

The Influence of Teacher-Student Relationships on Learning Motivation of Elementary School Students

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Abstract: In this study, the influence of teacher-student relationship on learning motivation of primary school students was investigated by using the teacher-student relationship questionnaire and the learning self-regulation scale, and the third- and fourth-grade students of four elementary school in Hangzhou were selected through multi-stage sampling. The results show that: (1) Teacher-student relationship has a significant effect on students' learning motivation and has a certain positive predictive effect on it. (2) From the perspective of intermediate elementary school students, student gender had no significant effect on teacher-student relationships and motivation; student age had a significant effect on both and positively predicted them. (3) Interviews revealed that teachers' teaching concepts and attitudes have an impact on students' perceived teacher-student relationships and their motivation to learn, and that students' academic situations have a positive impact on students' motivation to learn.

Keywords: Teacher-Student Relationship; Motivation; Elementary School Students.

1. Introduction

In 2021, the General Office of the Central Committee of the Communist Party of China (CPC) and the General Office of the State Council issued the Opinions on Further Reducing the Burden of Homework for Students in Compulsory Education and the Burden of Out-of-School Training (hereinafter referred to as the "Double Reduction"), which demanded to effectively reduce the burden of homework and out-of-school training for students in the stage of compulsory education, and at the same time, the new curricular reform advocated a student-oriented learning mode. At the same time, the new curriculum reform also advocates a student-oriented learning style. At the same time, the new curriculum reform also advocates student-oriented learning. This has put forward new requirements for students' independent learning ability. Elementary school students have more time for independent learning, while some students may be in a state of passive learning or give up learning due to insufficient motivation, which has a negative impact on their academic performance and mental health.

At the elementary school stage, children initially leave their families and enter schools, and from the perspective of social-ecological system theory, teachers and classmates occupy an important part of children's micro-systems, and the influence of peers and teachers on children gradually increases. At the same time, this stage is also an important period to cultivate the comprehensive quality development of primary school students in all aspects, in which the teacher-student relationship has uniqueness and representativeness, and always throughout the educational activities, so the establishment of a harmonious relationship between teachers and students in elementary school is very important for primary education and teaching. In the process of primary education, the harmonious relationship between teachers and students is conducive to the physical and mental health development of elementary school students, optimize the quality of education and teaching, and thus promote the common development of teachers and students, but also to

achieve the accelerated modernization of education, the construction of a strong educational country, "to do a good job of people's satisfaction with the education" basis. Therefore

This study further examines the influence of teacher-student relationship on children's motivation in elementary school under the background of "Double Reduction", with the intention of increasing elementary school teachers' attention to teacher-student relationship with their students.

2. Literature Review

2.1. Teacher-Student Relationships

Domestic and foreign definitions of teacher-student relationship are slightly different. Domestic scholars Li Jinyu defines "teacher-student relationship" as a special interpersonal relationship that is established and developed through mutual influence and interaction between teachers and students in the process of common education and teaching, and he believes that both teachers and students benefit from the teacher-student relationship together. Wu Kangning, on the other hand, holds the "teacher-student unity view" and the "teacher-student interchangeability view", believing that teachers and students are a community of coexistence, co-existence and common destiny, and that their roles are "immediate" and "mutual"[1,2]. The roles of teachers and students are characterized by "instant play", "mutual definition" and "replacement at any time". Foreign scholars such as Raposa EB, on the other hand, believe that the teacher-student relationship is a supportive relationship between teachers and students [3].

In this study, the author considers the teacher-student relationship as an interpersonal relationship that develops as a result of the mutual interaction between teachers and students in the process of teaching and learning activities and interactions.

By organizing the existing research literature of scholars at home and abroad, it can be found that for elementary school students, close teacher-student relationships are more conducive to the formation of positive emotional attitudes

toward school, strengthening children's adaptation to school, and facilitating the healthy development of the self-concept of the elementary school students [4-6]. In addition, teacher-student relationships also have an important impact on other interpersonal relationships such as parent-child relationships and peer relationships [7]. A good teacher-student relationship enables students to actively participate in classroom and school activities and to form positive emotional relationships with classmates [8,9]. Foreign scholars such as Skalická V have shown that conflicting teacher-student relationships may increase children's behavioral problems through the intra-individual differences method [10].

2.2. Learning Motivation Theory:

Learning motivation is the driving force that inspires and sustains learners to carry out learning activities and then motivates them to achieve learning goals [11]. Currently there is no unanimity among scholars regarding the definition of learning motivation. Some researchers such as Noe et al. define learning motivation as the learner's willingness and desire to engage in the learning process, viewing it as a willingness, desire and drive and arguing that it determines the direction and focus in the decision-making process. Other scholars, such as Pintrich, believe that learning motivation is an internal process that maintains and inspires learners to accomplish learning programs and learning goals, and the level of motivation depends on learners' willingness to learn [12].

Through sorting out the existing literature, this study integrates the scholars' views that learning motivation is a psychological process to stimulate and maintain learning activities and complete learning programs and learning goals, and that learning motivation is related to learners' willingness, needs, and drives.

Through research on college students, it was found that learning motivation promotes individuals to be more engaged in learning, ensures that students are focused and motivated to learn, and positively affects students' performance [13-14]. In a study of primary and secondary school students, Wang Youzhi found that the learning motivation of students at different learning stages, on the other hand, showed a general decreasing trend as the grade level increased [15].

Looking at the structural characteristics of students' motivation, Zhang Min and Lei Kaichun showed that elementary school students' motivation to learn (grades 4-6) mainly consists of seven types, namely, knowledge-seeking, rewarding, altruistic, interactional tendency, survival, academic achievement, and pragmatic motivation [16]. High school students' motivation for learning has changed compared with that of elementary school students, and scholars Xia Lingxiang and Zhang Shiyu believe that there are four elements, which are the pursuit of superiority, rewarding the society, seeking employment and pursuing honor [17]. As for college students, cognition, achievement, affiliation and prestige constitute their learning motivation, and the most crucial elements are cognition and achievement [18].

2.3. Literature Review

Based on the literature combing, it can be seen that the current research of scholars at home and abroad on teacher-student relationship is not limited to pedagogy, but is studied from the perspective of psychology, sociology and other multidisciplinary perspectives, with a wide range of research

areas and relatively rich explanations of teacher-student relationship.

In terms of learning motivation, the existing research is more focused on college students and junior and senior high school students, and pays less attention to elementary school students, and most of the current research is about the direct impact of the teacher-student relationship on learning motivation, and there is a lack of research on how the teacher-student relationship in elementary school plays a role in elementary school students' learning motivation from the point of view of the students' sense of academic self-efficacy.

In addition, scholars' research on teacher-student relationship is mainly theoretical, focusing more on the abstract definition and type of teacher-student relationship, with more in-depth discussion on the subject and characteristics of teacher-student relationship, while there is a certain gap in empirical research on teacher-student relationship, and the theory-based research lacks guiding significance for enhancing the new density of teacher-student relationship or improving the practice of teacher-student relationship. Therefore, this study combines questionnaires and interviews to explore the correlation between teacher-student relationship and learning motivation in elementary schools.

3. Method

3.1. Research Hypothesis

According to the theoretical background of the previous article, the author puts forward the hypothesis that teacher-student relationship is positively correlated with the learning motivation of primary school students, and that teacher-student relationship has a certain predictive effect on students' learning motivation.

3.2. Research Tools

3.2.1. Teacher-Student Relationship Questionnaire

Developed by Pianta et al., revised by Wang Wei and Wang Xiaohua, and revised again by Zou Hong, Ye Yuan, and Qu Zhiyong in 2007, the questionnaire consists of 23 items divided into four dimensions of closeness, conflict, support, and satisfaction, and is student-rated [19]. The results of the validated factor analysis by Zou Hong et al. showed that the questionnaire had good reliability and validity (Cronbach's α reliability coefficients for each dimension ranged from 0.71 to 0.87, respectively).

3.2.2. Learning Self-Regulation Scale

The Chinese version of the Learning Self-Regulation Scale (SRQ-A) developed by Ryan et al. was used to rate students' motivation. Each question was scored on a 4-point scale from the order of complete non-compliance to complete compliance [20]. The scale had good reliability and validity as tested by Zhou Ying and other researchers [21].

3.3. Research Subjects

Multi-stage sampling method was adopted to select third and fourth grade students from four elementary school in Hangzhou, and three classes in each grade were randomly selected (24 classes in total), and 10-15 students in each class were selected for the questionnaire survey. The questionnaires were distributed online with the help of teachers with the consent of schools and parents, and were filled out by students and then collected. The whole process was anonymous to protect students' privacy. A total of 310 questionnaires were

distributed and a total of 297 valid questionnaires were collected, with a validity rate of 95.8%, and the average age of the students was 10.34 years old. Details of the source of the student sample are shown in the table 1:

Table 1. Basic statistics of the survey sample

	Total	Gender		Grade	
		Boys	Girls	Third grade	Forth grade
Number	297	135	162	142	155
Percentage	-	45.55%	54.55%	47.81%	52.19%

3.4. Research Methodology

The research study was conducted by contacting the teachers of the school and the parents of the students explaining the purpose of the study and obtaining their consent. The questionnaires were distributed by sampling the subjects through multi-stage sampling method and after recovering the questionnaires the data were statistically analyzed using SPSS 26.0. After the questionnaire survey the researcher selected six relatively familiar primary school students (three from each grade) to conduct semi-structured interviews in order to get a more in-depth answer about the topic and at the same time to make the study more vivid.

3.5. Findings

As shown in table 2, the relative autonomy coefficient of the students was calculated based on the formula related to Ryan et al.'s Self-Regulation of Learning Scale (SRQ-A), which represents the students' motivation to learn, and the higher the score, the stronger the students' autonomy to learn, the stronger the motivation to learn. The positive dimensions (intimacy dimension and supportive dimension) of the teacher-student relationship questionnaire were taken to measure the teacher-student relationship. Descriptive statistics of the scores of the variables are as follows:

Table 2. Teacher-Student Relationships, Learning Motivation Descriptive Statistics

	Mean (n=297)	
	Statistics	Standard error
Teacher-student relationship	30.74	0.68
Motivation to learn	5.01	1.09
Number of valid cases (in columns)	297	

The independent samples t-test was used to analyze the differences in the core variables on demographic variables, and the results are shown in table 3: among the available research subjects, elementary school girls scored higher mean scores than boys on teacher-student relationship and motivation to learn, but the research data showed that gender did not have a significant effect on them.

Table 3. Analysis of Gender Differences in Teacher-Student Relationships and Learning Motivation

	Gender	Mean	Standard error
Teacher-student relationship	Girls (n=162)	32.05	0.84
	Boys (n=135)	29.16	0.77
Motivation to learn	Girls (n=162)	6.65	0.74
	Boys (n=135)	3.04	0.42

Table 4 illustrates that pearson's product-difference correlation was used to analyze the correlation of the variables, and the specific results were as follows: teacher-student relationship and learning motivation were significantly positively correlated.

Table 4. Correlation Analysis of Teacher-Student Relationship and Learning Motivation

		Motivation to learn	Teacher-student relationship
Motivation to learn	Pearson's correlation	1	0.68**
	Significance (two-tailed)	-	<.001
Teacher-student relationship	Pearson's correlation	0.68**	1
	Significance (two-tailed)	<.001	-

**Significant correlation at the 0.01 level (two-tailed).

On this basis, regression analysis of teacher-student relationship and motivation to learn was conducted and the results showed that teacher-student relationship significantly predicted motivation to learn ($a=0.68$, $t=5.81$, $p<0.001$), and in the middle elementary grades, student age significantly predicted teacher-student relationship and motivation to learn ($b=0.24$, $t=0.15$, $p<0.01$), and gender did not have a significant effect on teacher-student relationship and motivation to learn. The specific data are shown in table 5:

Table 5. Regression Analysis of Teacher-Student Relationships and Motivation to Learn

		Standardized coefficient Beta	t	p
Motivation to learn	Teacher-student relationship	0.68	5.81	<.001
	Gender	0.03	0.39	0.42
	Age	0.24	0.15	0.002
Teacher-student relationship	Gender	0.078	4.62	0.339
	Age	0.181	2.163	0.034

4. Analysis and Discussion

The study shows that teacher-student relationship is positively related to the motivation of students at the middle primary level. However, there is no significant difference between the teacher-student relationship and motivation of male and female students in terms of gender of the students at this level. In terms of age, the influence of age on teacher-student relationships and motivation was significant.

The overall score of students' perception of teacher-student relationship is good and in the middle-high level, which means that the teacher-student relationship from the students' point of view is good. Both the questionnaire results and the interview results indicate that from the majority of students' perspectives, teachers are fair and just, care about students' physical and mental well-being, and are willing to provide additional instructional assistance.

The overall score of students' motivation for learning was moderate, and the interviews revealed that some students' motivation for learning was affected by various aspects, including: whether the courses and assignments were boring;

whether the students were good at the course; the teachers' teaching status and educational concepts; and the relationship between teachers and students outside the classroom. Some of the students showed the following specific behaviors: low motivation due to boring courses or assignments; aversion and resistance to specific courses because they are not good at them but have to learn them for many reasons; high motivation due to the fact that they are good at a certain course and it is easy for them to learn it; incorrect concepts of education and behaviors of some teachers negatively affect teacher-student relationship: some teachers show more positive interaction with students who have excellent academic performance; some teachers show more positive interaction with students who are good at a course; some teachers show more positive interaction with students who are good at a course. Some teachers show a more positive attitude towards students with good academic performance and a negative attitude towards students with poor academic performance, which affects the learning motivation of students (especially those with poor academic performance); teachers who are strict in teaching and close to their students after class are more likely to establish a good teacher-student relationship with their students and positively affect their learning motivation.

In order to promote students' healthy development and academic performance, it is recommended that teachers pay more attention to and understand the age and psychological development of students at this stage, and adopt more flexible teacher-student interactions. In addition, teachers should treat students equally, especially those with poor academic levels, and communicate with them more often to make them feel valued by teachers.

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