

Parent's Involvement in Homework: The Effects of Parental Reactions to Pupils' Emotions on Academic Performance

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Abstract. In recent years, the Ministry of Education of the People's Republic of China has implemented a "double reduction" policy to reduce the burdens of pupils from homework. However, the pupils still have to face great pressure from homework unavoidably due to the increasingly fierce competition and parents' anxiety about children's education. For parents, accompanying their children's homework is not only an obligation but also a challenge, which has attracted more and more social attention. Generally, it is anticipated that there are several advantages if the parents can accompany their children when they are doing their homework. First, it can help form a good family learning atmosphere and imperceptibly affect children's learning attitude. Second, parents can provide targeted guidance according to the needs of children, correct their homework mistakes in time, and improve the completion degree and quality of homework, thus possibly improving the academic performance of the pupils. However, practical problems also exist when parents accompany their children to do their homework, including poor accompanying quality, negligence of children's negative emotions, over-strong purpose, and lack of in-depth emotional communication. In particular, parents' emotional responses can indirectly affect children's academic performance by influencing their emotional regulation ability. In this work, we suggest that the parents respond to the children's negative emotions in a supportive manner during the process of homework. That is, the parents can try to reduce the utilitarian nature of accompanying homework and strengthen the emotional communication. In such a way, they can regard the accompanying homework as a participation in the growth of a period of life to effectively alleviate the anxiety brought by the accompanying.

Keywords: Parental emotional reactions, homework companion, academic achievement.

1. Introduction

On July 24, 2021, the General Office of the CPC Central Committee and the General Office of the State Council of China issued Opinions on Further Reducing the Homework Burden of Students in the Compulsory Education Stage and the Burden of Off-campus Training to reduce the homework burden of students in the compulsory education stage. However, until today if you ask an elementary or middle school student what they would most like to be rewarded for, I guess most of them will still say that they do not want to have their homework. In the File, the previous written homework for grades 1 and 2 has been changed to oral homework and practice homework, which includes reading Chinese, math, English, gymnastics, training jumping rope, and so on. For pupils of grade 3 and above, their teachers often tend to assign some homework in a so-called "voluntary completion" mode. It is still a mandatory task in a more practical way. In addition, the parents often push their children to attend a variety of interest-oriented training classes. Thus, the homework burden of primary school students in compulsory education has not been reduced. With the development of information technology, some new requirements have been given during the homework of primary school students, such as video production, PPT presentation, album integration, questionnaire survey, etc. Each type of homework consumes a lot of energy for students and their parents.

The homework for primary school students is not only heavy but also difficult. Thus, homework companionship has become an important task for most parents after their work. However, the feeling of homework accompanying most parents is not good, and sometimes even terrible [1]. In the process of homework companionship, the parents can exert some corporal punishment on their children if the children perform badly and arouse their parents' severe anxiety. In addition, the news has reported

some unfortunate incidents for the parents during homework companion such as sudden diseases or heart strokes caused by extreme anger. There are also many jokes and stories about homework companions on the Internet. Therefore, homework companionship has become a kind of torture and practice for all parents. Although the parents have spent most of their off-work time accompanying their children's homework, most of their children's academic performance is still not ideal, and some children even lose their interest and motivation in learning. As a result, parents' efforts are now prominent to contradict their children's academic performance.

The efforts do not always bring the expected results. Many factors can affect the efficiency of homework companions. Among them, the parents' emotional response is an important content of homework companionship and a key factor affecting the efficiency of homework companionship. Good homework companionship and supportive emotional responses from parents can improve homework completion rates, reduce homework problems, and probably improve pupils' academic performance [2], and vice versa. Previous studies have shown that if parents only help their children finish their homework, the impact of parents' involvement on students' academic performance is weakest [3]. This also reflects from another side that during homework companion if parents only focus on the homework and grades, the final result will be poor. Some research findings disclose that during homework companionship, the mothers should support the adolescents' learning and inspire their motivation in a more optimized way [4]. Herein, it should be noted that the more optimized approach also includes the parental emotional responses in this study.

The parents' emotional response is an aspect of their emotional socialization. Previous research mainly focused on the impact of parents' emotional socialization on their children's emotional social ability. They do not involve the impact of parents' emotional responses on pupils' academic performance in the specific context of homework companionship. This study first attempts to analyze the current problems of homework companionship, and then gives suggestions to the parents with grade anxiety during homework accompanying. This work tries to guide the parents to pay more attention to their emotional reactions in the process of homework accompanying, to alleviate the unnecessary anxiety of companionship.

2. The Current Situation of Parents Accompanying Primary School Students to Complete Homework

2.1. Support System Provided by Parents in Homework for Elementary School Students

It is normal for Chinese parents to accompany primary school students to do their homework. In December 2017, the artificial intelligence education platform "Afan" released the Internet education big data report "Homework Pressure Report of Primary and secondary school students in China", revealing that nearly 80% of parents accompany their children to do homework every day. Parents not only accompany their children to do homework but also help do homework for their children sometimes. "The 'game' of summer's homework has become a home field for parents," said a news report on Chinanews.com [5]. Primary school students, especially those in grades one and two, are in the transition period of using pen and paper for learning. Thus, these pupils have not yet developed a conscious learning habit and correct learning attitude. Parents accompany their children to do homework, which is conducive to improving the efficiency and quality of their children's homework, keeping up with the rhythm of classroom learning, and realizing the role transition from preschool children to primary school students as soon as possible. In the middle and higher grades of primary school, the learning content and difficulty are increased, and parents can allocate timely according to the needs of their children, carry out targeted guidance, timely detection and correction of mistakes, and help children better understand and grasp the learning content. Empirical research has confirmed that the homework accompanying parents can effectively help their children to finish their homework in time with high quality [6].

In addition, it is generally recognized that the environment has a great impact on education. In ancient China, there is a famous story about education that is called "Meng's mother moved three

times". When parents accompany their children to do their homework, sometimes they even do not need to provide direct guidance. Instead, they just read books gently next to the children. In such a way it can also be conducive to promoting the students' learning because it creates a good family learning environment for the children. Such a family education environment can thus subtly affect their children's learning attitudes, habits, and behaviors.

2.2. The Dilemma of Parents Accompanying Study

Recent studies have verified that parents' accompanying homework can positively impact children's physical and mental health development and homework completion results. However, these researches mainly focused on whether parents accompanied the children when they were doing homework. The accompanying means and quality, on the other way, were largely overlooked. Currently, parents' accompanying homework faces a major problem of lack of accompanying quality as will be discussed in the following.

First, the parents can ignore their children's negative emotions. At the moment when a child sits down at his/her desk after school to do homework, he/she may have negative emotions. Such feelings can be caused by either frustration or sadness from unpleasant things that occurred at school, or fear from homework that is too difficult. However, the parents sometimes fail to encourage the expression of emotions and provide emotional comfort, thus ignoring the children's feelings. Second, the homework accompanied by parents can be purpose-oriented. Some studies have demonstrated that 79.2% of parents choose "for the stability and improvement of children's grades" as the main purpose of companionship [7]. Third, there is a lack of deep emotional communication during the homework companion. In recent years, various companionships, including parenting companionship, entertainment companionship, and homework companionship have become a new family ethic. If the parents cannot accompany their children to do these things, they might be supposed to be incompetent and irresponsible to their children. It is generally believed that parents who failed to fulfill their duty of companionship would regret for life due to the loss of precious companionship time even though they had achieved high personal achievements in their careers. So sometimes the parents who accompany the homework feel that they are morally kidnapped to some extent. In addition, due to the fierce social competition and high work pressure, parents have to invest a lot of time and energy in their work, and thus have little time left to accompany their children's homework. Thus, the parents often have a feeling of "falling into a time shortage" [8]. Parents fulfill the responsibility of companionship because of responsibility, but can lack positive and in-depth emotional communication due to the time shortage.

3. The Influence Mechanism of Parents' Emotional Reactions on Children's Academic Performance

3.1. Parents' Emotional Reactions

Parents' emotional response is an aspect of parents' emotional socialization, which refers to parents' real-time response attitude and behavior in the face of children's random emotional expression in daily life [9]. Nancy Eisenberg's team divided parental emotional responses into supportive and non-supportive responses. Parents' supportive emotional responses include Expressive Encouragement, Emotion-Focused Reactions, and Problem-Focused responses. Parents' unsupportive emotional Responses include Punitive Responses, Minimization Responses, and Distress Reactions [10].

Parents' emotional response can be used as an adhesive of the parent-child relationship to enhance emotional connection. On the other hand, it can also be used as a barrier to the parent-child relationship, causing children to distrust and alienate their parents. When a child has negative emotions, some parents take the opportunity to preach, ignore, and deny the child's feelings, or even let the child to learn a lesson through ridicule. This can make the child feel very disappointed lays a

hidden danger for the parent-child relationship, adolescent rebellion, and even causes a pathological personality teenager [11].

Compared with material conditions, the supportive emotional responses and emotional value that the parents can provide to the children are a more valuable resource, which is conducive to building a good parent-child relationship, making children feel more secure, belonging, and happy, and helping children learn. The moment a child finishes the school day and sits down at his desk to do his homework may carry negative emotions. In addition, some unpleasant things that happen in the school could cause depression and sadness. Sometimes, difficult homework can bring fear feelings to the children. Note that all these negative emotions will affect the children's learning efficiency and parents' companionship efficiency. In the process of accompanying the homework, parents can encourage the children to express their feelings, comfort the children's emotions, and discuss countermeasures with the children. These warm and supportive emotional responses can make the children come out from the negative emotions as soon as possible and devote themselves to learning. On the contrary, some parents deny, ignore the children's negative emotions, and only focus on tutoring homework. In such cases, most of the children's attention is focused on emotional pain, and there are not many cognitive resources and attention resources for learning, so it is rather difficult to obtain a good homework companion effect.

3.2. The Effects of Parents' Emotional Reactions on Children's Self-Regulation

The influence of parents' emotional responses on children's and adolescents' emotional regulation has been studied in foreign countries. In a review article entitled "The Role of the Family Context in the Development of Emotion," the authors reviewed the current literature on the relationship between components of the family environment and emotional regulation (ER) in children and adolescents. They argued that parenting practices related to emotion and emotion management, as well as the emotional climate of the family, could influence emotional regulation [12]. Different parental emotional responses have different effects on children's self-emotional regulation. Parents' unsupportive emotional responses were associated with lower levels of emotional regulation skills and greater use of maladaptive emotional regulation strategies in children in adulthood, while parents' use of supportive emotional responses was associated with higher levels of emotional regulation skills and greater use of adaptive emotional regulation strategies [13]. The mother's supportive response positively predicts the child's emotional regulation ability, while the non-supportive response negatively predicts the child's emotional ability, and this predictive power remains significant after controlling the children's gender [14].

When parents accompany their children in the process of writing homework, the more they try to eliminate their children's negative emotions by ignoring or negating them, the easier it is for their children's emotions to be over-wakened. The children's emotion is like a strong elephant, the parents are like the person who rides on the elephant, the more they want to tame it, the more the elephant rebels, the disparity in strength between people and elephants, the parents' neglect and denial are doomed to destroy the children's emotion. Another phenomenon also attracts people's attention. When the children write slowly and make many mistakes in their homework, the parents can easily lose their temper. They scold the child, frightening them and destroying the precious parent-child relationship. Therefore, in the process of accompanying homework, if parents adopt non-supportive emotional reactions such as punishment and neglect the children's needs, then it cannot improve children's self-regulation ability when writing homework.

3.3. The Effects of Children's Self-Regulation on Their Academic Performance

Pupils' self-regulation is very important for their academic performance. Some studies have proved that students with strong self-regulation ability have higher math and reading scores [15]. On the contrary, some pupils have poor self-regulation ability, they tend to express negative emotions, and thus have poor academic performance [16]. Therefore, programs aimed at improving self-regulation

skills and enhancing early academic abilities may be the most effective way to help children succeed in school [17].

Children's emotional regulation ability is a kind of non-cognitive ability, but it is closely related to academic performance. First of all, the ability that children to regulate and control emotions is conducive to building good teacher-student and student-student relationships. Children can feel the love and support of teachers from the interaction between teachers and students, and feel the fun of school life from the cooperative learning with classmates in class and the games and activities after class, which are all conducive to promoting learning. Secondly, the ability that children to regulate and control emotions is conducive to overcoming learning difficulties and enhancing learning self-efficacy. When facing learning challenges, children with strong self-regulation ability will not give up, and instead try different strategies to solve problems. In such cases, advanced cognitive ability and creativity can be stimulated as a result.

To sum up, self-regulation plays a mediating role between parents' emotional responses and academic performance. Specifically, parents' supportive emotional response can promote pupils' academic performance by promoting self-regulation, while non-supportive emotional response can impede pupils' academic performance by hindering their self-regulation.

4. Suggestion for Parents Involvement in Primary School Students' Homework

4.1. Supportive Responses to Children's Negative Emotions

The brains of elementary school students are still immature, and the limbic system of the brain does not match well with the neural networks of the prefrontal cortex. The limbic system, which is responsible for emotional activation and activation, develops much faster than the frontal lobe (the control system in the brain), especially the prefrontal cortex. Therefore, primary school students cannot effectively regulate emotions, and these negative emotions will affect children's learning efficiency and parents' companionship efficiency.

Psychologist Crick once said that it is possible to make high-level explanations of our perception, thinking, and behavior only after truly understanding the working principles of the brain [18]. In the process of accompanying homework, parents should first pay attention to their children's emotional state. Then they can take supportive responses and adopt strategies such as encouraging expression, emotional attention, and problem concern to help their children to maximize positive emotions and minimize negative emotions.

First, parents can listen quietly and intently to their children. Listening is the best communication. When parents listen quietly and attentively, children will have the feelings of being seen, respected, and recognized. Then they can feel relieved in the talk. Second, parents can use some simple words like "Oh..." "Well..." "Oh..." etc. as a simple response to express their care for their children's feelings. When children have negative emotions, what they need most is understanding and acceptance from their parents. Thus the parents should respond sincerely to their children, and give their children a sense of security. Third, parents should avoid asking questions and giving advice to their children when they are emotional. Emotions can affect cognition, and the higher the level of activation of negative emotions, the worse the effect of cognitive activities. The physiological structure of the brain determines that children are unable to complete high-level cognitive activities such as analyzing problems and accepting suggestions under emotional storms [19].

4.2. Avoid a Utilitarian Mentality When Accompanying Children to Complete Homework

There is a famous saying in China that says "Books have their own Yan Ruyu, books have their own gold house". Indeed, in China, countless people change their fate, and even their whole family's fate through the imperial examination (in ancient times) or college entrance examination. Therefore, there is an increasing of utilitarian tendency in learning. Similarly, many parents face short-sighted, utilitarian problems when they accompany their children's homework. For example, in the process of accompanying homework, a child's wrong topic can sometimes initiate the anxiety mode. First, the

parents think the wrong topics mean that the children have loopholes in their learning. Then, the parents are worried that their children will have low test scores. Next, they are anxious that their children are unable to go to top universities. Finally, they believe that it is difficult for their children to find a good job in the future. In addition, a child's dawdling behavior can trigger a similar domino effect of worry.

However, the accompanying homework is not like a short-term stock trading, the effect is not immediate. Also, the homework is not a college entrance examination where academic performance is the only measure. In the process of accompanying homework, parents should pay more attention to cultivating children's learning habits and attitudes, and help children master efficient learning methods. As the saying goes: If you bloom, butterflies will come. When children have good learning habits and attitudes, and master efficient learning methods, and then they can have good academic performance naturally as well. Without the utilitarian homework, it is like the spring breeze drizzle, the process is slow, and the child's good learning habits and learning attitude have been growing quietly.

In addition, the guiding role of society and school in family education should be strengthened. From the social level, the government should set up a special guidance institution for family education. At the school level, schools should hold regular lectures and invite experts to impart professional educational concepts. Through the guidance of society and school, parents' educational ability and cognitive ability can be greatly improved. Then the parents can deeply realize that homework companionship is not "only high-score theory", but a starting point to help children develop emotions, experience, and knowledge.

4.3. Strengthen the Emotional Communication between Parents and Children

In the process of homework companionship, parent-child's effective communication will not waste homework time, but instead, it can improve work efficiency and academic performance. According to Matthew D. Lieberman, founder of social cognitive neuroscience, the need for social interaction is even greater than the need for food and warmth. Our need for social connection is extremely strong and continues throughout our lives [20]. It's human nature for children to be more interested in emotionally connecting with their parents than in homework. Asking them to focus all their attention on their homework and not talk to their parents about topics unrelated to their studies has little difference from asking a hungry person not to develop a desire to eat food. In the process of homework, if parents can respond to children's emotions in a supportive way, and strengthen the emotional communication between parents and children, then the children will feel that they are cared for by parents, loved by parents, and accepted by parents. In such cases, an intimate social connection can be established between children and their parents. This good feeling can improve learning efficiency, because positive emotions can improve working memory ability. According to neurologist Greg Ashby, when you feel good, dopamine is released in the ventral tegmental area in the brain stem, and dopamine enters the ventral striatum and the lateral prefrontal cortex, which is responsible for cognitive function, and becomes more active [21].

5. Conclusion

Companionship is the longest love confession. Because parents love their children, they are willing to sacrifice their own entertainment time to accompany their children to enhance the parent-child relationship and bring children's physical and mental health growth. Specific to homework, when parents accompany primary school students to write homework, children can feel the care and support from parents. Thus, the children will have more strength to climb the book mountain and do canoe learning. Companionship can also help form a good family learning atmosphere, imperceptibly affecting the children's learning attitude. It can provide targeted guidance according to the needs of children and correct mistakes in time as well as improve the completion rate and quality of homework. Thus, it may improve the academic performance of primary school students. However, due to the

fierce competition in all walks of life, parents are under great pressure from work, and have less energy and way to learn professional parenting knowledge. Thus parents have to face practical problems such as poor quality of companionship, such as ignoring children's negative emotions, strong utilitarian companionship, and lack of in-depth emotional communication. In particular, the emotional response of parents, that is, the sensitivity, acceptance, and guidance of parents to themselves and their children's emotions, indirectly affects their children's academic performance by affecting their emotional regulation ability. The author herein suggests that parents should listen to their children's expressions or even vent their emotions quietly and intently during the homework process, and respond to their children's negative emotions with simple and warm language, accepting and understanding their children. In addition, the parents should try to avoid the utilitarianism of companionship. Instead, they should regard accompanying homework as participating in the growth of children. In such a way, the parents can see the gradual progress of their children in academic performance. Meantime, the parent-child emotional communication can be strengthened and the parent-child relationship can be improved. As a result, the learning anxiety can be largely relieved. In the future, the empirical further in-depth research on the influence of parents' emotional responses on pupils' academic performance is necessary from both theory and experimentation.

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