

THE RELATIONSHIP BETWEEN SENIOR PRIMARY SCHOOL STUDENTS' PERCEIVED TEACHER-STUDENT RELATIONSHIP AND LEARNING MOTIVATION IN ZHENGZHOU, HENAN PROVINCE, CHINA

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Abstract: This study used 223 valid questionnaires from senior primary school students in Zhengzhou City, Henan Province, as sample data. The effective return rate reached 98.67%. SPSS 26.0 statistical software was used to analyze data processing, to verify the structural validity of the research tool, descriptive statistics, t-test or one-way ANOVA analysis were used to explain the difference statistical research results, and Pearson correlation analysis was used to conduct statistical research on the correlation between students' perceived teacher-student relationship and learning motivation. The research conclusions obtained from its data analysis were as follows: The proportion of attachment type, intimacy type, conflict type, and avoidance type in the teacher-student relationship was 26%, 35%, 14%, and 25%, respectively. The learning motivation was moderate, with achievement motivation being the highest and deep motivation being the lowest. There were significant differences in senior primary school students' learning motivation with different demographic backgrounds (whether to serve as class cadre or not, gender, teacher-student relationship types). There was a positive correlation between attachment type, intimate type and learning motivation, and a negative correlation between conflict type, avoidance type and learning motivation.

Keywords: Senior Primary School Students, Perceived Teacher-Student Relationship, Learning Motivation

Introduction

On a global scale, people's attention to primary education was gradually increasing (Liu, 2019). UNICEF and other international organizations repeatedly emphasized the critical role of primary education in achieving the goal of global education equity and sustainable development (Lu et al., 2022). Governments of various countries and regions also issued policies, hoping to improve the investment and quality of primary education and create a better learning environment and conditions for children. It was increasingly recognized that primary school was the critical stage of children's

development, and this stage of education had a far-reaching impact on children's cognitive, social, emotional, and moral development. It was the beginning of children's primary education and a critical period for developing essential skills and qualities. A high-quality primary education could provide children with a solid foundation of knowledge and skills, stimulating interest in learning, self-efficacy, and self-esteem (Guo, 2022).

In primary school, the role of teachers was significant as the teachers needed to create a positive, caring, and supportive learning environment to meet the needs of each child and unleash potential. Primary school students' psychological and emotional development was susceptible and active, and learning motivation and interest depended on their relationship with teachers to a great extent. A good teacher-student relationship was beneficial for improving learning motivation and academic record (Ge, 2022). Most of the time, primary school students' learning motivation was not spontaneous, but teachers had to guide and stimulate it through appropriate teaching strategies (Li, 2023).

Learning motivation was seen as a complex psychological structure influenced by many factors. The teachers' teaching behavior and attitude were among the most critical factors. For example, teacher expectations, evaluations, feedback, and other behaviors could all affect students' learning motivation (Sun, 2018). In addition, factors such as the difficulty of teaching content, students' learning experience, and learning environment also significantly impacted learning motivation. Learning motivation was the internal driving force that promoted students' learning, which was related to students' learning attitudes, learning input, and even academic records (Lu, 2022). Especially in primary school, students' motivation profoundly impacted learning paths and outcomes. Due to the psychological characteristics and cognitive level of primary school students, they were often susceptible to teachers' emotional and behavioral responses. Therefore, teachers could play an essential role in guiding the learning motivation of primary school students.

Therefore, helping primary school teachers manage relationships with students and improve learning motivation through good teacher-student relationships was an essential topic in current educational research. In this context, this study would explore the relationship between primary school teacher-student relationship and student learning motivation. It was hoped that through the in-depth analysis of this issue, the research could reveal the internal relationship between them, which was conducive to enriching and deepening the understanding of primary education and providing new perspectives and ideas for academic circles. This study offered powerful empirical support for primary education practice, helped schools and teachers manage and guide students more effectively, and optimized educational methods and strategies to stimulate students' enthusiasm and improve learning effectiveness. Finally, it promoted the development of academic theory and practice, contributed to building a more just and effective education system, and cultivated more outstanding talents.

Research Objectives

(1) To understand current senior primary school students', perceive the teacher-student relationship and learning motivation.

(2) To analyze the differences in senior primary school students' learning motivation with different demographic backgrounds (whether to serve as class cadre or not, gender, teacher-student relationship types).

(3) To determine the correlation between senior primary school students' perceived teacher-student relationship and learning motivation.

Literature Review

Research on the Teacher-Student Relationship

The definition of teacher-student relationship was more often interpreted from the perspectives of psychology and interpersonal relationships. For example, Zhan & Le (2004) defined the teacher-student relationship as a broad interpersonal relationship involving students and teachers. In addition, A positive teacher-student relationship helped to increase students' emotional connection and sense of security. In addition, Pollock (2021) believed that the characteristics of the interpersonal relationship lay not only in the quality of interaction between the two parties but also in one person's perception and inner feelings towards another person, such as a sense of belonging, trust, and connection. The teacher-student relationship was a distinctive interpersonal teacher-student relationship.

In addition, Jing (2023) pointed out that from the education perspective, the teacher-student relationship was a two-way intentional relationship. That was, teachers wanted students to learn and grow in the knowledge taught by teachers, whereas students needed feedback on the desire to enjoy learning from teachers. This conclusion also verified the research results of Wang (2022), who believed that the teacher-student relationship was the link between students and teachers to exchange emotions, ideas, and information in class, which affected the cultivation of students' literacy and ability.

The measurement of the teacher-student relationship was of great significance for studying the teacher-student relationship. Shen (1990) studied the new teacher-student relationship theory from three perspectives: teaching, emotion, and ethics. Jia (1993) thought teachers were an important external factor affecting students' learning enthusiasm, attitude, and academic achievement. Li (1998) analyzed the conceptual basis for constructing an excellent teacher-student relationship from four perspectives: the modern humanistic view, the educational view, the teacher view, and the student view. Zhang (2001) believed interaction was an effective way for students to acquire and apply knowledge and skills.

Ling (2010) analyzed the current situation of the teacher-student relationship in Chinese universities, attempting to establish a harmonious teacher-student relationship by utilizing the psychological education function of implicit curriculum. Research on the teacher-student relationship

was generally analyzed from a disciplinary perspective. Chinese scholars explored the teacher-student relationship from the perspective of interactive communication and the aspects of emotions, learning, and language.

This study investigated teachers' influence on the teacher-student relationship regarding personality traits, educational and teaching abilities, and attitudes toward student communication. Starting from the good external image of teachers, Yu (2012) studied the role of teacher image in teacher-student relationship. They found that an excellent external image of teachers could create a harmonious psychological environment and promote the development of educational and teaching work.

Zhu & Xiao (2011) comprehensively summarized the characteristics of teachers, believing that personality traits, charisma, comprehensive abilities, and behavioral styles all affect the quality of teacher-student relationship. Ye & Gao (2021) thought that teacher accessibility was an essential prerequisite for the smooth establishment of teacher-student relationship and an essential component of such relationships. Through interviews with primary school students, Liu (2023) found that students prefer teachers who understand and tolerate students and could deal with conflicts appropriately.

At the same time, Li & Liu (2007) found that students with learning difficulties have a significant positive correlation with negative teacher-student relationship from the perspective of students' academic behavior. Zhang (2013) extended student-related factors to students' families and found that parent-child relationships were essential in forming the teacher-student relationship.

Research on Learning Motivation of Students

Psychologists typically interpreted motivation as the intrinsic strength or psychological reasons behind behavior. Zhang (2005) understood that learning motivation was an internal psychological path that encouraged students to keep learning activities and guided them towards specific goals. In addition, Wu (2011) believed that motivation was an internal process which could neither be observed nor measured. It was an internal behavioral motivation that provided trends and energy for one's behavior. Learning motivation was an internal process in which students engaged in learning activities. The researcher thought learning motivation was "stimulating students to carry out learning activities, maintaining and guiding learning behaviors to develop towards specific learning goals, to establish an internal process or psychological state". Generally speaking, Wu (2014) believed that learning motivation was a kind of motivation tendency that motivated students to achieve their own goals in learning activities, and it was the motivation to promote students to achieve expected goals and promote students' learning.

Research measuring students' learning motivation could be roughly divided into two categories. The first category was to study why students learn from experience, and then investigate and obtain statistical data for each reason. The primary survey investigated the level of agreement among grade 8

students with the above items. The results showed that the percentage of students in grade 8 who expect to graduate from college (the highest expectation of further studies in the options) was the highest, and the average scores of these students in mathematics were also significantly different from those of other students (Guo, 2004).

In addition, Liu & Fang (2006) took academic record goals, academic self-efficacy, academic success or failure attribution and achievement motivation as the measurement indicators of learning motivation. They compiled a middle school students' learning motivation questionnaire using factor analysis and a structural variance model.

Zhang & Guo (2015) divided the influence of learning motivation into subjective and objective aspects. Subjective aspects included individual needs and life value goals, age groups, temper and individual differences, ambition and pursuit, anxiety and tension levels, etc. Objectively, it came from the family of origin, community environment, and school education and teaching. The influence of schools mostly came from teachers.

Furthermore, Zhang (2021) pointed out that students could learn through questions, primary school students could learn through multimedia, and students could be motivated to learn through real-life scenarios.

Research on the Relationship between Teacher-Student Relationship and Learning Motivation

A study on the relationship between primary school teachers and students and learning motivation found that Luce et al. (2017) suggested that teacher expectations could influence students' self-expectations, and students might work harder to meet high expectations. The behavior and attitude of teachers were the objects that students imitated. A teacher who loved learning was passionate, and full of innovative spirit could often stimulate students' enthusiasm for learning, making them full of love and expectations for learning (Zhao & Wang, 2012).

Wang (2017) proposed that establishing a harmonious teacher-student relationship could stimulate students' learning motivation, which was beneficial for cultivating learning autonomy. Chang (2022) pointed out that the sense of distance and indifference between teachers and students could affect emotions in the classroom, thereby affecting teaching effectiveness and even having negative impacts. Wan (2022) pointed out that establishing a harmonious teacher-student relationship was conducive to improving students' learning enthusiasm.

Through existing literature, it could be found that the teacher-student relationship in primary school has a significant impact on students' learning motivation. It was because children's attitudes and motivations towards learning formed in primary school, and teachers were undoubtedly the most important influences in this process. Firstly, teacher support and encouragement were the most effective ways to stimulate students' intrinsic motivation. When teachers paid attention to the needs of students,

provided positive feedback, and respected autonomy, students were more likely to engage in learning and actively explore new knowledge. These behaviors satisfied students' sense of self-worth, making them feel that learning was valuable (Zhang & Lou, 2010). Then, positive feedback could help students understand their strengths and weaknesses, which also helped stimulate learning motivation (Liu, 2010). When teachers had high expectations for students, learning motivation and performance improved. High expectations could stimulate students' self-expectations, stimulating learning motivation.

Methodology

The research population was the senior primary school students in Zhengzhou City, Henan Province, and this population was tested and investigated. Among them, the selection of population sampling number was based on the random sampling standard of the Morgan Table. The study selected the most representative primary school with 1816 students, including 322 in grade 5 and 278 in grade 6. Therefore, the total number of fifth and grade 6 students participating in the survey was 600, and the total number of students sampled according to the Morgan Table was 234, which met the requirements of statistical standardization, and then statistical analysis of the data was carried out. The formal test adopted the purposive sampling method to classify the basic situation of class cadre, gender, achievement, and teacher-student relationship types. Finally, 234 questionnaires were collected, and 223 valid questionnaires were obtained after sorting. The effective return rate reached 95.30%.

The Questionnaire of Teacher-Student Relationship compiled by Zhang (2003), which included four dimensions: avoidant type, conflict type, intimate type, and attachment type. It was compiled concerning Pianta's questionnaire, and many scholars had tested the questionnaire for reliability and validity, which had a high reference value, so this study used this questionnaire. There were 22 questions in the questionnaire. Cronbach's α was 0.752, and the validity of the questionnaire was tested by factor analysis of SPSS. The results showed that the KMO value of the scale was $KMO=0.913$. The chi-square value of Bartlett's spherical test was 235.263 ($p < 0.001$), reaching a significant level. At the same time, researchers had repeatedly tested the questionnaire for many years, and it had high expert validity, so the original questionnaire had good reliability and validity. This study used the learning motivation variables from Biggs's (1987) learning process questionnaire, which included three dimensions: surface motivation, deep motivation, and achievement motivation. Each dimension included six items, so this questionnaire had 18 items. Countless scholars have repeatedly validated this scale, which still has strong adaptability. The internal consistency coefficients of the original subscale were 0.825, 0.559, and 0.611, respectively, and the internal consistency coefficients of the total scale were 0.719. The questionnaire had good reliability and validity, which showed that the original scale's reliability was ideal and had a high internal consistency coefficient. The KMO of the questionnaire was 0.859 (> 0.6), and Bartlett's sphericity test ($p=0.000 < 0.05$) showed that the original questionnaire had high validity.

Results

Demographic Analysis of Questionnaire Participants

In this study, the senior students at a primary school in Zhengzhou City, Henan Province, were investigated by questionnaire, and 223 valid questionnaires were collected and sorted out. The demographic backgrounds surveyed mainly include gender, academic record, and whether to serve as class cadre. In the valid questionnaire, there were 115 males, accounting for 51.6%, and 108 females, accounting for 48.4%, which showed that the gender ratio of the students surveyed was relatively balanced. Regarding students' academic records 52 students rated academic record as upper class, accounting for 23.3%. 107 students rated academic record as middle class, accounting for 48.0%, and 64 students rated academic record as lower class, accounting for 28.7%. It could be seen that the majority of students believed that academic record was at the middle level. Regarding whether to serve as class cadre or not, there were 49 students who served as class cadre, accounting for 22.0%, and 174 students without whether to serve as class cadre or not, accounting for 78.0%. It could be seen that the class cadre group was far less than ordinary students, which was in line with general cognition.

Descriptive Statistics on the Levels of Teacher-Student Relationship and Learning Motivation of Senior Primary School Students

1) The survey of teacher-student relationship among senior primary school students, 58 students were inclined to the attachment teacher-student relationship, accounting for 26%; 79 students were inclined to the intimate teacher-student relationship, accounting for 35%; and 30 students were inclined to the conflict teacher-student relationship, accounting for 14%. The number of students with avoidant teacher-student relationship was 56, accounting for 25%, as Table 1 shows.

Table 1: The Current Teacher-Student Relationship of Senior Primary School Students

| Dimension | N | Percentage |
|-----------------|----|------------|
| Attachment type | 58 | 26.0 |
| Intimate type | 79 | 35.0 |
| Conflict type | 30 | 14.0 |
| Avoidant type | 56 | 25.0 |

2) The senior primary school students' mean learning motivation was 3.060, which was moderate. The means of deep motivation, surface motivation, and achievement motivation were 2.851, 3.114, and 3.213, respectively, among which the mean of achievement motivation was the highest, followed by surface motivation, while the mean of deep motivation was the lowest. Therefore, the overall level of learning motivation among senior primary school students in a primary school in Zhengzhou City, Henan Province, was moderate, with the highest average achievement motivation and the lowest average deep motivation, as shown in Table 2.

Table 2: Descriptive Statistics of Learning Motivation of Senior Primary School Students

| Dimension | N | M | SD | Interpretation |
|-----------------------------|-----|-------|-------|----------------|
| Deep motivation | 223 | 2.851 | 0.786 | Moderate |
| Surface motivation | 223 | 3.114 | 0.790 | Moderate |
| Achievement motivation | 223 | 3.213 | 0.772 | Moderate |
| Overall learning motivation | 223 | 3.060 | 0.682 | Moderate |

Differences Analysis on the Levels of Learning Motivation of Senior Primary School Students Compared with Demographic Backgrounds

There were significant differences in senior primary school students' learning motivation with different demographic backgrounds (whether to serve as class cadre or not, gender, teacher-student relationship types). There was a significant difference in learning motivation of the senior primary school students, and the students who self-rated learning achievements in the upper and middle reaches were significantly higher than those who rated learning achievements downstream. The overall difference in learning motivation among senior students regarding whether to serve as a class cadre was significant. The class cadre or not students were significantly higher than non-class cadres' students. Meanwhile, whether or not to serve as a class cadre of students was significantly higher than that of non-class cadre students. The overall level of learning motivation of the senior primary school students with close teacher-student relationships was significantly higher than that of the students with conflict relationships.

Correlation Analysis among Teacher-Student Relationship and Learning Motivation

The correlation coefficient r between attachment type and learning motivation was 0.650, and both reached a significant level at the 0.001 level. The correlation coefficient r between intimacy type and learning motivation was 0.581, and both reached a significant level at the 0.001 level. The correlation coefficient r between conflict type and learning motivation was -0.382, and both reached a significant level at the 0.001 level. The correlation coefficient r between avoidance and learning motivation was -0.485, and both reached a significant level at the 0.001 level. There was a significant positive correlation between attachment type, intimate type, and learning motivation in the senior primary school students' perceived teacher-student relationship. At the same time, there was a significant negative correlation between conflict type, avoidance type, and learning motivation. The overall relevant situation was shown in Table 3.

Table 3: Correlation Analysis of Teacher-Student Relationship and Learning Motivation among Senior Primary School Students

| Dimension | Attachment type | Intimate type | Conflict type | Avoidant type |
|-----------------------------|-----------------|---------------|---------------|---------------|
| Overall learning motivation | .650*** | .581*** | -.382*** | -.485*** |

Note: *** $p < .001$

Discussion

Current Students' Perceived Teacher-Student Relationship and Learning Motivation among Senior Primary School

The intimate type had the most significant number and the highest proportion, indicating that the perceived teacher-student relationship among senior primary school students was in a relatively good state at present, which was consistent with many previous research conclusions (Ma, Li & Liu, 2022). It indicated that students have high trust and affection towards teachers and highly recognize and pay attention to words and actions. The means of achievement motivation and surface motivation were relatively high, which showed that the source of learning motivation of senior primary school students was still more inclined to external factors.

Differences in Senior Primary School Students' Learning Motivation

The difference analysis of self-assessment of learning achievement, students with middle grades or above were more motivated in learning motivation. This finding was supported by previous studies (Liu, 2016). Students who served as class cadres had stronger learning motivation. Zhang et al. (2021) also reached this research conclusion. The reason might have been that students who served as class cadres were small assistants to teachers in organizing and managing the class and had more frequent exchanges and interactions with teachers in daily life. The different teacher-student relationship types, the overall level of learning motivation of students with close teacher-student relationship was higher than that of students with conflict relationships.

Wang (2017) and Muller (2020) were also consistent with the conclusion of this study. The reason might have been that the close teacher-student relationship was based on trust, understanding, and respect, and helped to establish a good communication channel between teachers and students. In contrast, conflict-oriented teacher-student relationships were often accompanied by mistrust, misunderstanding, and estrangement. In this kind of relationship, students might have been resistant to teachers and unwilling to accept teachers' teachings and suggestions. At the same time, teachers' criticism and accusations might have frustrated and disappointed students, reducing learning motivation and self-confidence.

Relationship between Perceived Teacher-Student Relationship and Learning Motivation among Senior Primary School Students

There was a significant positive correlation between attachment type, intimate type, and learning motivation, and a significant negative correlation between conflict type, avoidance, and learning motivation. The more students perceived a positive teacher-student relationship, the higher learning motivation was, while the more students perceived a negative teacher-student relationship, the lower learning motivation was. It was consistent with the research conclusion of Wang (2013).

Conclusions

1) In a primary school in Zhengzhou, Henan Province, the proportion of attachment type, intimacy type, conflict type, and avoidance type in the teacher-student relationship of senior primary school students was 26%, 35%, 14%, and 25%, respectively. In a primary school in Zhengzhou City, Henan Province, the overall learning motivation of the senior students was at a middle level, among which the achievement motivation was the highest and the deep motivation was the lowest.

2) In a primary school in Zhengzhou, Henan Province, the overall difference in learning motivation in gender was insignificant. Still, the surface motivation dimension of male students was significantly lower than female students. In a primary school in Zhengzhou City, Henan Province, there was a significant difference in the overall learning motivation of the senior primary school students, and the students who self-rated learning achievements in the upper and middle reaches were significantly higher than those who rated learning achievements downstream. In the deep motivation dimension, the students' self-rated academic performance upstream was significantly higher than those downstream. In the surface motivation dimension, students with self-rated academic performance in the upper and middle reaches were significantly higher than those with self-rated academic performance downstream. In achievement motivation, students with self-rated academic performance in the upper and middle reaches were significantly higher than those with self-rated academic performance downstream. In a primary school in Zhengzhou City, Henan Province, the overall difference in learning motivation among senior students regarding whether to serve as a class cadre was significant. The class cadre or not students were significantly higher than non-class cadres' students.

Meanwhile, whether or not to serve as a class cadre of students was significantly higher than that of non-class cadre students in the three dimensions of deep, surface, and achievement motivation. In a primary school in Zhengzhou City, Henan Province, there was a significant difference in the overall learning motivation of the senior primary school students. The overall level of learning motivation of the senior primary school students with close teacher-student relationships was significantly higher than that of the students with conflict relationships.

3) There was a significant positive correlation between attachment type, intimacy type, and learning motivation, and a significant negative correlation between conflict type, avoidance type, and learning motivation in the teacher-student relationship of senior primary school students.

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