that affect their individual physical and mental development. As a result of the COVID-19, large-scale online education is taking place across the country. To understand the parent-child relationship status of junior high school students in the home online education environment, this study conducted an empirical investigation on junior high school students and their parents. The results of the study showed that the parent-child relationship of middle school students in the home online education environment changed significantly under the influence of various factors, including parent-child time, parent-child communication and interaction, parents' tendency to care, parents' guidance and assistance to their children, and children's learning status. It is expected that the research study will propose empirical-based countermeasures for educational administrators, teachers, parents, students, and other practice subjects, to promote a healthier and more harmonious development of parent-child relationships among junior high school students.

Keywords

Online education; Learning at home; Middle school students; Parent-child relationship.

1. Presenting the Problems

The issue of the parent-child relationship among middle school students has been a focal point in adolescent development, and it is an important stage in the transition of individuals from childhood to adulthood [1]. It is a critical issue that affects the physical and mental development of junior high school students and the overall development of individuals [2]. In response to the call of the Ministry of Education to "Stopping classes but not stopping learning" due to the COVID-19 [3], primary and secondary schools in various regions have started online education, insisting on the combination of online teaching by teachers and independent learning by students at home to promote the overall development of students' knowledge, physical, and mental health. In the context of the shift from physical school teaching and student classroom learning to online teaching and student home learning, the learning environment of junior high school students has become more closely connected to the family, and the influence of online education on family parent-child relationships plays an important role in the healthy growth of adolescents. This study aims to clarify the current problems and influencing factors of parent-child relationships among junior high school students in the home online education environment and to propose effective strategies to improve parent-child relationships among junior high school students in a targeted manner.

2. Design of the Study

2.1. Purpose of the study

A survey was conducted on junior high school students and their parents to understand the current situation, problems, and influencing factors of the parent-child relationship in the home online education environment, to analyze and describe the parent-child relationship of junior high school students in the home online education environment from multiple perspectives, and to suggest specific suggestions for the harmonious development of the parent-child relationship.

2.2. Research Content

This study focuses on the parent-child relationship of junior high school students. The study focuses on eight dimensions: time spent together, parenting style, relationship status, interaction, tendency to care, learning status, communication, and facilitation factors to understand the parent-child relationship in the home online education environment. The parent-child relationship questionnaire was distributed to junior high school students and their parents to understand the current parent-child relationship status and problems, and then analyze the factors affecting parent-child relationship from the perspective of students and parents respectively, and finally propose strategies and suggestions to improve the parent-child relationship of junior high school students based on the research results.

2.3. Research Methodology

According to the topic, purpose, content, and characteristics of the research subjects, two research methods, the literature method, and questionnaire method were used in this study.

2.3.1. Literature Method

At present, domestic and foreign research results on the parent-child relationship are relatively fruitful. Through collecting and reading a large amount of literature related to parent-child relationship in education and psychology, we can understand the current research progress and research methods on the parent-child relationship through collation, identification, and analysis, and form a theoretical and scientific understanding so as to guide the smooth conduct of this study.

2.3.2. Questionnaire method

This study also used a combination of online and offline questionnaires, with electronic questionnaires randomly distributed to middle school students and their parents online and paper questionnaires distributed to middle school students and their parents offline through field visits to schools and contacting teachers.

3. Research Results and Analysis

In this study, the following findings were obtained by administering parent-child relationship questionnaires to junior high school students and their parents separately and using SPSS19.0 to quantitatively analyze the data obtained.

3.1. Sample Characteristics

In this study, students and their parents in the first, second and third grades of junior high school were selected as the subjects, and parent-child relationship questionnaires were distributed to students and parents respectively. Among them, 350 student questionnaires were distributed, and 348 valid questionnaires were returned, with a return rate of 99.4%; 220 parent questionnaires were distributed, and 210 valid questionnaires were returned, with a

return rate of 95.4%. The basic information of the surveyed students and parents is shown in Table 1 and Table 2.

Table 1. Basic information of students

Projects	Type	Number of people (person)	Percentage (%)
Gender	Male	169	48.6
	Female	179	51.4
Grade	First Year	148	42.5
	Second year	98	28.2
	Junior year	102	29.3
Place of residence	Rural	219	62.9
	County, City	129	37.1

According to the data in Table 1, among the 348 students tested, 48.6% were male and 51.4% were female; 21.3% were only children and 78.7% were non-only children; 42.5% were in the first year of junior high school, 28.2% were in the second year of junior high school, and 29.3% were in the third year of junior high school; 62.9% were in rural areas and 37.1% were in the county.

Table 2. Basic parental information

Projects	Type	Number of people (person)	Percentage (%)
Child's Grade	First Year	74	35.2
	Second year	69	32.9
	Junior year	67	31.9
Child's Gender	Male	93	45.2
	Female	115	54.8
Place of residence	Rural	138	65.7
	County, City	72	34.3
Place of residence	Authoritative	66	31.4
	Indulgent	21	10.0
	Democratic	123	58.6

According to the data in Table 2, it can be seen that among the 210 parents of students surveyed, 35.2% of parents' children were in the first year of junior high school, 32.9% of parents' children were in the second year of junior high school, and 31. 9% of parents' children were in the third year of junior high school; among the parents surveyed, 45.2% of parents' children were boys and 54.8% of parents' children were girls; the place of residence was mostly rural, reaching 65.7%, and 34.3% in county and city; in terms of parenting style, 31.4% of parents are authoritative, 10.0% are permissive, and 58.6% are democratic.

3.2. Current Status of Parent-child Relationship Among Middle School Students

3.2.1. Time spent together

By investigating the time spent with parents and parent-child relationship status in school and home online learning environments, we compared and analyzed the parent-child relationship status and change patterns of junior high school students in the two learning environments.

For the parent-child time situation, the question "How much time do you spend with your parents or children on average every day during school study?" was set for students and parents respectively. "How much time do you spend with your parents or children on average every day during your home study period? Two questions. Five options were created, depending on the degree to which the parents and students' circumstances matched the program descriptions. 1 point for "less than 1 hour", 2 points for "1-2 hours", 3 points for "2-3 hours", 4 points for "3-4 hours 4 points for "more than 4 hours" and 5 points for "more than 4 hours". The mean (theoretically 3.0 for a five-level scale) and standard deviation analysis of the time spent between parents and children in two different environments is shown in Table 3.

Table 3. Daily time spent with their parents

	While studying at school	Home Online Learning Period
Average value	2.79	3.06
Standard deviation	1.392	1.423
Number of cases	558	558

According to the data in Table 3, it can be seen that among the 558 valid subjects, their standard deviations are small, the difference status between different students and parents is small, and the mean value can better reflect the trend of the variables. The mean value of the score of parent-child time during school study was 2.79; the mean value of the score of parent-child time during home online study was 3.06, and the parent-child time during home online learning increased significantly compared with the parent-child time during school study.

3.2.2. Relationship Change

The parent-child relationship status of middle school students in both school-based and home-based online learning environments is shown in Table 4.

Table 4. Parent-child relationship status

Projects	Type	Number of people (person)		Percentage (%)	
		Students	Parent	Students	Parent
While studying at school	Very good	127	90	36.5	42.9
	better	105	63	30.2	30.0
	General	81	49	23.3	23.3
	Not so good	19	8	5.5	3.8
	Very bad	16	0	4.6	0.0
During home online learning	Become much better	89	70	25.6	33.3
	Became a little better	98	69	28.2	32.9
	No change	114	37	32.8	17.6
	Got a little worse	17	13	4.9	6.2
	Got much worse	30	21	8.6	10.0

According to the data in Table 4, it can be seen that among the surveyed students and parents, the relationship between most of them and their parents is relatively good during the school study period, more than 60% of them think the parent-child relationship is good or better, more than 20% of them think the parent-child relationship is average, meanwhile, a small number of them think the parent-child relationship is not so good or very bad. During the home online

learning period, more than 50% of students and parents thought the parent-child relationship had become better, 32.8% thought the relationship with their parents had not changed, 17.6% thought the relationship with their children had not changed, and more than 10% thought the parent-child relationship had become worse.

After a brief analysis of the parent-child relationship status of middle school students in both settings, a further chi-square analysis was conducted on the parent-child relationship status and relationship change status of middle school students in both school and home settings with respect to the demographic variables of parents, and the results are shown in Table 5.

Table 5. Frequency and consistency test results under cross-grouping

Projects	Child's Gender		Child's Grade			Place of residence		Parenting Style		
	Male	Female	First Year	Second year	Junior year	Rural	Count, City	Authoritative	Indulgent	Democratic
While studying at school	value=28.719 df=3 P=0.000		value=25.968 df=6 P=0.000			value=13.667 df=3 P=0.003		value=11.349 df=6 P=0.078		
During home online learning	value=5.057 df=4 P=0.282		value=60.612 df=8 P=0.000			value=20.406 df=4 P=0.000		value=27.107 df=8 P=0.001		

From the above table, it can be seen that the chi-square test p-value of child's gender is 0.000<0.05, which indicates that child's gender has an effect on parent-child relationship, and girls have better relationship with their parents than boys; in addition, the chi-square test p-value of child's grade and place of residence is also less than 0.05, which indicates that child's grade and place of residence have an effect on parent-child relationship; there is no significant association between parenting style and parent-child relationship. There was no difference between the child's gender and the change of parent-child relationship during the family online learning period, and the p-value of the chi-square test for the child's grade, place of residence, and parenting style was less than 0.05, so all three had an effect on the change of parent-child relationship.

3.3. Factors Influencing the Parent-child Relationship

After understanding the time spent with junior high school students and their parents and the changing status of their relationship, the factors influencing the parent-child relationship of junior high school students in a home-based online learning environment were further investigated. Ten questions were designed to cover four dimensions: communication and interaction, caring tendencies, guidance and help, and learning status. Each question was preceded by the phrase "during home online learning", and four standardized options were created depending on the degree to which the parents' and students' own situations matched the item descriptions. A score of 1 was given for "totally disagree", 2 for "not really agree", 3 for "basically agree", and 4 for "totally agree "4 points. The mean(theoretically 2.5 on a four-level scale)and standard deviation analyses of factors influencing parent-child relationships between parents and children in a home-based online learning environment were conducted, and the results are shown in Table 6.

According to the data in the table 6, it is clear that among the valid subjects, the mean values of both parent and student scores in all aspects are greater than 2.5, and the mean values of parent scores in all aspects are higher than the mean values of student scores in all aspects.

On the dimension of communication and interaction, the mean difference between students' and parents' scores on the question of "spending more time together and communicating more" is not significant, indicating that parents and children spend more time together in the online learning environment at home, which to a certain extent facilitates communication between parents and children. There are some differences between students' and parents' opinions on

the questions of "Online courses allow more parent-child interaction" and "Parents respect their children's opinions when disagreements arise", with parents agreeing more on these two questions than students.

Table 6. Factors influencing the parent-child relationship

Project Dimension	Projects	average value		Standard deviation	
		Students	Parent	Students	Parent
Communication and Interaction	Spending more time together and communicating more	2.97	3.01	0.843	0.888
	Online courses allow more parent-child interaction with each other	2.87	3.10	0.922	0.812
	When disagreements arise, parents respect their children's views	2.81	3.15	0.950	0.867
Tendency to Care	Parents give more attention to their children in life	3.12	3.32	0.884	0.683
	Parents care more about their children's spiritual life than their academic performance	2.86	3.10	0.958	0.785
	Parents learn more about and meet the needs of their children in all areas	3.17	3.37	0.844	0.666
Guidance and Help	Parents give their children more help with their studies	2.86	3.09	0.867	0.810
	Advice for parents to help their children in both school and life	3.17	3.31	0.886	0.723
Study Status	The child has a positive attitude and is motivated to learn	2.98	3.05	0.787	0.714
	Children are able to arrange their study and recreation time rationally	2.98	3.18	0.848	0.716

In terms of the tendency to care, both students and parents agreed more on the questions "Parents should care more about their children's lives "and" Parents should understand and meet their children's needs more". On the other hand, there is a difference between parents' and students' agreement on the question of "parents care more about their children's spiritual life rather than their academic performance", and in general, parents agree more than students.

On the guidance and help dimension, both parents and students agree more, saying that the home online learning environment gives parents more help in their children's life and study.

On the learning status dimension, both parents and students agree more, with students mostly believing that they have a positive attitude and are motivated to learn in the home online learning environment, and that they can reasonably arrange their study and entertainment time. Parents are generally satisfied with their children's online learning at home.

To further explore strategies for improving parent-child relationships among middle school students, four multiple-choice questions were set for students and parents, respectively. The aim was to understand parents' tendency to care, ways to mediate conflicts between parents and children, difficulties in getting along with parents and children, and ways to help promote parent-child relationships in a home-based online learning environment. Multiple response analysis was conducted on the data, and the results are shown in Table 7.

Table 7. Results of multiple responses

Projects	Type	Students			Parent		
		Response			Response		
		N	Percentage (%)	Percentage of cases (%)	N	Percentage (%)	Percentage of cases (%)
What parents care more about their children	Learning	269	29.6	77.3	161	27.7	76.7
	Socializing	113	12.4	32.5	56	9.6	26.7
	Physical Health	253	27.8	72.7	162	27.8	77.1
	Mental Health	152	16.7	43.7	136	23.4	64.8
	Hobbies and Interests	123	13.5	35.3	67	11.5	31.9
The way to mediate conflicts	Negotiating calmly to solve the problem	190	33.1	54.6	114	36.3	54.3
	Heated arguments	60	10.5	17.2	25	8.0	11.9
	Cold war	88	15.3	25.3	24	7.6	11.4
	Communication by text message, telephone	58	10.1	16.7	35	11.1	16.7
	Mediation through others	71	12.4	20.4	31	9.9	14.8
	Basically no conflict	107	18.6	30.7	85	27.1	40.5
Difficulties in parent-child relationship	Parents are too busy, lack of companionship	132	21.6	38.0	102	30.6	50.7
	No common topics, little communication	151	24.7	43.5	70	21.0	34.8
	generation gap, unable to understand	162	26.5	46.7	89	26.7	44.3
	Expect too much from children	22	15.7	27.7	22	6.6	10.9
	Can't help children solve their study problems	70	11.5	20.2	50	15.0	24.9
Ways to promote parent-child relationship	Communicate more and understand needs	208	22.9	59.8	131	23.8	62.7
	Spend time with your child	149	16.4	42.8	102	18.5	48.8
	Give your child more personal space	172	18.9	49.4	116	21.1	55.5
	Respect your child's wishes and do not force them	212	23.3	60.9	121	22.0	57.9
	Support your child's hobbies and interests	167	18.4	48.0	80	14.5	38.3

According to the data in Table 7, it can be seen that in the process of home network learning, both students and parents think that parents care more about their children's study and physical health, and relatively less about their children's socializing. In terms of conflicts, there are a variety of ways to mediate between parents and children, while some respondents said that conflicts between parents and children basically do not occur. In terms of difficulties in getting along between parents and children, "parents are too busy to spend time with their children", "no common topics and lack of communication" and "generation gap in thinking and cannot understand each other" are problems that many students have when they get along with their parents. In addition, "parents are too demanding of their children" and "parents cannot help their children with their study problems" are also problems that junior high school

students have when they get along with their children. Finally, regarding the ways to promote parent-child relationship, more than half of the students and parents agreed that "parents communicate more with their children and parents understand more about their children's needs" and "respect more the children's wishes and do not force them" are effective ways to promote parent-child relationship. In addition, "parents should study and play more with their children", "parents should give their children more private space" and "parents should support their children's hobbies" were also recognized by most students and parents.

4. Research Conclusion and Countermeasure Suggestions

Through the survey research and data analysis, this study obtained the following research findings, and based on the findings, several suggestions for improving parent-child relationships among middle school students were made for different subjects.

4.1. Research Findings

4.1.1. The Parent-child Relationship Status of Middle School Students During Their Study in School Is Good, but There Are Still Some Problems

The results of the study on the parent-child relationship of junior high school students during their study period showed that the parent-child relationship of junior high school students during their study period was generally optimistic, and more than half of the respondents said that the relationship between parents and children was good. But at the same time, there are also a small number of people who think that the parent-child relationship is not very good or very bad, and there are some problems.

4.1.2. In-home Online Education Has An Impact on the Parent-Child Relationship of Junior High School Students, and the Facilitation Effect Is More Obvious

Some studies have shown that the changes in the parent-child relationship in junior high school are specifically manifested in the decreasing trend of the parent-child relationship closeness among junior high school students, changes in the parent-child attachment behavior, and junior high school students' preference to spend more time with peers and less time with their parents and reluctance to communicate with them[4]. By investigating and comparing the time spent between parents and children in two different environments of junior high school students studying at school and studying at home, it was found that the time spent between parents and children during home online learning increased significantly compared to that during school study. By investigating the changes in the parent-child relationship in the home online learning environment, it was found that home online learning affected the development of the parent-child relationship of junior high school students to a certain extent, and a small number of students and parents reported that parent-child relationship had become worse during home online learning. At the same time, more than half of the students and parents reported that the parent-child relationship had become better as a result of online learning at home. The overall effect on the parent-child relationship was positive.

4.1.3. The Factors That Influence the Parent-child Relationship of Home Online Education on Middle School Students Are Manifested in Several Aspects

Through further research, in general, there are many factors that influence the parent-child relationship of junior high school students in the home online education environment, such as the increase of parent-child time and the online curriculum brought about by home study further promote the communication and interaction between parents and children; the degree of parents' understanding and concern for children's needs in the home environment also determines the parent-child relationship to a certain extent; the home online learning environment allows parents to participate more in and understand their children's learning life and provide guidance and assistance to them, which also contributes to the development of the

parent-child relationship. At the same time, the emotional instability between parents and children, the lack of timely communication between home and school, and the disagreement between parents and children about the use of electronic devices in the home online education environment also hinder the development of the parent-child relationship in junior high school to a certain extent. In general, the factors that affect the parent-child relationship in the home online education environment are divided into two aspects: facilitating factors and hindering factors.

4.2. Suggestions for Countermeasures

4.2.1. Educational Administrators and Teachers

This large-scale family network education has put forward new requirements for both education administrators and teachers. In order to promote the positive development of parent-child relationships among junior high school students in the family network education environment, firstly, for education administrators, the rationality of online life and recorded curriculum should be fully considered, and each school should develop learning plan arrangements with school characteristics according to the actual situation[5]; at the same time, the characteristics of the family network education environment and the psychological development characteristics of junior high school students should be combined to set curriculum structure; it should also fully consider the online education teaching plan and carry out certain professional training for online education for front-line teachers. For front-line teachers, teachers should contact parents closely, ensure parent-child time, communicate with parents about students' situation in a timely manner, and set up some special family practice activities and parent-child interaction activities in combination with the family environment[6]. Provide more favorable conditions for students and parents to get along with each other.

4.2.2. Parent

During the period of home-based online education, most parents also delayed their start of work due to the epidemic, and some even lost their jobs and stayed at home. On the one hand, the anxiety of parents experiencing great stress may affect their children[7]; on the other hand, it provides time and opportunity to promote the parent-child relationship. In order to enhance parent-child relationship, it requires parents to spend more time with their children, find common topics with them, understand and try to meet their children's reasonable needs[8]; try to understand their children, not to expect too much from them, but to guide and help them to set goals and make reasonable plans in the light of their children's actual situation; parents should also play the role of role model, avoid passing negative emotions to their children, actively lead their children to study and think, and provide favorable suggestions for their children's life and study as much as possible, create a good family atmosphere, and provide a good learning environment for their children; when conflicts occur between parents and children, they should try to find a way to reconcile the problem that is easy for their children to accept; at the same time, parents should give their children some private space and time, respect their children's wishes, support their children's interests, and promote their all-round development.

4.2.3. Students

For students, in the environment of home online education, they should manage and plan their time well; cooperate well with parents, teachers, and schools, and actively participate in online and offline teaching activities; take the initiative to discuss and communicate with parents and teachers when they encounter problems; when conflicts occur, negotiate patiently with parents to solve the problems; grasp the time to use electronic devices for online entertainment and spend more time with parents[9]. At the same time, they should also be more understanding

and grateful for their parents' concern and try to form a harmonious and harmonious relationship with them.

5. Concluding Remarks

At present, the large-scale home-based online education has gradually returned to the offline education model with the effective control of the epidemic, and the resumption of work and production is steadily taking place, and many parents have returned to their jobs. However, the impact of online education at home on the parent-child relationship of middle school students is still worth further consideration. Both students and parents should actively play the favorable factors that promote the development of the parent-child relationship in the home online education environment and avoid the unfavorable factors that hinder the healthy development of the parent-child relationship, so as to promote the more healthy and harmonious development of parent-child relationship for middle school students.

Acknowledgments

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