

The Influence of Head Teacher's Leadership Style on Junior High School Students' Learning Engagement: The Mediating Effect of Self-efficacy

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Abstract. As a class leader, junior high's head teachers play an imperative and essential role in the development of junior high students and the whole class. Based on this reason, the aim of this research is to investigate the effect of the head teachers' leadership style on junior high students' learning engagement, inspecting mediating effect of self-efficacy. The study used three authority scales, they are teacher leadership style scale, academic self-efficacy scale and study engagement scale. With these scales, the study finally launches the research on the influence of head teacher's leadership style on middle school students' learning engagement and the role of self-efficacy in mediating. The results from this study are as follows. First, authoritative teacher leadership style and democratic teacher leadership style are positively correlated with junior high students' self-efficacy and learning engagement. Second, learning engagement is significantly affected by self-efficacy. Third, self-efficacy plays the intermediary role between democratic and authoritative teacher leadership styles and junior high students' learning engagement. As a conclusion, this research suggests head teachers should improve junior high students' self-efficacy by making changes to their leadership style so that they can have a positive influence on their students' learning input. Additionally, head teachers are suggested to carry out a democratic and authoritative teacher's leadership style, instead of a laissez-faire teacher's leadership style. For example, the head teacher is bound to protect students' self-esteem and respect the individual differences.

Keywords: Teachers' leadership style; learning engagement; self-efficacy; junior high students.

1. Introduction

Head teachers are the second parents of junior high students at school, whom the student's worship and respect the most. It is necessary to study the leadership style of the head teacher, which has an important guiding role for the head teacher to carry out class management. Then, junior high school students' learning input will be indirectly improved. Junior high students' academic goal orientation is linked to multiple ingredients. Such as internal incentives and external rewards. The extent of learning engagement also partly depends on students' goal orientation [1]. The junior high students with higher self-efficacy considerably trust themselves and have intrinsic impetus to conquer difficulties.

Former research has indicated that the study environment of the class, students' internal learning motivation, teachers' emotional support, teacher-peer relationships and high-quality classroom interactions all have an impact on students' learning engagement [2]. In fact, different teachers' leadership styles lead to different relationships between teachers and students and various study environments of class and alter the extent of students' internal learning motivation. Besides, students' academic performance and learning behavior are also influenced by teachers' motivation which has become a potential inner reason for the leadership style the teacher had [3]. The head teacher of junior high school ought to help junior high school students develop abilities, skills and proper studying habits on the base of self-efficacy [4].

In recent years, there have been not only a lot of related researches between teacher leadership and self-efficacy, but also there have been numerous studies between academic engagement and self-

efficacy [5]. However, most of them focused on university education and only a few of them are about middle school education.

2. Method

2.1. Research Design

The questionnaire used in this study is compiled from three authoritative scales. First, this study used the leadership style of the head teacher questionnaire which was adapted by Qi Shuhui based on ensuring the reliability and validity of the original scale made by Wu Guangdian in 1978. There are 15 questions and three dimensions in total. Three dimensions included democratic teacher leadership style, authoritative teacher leadership style and laissez-faire teacher leadership style. The higher the score, the better this particular kind of leadership style [6]. Second, the study engagement questionnaire is compiled by Schaufeli. There are a total of 17 questions in it. If the score in the questionnaire is high, it proves that the students have the better learning engagement [7]. The last authoritative scale used in this research was created by Liang Yusong. There is a total of 22 questions and 11 questions for each dimension in this questionnaire. Two dimensions consist of learning behavior and learning ability. The reliability and validity are good, and Cronbach's alpha is greater than 0.9. The scoring method is Likert five-point scoring. If the score in the questionnaire is high, it proves that the students have the better academic self-efficacy [8]. The Cronbach's alpha of the questionnaire used in this study is 0.941.

2.2. Research Object

The subject of this survey is junior high students from grades one to three from a school in Qingdao. This study selected one class in each grade and then handed out the electronic questionnaire. The three classes have 33 students, 47 of them are boys and 52 of them are girls. The sample size is 99. The research has shown that 71.7% of these junior high students are class leaders or subject representatives. 88.9% of them have a female head teacher. 65.7% of them have never changed their head leaders. 96% of them have a head leader who also teaches one of their subjects.

2.3. Research Process

First, this study had a pre-survey. 30 electronic questionnaires were handed out. After cycling the questionnaires, one of the junior high students was randomly chosen to have a conversation. It turned out that the design of this questionnaire was verified as comprehensive and easily understandable. Then, this study distributed 99 formal electronic questionnaires. It took 3 days to recycle all the questionnaires.

2.4. Data Analysis Method

The reliability and validity of the questionnaire, correlation analysis and mediating effect were tested by SPSS 27.0 software in this research.

3. Result

3.1. The Positive Correlation among Authoritative and Democratic Teacher Leadership Style, Junior High Students' self-efficacy and Learning Engagement

Table 1. The dependence relation among different dimensions of teacher leadership style, academic self-efficacy and learning engagement

		Self- efficacy	Learning engagement	Democratic teacher leadership style	Authoritative teacher leadership style	Laissez-faire teacher leadership style
Self-efficacy	Pearson Correlation	1	.699**	.260**	.236*	.134
Learning engagement	Pearson Correlation	.699**	1	.092	.075	-.011
Democratic teacher leadership style	Pearson Correlation	.260**	.092	1	.679**	.706**
Authoritative teacher leadership style	Pearson Correlation	.236*	.075	.679**	1	.855**
Laissez-faire teacher leadership style	Pearson Correlation	.134	-.011	.706**	.855**	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

This study carries out Pearson correlation test for three dimensions of teacher leadership style including democratic teacher leadership style, authoritative teacher leadership style and laissez-faire teacher leadership style, learning engagement and self-efficacy. From Table 1, the study came out with four conclusions. First, the correlation between learning engagement and students' self-efficacy is significantly positive. Second, the correlation among democratic teacher leadership, authoritative teacher leadership and self-efficacy is positively significant, while there is no significant correlation between laissez-faire teacher leadership and self-efficacy. Third, democratic teacher leadership and authoritative teacher leadership have a significant positive correlation with learning engagement, but there is a negative correlation between laissez-faire and learning engagement.

3.2. Learning Engagement Is Significantly Affected by Self-efficacy

Table 2. The regression model when the independent variable is self-efficacy and the dependent variable is learning engagement

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
(Constant)	-.123	.555		-.221	.825
1 Self efficacy	1.385	.144	.699	9.623	.000

a. Dependent variable: learning engagement

The result of regression analysis indicated that when self-efficacy is regarded as independent variable and learning engagement is considered as dependent variable, the Cronbach's alpha is .000. It indicates the better the junior high students' academic self-efficacy, the better their learning engagement.

3.3. The Full Intermediary Effect of Self-efficacy between Democratic and Authoritative Teacher Leadership Style and Junior High Students' Learning Engagement

Table 3. The mediating effect test when the independent variable is teacher leadership style and the dependent variable is learning engagement

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
(Constant)	4.468	.574		7.786	.000
1 Democratic teacher leadership style	.291	.266	.159	1.094	.277
Authoritative teacher leadership style	.381	.281	.269	1.357	.178
Laissez-faire teacher leadership style	-.489	.285	-.353	-1.717	.089

a. Dependent: learning engagement

Table 4. The mediating effect test when the teacher's leadership style is considered as the independent variable, while self-efficacy is regarded as the dependent variable

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std.Error	Beta		
(constant)	2.863	.298		10.777	<.001
1 Democratic teacher leadership style	.298	.133	.254	2.246	.027
Authoritative teacher leadership style	.238	.100	.349	2.373	.020

a. Dependent: self-efficacy

Table 5. The mediating effect test when the self-efficacy is considered as the independent variable and the dependent variable is learning engagement

Model	Coefficients ^a			t	Sig.
	Unstandardized Coefficients		Standardized Coefficient		
	B	Std.Error	Beta		
(Constant)	.182	.620		.294	.769
1 Self-efficacy	1.427	.153	.720	9.318	.000

This research adopted a stepwise regression analysis method to analyze the data. The result indicated that junior high students' head teachers' leadership style has no significant effect on junior high students' learning engagement. However, the head teachers' leadership style will make an impact on self-efficacy and self-efficacy will make an impact on junior high students' learning engagement. So self-efficacy plays a part in the intermediary effect between teacher leadership style and junior high students' learning engagement.

4. Discussion

4.1. The Significance of Self-efficacy in Junior High' s Study

Self-efficacy points to the self-belief level in solving problems of an individual. Learning engagement means the extent of concentration, activity and devotion when students are studying and doing their assignments [5]. Learning engagement is a dynamic existence and a significant index for measuring students' academic performance [2]. The data of this research suggests that the self-efficacy of junior high students has an important effect on their learning engagement. Hence, the head teacher of junior high should pay attention to how to enhance students concentration and interest in study. For instance, teachers could achieve them by sticking up for students' self-esteem in class, elevating their anticipation for their students. In this way, students possibly can transfer the high expectations from their head teacher into studying motivation [9]. The head teaches' definition of failure, success and confidence and their attitude toward life all influence their students potentially [10]. Self-efficacy

also predicts the self-assessment and academic performance of students. At the same time, the head teacher of a class should behave properly, be kind and humorous but also be serious and respectable. Junior high students should be protected and supported from various dimensions of emotions. Teachers should spur the enthusiasm and initiative of students. With the advancement of technology, being addicted to electronic devices has become one of the common problems among junior high students. Because of their young age, their intrinsic motivation is not strong enough to control themselves very well. Most of them need to be restrained by their parents. For example, numerous parents limit their kids' usage time on the phone. However, a scholar has clarified that academic self-efficacy and self-control in learning are significantly related. The better the self-efficacy, the better the self-control in learning. Positive emotions such as satisfaction, pride and relaxation are also tightly combined with self-control in learning [11]. Finally, self-efficacy has a positive predictive effect on psychological resilience. It belongs to one of the internal protection factors of psychological resilience [12]. In a nutshell, helping junior high students improve their self-efficacy can be conducive to their statement when they are facing challenges and external temptation. Additionally, it helps them to remain hard-working and persistent.

4.2. The Enlightenment of Class Head Teacher' s Leadership Style

In 1939, an American psychologist called Kurt Lewin first put forward the concept of teacher leadership style. He divided this concept into three types. They are democratic style, authoritative style and laissez-faire style. The data in this study shows that democratic teacher-leading style and authoritative teacher leading style have a significant positive impact on junior high students' academic self-efficacy. However, the students' academic self-efficacy in the laissez-faire class is low. So, it is imperative to avoid being indifferent, ignoring students' feelings, spoiling and taking less care of students when a head teacher is leading and governing the class. The inappropriate behaviour of head teachers such as indulging students can lead to negative consequences. Students may become selfish, have no goals and don't want to share and cooperate. When managing a class, there should be a necessary class management system. Appropriate reward and punishment measures should be carried on. Head teachers should avoid the formation of lazy and scattered class styles due to personal behavior. Second, junior high students are confronting the period of puberty, so it is a priority for head teachers to focus on both mental health development and physical health development of students. As a pilot of a class, head teachers are suggested to be democratic and authoritative, adopting a variety of ways of cooperation and mutual assistance, being patient with students and helping them solve the problems they might face in study and life. It is also the head teachers' duty to recall students' academic emotional experiences and eradicate the negative effect of down feeling in the study. Class leaders and subject representatives should be encouraged to play a positive leading role as much as they can.

Head teachers should regularly hold class meetings, where every student has the right and freedom to discuss classroom regulations and the disadvantages the head teacher had, making every student feel like an important member of the class to establish a better class atmosphere. Nowadays, most of the junior high head teachers are also junior high students' teaching teachers. The survey reported that almost all head teachers were solemn and earnest in the course of teaching. However, more than half of students don't want their head teachers to be serious during the class, they want them to be nice and treat them without prejudice and stereotype. As junior high students grow up, academic pressure gradually overwhelms them. They are drowned by higher expectations from parents, society and teachers. The competition among classmates is fiercer and fiercer and the physical and mental burden of junior high students is heavier and heavier. Consequently, the head teacher has the responsibility to always pay attention to the psychological changes of students and follow up on the status of students' study and life. Establishing an intimate emotional connection with students and having communication with students' parents in time is crucial. Head teachers should also learn as much as possible about each student' s family situation and always be there to provide appropriate guidance and help.

5. Conclusion

According to the results from the questionnaire, this research discovered that self-efficacy does play a role in connecting democratic and authoritative leadership styles with students' learning engagement. Therefore, this study proposes that first, it is feasible for head teachers to improve junior high students' self-efficacy by making changes to their leadership style, to make influence on their learning input. Second, the democratic and authoritative teacher leadership styles are the best choices for head teachers. For example, head teachers are recommended to formulate reasonable and measurable rules to manage a class, be friends with students and so on. Third, if a head teacher implements the laissez-faire teacher leadership style, students' learning engagement will be decreased.

Based on this study, junior high head teachers can make clear what exactly may be advantageous for junior high students to boost their eagerness and affection for study, guiding head teachers when governing a class of pubescent people and laying down the class regulations. The results of this study can be helpful for enhancing teachers' literacy and developing their personal qualities.

However, the research samples in this research were only selected from one junior high school in Qingdao, it was not nationwide. Therefore, the sample size was relatively small. In consideration of that, future studies can expand the sample size and figure out other potential factors that would affect students' study engagement.

On the basis of the result of this study, future studies can emphasize and further investigate the relation between teacher leadership style and self-efficacy in specific subjects, the differences among subjects and the influential factors behind them. Future studies should also concentrate on the methods for teachers to enhance students' study engagement and self-efficacy in order to improve students' academic performance.

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