

The Impact of Interpersonal Relationships on Students' Academic Achievement in Primary and Secondary Schools

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Abstract. Schools are places of knowledge transfer and crucial settings for students to develop social skills and cultivate interpersonal relationships. Therefore, focusing on students' interpersonal relationships within schools is essential to understand how these interactions impact their academic performance. Teacher-student relationships and peer relationships are most common and significant interpersonal relationships in school. These relationships can profoundly influence students' academic performance, with peer acceptance showing a positive correlation and peer rejection showing a negative correlation with academic achievement among adolescents. In contrast, the teacher-student relationship has a bi-directional effect on academic achievement. In addition to direct effects, interpersonal relationships also impact academic achievement through mediating factors such as motivation, school belonging, and academic engagement. This paper aims to delve into the influence of interpersonal relationships within primary and secondary schools on students' academic achievement and provide insights for schools, teachers, parents, and policymakers on improving the social environment within schools to better support students' learning and development.

Keywords: Teacher-student Relationship, Peer Relationship, Academic Achievement, Primary School, Secondary School.

1. Introduction

Schools are not only where knowledge is imparted but also important places for students to build social skills and develop interpersonal relationships. Therefore, researchers should focus on students' interpersonal relationships within schools to understand how these relationships affect students' academic performance (AP).

Interpersonal relationships in schools include relationships between students and their peers, teachers, parents, and other campus staff, with teacher-student relationships and peer relationships being the most common and essential. These relationships may have far-reaching effects on students' academic performance, which academic achievement (AA) is undoubtedly the most important one. From the current reality of school education and society in China, students' academic achievement in school is not only the focus of teachers and parents but also an essential criterion for students to evaluate themselves and their peers, as well as an important index in educational research. Therefore, researchers often use students' academic achievement to assess students' academic performance. Research has shown that positive relationships can stimulate students' interest in learning, increase their self-esteem, and improve their academic achievement. Conversely, negative relationships may decrease students' motivation to learn, affect their academic achievement, and even negatively impact mental health.

However, even though interpersonal relationships within schools impact students' academic achievement, knowledge in this area still needs to be improved. Therefore, this paper aims to give a thorough analysis of the significance of interpersonal connections within the school on students' AA in both primary and secondary schools, through which the role of these relationships can be better understood by examining this critical issue in-depth, to provide schools, teachers and policymakers with more insights on how to improve the social environment within schools. These will help to create more inclusive and positive school environments in which each student can realize their full potential, thereby better-supporting students' learning and development and laying a solid foundation for future success.

2. The Conceptual Definition of Interpersonal Relationship and Academic Achievement

2.1. Definition of Interpersonal Relationship

Interpersonal interaction is an integral part of an individual's social needs, and various interpersonal relationships are formed in interpersonal interaction. Many studies in China and abroad have shown that the quality of interpersonal relationships has an essential impact on students' academic performance and mental health and that good interpersonal relationships can promote the growth of their interpersonal Skills, self-consciousness, and the improvement of their academic performance [1]. Therefore, studying the developmental characteristics of secondary school students' interpersonal relationships is of great theoretical and practical significance.

2.2. Definition of Academic Achievement

Academic performance is the most direct indicator of a student's academic performance [2]. Academic achievement in this study refers to the grades of courses taken in the previous semester or academic year, including single-subject academic grades and all-subject grades. Academic achievement is the most direct way for parents, teachers, and students to understand recent learning and its effects.

3. Peer Relationships' Impact on AA

3.1. Types of Peer Relationships

Scholars classify peer relationships (PR) into acceptance and rejection according to the different attitudes of peers towards other individuals. Peer acceptance means that an individual is liked and accepted by other individuals in the group to which he or she belongs [3]. Peer rejection means that a child is not liked or rejected by the other peers in his or her peer group [4].

3.2. The Impact of PR on Students' AA

The former study's results clearly show that peer relations are an essential factor in students' AA. The more popular students are in the class, the more they contribute to their learning; the more they are ostracized, the worse their academic performance. At the primary and secondary school levels, peers provide young students with the most acceptable standards for evaluating competence, roles, and behavioral norms. Peers are, therefore, the most crucial reference group for influencing individual development.

Scholars have pointed out that good peer relationships significantly contribute to students' academic development, which can promote the exchange of information and the consolidation of friendship and produce promotion effects among peers, forming a school atmosphere of mutual respect and friendship. These are conducive to adolescents improving their personal social ability and learning ability in school. At the same time, good interpersonal skills put them in an advantageous position in interactions and build a harmonious relationship among students, thus improving their academic achievement [5,6].

Of course, peer relationships can also lead to decreased academic achievement. There is an interaction between academic achievement and peer relationships. Individuals in their student years need a sense of belonging and acceptance from their peers; therefore, being rejected at this time can affect many aspects of their learning and life. It is worth drawing attention to the fact that even if peer acceptance has a positive effect on academic achievement, it cannot compensate for the negative effect of peer rejection on academic achievement.

3.3. The Impact of School Bullying on AA

3.3.1 Definition of School Bullying

School bullying is usually the form of rejection in peer relationships. School bullying, i. e. , bullying and oppression by the bullies against the bullied, caused by the mismatch of family background, power, academic performance, physical strength, and interpersonal relationships between children within the school, including verbal or physical aggression, resistance, and rejection in social situations, as well as taunts or mockery akin to harassment when discussing sex or body features. School bullying can cause internal physical and psychological harm and external academic achievement to the bullied. School bullying is not a peer relationship based on intimacy, friendliness, or supportiveness but a conflictual and hostile relationship. It usually involves an unequal power relationship in which one party tries to dominate or harm the other.

3.3.2 The Impact of Bullying on Students' AP

Bullying is prevalent in elementary and secondary schools. School bullying has a significant negative impact on students' interest in learning and academic efficacy, resulting in a lack of interest in learning and low self-efficacy, which directly or indirectly leads to poorer academic achievement, while classes with an atmosphere that is more conducive to pro-social behaviors have better academic performance [7]. This correlation has also been seen in separate subject grades, with higher school bullying associated with lower math and reading scores [8].

3.4. Influencing Mechanism

3.4.1 Direct Influence

Positive peer relationships promote cooperation and mutual support in learning, provide information related to learning, share various learning resources, and enable students to work together to solve problems, discuss course content, and encourage each other. This can increase learning efficiency, aid comprehension, and memorization, and ultimately help students improve their academic performance [9]. Negative peer relationships, including school bullying, can cause students to fear going to school because and, therefore, rarely participate in school, leading to a direct decline in academic achievement [7].

3.4.2 Mediating Factors

About learning motivation, research reveals that PR can influence students' learning motivation and ultimately reflect on their academic achievement. Interaction with positive peers would stimulate interest in learning, increase goal orientation in learning, and enhance motivation. On the other hand, negative peer relationships can lead to feelings of inferiority and reduce learning motivation [10]. An example of crucial relationships in the school setting that promote academic success is given by a Canadian study. It demonstrates how, depending on students' learning motivation, peer interactions can result in academic accomplishment. In contrast to students with average or below-average peer relationships, students experiencing high-quality peer relationships and hence seeing the classroom atmosphere as inclusive and helpful have lowest test anxiety levels, leading to improved AA. Actually, students who felt they had positive PR had better self-esteem, were happier, and experienced less test anxiety. Greater academic success is the result of all these elements.

As for the school belonging, the impact of peer relationships on students' academic progress is mediated by school belonging (SB). Students who have positive peer interactions feel more like they belong at school, and academic achievement improves when a student has a stronger sense of belonging [5]. Researchers used questionnaires to examine 441 students in the experiment and plotted a structural equation model as a hypothetical model to test the association between peer relationships, SB, and student's AA. Among them, student-student relationship is the exogenous latent variable, students' academic achievement is the endogenous latent variable, and school belonging is the mediator variable. The experiment results show that harmonious peer relationships improve students' school belonging. Students perform better academically when they feel more a part of the school.

Harmonious peer relationships make students feel that they can integrate into the group, be accepted and respected by their classmates, win support, and consider themselves a part of the school, which improves students' sense of school belonging. Negative peer relationships, especially school bullying, lead to lower academic achievement by decreasing students' sense of belonging [11].

When it comes to academic engagement, researchers find that negative peer relationships in which school bullying affects academic performance through academic engagement. It decreases students' academic engagement, leading to poorer academic achievement [11]. A total of 813 students from 102 different classrooms were enlisted for the study. The validated Chinese version of the Utrecht Work Engagement Scale—Student was utilized to evaluate the level of academic engagement. Academic achievement is favorably predicted with academic engagement, as demonstrated by the results of the entire sample. Academic achievement, academic engagement, and school bullying all had a substantial indirect impact at the same time.

4. Teacher-student Relationships' Impact on AA

4.1. Definition of Teacher-student Relationship(TSR)

Educational and psychological researchers have developed specific conceptualizations of teacher-student relationships: TSR is the interaction and mutual influence between teachers and students. The relationship with the teacher is the foundation of the student's experience in school. Positive teacher-student relationship is a supportive environment that promotes adjustment and learning [12].

4.2. The Impact of Teacher-student Relationship on AA

Research has found that having a positive teacher-student relationship (TSR) is related to better student achievement [13]. In this, both teacher-perceived TSR and student-perceived teacher expectations positively impact student achievement [14]. This is because positive interpersonal skills put students in an advantageous position in school interactions, which leads to a more harmonious TSR and promotes academic achievement [6].

Researchers looked into the relationships between student-teacher interactions and academic achievement using a meta-analytic technique. They adjusted for methodological features of the primary studies (i.e., same informant/method, grades as an indicator of achievement, cross-sectional studies) that could cause overestimation of associations while analyzing associations between teacher-student relationships and learning behavior. They have found that associations of teacher-student relationships with achievement were substantial. It is worth noting that even if the teacher-student relationship is not harmonious at the beginning, academic performance will be improved to a certain extent when the relationship between students and teachers improves [15].

Not only does overall academic achievement reveal a clear correlation, but it is also present in some subjects - students who have positive relationships with their teachers have higher AA in math and reading [8].

4.3. Influencing Mechanism

In contrast to the simultaneous direct and mediating factor influence mechanisms with peer relationships, there is no more apparent direct correlation between TSR and academic achievement, but more through different mediating factors that influence academic achievement.

4.3.1 Learning Motivation

Positive TSR works to improve AA because they improve students' learning motivation more directly. It is the motivation that promotes academic achievement [16]. In the experiment, 534 middle school students from a sizable suburban city were given questionnaires by the researcher in order to gather data. According to the path model results, pupils who had stronger relationships with their teachers were much more motivated and achieved academically both at the start and end of the school year than those who had weaker relationships. Academic achievement was well predicted by students'

learning motivation throughout the academic year. Academic achievement throughout the academic year was not significantly impacted by student-teacher relationships. Through the strong positive association between relationships and learning motivation, indirect evidence of the impact of relationships on academic achievement was observed.

4.3.2 Academic Engagement

Scholars have shown that the academic engagement influences TSR and AA. Academic engagement helps students to develop positive relationships with their teachers and helps to promote positive student outcomes [17].

The 641 children who answered self-report questionnaires given to them were the subject of this study. According to the study's findings, students with stronger student-teacher ties did, in fact, begin the school year with higher levels of engagement than students with weaker relationships, while they also showed greater improvement over time. Academic engagement helps students to develop positive relationships with their teachers and helps to promote positive student outcomes. Students who thought their teachers valued them were more likely to indicate that participating in academic activities was stimulating and enjoyable as well as that they felt content and at ease in the classroom. On the other hand, kids who experience feelings of insignificance or rejection from educators are more prone to experience frustration, boredom, and alienation from educational endeavors. Put differently, their lack of academic engagement impedes their academic performance; poor performance combined with dissatisfaction weakens social support, making them feel even more alienated.

5. Strategies for Interpersonal Intervention and Improvement

5.1. Government and Related Agencies

The government needs to establish relevant laws and regulations to ensure that teachers' salaries and benefits are further improved and that there are smooth career paths to increase teachers' sense of professional well-being, thus enhancing the teacher-student relationship in schools. Secondly, the government can improve teacher-student relationships in schools by changing the high demands and expectations of society on teachers and by respecting and recognizing teachers' efforts to increase teachers' sense of achievement in their careers.

Local education research institutes and teacher development centers should focus on and increase research on teachers' communication skills and conflict-coping strategies. These studies can help teachers overcome psychological and professional stress, improve their ability to cope with conflict and achieve a more harmonious teacher-student relationship through case studies, in-school guidance, and lectures.

5.2. Schools

Schools should advocate respect for teachers and actively commend and publicize outstanding teachers to enhance their sense of honor in society. At the same time, they ought to aggressively reduce the amount of homework assigned to elementary and secondary school students, encourage the holistic growth of pupils, and provide opportunities for children to experience happiness and joy in the classroom. School leaders should also act positively to improve their quality and actively guide and help teachers improve their communication skills and utilize their collective power to promote harmonious teacher-student and peer relationships in schools.

Schools should emphasize the need for prevention by focusing on vulnerable groups and all students, identifying and intervening to stop interpersonal conflicts in schools, reconciling them, and building a positive and harmonious atmosphere.

5.3. Teachers

Researches have shown that when students are not informed that they are receiving experiments or interventions but rather that the intervention information is integrated into school assignments, and classroom discussions, these interventions appear to be simply part of the school day [16]. As a result, these interventions do not cause students to resist or feel controlled. Thus, in many ways, teachers can improve student-teacher relationships in similarly insidious ways. After a repetition period, students may not notice any minor changes but improve the student-teacher relationship.

At the teacher level, in order to enhance the teacher-student relationship, teachers must cultivate students' self-confidence, optimism, and positive mindset, recognize the value and dignity of each student, promote a congenial classroom atmosphere, and make good use of peer teaching to supplement regular teaching and create as many opportunities for success for each student as possible.

At the same time, teachers need to allow students to comment on the teacher's classroom performance so that students can feel and honestly believe that their teachers care about what they think, which can be effective in improving the teacher-student relationship.

6. Conclusion

Many studies confirm that interpersonal relationships in schools affect academic achievement. Positive interpersonal relationships can motivate students, increase their self-esteem, and improve academic achievement. On the contrary, negative interpersonal relationships can decrease students' learning motivation and negatively affect AA. Interpersonal relationships either directly or indirectly affect academic achievement through learning motivation, SB, and academic engagement, with peer relationships significantly affecting overall academic achievement and teacher-student relationships affecting both overall academic achievement and individual subject achievement.

Even though interpersonal relationships in schools critically impact students' academic achievement, knowledge in this area is still limited. In primary and secondary schools, whether teacher-student or peer relationships, interpersonal relationships are short-lived, and students face new relationships at any time, so future research could focus more on studying students' academic achievement when interpersonal relationships change. At the same time, there is still a huge gap in research on the interaction between different interpersonal relationships. Research could be conducted to examine the interactions between teacher-student and peer relationships and whether they impact academic achievement. This would create more inclusive and positive school environments where every student can realize his or her full potential and build a solid foundation for future success.

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