THE INFLUENCE OF TEACHER ENTHUSIASM ON HIGH SCHOOL STUDENTS' CLASSROOM PARTICIPATION: THE MEDIATING ROLE OF ACHIEVEMENT MOTIVATION

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ABSTRACT

In recent years, students' classroom participation, which is an important indicator of teaching effectiveness, has thus become a subject of concern for educational psychology. However, at this stage, most of the research on classroom participation in China focuses on investigating the frequency of behavioral participation in specific disciplines or examining the influence of a single factor on classroom participation, while there is a relative lack of research on the effects of multiple factors on classroom participation and their influencing mechanisms. Teacher enthusiasm refers to a positive emotional experience and behavioral characteristics demonstrated by teachers in the process of teaching and educating people, and is a specific expressive force for teachers to positively deliver educational content. Teacher enthusiasm has been shown to be related to factors such as students' academic performance, motivation, and therefore may affect students' Classroom Participation. There have been no empirical studies that have examined the influence of teacher enthusiasm on students' Classroom Participation. Therefore, the research objectives of this study were 1. To examine the state of classroom participation among high school students. 2. To examine the relationship between teacher enthusiasm and classroom participation. 3. To examine the mediating role of achievement motivation in the relationship between teacher enthusiasm and classroom participation.

This study utilized quantitative research methodology. The study selected 707 high school students in Guangdong to investigate classroom participation, teacher enthusiasm, and achievement goal orientation in seven subjects, including language and mathematics. The results of the study showed that: 1. Classroom participation in each subject was ranked in the order of main subjects, physical education (outdoor) subjects,

and auxiliary subjects, and there were grade differences in classroom participation between auxiliary subjects and main subjects, and the grades with the highest levels of classroom participation in the main subjects and auxiliary subjects were the first year and the second year of high school, respectively; 2. There was a significant correlation between teacher enthusiasm and classroom participation in each subject, and teacher enthusiasm was a significant positive predictor of classroom participation; 3. Achievement motivation mediated the relationship between teacher enthusiasm and classroom participation. Specifically, in the main subject classroom, teacher enthusiasm had a significant indirect effect on classroom participation through the performance-avoidance goal orientation in achievement motivation; in the secondary subject and physical education (outdoor) classroom, teacher enthusiasm had a significant indirect effect on classroom participation through the mastery goal orientation in achievement motivation.

Keywords: high school students, classroom participation, teacher enthusiasm, achievement motivation

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MA JIA

DECLARATION

I, MA JIA, hereby certify that the work embodied in this independent study entitled "THE INFLUENCE OF TEACHER ENTHUSIASM ON HIGH SCHOOL STUDENTS' CLASSROOM PARTICIPATION: THE MEDIATING ROLE OF ACHIEVEMENT MOTIVATION" is result of original research and has not been submitted for a higher degree to any other university or institution.

(MA JIA)
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Chapter 1 Introduction

1.1 Background of the Study

In recent years, the level and manner of student participation in classroom activities have received widespread attention from educational researchers and practitioners. Classroom participation is a critical indicator of the quality of classroom teaching and a key factor influencing student learning outcomes. In the context of China, characteristics of classroom participation include low frequency of participation, limited active engagement, and insufficient teacher-student interaction (Zhang & Chen, 2021). Research indicates that the current state of classroom participation is less than satisfactory, with many students avoiding participation, contributing infrequently, or engaging passively (Liu & Zhao, 2022). Such passive involvement restricts the development of students' cognitive, emotional, and social competencies, leading to concerns about the effectiveness of classroom teaching.

Classroom participation refers not only to students' behavioral involvement in class activities but also to their cognitive engagement with learning objectives and their willingness to communicate and collaborate with peers and teachers (Wang & Sun, 2023). It encompasses verbal behaviors such as asking and answering questions, as well as nonverbal behaviors such as attentiveness, note-taking, and group cooperation. Studies have shown that a crucial measure of teaching quality is the degree of student classroom participation and engagement (Lee & Martin, 2021). Active participation enhances students' academic performance, fosters critical thinking, strengthens interpersonal relationships, and promotes overall personal growth. Therefore, improving the level of student classroom participation is not only a means to enhance classroom quality but also a foundation for fostering holistic student development.

Existing research on classroom participation in China mainly focuses on two categories of influencing factors: individual and environmental. Individual factors include gender, personality traits, academic performance, self-concept, and learning motivation (Hu & Li, 2020). Environmental factors involve teacher behaviors, class size, teacher-student relationships, parenting styles, and cultural background (Chen & Wang, 2021). Many scholars have explored the impact of teacher behaviors—such as teaching methods, classroom management styles, and instructional strategies—on classroom participation. However, relatively little attention has been paid to teacher enthusiasm, despite its crucial role in shaping classroom dynamics and student motivation.

Teacher enthusiasm is defined as the positive emotional experience and expressive behaviors teachers display in the process of educating students (Keller et al., 2016). It represents a teacher's passion for teaching, enjoyment of the subject, and energetic communication of knowledge. Enthusiastic teachers tend to demonstrate higher levels of engagement, positivity, and expressiveness in classroom instruction, which can directly influence students' emotional responses and behavioral engagement (Jiang et al., 2024). Research has found that teacher enthusiasm not only enhances students' learning motivation and classroom participation but also contributes to teachers' own professional satisfaction and psychological well-being (Frenzel et al., 2021). Enthusiastic teachers are often perceived as more approachable, supportive, and inspiring, thereby fostering stronger teacher-student relationships and a more active classroom atmosphere.

However, some studies in the Chinese educational context have reported that students perceive a lack of teacher enthusiasm and emotional connection in classroom teaching (Li & Zhang, 2023). This emotional distance between teachers and students may weaken students' intrinsic motivation to participate actively. Despite growing international evidence linking teacher enthusiasm to student engagement, whether and how teacher enthusiasm influences high school students' classroom participation in China remains underexplored. Therefore, this study aims to investigate the mediating role of teacher enthusiasm in shaping high school students' classroom participation, providing new insights into how affective teaching variables contribute to student engagement and learning outcomes.

1.2 Problems of the Study

In China, there are numerous factors influencing classroom participation, but empirical research is limited, with many new perspectives yet to be explored, making the research incomplete and not thorough enough. By reviewing Chinese literature and summarizing the existing information on factors affecting classroom participation among Chinese students, this study proposes the following questions:

Firstly, research subjects are primarily focused on students of specific subjects within a certain educational stage, lacking comprehensive attention across various subjects throughout the entire educational stage. Existing literature shows that research perspectives on classroom participation are singular, mainly concentrated in the field of education, with relatively few studies in the field of psychology (Zhu, 2020; Wang & Sun, 2021). Therefore, considering the context of general high school education in

China, this study proposes the first research question: What is the status of classroom participation among high school students?

Secondly, while research mostly emphasizes individual factors affecting students, there remain unexamined variables among external environmental factors, such as teacher enthusiasm in teaching behaviors. Existing research evidence indicates that teacher teaching behaviors significantly impact student classroom participation (Xue, 2024; Chen et al., 2024). However, as an aspect of teaching behavior, teacher enthusiasm has not been directly explored in relation to classroom participation. Based on this, the study proposes the second research question: What is the correlation between teacher enthusiasm and classroom participation?

Lastly, research methods predominantly focus on descriptive statistics, with few studies establishing mediation models to analyze large sample data and reveal specific internal mechanisms. Research points out that there is a close relationship between teacher enthusiasm, achievement motivation, and classroom participation (Xu, 2024). Both teacher enthusiasm and achievement motivation may significantly influence classroom participation. However, whether these conclusions hold true for Chinese high school students remains to be verified. Therefore, this study proposes the third research question: Does and how does teacher enthusiasm affect high school students' classroom participation?

1.3 Objectives of the Study

1. To examine the state of classroom participation among high school students.

2. To examine the relationship between teacher enthusiasm and classroom participation.

3. To examine the mediating role of achievement motivation in the relationship between teacher enthusiasm and classroom participation.

1.4 Scope of the Study

In this study, the convenience cluster sampling method was used to select high school students in Guangdong Province as the research subjects, and a questionnaire was administered collectively in the classroom.

1.5 Significance of the Study

Theoretical Significance: By investigating the mediating role of achievement motivation, this study contributes to the theoretical understanding of how internal and external factors interact to influence classroom participation. It bridges the gap between

educational and psychological perspectives on student engagement. By exploring the application of achievement goal orientation theory in the context of teacher enthusiasm and classroom participation, the study enriches the theoretical framework and offers new insights into the motivational processes that drive student engagement in educational settings.

Practical Significance: Understanding the factors that influence classroom participation can lead to the implementation of interventions aimed at increasing student engagement. This, in turn, can improve academic performance and overall learning experiences for high school students. The findings provides valuable insights for educators on the importance of teacher enthusiasm in fostering student engagement. By highlighting effective teaching behaviors, the study can help teachers develop strategies to enhance classroom participation.

1.6 Definition of Key Terms

Teacher enthusiasm refers to the teacher's observable passion, energy, and positive emotional expression toward teaching and learning activities.

Achievement motivation is the internal drive or desire that prompts individuals to strive for success and accomplish goals.

Classroom participation refers to students' active involvement in classroom learning processes, including verbal contributions, nonverbal engagement, collaboration with peers, and responsiveness to instructional activities.

Chapter 2 Literatures Review

2.1 Introduction

Teacher enthusiasm has long been recognized as a critical factor influencing student engagement and academic achievement. Enthusiasm in teaching can be defined as the passion and excitement that teachers display towards their subject matter and their instructional activities (Kunter et al., 2008). This enthusiasm is not only an intrinsic quality but also a communicative behavior that can significantly affect students' motivational and emotional states (Frenzel et al., 2009). In educational psychology, understanding the dynamics of how teacher enthusiasm impacts classroom participation is essential for developing effective teaching strategies that promote active learning and student involvement (Patrick et al. 2007).

Studies have demonstrated that enthusiastic teachers tend to create more stimulating and enjoyable learning environments, which can lead to higher levels of student engagement and participation (Anderman & Patrick, 2012; Reeve, 2012). This positive classroom atmosphere is crucial for fostering students' intrinsic motivation, which is a key determinant of their willingness to participate in class activities (Ryan & Deci, 2000). Moreover, the impact of teacher enthusiasm can vary across different educational contexts and cultures, suggesting that cultural factors may moderate the relationship between teacher enthusiasm and student engagement (Fassinger, 1995; Liu, 2018).

2.2 Classroom Participation

Classroom participation refers to the active engagement of students in the learning process, including behaviors such as attending classes, contributing to discussions, asking questions, collaborating with peers, and completing assignments (Tas, 2016). It represents an essential component of student engagement that encompasses behavioral, emotional, and cognitive dimensions of learning (Fredricks et al., 2004). Research has indicated that classroom participation is a multifaceted construct influenced by individual factors such as motivation, self-efficacy, and personality traits, as well as contextual and environmental factors including classroom climate, teacher behavior, and institutional culture (Fassinger, 1995; Martin & Rimm-Kaufman, 2020).

Empirical evidence suggests that higher levels of classroom participation are positively correlated with academic achievement, deeper learning outcomes, and enhanced interpersonal communication skills (Elliot & McGregor, 2001; Mih et al., 2015). Active participation not only facilitates cognitive development but also

strengthens students' sense of belonging and social integration within the learning community (Ryan & Deci, 2020). Furthermore, students who participate actively tend to develop stronger critical thinking and problem-solving abilities, demonstrating greater adaptability in dynamic classroom environments (Deng et al., 2023).

In the Chinese educational context, classroom participation has been the subject of increasing scholarly attention in recent years. Research has explored participation patterns among students across different educational levels and disciplines, often emphasizing its frequency, intensity, and the influence of various determinants (Yang & Xu, 2019; Li, 2013). However, the majority of studies have focused primarily on structural or situational factors, such as subject difficulty, class size, and assessment methods, while paying less attention to the interplay between teacher-related and psychological variables (Liu, 2018; Zhou & Chen, 2020).

Recent studies have begun to expand this perspective by examining how teacher enthusiasm, emotional contagion, and instructional style affect students' participation behaviors. For instance, Chen et al. (2024) found that teacher enthusiasm significantly enhances students' emotional engagement and willingness to participate in classroom activities. Similarly, Xu (2024) revealed that the perceived warmth and enthusiasm of teachers foster a supportive learning climate that encourages active student participation and collaboration. Moreover, Zhang and Li (2022) demonstrated that the use of interactive and student-centered pedagogies in Chinese high schools promotes not only behavioral participation but also the development of students' achievement motivation and self-regulated learning. Despite these advances, comprehensive investigations that integrate both teacher- and student-related determinants into a unified analytical framework remain limited.

2.3 Teacher Enthusiasm

Teacher enthusiasm is defined as the enthusiasm a teacher shows toward teaching and the subject matter, which can significantly impact students' motivational and emotional states (Kunter et al., 2008). It reflects teachers' affective engagement, energy, and passion for instructional activities, which are conveyed through verbal and nonverbal behaviors such as tone of voice, gestures, and facial expressions. Enthusiastic teachers are often perceived as more engaging, inspiring, and supportive, helping to create a positive classroom climate that encourages student curiosity and participation (Reeve, 2012; Anderman & Patrick, 2012).

Recent research has emphasized that teacher enthusiasm not only improves the emotional atmosphere of the classroom but also facilitates stronger teacher-student

relationships and a sense of belonging among learners (Frenzel et al., 2021). Enthusiasm serves as an emotional contagion mechanism, where students internalize teachers' positive emotions, leading to greater intrinsic motivation, attention, and persistence in learning tasks (Jiang et al., 2024). Studies in both Western and Chinese contexts indicate that when teachers display high enthusiasm, students are more likely to engage behaviorally and cognitively, participate actively in class, and demonstrate higher academic achievement (Chen et al., 2024; Keller et al., 2016).

Empirical findings support the view that teacher enthusiasm is a key predictor of student engagement and achievement motivation. For example, Keller et al. (2023) found that teacher enthusiasm significantly predicts students' academic emotions and engagement across different cultural settings. Similarly, Xue (2024) demonstrated that teachers' expressive enthusiasm in Chinese classrooms enhances students' feelings of belonging and engagement. Moreover, Chen et al. (2024) identified enthusiasm as a crucial antecedent to emotional engagement and classroom participation among Chinese EFL learners, suggesting its cross-disciplinary and cross-cultural importance.

Research has consistently demonstrated that teacher enthusiasm positively influences students' intrinsic motivation, academic performance, and emotional engagement (Saeed & Zyngier, 2012; Wolters, 2004; Fassinger, 1995; Mih et al., 2015). In recent studies, this relationship has been further strengthened through the application of advanced modeling techniques such as structural equation modeling, confirming enthusiasm's mediating and moderating effects on learning-related variables (Jiang et al., 2024; Xu, 2024). Overall, the growing body of evidence highlights that teacher enthusiasm remains a central determinant of effective teaching and student success in contemporary classrooms.

2.4 Achievement Motivation

Achievement motivation refers to the internal drive that prompts students to strive for success and accomplish their academic goals (Elliot & Church, 1997). It is commonly divided into different goal orientations, such as mastery goals (focused on learning and understanding), performance-approach goals (emphasizing outperforming others), and performance-avoidance goals (aiming to avoid doing worse than others) (Wolters, 2004; Saeed & Zyngier, 2012). Research has shown that different types of achievement motivation can mediate or moderate the relationship between teacher behaviors and student engagement (Mih et al., 2015; Reeve, 2012). For example, teacher enthusiasm can enhance students' mastery goals, thereby leading to higher classroom participation (Anderman & Patrick, 2012).

Recent empirical studies further elaborate these relationships. For instance, in the Chinese educational context, a study found that academic motivation (broadly defined) significantly predicted student academic engagement in EFL classes: higher academic motivation was strongly associated with greater student engagement (Wang & Xiong, 2022). Another study among Chinese primary students examined the links among motivation, engagement, and achievement in mathematics, confirming that motivation positively relates to engagement, which in turn links to achievement outcomes (Xia et al., 2022). Furthermore, in a more recent Chinese study, students' perceptions of their teachers' emotions (including enthusiasm) were shown to influence their own engagement, with achievement-related emotions and motivation playing a mediating role (Shi & Liu, 2025). Collectively, these studies underscore that achievement motivation remains a vital construct that interacts with teacher behaviors (such as enthusiasm) and student engagement patterns.

2.5 Relevant Studies

2.5.1 Teacher Enthusiasm and Classroom Participation

Research has consistently shown a positive relationship between teacher enthusiasm and student engagement, which in turn affects classroom participation (Kunter et al., 2008; Reeve, 2012). Enthusiastic teachers are able to create an engaging and stimulating learning environment that encourages students to participate more actively in class (Anderman & Patrick, 2012; Saeed & Zyngier, 2012). This relationship has been demonstrated across educational contexts—primary, secondary, and higher education—highlighting its universal importance (Wolters, 2004; Fassinger, 1995).

Recent empirical studies have strengthened this evidence base, revealing that teacher enthusiasm serves as both a direct and indirect predictor of classroom participation and academic engagement. Frenzel et al. (2021) demonstrated that enthusiastic teachers positively influence students' emotional experiences and learning engagement through emotional contagion mechanisms. Keller et al. (2023) confirmed that enthusiasm significantly predicts students' engagement and achievement emotions across diverse cultural contexts. Similarly, Xue (2024) found that teachers' expressed enthusiasm enhances students' sense of school belonging and motivation in Chinese classrooms, fostering more frequent and meaningful classroom participation.

Further, Jiang et al. (2024) revealed that teacher enthusiasm not only enhances students' cognitive and behavioral engagement but also promotes emotional involvement, thereby reinforcing participatory classroom dynamics. Chen et al. (2024) also reported that in Chinese EFL contexts, teacher enthusiasm substantially increases

students' willingness to communicate and engage, suggesting that enthusiasm functions as a universal motivational catalyst. Collectively, these studies confirm that teacher enthusiasm remains a vital driver of classroom participation, shaping both students' affective responses and behavioral outcomes.

2.5.2 Achievement Motivation as a Mediator

Achievement motivation has been identified as a key mediator in the relationship between teacher enthusiasm and student engagement (Elliot & Church, 1997; Mih et al., 2015). It encompasses various goal orientations—mastery, performance-approach, and performance-avoidance goals—that distinctly shape students' learning behaviors (Elliot & McGregor, 2001). When teachers display high enthusiasm, they inspire students to pursue mastery goals focused on learning and self-improvement rather than mere competition or avoidance of failure (Anderman & Patrick, 2012; Wolters, 2004).

Recent research provides empirical confirmation of this mediating mechanism. Wang and Xiong (2022) demonstrated that academic motivation plays a significant predictive role in Chinese students' engagement, with higher levels of intrinsic motivation corresponding to greater classroom participation. Similarly, Xu (2024) found that teacher enthusiasm positively influences student creativity and engagement, mediated by students' achievement motivation and mastery-goal orientation. In another study, Xia et al. (2022) reported that achievement motivation indirectly affects academic performance through increased engagement, emphasizing its mediating function between teacher-related factors and classroom participation.

Moreover, Shi and Liu (2025) highlighted that students' perceptions of their teachers' emotional expressiveness and enthusiasm enhance their achievement emotions and intrinsic motivation, which in turn promote Classroom Participation. These recent findings collectively underscore that achievement motivation functions as a dynamic psychological bridge linking teacher enthusiasm to students' active classroom participation and academic success.

2.6 Conceptual Framework

In response to the questions posed, this study takes a new perspective and approach, aiming to examine the differences and factors affecting Chinese high school students' classroom participation in various subjects, with particular attention to the differences in grade level, gender, and teaching environments inside and outside the household, as well as the effects of teacher enthusiasm and achievement motivation. By exploring the mediating role of achievement motivation in the relationship between teacher enthusiasm and classroom participation supported by the achievement goal orientation

theory, in order to develop a deeper theoretical understanding of the nature of classroom participation and the whole mechanism of its role and influence, this study constructs a theoretical basis and guidance for enhancing classroom participation in teaching practice. The conceptual framework is shown in Figure 2.1.

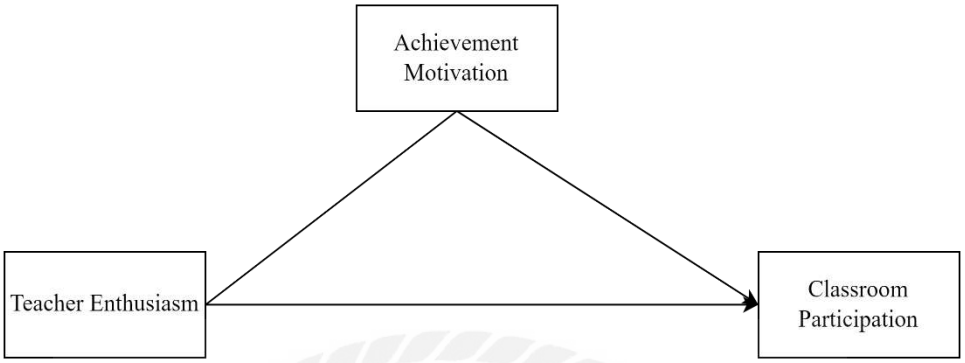

Figure 2.1 Conceptual Framework

Chapter 3 Research Methodology

3.1 Introduction

A quantitative research method was adopted to organize and analyze the collected data using SPSS, descriptive statistics, correlation analysis, and mediation effect test.

3.2 Research Design

This study employed a quantitative research design to examine the impact of teacher enthusiasm on high school students' classroom participation, with achievement motivation as a mediating variable. The study involved a cross-sectional survey administered to high school students across different subjects to collect data on their perceptions of teacher enthusiasm, their motivation, and their level of classroom participation.

Based on the purpose of this study and taking into account the students' academic goals as opposed to their engagement behaviors, the research participants were asked to evaluate Classroom Participation, teacher enthusiasm, and achievement motivation in seven subjects. The subjects to be evaluated were the three main subjects of language, math, and English, and the three secondary subjects of art, music, and mental health. Physical education, which is mainly an outdoor activity, has a different teaching and learning environment from the other subjects, and was therefore compared to the three main subjects and the three secondary subjects separately.

3.2.1 Classroom Participation Scale

Classroom participation scale, developed by Reeve and Lee (2014), is divided into four dimensions: behavioral participation, emotional participation, cognitive participation, and autonomous participation, each consisting of 3 items. Behavioral participation is assessed through 3 items, such as "I strive to achieve good grades in this subject." Emotional participation is assessed through 3 items, such as "I am willing to learn new things in this subject's class." Cognitive participation is assessed through 3 items, such as "When the teacher introduces new tasks in this subject's class, I fully engage." Autonomous participation is assessed through 3 items, such as "In this subject's class, I actively express my preferences and opinions." All items are scored on a Likert 5-point scale ("1=strongly disagree" to "5=strongly agree"), with higher scores indicating higher levels of classroom participation in each dimension.

3.2.2 Student Perception of Teacher Enthusiasm Scale

Teacher enthusiasm scale, adapted from Kunter et al. (2008), measures students' perception of their mathematics teacher's enthusiasm. The single-factor scale includes

3 items. For this study, the scale was translated and revised to correspond to the specific subject. Students' perception of teacher enthusiasm is assessed through 3 items: "This subject's teacher seems to enjoy teaching," "This subject's teacher is an enthusiastic teacher," and "This subject's teacher is passionate about this subject." All items are scored on a Likert 5-point scale ("1=strongly disagree" to "5=strongly agree"), with higher scores indicating higher perceived teacher enthusiasm.

3.2.3 Achievement Motivation Scale

Achievement motivation scale, developed by Elliot and Church (1997), is an achievement goal orientation divided into three dimensions: mastery goal orientation, performance-convergence goal orientation, and performance-avoidance goal orientation, each consisting of 6 items. For this study, the scale was translated and revised, ultimately deleting 4 items and retaining 14 items in the final questionnaire. Mastery goal orientation is assessed through 6 items, such as "It is important to get high scores on exams and tests in this subject." Performance-convergence goal orientation is assessed through 3 items, such as "It is important to get high scores on exams and tests in this subject." Performance-convergence goal orientation is assessed through 5 items, such as "It is very important not to perform worse than others in this subject." All items are scored on a Likert 5-point scale ("1=strongly disagree" to "5=strongly agree"), with higher scores indicating stronger achievement goal orientation in each dimension.

3.3 Hypothesis

H1: High school students' classroom participation across subjects varies by grade level and gender.

H2: Teacher enthusiasm has a positive effect on classroom participation across different subjects.

H3: Achievement motivation mediates the relationship between teacher enthusiasm and classroom participation.

3.4 Sampling and Data Collection

In this study, the cluster sampling method was used to select high school students in Guangdong Province as the sample. 800 questionnaires were distributed to 23 classes in 7 schools and 734 questionnaires were collected, of which 707 were valid.

3.5 Data Analysis

The collected data were organized and analyzed using SPSS, and the data were subjected to common method bias test, descriptive statistical analysis, correlation analysis, and mediation effect test.

1. Common Method Bias Test

Before formal data analysis, a common method bias (CMB) test was performed to ensure that the results were not affected by single-source or measurement bias, which can arise when all data are collected through self-reported questionnaires. The Harman's single-factor test was applied by conducting an exploratory factor analysis (EFA) on all questionnaire items without rotation. If the first principal component explained less than 40% of the total variance, it indicated that no serious common method bias existed in the data (Podsakoff et al., 2003). This procedure ensured that the subsequent analyses were statistically robust and free from significant bias.

2. Descriptive Statistical Analysis

Descriptive statistics were used to summarize the demographic characteristics of the respondents and to provide an overview of the main study variables, including teacher enthusiasm, achievement motivation, and classroom participation. Indicators including means, standard deviations, minimums, and maximums were calculated to assess the general tendencies and distribution of the variables. This step helped identify potential outliers, data anomalies, or skewness that could influence subsequent inferential analyses.

3. Correlation Analysis

A Pearson correlation analysis was conducted to examine the bivariate relationships among the key variables. This analysis helped determine the strength and direction of associations between teacher enthusiasm, achievement motivation, and classroom participation. Significant positive correlations among these variables would preliminarily support the hypothesized relationships, providing the foundation for further mediation analysis.

4. Mediation Effect Test

To examine whether achievement motivation mediates the relationship between teacher enthusiasm and classroom participation, a mediation analysis was conducted using SPSS PROCESS Macro (Model 4) developed by Hayes (2018). This method allows estimation of both direct and indirect effects through bootstrapping procedures, which provide confidence intervals for the mediating paths. A bootstrapping sample size of 5,000 iterations was used to generate 95% bias-corrected confidence intervals. If the confidence interval of the indirect effect did not include zero, the mediating effect

was considered statistically significant. This analysis helped clarify whether teacher enthusiasm affects classroom participation directly, indirectly through achievement motivation, or through a combination of both paths.

5. Reliability and Validity Checks

Before conducting correlation and mediation analyses, the reliability and validity of the measurement scales were assessed. Cronbach's alpha coefficients (α) were computed for each construct to ensure internal consistency reliability, with values above 0.70 considered acceptable (Nunnally, 1978). Additionally, Kaiser–Meyer–Olkin (KMO) and Bartlett's test of sphericity were conducted to verify data suitability for factor analysis. High KMO values (> 0.80) and significant Bartlett's test results ($p < 0.001$) indicated that the data were appropriate for further multivariate analysis.

3.6 Reliability and Validity Analysis of the Scale

The overall Cronbach's Alpha value for the survey questionnaire, as shown in Table 3.1, is 0.926, indicating excellent internal consistency reliability of the scales used in this study.

Table 3.1 Results of Reliability Analysis

Number of questions	Cronbach 's α
29	0.926

The Cronbach's Alpha values for each variable's scale were calculated, as detailed in Table 3.2. It can be observed that all α values for the scales in this study are above 0.7, indicating high reliability of the scales for each variable in this study.

Table 3.2 Results of Reliability Analysis for Each Variable

Variable	Number of questions	Cronbach 's α
Teacher Enthusiasm	3	0.877
Achievement Motivation	14	0834
Classroom Participation	12	0.856

The data were subjected to a discriminatory process of suitability for factor analysis and the results are shown in Table 3.3.

Table 3.3 KMO and Bartlett's Test[a]

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.973
Bartlett's Test of Sphericity	Approx. Chi-Square	4656.172
		560

	df Sig.	0.000

From Table 3.3, the overall KMO value of the questionnaire is 0.973 > 0.9 and the Bartlett's test Sig value is 0.000, indicating that the scale is suitable for factor analysis and can be tested in the next step.

Chapter 4 Findings

4.1 Descriptive Statistical Analysis

The basic analysis of classroom participation of high school students in each subject was derived from descriptive statistics of the data in each subject. The Student Classroom Participation Scale and the analysis results are shown in Table 4.1.

Table 4.1 Descriptive Statistics of High School Students' Classroom Participation in Different Subjects

Subject	Mean	Standard deviation	Post hoc comparison
Main subject classroom participation	4.064	0.602	Main Subjects > Physical Education > Secondary Subjects
Secondary subject classroom participation	3.665	0.664	
Physical Education (Outdoor) Classroom Participation	3.669	0.729	
Note: The main subjects are Language, Mathematics, and English; the secondary subjects are Art, Music, and Mental Health.			

The data in Table 4.1 show that the classroom participation scores of high school students were above 3.6 for each subject. The results show that students' classroom participation levels vary by subject type. Specifically, participation in main subjects (Language, Mathematics, and English) recorded the highest mean score (M = 4.064, SD = 0.602), indicating that students tend to be more engaged in these core academic areas. In contrast, secondary subjects (Art, Music, and Mental Health) demonstrated the lowest participation level (M = 3.665, SD = 0.664), while Physical Education (Outdoor) classes had a slightly higher mean (M = 3.669, SD = 0.729), suggesting moderate engagement.

4.2 Test of Differences in Classroom Participation

A one-way analysis of variance (ANOVA) was conducted to analyze the classroom participation of high school students at different grade levels with each subject, and the results are shown in Table 4.2.

Table 4.2 Tests of Grade Level Differences in High School Students' Classroom Participation in Different Subjects

Grade level (mean ± standard deviation)	Main subject classroom participation	Secondary subject classroom participation	Physical education classroom participation
Grade 10 (n=294)	4.13±0.57	3.69±0.63	3.68±0.73
Grade 11 (n=314)	4.05±0.61	3.70±0.70	3.71±0.75
Grade 12 (n=99)	3.93±0.63	3.48±0.62	3.51±0.64
F	4.407	4.342	2.983
p	0.013*	0.013*	0.051
Post hoc comparisons	Senior year > sophomore year > junior year	Sophomore > Senior > Junior	-
Note: * p <0.05 ** p <0.01, below.			

The data in Table 4.2 show that there are significant differences between high school students in different grades in terms of classroom participation in the main subjects, and the post hoc test found that students in the first year of high school had significantly higher classroom participation in the main subjects than the remaining two grades. There are also significant differences between high school students in different grades in terms of classroom participation in the secondary subjects, and the post hoc test found that students in the second year of high school had higher classroom participation in the secondary subjects than the remaining two grades.

An independent samples t-test was conducted on the classroom participation of high school students of different genders in relation to each subject and the results are shown in Table 4.3.

Table 4.3 Test of Gender Differences in High School Students' Classroom Participation in Different Subjects

Gender (mean ± standard deviation)	Main subject classroom participation	Secondary subject classroom participation	Physical education classroom participation
Male (n=304)	4.05±0.65	3.61±0.68	3.71±0.73
Female (n=403)	4.07±0.57	3.70±0.65	3.64±0.73
F	-0.417	-1.766	1.431
p	0.677	0.078	0.153

The data in Table 4.3 show that there is no significant difference between male and female high school students in terms of classroom participation in primary and secondary subjects as well as in physical education (outdoor).

4.3 Correlation Analysis

Pearson's correlation analysis was conducted on the three dimensions of classroom participation, teacher enthusiasm, and achievement motivation in the main, secondary, and physical education, and the results are shown in Table 4.4.

Table 4.4 Correlation Analysis of Teacher Enthusiasm, Classroom Participation and Achievement Motivation of High School Students in Different Subjects

		Mean	Standard deviation	Classroom Participation	Teacher enthusiasm	Mastery Goal	Performance-Convergence	Performance-Avoidance
Main Subject	Classroom participation	4.064	0.602	1				
	Teacher enthusiasm	4.393	0.588	0.616**	1			
	Mastery goal	4.056	0.674	0.396**	0.437**	1		
	Performance-convergence	3.729	0.834	0.236**	0.260**	0.475**	1	
	Performance-avoidance	3.277	0.921	0.394**	0.315**	0.370**	0.525**	1
Secondary Subjects	Classroom participation	3.665	0.664	1				
	Teacher enthusiasm	3.999	0.738	0.564**	1			
	Mastery goal	3.127	0.805	0.427**	0.379**	1		
	Performance-convergence	2.426	0.788	0.184**	0.147**	0.397**	1	
	Performance-avoidance	2.222	0.697	0.177**	0.116**	0.224**	0.424**	1
	Classroom participation	3.669	0.729	1				

Physical Education (Outdoor)	Teacher enthusiasm	3.932	0.831	0.539**	1			
	Mastery goal	3.146	0.834	0.432**	0.287**	1		
	Performance-convergence	2.639	0.886	0.197**	0.135**	0.452**	1	
	Performance-avoidance	2.316	0.793	0.160**	0.086*	0.273**	0.457**	1

The data in Table 4.4 show a significant positive correlation between performance-convergence goal orientation, and performance-avoidance goal orientation of classroom participation, teacher enthusiasm, and across all high school subjects.

4.4 Test of the Mediating Effect of Achievement Motivation on the Relationship between Teacher Enthusiasm and Classroom Participation

One of the objectives of this study is to examine the mediating effects of the three dimensions of achievement motivation on the relationship between teacher enthusiasm and classroom participation across subjects. After controlling for demographic variables, the mediating variables were added to the three dimensions of Achievement Motivation: Mastery Goal Orientation, Performance-Convergence Goal Orientation, and Performance-Avoidance Goal Orientation, across subjects, and the mediating effects were examined. Specific results are shown in Table 4.5 and Table 4.6.

Table 4.5 Analysis of the Mediating Effect of High School Students' Achievement Motivation on the relationship between Teacher Enthusiasm and Classroom Participation in Each Subject

		Classroom Participation		Mastery Goal		Performance-Convergence Goal			
		B	*t*	B	*t*	B	*t*	B	*t*
Main Subject	Teacher Enthusiasm	0.595	19.514**	0.400	11.031**	0.283	5.210**	0.396	6.870**
	Mastery Goal								
	Performance-convergence								
	Performance-Avoidance								
	R^2	0.467		0.397		0.118		0.186	

	F	76.337		57.362		11.688		19.911	
Secondary Subjects	Teacher Enthusiasm	0.538	20.161**	0.426	11.897**	0.172	4.225**	0.119	3.262**
	Mastery Goal								
	Performance-convergence								
	Performance-Avoidance								
	R^2	0.435		0.307		0.060		0.033	
	F	67.179		38.690		5.537		2.959	
Physical Education	Teacher Enthusiasm	0.488	17.917**	0.313	9.140**	0.139	3.492**	0.046	1.274
	Mastery Goal								
	Performance-convergence								
	Performance-Avoidance								
	R^2	0.363		0.231		0.082		0.037	
	F	49.721		26.274		7.842		3.358	

Table 4.6 Summary of Test Results for the Mediating Effect of Achievement Motivation on the Relationship between Teacher Enthusiasm and Classroom Participation of High School Students in Each Subject

	Path	Effect Value	(Boot SE)	(95% BootCI)	Test Findings	Percentage of effect
Main subject	Teacher Enthusiasm => Mastery Goal Orientation => Classroom Participation	0.048	0.014	0.021 ~ 0.075	Partially Mediated	8.069%
	Teacher Enthusiasm => Performance-Convergence Goal Orientation => Classroom Participation	-0.017	0.008	-0.035 ~ -0.003	Avoidance Effect	3.360%
	Teacher Enthusiasm => Performance-Avoidance Goal Orientation => Classroom Participation	0.054	0.011	0.033 ~ 0.075	Partially Mediated	9.093%

Secondary Subjects	Teacher Enthusiasm => Mastery-Goal Orientation => Classroom Participation	0.061	0.017	0.036 ~ 0.102	Partially Mediated	11.386%
	Teacher Enthusiasm => Performance- Convergence Goal Orientation => Classroom Participation	-0.002	0.006	-0.015 ~ 0.011	Mediated Not significant	0%
	Teacher Enthusiasm => Performance-Avoidance Goal Orientation => Classroom Participation	0.008	0.005	0.001 ~ 0.019	Partially Mediated	1.467%
Physical Education	Teacher Enthusiasm => Mastery Goal Orientation => Classroom Participation	0.072	0.016	0.052 ~ 0.116	Partially Mediated	14.814%
	Teacher Enthusiasm => Performance- Convergence Goal Orientation => Classroom Participation	-0.001	0.006	-0.014 ~ 0.011	Mediated Not Significant	0%
	Teacher Enthusiasm => Performance-Avoidance Goal Orientation => Classroom Participation	0.002	0.003	-0.003 ~ 0.010	Mediated Not Significant	0%
Note: Masking effect if a and b are significant and c' is significant and a*b is heteroscedastic with c'.						

The data in Table 4.6 show that the mediation analysis results examining how different types of achievement motivation (mastery goal, performance-convergence goal, and performance-avoidance goal orientations) mediate the relationship between teacher enthusiasm and students' classroom participation across three subject categories: main subjects, secondary subjects, and physical education.

The mastery goal orientation pathway (Effect = 0.061, Boot SE = 0.017, 95% CI [0.036, 0.102]) shows a significant partial mediation effect, contributing 11.39% of the total effect. Teacher enthusiasm effectively enhances students' intrinsic motivation to learn and participate in these subjects.

The performance-convergence goal orientation (Effect = –0.002, 95% CI [–0.015, 0.011]) was not significant, suggesting that competition does not meaningfully mediate participation in these courses.

The performance-avoidance goal orientation (Effect = 0.008, 95% CI [0.001, 0.019]) shows a small but significant partial mediation effect (1.47%), indicating that even avoidance-oriented motivation plays a minor role.

The mastery goal orientation pathway (Effect = 0.072, Boot SE = 0.016, 95% CI [0.052, 0.116]) shows a significant partial mediation effect, explaining 14.81% of the total effect. This suggests that teacher enthusiasm strongly promotes students' mastery motivation, which in turn enhances participation in physical education classes.

Both performance-convergence (Effect = –0.001, 95% CI [–0.014, 0.011]) and performance-avoidance (Effect = 0.002, 95% CI [–0.003, 0.010]) paths were not significant, indicating that competition- or avoidance-based motivations do not meaningfully mediate the effect of enthusiasm on participation in outdoor activities.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

(1) The current state of high school students' classroom participation

This study investigated the current state of classroom participation of Chinese high school students. The results of the study found that the overall level of classroom participation of high school students was not considered low, a result that is not consistent with previous studies that have concluded that the level of classroom participation of students in China is not optimistic. This is perhaps because of the different students' grades, or because it is related to the traditional classroom environment in China, where past studies have focused on examining only behavioral participation, and where most of the traditional classrooms in China take a classroom-centralized approach to lectures, where the teachers are dominant and students are encouraged to listen quietly and think quietly without excessive behavioral action participation.

This study investigated the differences in classroom participation of Chinese high school students across subjects. The results of the study found that participation was higher in the main subjects than in the secondary subjects. Previous studies have shown that Chinese students have low levels of classroom participation, but little is known about whether there are differences in classroom participation by subjects. This result may be due to the fact that students expect to be more engaged in the main subjects that they perceive to be more important to their future academic achievement and career goals. The result that physical education was the most engaged subject in the minor is consistent with this study's review that classroom participation was influenced by the instructional environment. This result is consistent with Hypothesis 1 of this study. Physical education is an outdoor class and students may be more willing to participate in outdoor classrooms because they provide a change in environment. The physical activities involved in outdoor classrooms may stimulate students' interest and motivation to participate, and the novelty of the environment may make them more curious and engaged.

This study investigated classroom participation and grade-to-grade differences among Chinese high school students in various subjects. The results of the study found that there were grade-level differences in high school students' classroom participation in main and secondary subjects, with sophomores having the highest level of participation in secondary subjects and freshmen having the highest level of participation in main subjects, a result which is partially consistent with Hypothesis H1

of this study. Based on this result, the reason may be that during the transition from the first year to the third year of high school, teachers' teaching styles and students' learning styles and development are changing, resulting in grade-level differences in participation in each subject.

This study investigated the differences in classroom participation across genders among Chinese high school students in each subject. The results of the study confirmed that there is no gender difference in classroom participation across subjects among Chinese high school students. This result is contrary to the existing view and hypothesis H1 of this study. Some studies suggest that certain cultural or social factors may affect the classroom participation activities of students of different genders, e.g., male students participate more actively in the classroom of physical education subjects than female students. However, it is possible that due to the change in cultural attitudes and the development of social norms, redistribution of educational resources, etc., these factors promote respect for individual differences, gender equality, and encouragement for both boys and girls to be able to choose areas of interest and thus actively participate in the classroom.

(2) Relationships between high school students' classroom participation, teacher enthusiasm, and achievement motivation

This study used scales to assess high school students' perceptions of teacher enthusiasm, as well as their levels of classroom participation and achievement motivation. From the data analyzed in the correlation between the three variables in each subject, it was found that teacher enthusiasm, classroom participation and achievement motivation were significantly related. Teacher enthusiasm had the highest level of correlation with classroom participation in the main subjects, while classroom participation in all subjects had the highest level of correlation with mastery goal orientation in achievement motivation. The high correlation between teacher enthusiasm and classroom participation in the main subjects illustrates the importance of promoting a positive and supportive learning environment that influences students' motivation, cognitive processes, and affective processes, which is important for increasing academic achievement, enhancing motivation, and improving attitudes toward learning. In addition, the results of the study indicated that classroom participation was most highly correlated with mastery goal orientation, which emphasizes the importance of facilitating deep and meaningful learning experiences in the classroom, thus contributing to the promotion of students' understanding and application of knowledge.

The above findings suggest that teacher enthusiasm is a key factor in promoting student engagement and motivation in the classroom, which is largely consistent with hypothesis H2 of this study. Teacher enthusiasm not only reflects the degree of teachers' love, responsibility and happiness for teaching, but also affects the level of students' motivation and enthusiasm for learning. Therefore, the growth of teacher enthusiasm can enhance both teaching skills and teaching effectiveness, which is consistent with the results of previous studies.

(3) The effect of teacher enthusiasm on high school students' classroom participation

From the results of the mediation test of high school students' classroom participation, teacher enthusiasm and achievement motivation in this study, it was found that teacher enthusiasm had a direct effect on students' classroom participation, and this direct effect was present in the main subjects, the secondary subjects and the physical education subject. This result fully validates the hypothesis H2 of this study, and the cross-disciplinary consistency of teacher enthusiasm on high school students' classroom participation further emphasizes the importance of teacher enthusiasm. Teacher enthusiasm can have an indirect effect on classroom participation through achievement motivation, i.e., achievement motivation partially mediates the relationship between teacher enthusiasm and classroom participation. This result suggests that teacher enthusiasm not only directly affects high school classroom participation, but also indirectly affects classroom participation by activating high school students' achievement motivation, a finding that is partially consistent with previous research on achievement motivation. In order to better explore the influence of teacher enthusiasm and high school students' classroom participation in a deep internal systematic way, this study also conducted a test of the mediating effect of the dimensions of achievement motivation on the relationship between teacher enthusiasm and high school students' classroom participation in various subjects, and the results of the study found that there is a complex correlation between teacher enthusiasm, classroom participation in various subjects, and the dimensions of achievement motivation, which is basically consistent with the hypothesis H3 of this study.

This study examined the effect of achievement motivation on the relationship between teacher enthusiasm and classroom participation in a mastery classroom of high school students and found that three dimensions of achievement motivation, namely mastery goal orientation, performance-convergence goal orientation, and performance-avoidance goal orientation, acted as a partial mediator or a masking effect between teacher enthusiasm and classroom participation in a mastery classroom, with the three

pathway models accounting for the effects of 8.069%, 3.360%, and 9.093%. This shows that for students with performance-avoidance goal orientation, teacher enthusiasm can increase their classroom participation, which is inconsistent with previous researchers' findings that performance-avoidance orientation negatively predicts learning participation. It may be because some students in the Chinese educational context may take test scores as their only goal and neglect their own experiences and interests in the learning process. They are afraid of failures and negative evaluations to avoid losing their chances and face, whereas teacher enthusiasm will bring them positive feedback and support, which gives them more motivation to engage in classroom activities. However, for performance- convergence goal oriented students, teacher enthusiasm produces a masking effect, which is consistent with the results of previous scholars' studies. Performance- convergence goal oriented students are more complex in their participation, which indicates that this part of the students already have enough intrinsic motivation, and don't need external incentives and feedbacks to support their learning, and they are more focusing on the intrinsic value and significance of their learning process rather than simply pursuing high grades, and for this group of students, teacher enthusiasm may not have much effect.

This study found that both mastery goal orientation and performance-avoidance goal orientation partially mediated the relationship between teacher enthusiasm and classroom participation, with the mediating effects of this pathway accounting for 11.386% and 1.467% of the total effect. This result suggests that high school students typically participate more actively in the main classroom because they do so by achieving high grades or receiving positive evaluations. This may occur because adolescents in the Chinese educational context are more often required to develop morally, intellectually, physically, spiritually, and aesthetically, and students are usually more appreciated, paid attention to, and recognized by society or their parents for their excellent performances in the highly competitive social environment, especially in high school main led by music and art, an explanation that is consistent with the findings of some previous studies. The generally low mediating effect of achievement motivation on the relationship between teacher enthusiasm and classroom participation in the secondary subjects compared to the main subjects may be due to the fact that in the context of China's general high school education environment and the college entrance examination model, students perceive the secondary subjects to be less important than the main subjects, and therefore are less motivated to excel in the secondary subjects, which may lead to a weaker mediating effect of achievement motivation on classroom participation in the secondary subjects.

The study added high school students' classroom participation in physical education to explore the differences between the three dimensions of achievement motivation for physical education and other subjects in terms of teacher enthusiasm as well as classroom participation. It was found that only mastery goal orientation partially mediated the relationship between teacher enthusiasm and physical education (outdoor) classroom participation in the three dimensions of high school students' achievement motivation, and the mediating effect was 14.814% of the total effect, respectively. Motivation for mastery goal orientation reflects students' desire to develop competence or improve their knowledge of new skills. This finding suggests that, on the one hand, students equipped with mastery goal orientation are more likely to actively participate in classroom activities when the teacher is enthusiastic. On the other hand, performance-convergence goal orientation and performance-avoidance goal orientation did not mediate significantly between teacher enthusiasm and mastery classroom participation, which may indicate that classroom participation in physical education (outdoor) may not be as influential for students who focus on achieving high scores or receiving positive evaluations and avoiding low scores or receiving negative evaluations as it is for students who focus on their own development or on improving their knowledge of new skills. Of these, mastery goals appear to be the strongest mediator when compared to other subjects, suggesting that students motivated to master new skills and knowledge tend to be more actively engaged in classroom activities in PE when they feel enthusiastic about their teachers. The results of students' classroom participation in physical education accounted for a somewhat higher effect ratio compared to classroom participation in other minors, possibly due to the fact that it is only outdoors and students feel teacher enthusiasm more strongly in physical education than in other minors, which also increases students' motivation to achieve and thus influences classroom participation.

Overall, the above results also serve to illustrate that high school students may have different achievement motivation and classroom participation in different subjects as a result of their academic goals in high school, e.g., in all subjects, teacher enthusiasm led to a significant effect of high school students' mastery goal-directed motivation on classroom participation; and high school students' performance-avoidance goal motivation led to a masking effect of classroom participation in the main subject.

5.2 Recommendation for Future Study

Based on the results and analysis of this study, there are several future research directions and practical applications that can be explored.

First, there is great value in exploring the relationship between teacher enthusiasm and student development beyond Classroom Participation and achievement motivation. For example, future research could investigate how teacher enthusiasm affects other student developments such as academic achievement, self-efficacy, and mental health.

Second, the current study focused on high school students in China, so future research could examine whether these results can be generalized to students in other settings and cultures. It would be valuable to examine the relationship between teacher enthusiasm, Classroom Participation, and achievement motivation in different educational contexts, such as elementary school, middle school, and college, as well as in other countries.

Again, the current study used self-reported measures of teacher enthusiasm, Classroom Participation, and achievement motivation. Future research could use other methods, such as observation or teacher reports, to gain a more comprehensive understanding of the relationships between the constructs.

Finally, the results of this study have practical implications for educators. Given the significant correlation between teacher enthusiasm, achievement motivation, and Classroom Participation, teachers may want to consider ways to increase their enthusiasm for teaching and provide opportunities for students to develop mastery-oriented achievement motivation. Teachers may also benefit from training on how to increase their enthusiasm for teaching and effectively support student achievement motivation and Classroom Participation.

Thus, this study provides valuable insights into the relationship between teacher enthusiasm, achievement motivation, and Classroom Participation among Chinese high school students. Future research can build on these findings to enhance our understanding of the mechanisms by which teacher enthusiasm affects student achievement, explore the generalizability of these findings to other settings, and develop practical strategies to increase teacher enthusiasm and support student development.

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Appendix

Part 1

School:

Grade:

Age:

Gender: A. Male B. Female

Only Child: A. Yes B. No

Your Last Semester's Grades: A. Excellent B. Above Average C. Average D. Below Average E. Poor

Part 2

No.			Chinese	Math	English	Psychology	Music	Art	Physical Education
1	I strive to achieve good grades in this subject.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
2	I do my best to engage in this subject's class.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
3	I concentrate on what the teacher says in this subject's class.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							

4	I feel comfortable in this subject's class.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
5	Participating in this subject's class is interesting to me.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
6	I am willing to learn new things in this subject's class.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
7	When the teacher introduces new tasks in this subject's class, I participate fully.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
8	In this subject's class, I follow up on my understanding of the course content, not	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							

	just whether I got the correct answer.								
9	If I find it difficult to understand the material in this subject's class, I try to find new ways to understand it.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
10	In this subject's class, I ask the teacher questions to help my learning.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
11	I let the teacher in this subject know what interests me about the class content.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
12	In this subject's class, I actively express my preferences and opinions.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
13	I think the teacher in this subject seems	Strongly disagree							
		Disagree							

	to enjoy teaching.	Neutral							
		Agree							
		Strongly agree							
14	I think the teacher in this subject is enthusiastic.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
15	I think the teacher in this subject is passionate about the subject.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
16	I think it is important to study hard in this subject.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
17	In this subject, personal progress is very important.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
18	In this subject, truly understanding the learning	Strongly disagree							
		Disagree							
		Neutral							

	material is the main goal.	Agree							
		Strongly agree							
19	In this subject, understanding is more important than memorizing.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
20	In this subject, learning new perspectives and concepts is very important.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
21	In this subject, it's okay to make mistakes as long as you are learning.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
22	In this subject, getting good grades is the main goal.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
23	In this subject, it is very important to arrive at the	Strongly disagree							
		Disagree							
		Neutral							
		Agree							

	standard answer.	Strongly agree							
24	In this subject, it is important to get high scores in exams and tests.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
25	In this subject, it is very important to show others that your work is not bad.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
26	In this subject, it is very important not to make mistakes in front of everyone.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
27	In this subject, it is very important not to perform worse than other classmates.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							
28	In this subject, one of the goals is	Strongly disagree							
		Disagree							

	to avoid looking stupid.	Neutral							
		Agree							
		Strongly agree							
29	In this subject, one of the goals is to avoid looking like you can't complete the coursework.	Strongly disagree							
		Disagree							
		Neutral							
		Agree							
		Strongly agree							