Influence of Parenting Style, Teacher Support and Academic Self-efficacy on Academic Achievement

Beijia Wang^{1,a,*}

¹College of Life Sciences, Shanghai Normal University, Shanghai, 201418, China a. 1910841235@mail.sit.edu.cn *corresponding author

Abstract: There is no doubt that academic achievement (AA) plays an undeniable important role in students' personal growth, social position and career development. Throughout history, the influencing factors of AA have always been a topic of common concern in the field of education internationally. Previous studies have shown that parenting style (PS), teacher support (TS), and academic self-efficacy (AS) all have significant total influences on AA. The aim of this study is to summarize the methods and results of some relevant researches on the impact of PS on AA, the impact of TS on AA, and the impact of AS on AA. This study concludes that PS, TS and AS are all positively related to AA. This study further analyzes the characteristics, advantages as well as shortcomings of the existing researches, provides some suggestions for improving academic achievements based on this, and looks forward to the future of academic achievement research.

Keywords: academic achievement, parenting style, teacher support, academic self-efficacy

1. Introduction

Academic achievement (AA) mainly refers to the achievements and performance of students in the learning process, including academic performance, academic activities and research experience, etc. it can reflect students' learning ability, academic literacy, innovation ability, and comprehensive quality, and are important indicators to measure students' academic level and career development potential. Undoubtedly, AA is an important and relatively fair measurement standard for students, and therefore receives joint attention from parents, teachers and students themselves.

So far, there have been many studies aimed at analyzing the factors that affect AA. For example, some studies proposed that parenting style (PS) had a significant positive impact on AA. Other researches found that teacher support (TS) can affect students' AA positively to a large extent. In addition, it is shown by some studies that there is a positive correlation between academic self-efficacy (AS) and AA. The definitions and influences of these three factors will be detailed in the following chapters.

The purpose of this study is to explore the impact of PS, TS and AS on AA through the analysis of previous studies, and to provide suggestions on how to achieve higher AA.

^{© 2023} The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

2. Impact of PS on AA

2.1. Definition of PS

PS refers to the relatively stable educational behavior exhibited by parents during the education process, which is difficult to be changed [1].

PS can be simply divided into positive PS and negative PS [2]. Positive PS usually provides children with physiological and psychological care, warmth, understanding, and trust. These behaviors can make children feel love and respect, providing good conditions for their physical and mental health development. On the contrary, negative PS mainly refer to refusal of children's demands, denial of behavior, interference in life and learning, and over protection. These behaviors may lead to children's poor metal health and intense relationships with their parents.

According to Baumrind, PS are categorized into authoritative, authoritarian and permissive, which is the most widely accepted classification method. Further research has found that different PS have a significant impact on children's social development and personality formation, with children who receive authoritative PS having better social and cognitive development than those who grow up under the other two PS.

In addition, many scholars have also classified PS. Researchers have proposed different types of PS based on their respective perspectives.

2.2. Evidence from Empirical Studies

Several studies have shown that PS can affect students' AA to a large extent.

For example, Bai used a questionnaire to investigate a sample of 508 senior high school students [3]. The PS questionnaire used by the research institute was divided into three dimensions: refusal, emotional warmth, and over protection. From the results, it could be seen that emotional warmth is significantly positively correlated with students' AA, while refusal and over protection are significantly negatively correlated with students' AA. This study further examined the mediating role of achievement motivation between the two variables. It concluded that PS has a direct impact on students' AA, and can also indirectly affect students' AA by influencing their achievement motivation.

A study conducted by Hou has also shown the close relationship between PS and AA [4]. The study chose 1200 primary school as participants, and the questionnaire used also included the same three dimensions. This study proposed that PS affected children's AA by influencing their learning habits. Among them, the more parents adopt the emotional warmth PS, the better the learning habits of primary school students, and they will also have better AA. However, when using negative PS, the situation is different. Although both parents' refusal behavior could lead to poor AA, a mother's over protection leads to better AA, while a father's experience is the opposite.

Furthermore, Li studied a sample of 400 high school students and reached similar conclusions [5]. Besides achievement motivation, this study also found that high school students' subjective well-being plays a mediating role in the relationship between PS and AA, and has the largest effect between positive PS and AA. To be specific, the higher the level of warmth and the more understanding children experience in their daily lives, the less rebellious their emotions are, and their AA will correspondingly improve. On the contrary, if parents refuse, deny or severely punish their children, it will be a negative impact on their children's self-awareness. As they tend to lack confidence and avoid problems, their AA will be low.

However, despite the significant impact of PS on AA, there are non-ignorable differences in PS between the West and the East families. Therefore, cultural background should be taken into account to draw more comprehensive conclusions. Moreover, some scholars have proposed that family

education is a two-way interactive process. Children's AA also has a significant impact on PS, providing new directions for future research.

2.3. Analysis of the above Empirical Studies

Previous researches have shown that PS has a significant impact on students' AA.

On the one hand, PS can affect their children's learning attitude and motivation. If parents can give their children sufficient attention and support, encourage them to actively participate in learning activities, and help them establish correct learning methods and habits, their children's AA may be improved. On the contrary, if parents are indifferent or too strict with their children's academic performance, they may develop a negative attitude towards learning, lack confidence and motivation, and thus affect AA.

On the other hand, PS can also affect their children's emotional state and mental health. If parents can provide emotional support and encouragement to help their children establish a positive emotional state and self-confidence, their children's AA can be improved. On the contrary, if parents often criticize or overemphasize academic performance, children may experience anxiety, stress, and negative emotions, which can affect their AA.

3. Impact of TS on AA

3.1. Definition of TS

TS refers to students' perception of teachers' behavioral attitude to them in daily school learning [6]. It can be further divided into three aspects: knowledge, ability and emotional.

Knowledge support refers to students' perception that teachers provide them with sufficient support and autonomy in assigning academic tasks, selecting learning content, and problem-solving methods to enhance their enthusiasm for learning. Ability support refers to a teacher's educational and teaching abilities, including the mastery of professional knowledge and teaching to students. Emotional support refers to the positive attention and care provided by teachers to students, as well as emotional counseling, to promote the development of non-intellectual factors in students.

In conclusion, TS can be considered as a collection of various resources provided by teachers, which can help students achieve certain academic goals. It has a significant impact on students' cognitive and emotional development.

3.2. Evidence from Empirical Studies

Several studies have shown that there is a positive correlation between TS and students' AA.

For instance, Ouyang used a questionnaire of teachers' supporting behavior to students and students' perception to teachers' supporting to investigate a sample of 364 students in primary school [7]. The questions involved knowledge support, ability support and emotional support. The score would be scored from 1 to 6, ranging from completely non-compliant to fully compliant. The higher the score, the more students perceived the support provided by the teacher in various aspects. The study found that students who received more TS had significantly better academic performance than students who received less TS. This study further suggested that students' perception of TS as a mediating factor between academic performance and teachers' expectations, which refers to a certain predictive cognition of behavioral outcomes generated by teachers based on their understanding of students. According to the research, TS can indirectly guide students to evaluate their learning abilities, form a certain academic self-concept, and thus affect their AA.

A study conducted by Chen has also shown the close relationship between the two variables [6]. The sample consisted of 450 junior high school students, and they were investigated about their

perception of TS and their academic performance in mathematic. The research indicated that to a large extent, junior high school students experience a high level of TS for their abilities, learning, and emotions, especially in terms of ability. The higher the level of support, the better their AA will be. This study further suggested that TS can enhance students' own learning engagement and their sense of self-efficacy, which can act as mediating variables between TS and AA.

What's more, An, Yu and Xi studied a sample of 497 middle school students from three junior high schools, and proved the indirect relationship between TS and AA as well [8]. They also found a significant positive correlation between TS and AA, but it required positive emotions and learning engagement as mediators between these two variables. To be specific, the authors believed that TS could boost students' positive emotions, enhance their engagement in learning, encourage them to work hard to mater more learning skills and content, and eventually improve their AA.

In summary, although empirical studies have yielded valuable insights into the relationship between TS and AA, further research is needed to fully elucidate its potential mechanisms of action.

3.3. Analysis of the above Empirical Studies

Existing research has demonstrated the positive effect of TS on students' AA. There are two different ways for this positive impact: direct and indirect.

The direct impact of TS on students' AA is significant. Firstly, TS can help students better understand and master knowledge. Teachers can help students understand complex concepts and theories through various teaching methods and strategies, such as explanation, demonstration, discussion, etc., in order to improve their AA. Secondly, TS can provide students with a better learning environment and resources. Teachers can create better learning conditions for students by organizing various learning activities, providing learning materials and tools, and thereby helping them gain better AA.

On the other hand, the indirect impact of TS on students' AA is relatively complex, requiring other factors as mediators, such as students' positive emotions, achievement goals and learning engagement. Students' perception of TS can enhance their learning motivation and self-confidence. When feeling the care and support of teachers, the students will develop a stronger interest in learning, participate more actively in their study, thus increase their learning efficiency, and finally achieve better academic performance. Furthermore, according to the Pygmalion effect states, when students receive support from their teachers, they tend to set higher goals, and make more effort to accomplish them, which can also lead to their better AA.

4. Impact of AS on AA

4.1. Definition of AS

Bandura defined self-efficacy as an individual's expectation of whether they have the ability to operate in a specific context [9]. It refers to the individual's judgment of the level at which they can complete a certain behavioral activity before performing it.

AS refers to students' belief in their behavioral ability to successfully complete their studies [10]. It can be further divided into two types: learning ability self-efficacy and learning behavior self-efficacy. Researches have shown that students with high AS often attribute their success to their own efforts and abilities, while those with low AS tend to attribute their success to other uncontrollable factors, such as luck.

4.2. Evidence from Empirical Studies

Several studies have shown that there is a positive correlation between students' AS and their AA.

For instance, Luo used a questionnaire to investigate a sample of 1158 college students [11]. The AS questionnaire consists of two dimensions: learning ability AS and learning behavior AS. The higher the score, the higher the self-efficacy. The AS score of students was calculated by adding the scores of the two dimensions. The study found that AS and AA is significantly and positively associated with each other, and further proposed that learning engagement played the mediating role of between the two variables. High AS can lead to high learning engagement, and eventually contribute to good AA; whereas the converse is also true. In summary, AS can influence AA in both direct and indirect ways.

Zuo did a similar research on a sample of 384 junior high school students and also found the significant positive correlation between AS and AA [10]. With learning ability AS and learning behavior AS being measured, the study proposed that AS is a good predictor of AA. In addition, the study found that learning motivation can be one of the outcomes of AS and have an impact on AA. The study further suggested that AS and learning motivation are sometimes complementary factors, synergistically affecting AA.

In addition, academic efficacy can also act as a mediator between TS and AA, which is consistent with some studies mentioned in 3.2. for instance, Liang studied a sample of 651 university students by measuring TS, AS and AA [12]. The correlation analysis showed that AS significantly mediated the effects of TS and AA. The study proposed that although TS did not have direct influences on students' AA, it influenced AS positively instead.

Furthermore, it is worth mentioning that academic performance also has a significant impact on self-efficacy. Students with better AA usually have more confidence because they have achieved success in their studies, which enhances their sense of AS. This provides direction fir future studies.

4.3. Analysis of the above Empirical Studies

It can be concluded from empirical studies that AS has a significant impact on AA.

Firstly, AS can affect students' learning motivation. Students with a strong sense of AS will face learning tasks more confidently, become more engaged in learning, and thus improve learning motivation. On the contrary, students with weak AS often feel powerless to face learning tasks and have lower learning motivation.

Secondly, AS can affect students' learning strategies. Students with strong AS tend to be more willing to try new learning strategies and are more likely to adopt effective learning strategies, thereby improving learning efficiency and AA. On the contrary, students with weak AS are more willing to adopt familiar learning strategies and are unwilling to try new learning strategies, which can do bad to their AA.

Last but not least, AS can also affect students' thinking patterns and thus influence their AA. Students with strong AS tend to imagine successful activity scenes, therefore they will adopt more proactive actions to complete learning tasks. By contrast, students with low AS tend to construct failure scenarios and overly consider failure events, which poses an obstacle to their learning behavior.

5. Conclusion

This study has found that PS, TS, and AS all have an impact on AA.

PS has a significant positive impact on students' AA. Positive PS can promote children's interest and motivation in learning, which is beneficial for improving their AA. In contrast, negative PS may lead to a lack of attention and support for children, leading to poor AA. With the development of society, many parents have realized the importance of educating their children through various methods. But in reality, there are still many overprotective and rejected parenting methods. In order

for children to achieve higher AA, parents should use more encouraging words to give their children confidence.

TS is also one of the important factors that affect students' AA. Teachers can help students improve their AA by providing guidance and support. When teachers are able to pay attention to students' needs and provide appropriate support, students' AA may be improved. Therefore, in order to enable students to achieve higher AA, teachers should fully play their leading role in the teaching process. For example, teachers should create a relaxed and harmonious classroom environment for students, fully stimulate their initiative, give them sufficient thinking time when assigning tasks, and actively care for them in both learning and life.

AS is also positively correlated with students' AA. Students with high self-efficacy are more likely to actively face learning challenges and achieve better AA. On the contrary, students with low self-efficacy may lack confidence and easily give up when facing difficulties.

These factors interact with each other and collectively affect students' AA. For example, both TS and PS may affect students' self-efficacy, further affecting their AA. Therefore, in order to improve students' AA, it is necessary to comprehensively consider these factors and take corresponding measures. Meanwhile, due to the fact that existing research mostly selected students of a certain age group as participants, future research can choose to compare students of different age groups and find out whether the impact of PS, TS, or AS on AA varies among different age groups.

References

- [1] Li Dezhen (2021). The influence of PS and self-control on autonomous learning and academic achievement (Master's thesis, Central China Normal University)
- [2] Xu Hongyue (2019). A Study of PSs and Academic Motivation on Academic Achievement among Junior High School Students (Master's thesis, Jilin University)
- [3] Bai Honghong (2017). Junior high school students PSs achievement motivation and Research on the relationship between academic achievement (Master's thesis, Hebei University)
- [4] Hou Yongxia (2022). Research on the Impact of Family PSs to Academic Performance of Primary School Students: Using Study Habits as Mediating Variables (Master's thesis, Huabei Normal University)
- [5] Li Xiao (2022). The Influence of Family PSs on Academic Performance: The Mediating Role of Subjective Well-Being and Motivation for Achievement (Master's thesis, Henan University)
- [6] Chen Jing (2023). Research on the Impact of Perceived Teacher Support on Mathematics Learning Performance of Junior High School Students (Master's Thesis, Gannan Normal University)
- [7] Ouyang Dan (2005). A Research on the Relation among Teachers' Expectation, Self- conception of students' academic achievement, Students' Perception of Teacher's Behavioral supporting and the Study Achievement (Master's Thesis, Guangxi Normal University)
- [8] Fuhai An, Jingyi Yu, Linjin X (2023). Relations between perceived teacher support and academic achievement: positive emotions and learning engagement as mediators, Current Psychology 2023: 42:26672–26682
- [9] Ning Liangqiang (2009). Vocational College Students' Academic Self-Efficacy, Learning Motivation and its relationgship with Academic Performance (Master's thesis, Shandong Normal University)
- [10] Zuobin, Tan Yali (2002). Research on the Achievement Goal Orientation and Personality Characteristics of Novice Proficient and Expert Teachers (04), 24-27+46
- [11] Qin Luo, Lunchao Chen, Dongfang Yu, Ke Zhang (2023). The Mediating Role of Learning Engagement Between Self-Efficacy and Academic Achievement Among Chinese College Students, Psychology Research and Behavior Management 2023:16 1533–1543
- [12] Huang, L.; Wang, D. (2023). Teacher Support, Academic Self-Efficacy, Student Engagement, and Academic Achievement in Emergency Online Learning. Behav. Sci. 2023, 13, 704. https://doi.org/10.3390/bs13090704