

FACTORS AFFECTING THE ACADEMIC SUCCESS OF SENIOR HIGH SCHOOL STUDENTS





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FACTORS AFFECTING THE ACADEMIC SUCCESS OF SENIOR HIGH SCHOOL STUDENTS



A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of MASTER OF EDUCATION

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THE THESIS TITLED

FACTORS AFFECTING THE ACADEMIC SUCCESS OF SENIOR HIGH SCHOOL STUDENTS

BY

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This study aims to investigate the relationship between learning motivation, student participation, learning effort, learning self-regulation, achievement goal, learning self-efficacy, and academic success and to investigate the effects of learning motivation, student engagement, learning effort, learning self-regulation, achievement goals, and learning self-efficacy on academic success. The survey was conducted on tenth-grade students at Chenzhou No. 3 Middle School. The tenth grade has a total of 600 students and among the four classes, 234 students were randomly selected as the research sample. The data collection was conducted with a questionnaire, The data was analyzed by the Pearson Product Moment Correlation Coefficient and Stepwise Multiple Regression Analysis. The results were as follows: (1) there was a significant positive correlation between the six factors of academic success in Chenzhou No.3 Middle School, learning motivation (X₄), student participation (X₂), learning effort (X₂), learning self-regulation (X₄), achievement goals (X_s) and learning self-efficacy (X_s) at a .01 level; (2) there were six factors that affected academic success at .01 level from large to small, learning self-efficacy (x6), learning motivation (X_1), student participation (X_2) , learning self-regulation (X_4) , study effort (X_2) , achievement goal (X_5) ; and (3) A significant predictive equation for the academic success of high school students. The raw scores were as follows: $\hat{\mathbf{Y}} = 0.565 + 0.211 X_2 + 0.127 X_4 + 0.127 X_5 + 0.120 X_3 + 0.115 X_6 + 0.108 X$. The standard scores were as follows: $Z = 0.201X_2 + 0.199X_5 + 0.171X_6 + 0.160X_4 + 0.159X_1 + 0.153X_2$.

Keyword : Academic success, Learning Motivation, Student Participation, Learning Self-regulation, Learning Self-efficacy

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Academically successful students had higher self-esteem, lower rates of depression, and were less likely to use alcohol and drugs. Academic success was important to students because it was intimately linked to favorable outcomes that we valued. Academically successful and highly educated people had higher employment opportunities, more stable employment, and higher wages than less educated people, were more likely to have health insurance, be less reliant on social assistance, be less likely to engage in criminal activity, and be more active, healthier, and happier citizens and charitable volunteers. Academic success was critical because future workers will require higher degrees of education to work in technically demanding occupations (Regier, J. 2011). Academic success could be characterized as either academic achievement or educational persistence, had been investigated in terms of purely academic factors such as lack of aptitude or good versus bad study habits (Guskey, 2013; Hatti & Anderman, 2013).

"Academic success was comprised of six components: academic achievement, satisfaction, skill and competency acquisition, persistence, achievement of learning objectives, and career success." (York et al.,2015, p. 9). Academic achievement was defined as advancement in the acquisition of educational skills, materials, and knowledge in an academic setting. "Students' subjective perception of how well the learning environment supports academic success" was defined as satisfaction," and student satisfaction indicated the quality of an educator's teaching skills. In an organization, skills refered to specific knowledge that might be based on technical, professional, or social expertise. Persistence was the student's persistence in learning; persistence; retention, was the time of retention, the duration of being constant or maintaining a certain state. A learning objective was a broad statement of the overall

outcome expected from a teaching unit or project. The favorable professional outcomes attained by an individual through work experience were referred to as career success.

The high school period was a very critical learning stage for students because in high school students would face the need to take the college entrance examination. Therefore, the quality of a student's studies would affect whether the student can enter a good university, or even be admitted to a university. This may affect the development of a student's future career and may also affect whether the student will work in the future. Being able to have a satisfying job makes a big difference. Academic work has always been the standard for testing a student's learning level, and it is an ability test to test the student's internal academic knowledge over a period of time. During my teaching of high school students, I found that most of the students who was good at academics and had been stable are usually hard-working and self-disciplined. They have clear learning goals and learning motivations and have their own unique learning methods and selfregulation. Ability, to know how to face your own studies, and not be troubled by various factors. They had strong achievement goals and persistent learning to successfully realized their dreams. Students with good academic performance naturally had stronger self-efficacy and abilities. Students would actively participate in learning and spend a lot of time solving academic problems. And those students who were not good at academics will spend a lot of time on social media and playing online games instead of participating in learning. Most of them had poor self-regulation ability and were easily affected by bad emotions. Compared with students with good academic performance, they were lazy. They didn't have much hope for their studies, and they had no motivation to learn. And there was no concept of achievement goals. In terms of learning, they didn't know what their studies can bring them, resulting in no academic goals or even plans and dreams for their future. So, it also leads to students who was not good at school, they didn't study hard and they didn't know why they studied hard.

Based on my own experience, I analyzed the problems students encountered in their studies: students lack the motivation to learn, pay attention to their own characteristics, and do not pay attention to learning, such as being keen to participate in basketball games and extracurricular recreational activities. But they don't care about their academic performance and feel that the current study is not suitable for them. In terms of learning, they are afraid of suffering and tiredness, and they are unwilling to work hard for academic progress. They always feel that they will always find a suitable major in the future, showing irresponsibility and immaturity towards life, and then developing some bad study habits, resulting in poor academic performance in the future and seriously affecting their own academic success.

In terms of student participation, it is possibly due to increased learning intensity. This has also caused some students to find ways to be lazy in terms of participation and find various reasons not to attend class. For example, because I went to bed too late at night and couldn't get up the next morning, I didn't go to class, or I pretended to be sick and found various reasons to ask for leave and not to go to class. Such learning status and learning performance seriously affect students' academic performance.

In terms of learning effort, students' lack of clear goals is one of the main factors that cause students to not study hard, and they lack clear goals for their future. Learning, many students are not sure what it can bring them in the future, or even what they can do in the future, which leads to their lack of effort in learning. They do not see the relevance of what they are learning to their future careers, or some students are not interested in what they are learning now. And the reason why some students don't work hard is that they dare not work hard. They are afraid that they will not get the results they want after working hard, which leads to choosing not to study hard and to be content with the status quo. If you don't work hard in your studies, you will not get good learning results, and you will not be successful in your studies.

In terms of learning self-regulation, most of the students were relatively poor in self-regulation in learning. For example, students are under the pressure of academic performance and the pressure to enter a higher school. As long as they feel some pressure, they can't control their emotions and focus, which leads to poor academic results. The extremely rapid development of today's society has caused students to feel more and more pressure, which has also caused many students to feel anxious. With the rapid development of the social economy, the influence of social media is also wider, such as the various social software and video-watching software used by students today. If students do not have good self-regulation skills, it will seriously affect their studies. It can also be severely affected in terms of academic success.

In terms of achievement goals, some students lack successful experience. Some students' academic performance is always good. They do not have the opportunity to serve as class cadres at school, and they rarely have the opportunity to participate in some important activities. They always miss various awards and honors, which causes some students to lack a sense of accomplishment. Whether they are at home or at school, they get little praise and rewards, but more criticism and punishment, so they often think that they are failures at school, which also leads to their belief in achievement goals and a sense of belonging in learning. And the emotion slowly fades away.

In terms of learning self-efficacy, some students will seriously lack self-confidence in the future learning process because of their temporary poor academic performance, or because they are not as good as other students in a certain aspect. For example, in the classroom, students who lack self-efficacy always feel that their learning ability is not as good as others and that their control and understanding of knowledge are not as good as other students. These students have a relatively low sense of identity themselves, which will also lead to negative learning in the future learning process.

From my personal teaching experience, for high school students, their success lies in whether they can achieve excellent results and whether they can be self-satisfied. The success of high school students lies in whether they can show their achievements in learning, or whether they can show themselves on a larger learning platform and achieve excellent results in learning competitions. If they want to succeed, they must first actively participate in learning and work hard and purposefully to learn to lay a firmer foundation for the knowledge they have learned. Constantly improve your professionalism, practice day after day, and be able to self-regulate your emotions and states when encountering setbacks and difficulties. This is an important factor in determining success for students in their studies.

Academic success was crucial because not only good jobs with suitable earnings for the students would have but also higher degrees of education to face the technologically challenging vocations the working students would need in the future (Brown, 1999; National Alliance of Business, Inc., 1998). Furthermore, the number of employment requiring a university education is expected to grow more than twice as quickly as those that do not require a university education over the next 10 to twenty years (Fleetwood & Shelley, 2000; Rentner & Kober, 2001). Academically successful kids would have greater options to choose their future occupations than those with less schooling (Schvaneveldt, Miller, & Berry, 2001), stronger self-esteem (Filozof et al., 1998), have reduced feelings of despair and anxiety (Cicchetti & Toth, 1998; Liem, Dillon, & Gore, 2001), break away from alcohol abuse and socially unexpected performance (Kasen et al., 1998), as well as refrain from engaging in chemical abuse (Hallfors et al., 2002; Schulenberg et al., 1994).

1.2 Research Questions

This study attempts to investigate the following questions:

1. What is the relationships between learning motivation, student

participation, learning effort, learning self-regulation, achievement goal, learning selfefficacy, and academic success?

2. What are the factors that affect academic success?

1.3 Research Objectives

- 1.3.1 To investigate the relationship between learning motivation, student participation, learning effort, learning self-regulation, achievement goal, learning self-efficacy, and academic success of students in Chenzhou No. 3 Middle School.
- 1.3.2 To investigate the effects of learning motivation, student participation, learning effort, learning self-regulation, achievement goal, and learning self-efficacy on the academic success of students in Chenzhou No. 3 Middle School.

1.4 Significance of research

Today, academic success has become an important factor that bothers students' physical and mental health and affects their life development. This study focuses on what factors affect students' academic success. This research may be helpful to all those working in education, including students and parents. Through it, students and parents, as well as teachers, can understand the problems that exist that affect students' academic success, so as to promote improvement. It helps students find scientific learning methods, clear learning objectives, and correct learning direction and plays a certain reference role for students to understand the true meaning of learning and improve their academic level. In this way, it can help improve student outcomes and the quality of learning. For teachers, this research can assist teachers enhance their teaching strategies and quality of instruction in the future teaching process, so as to help students improve their academic performance. At the same time, it also laid the foundation for me to engage in the education industry in the future. For schools, it can improve the learning atmosphere of school students.

1.5 Research Scope

Population

The population was conducted on tenth-grade students of Chenzhou No. 3 Middle School. The population has 600 students in total.

Participants

The participants were tenth-grade students of Chenzhou No. 3 Middle School. There are a total of 600 students in the tenth grade, and students from four classes are randomly selected as a research sample by simple random sampling, with a total of 234 students.

1.6 Study variables

Dependent Variable: Academic Success

Independent variable:

- 1. Learning motivation
- 2. Student Participation
- 3. Learning effort
- 4. Learning self-regulation
- 5. Achievement goal
- 6. Learning self-efficacy

1.7 Definition of Terms

1.7.1 Academic Success

Academic success refers to a student's capacity for self-motivation, self-efficiency, and ability to handle the study environment. and strive to succeed by focusing on their studies, achieving high grades, and improving their knowledge and skills.

1.7.2 Learning motivation

Learning motivation refers to the internal and external forces that enhance students' desire and willingness to learn.

1.7.3 Student Participation

Student participation refers to the concentration of students in the learning process and the degree of harmony with classmates or colleagues.

1.7.4 Learning effort

Learning effort refers to the amount of time and energy that students devote to learning is referred to as your learning effort. People with more perseverance, work harder in study and work, are willing to devote extra time to study and work in order to succeed.

1.7.5 Learning self-regulation

Learning self-regulation refers to ability and responsibility of students to control their emotions, thoughts, and behaviors in the learning process and apply numerous learning strategies in the learning process and adjust of learning time and learning environment to meet the prescribed learning goals effectively.

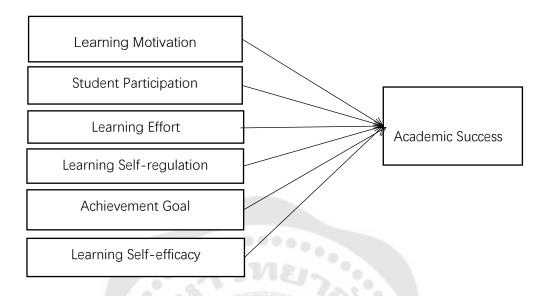
1.7.6 Achievement goal

Achievement goal refers to cognitive representations of desired outcomes that direct students' behavior in specific way and direct belief, sense of belonging, and emotion for the achievement behavior.

1.7.7 Learning self-efficacy

Learning self-efficacy refers to student believes in their ability to perform or be competent at a task and achieve good grades such as they are more confident, desire to study hard and work hard and confident to complete difficult tasks.

1.8 Conceptual Framework of Research



1.9 Research Hypothesis

- 1.9.1 Learning motivation, student participation, learning effort, learning self-regulation, achievement goals, and learning self-efficacy were related to the academic success of senior high school students in Chenzhou No.3 Middle School.
- 1.9.2 Learning motivation, student participation, learning effort, learning self-regulation, achievement goals, and learning self-efficacy affected the academic success of senior high school students in Chenzhou No.3 Middle School.

CHAPTER 2

LITERATURE REVIEW

1. Academic success

1.1 Definition of Academic Success

Kuh et al. (2006), student success is: Academic achievement, engagement in learning-related activities, satisfaction, acquisition of necessary knowledge, skills, and talents, perseverance, attainment of educational outcomes, and post-college performance are all considered to be indicators of student success. Definitions of academic success include academic achievement, satisfaction, acquisition of skills and abilities, persistence, achievement of learning goals, and career success (Kuh et al., 2006). According to Kulacsar (1978), "Academic achievement can be conceptualized as an expression of the concordance of the student's capacities and interests with school expectations, defined and given to the student through diverse instructive-educational approaches.

Adekunle and Omolola (2019) mentioned academic success can be simply defined as a student's capacity for self-motivation, self-efficiency, and ability to handle the study environment. Furthermore, academic success is determined by reference to the student's body of work, which includes the level of scientific education, the accumulation of new knowledge and the development of application skills, the emergence of personality traits, the interest and motivation for learning, the capacity for instruction, and the potential for personal development (Mihaela, 2014).

Academic success had been viewed as the completion of academic activities which improve the academic achievement of the student concerned (Ralph Olusola Aluko et al., 2016) which students master the knowledge, skills, proficiencies, and aptitudes that the instructor will teach or assign Salvia and Ysseldyke (2000).

In conclusion, academic success was an efficient and purposeful success.

Academic success measures a student's academic and intellectual development, which

depends on the student's academic performance and intellectual level. Academic success and academic achievement are interchangeable. Academic success can be seen as students' interests and efforts. Academic success can also be measured by improving student achievement. Academic success is defined as academic achievement related to the realization and realization of many activities and skills and the integration of information of a multicultural and scientific nature. Academic success is defined as achieving learning outcomes at all stages of the educational journey. Students strive to succeed by focusing on their studies, earning high grades, and improving their knowledge and skills. The learning phase is an important stage in a student's life and requires dedication and hard work to achieve academic success. It is important for students to strive for excellence and set achievable goals to achieve desired results.

1.2 Component of Academic Success

Kuh et al., (2006) Propose the components of academic success: academic achievement, satisfaction, acquisition of skills and abilities, persistence, achievement of learning goals, and career success.

- 1.2.1 Academic achievement, which typically crosses a number of disciplines, is the advancement made toward the objective of obtaining educational skills, resources, and knowledge. Instead of the broad acquisition of knowledge in non-academic settings, it refers to accomplishment in academic contexts (Bolt, N. 2011).
- 1.2.2 Satisfaction is the students' subjective perceptions of how well a learning environment supports academic success (Lo, 2010). Munteanu et al. (2010) highlighted that student contentment hints at the caliber of the teacher's teaching abilities. In the study by Lo (2010), highly satisfied students stressed the importance of the instructors' teaching and their commitment to the learning process as contributing factors to their ability to learn.

- 1.2.3 Acquisition of skills and abilities: Technical, professional, or social expertise may be the basis for skills, which are knowledge in an organization (Snyder & Cummings, 1998).
- 1.2.4 Persistence: (NCES 2021b) or the enrollment headcount of any cohort compared to its enrollment headcount on its initial official census date (Voigt and Hundrieser 2008) are definitions of persistence, which is defined as continued enrollment (or degree completion) at any higher education institution—including one different from the institution of initial enrollment—during the fall semesters of a student's first or second years.
- 1.2.5 Achievement of learning goals: A learning objective is a broad declaration of the intended overall result of a teaching strategy or program (Arreola, 1998).
- 1.2.6 Career success: Positive professional outcomes throughout a person's employment are referred to as career success, and they are assessed using both objective and subjective criteria (Ng et al., 2005). Success in a profession that can be measured objectively is highlighted by factors like income and past promotions. Subjective job success is a reflection of an individual's positive emotions of fulfillment and achievement at work. (Greenhaus et al., 1990; Ng et al., 2005; Rinfret, 2005).

1.3 Importance

Academic success is important, and performance after graduation is influenced by academic success. Students with strong degrees or advanced degrees are more likely to find jobs and earn higher wage grades than students without degrees or advanced degrees. (National Center for Education Statistics, 2001; U.S. Department of Commerce, Bureau of the Census, 1999). Academic success is important because it helps students get better jobs and higher wages, needed to handle the technologically demanding positions they will require in the future (Brown, 1999; National Alliance of Business, Inc., 1998). Since academic success significantly affects students' post-

graduation prospects in a positive way and since graduates People with advanced degrees are more likely to find jobs and earn higher wages than those without advanced degrees, the significance of academic success has been highlighted. In the next 10 to 20 years, the number of employment requiring a college education could more than triple (Fleetwood, C. 2000; Rentner, D. 2001).

Academic success aids students in avoiding sexual activity (Schvaneveldt et al., 2001), have higher self-regard (Filozof et al., 1998), have lower levels of hopelessness and worry (Cicchetti & Toth, 1998; Liem et al., 2001), leave alcohol abuse and unexpected social behavior behind (Kasen et al., 1998), and prevent themselves from engaging in chemical abuse (Hallfors et al., 2006; Schulenberg et al., 1994).

1.4 Measurement method

Bayat and Salehiniya (2019) studied 384 students who were selected using a stratified sampling technique from seven faculties (medicine, dentistry, pharmacy, health, paramedicine, nursery, midwifery, and rehabilitation) made up the study's assessed sample. Randomly, the sample size was divided into equal portions for each faculty's student population. 39-item questionnaire about academic accomplishment served as the basis for the data gathering techniques. in Adib-Hajbaghery *et al* (2016). Data analysis was carried out using the SPSS18 program. The result of the Adib-Hajbaghery *et al* (2019).'s according to the study, the academic achievement questionnaire's Cronbach's alpha values were 76%, and items' Likert scale scores varied from 1 (totally disagree) to 4 (absolutely agree). Validity and reliability approved by Adib-Hajbaghery *et al* (2019).'s study.

The coding scheme used to assess the definition of academic success was created using a grounded theory methodology (Charmaz, 2006; Glaser, 1992). Data were obtained using the TFS scale. The issues covered are: (1) how academic success is defined and (2) what measures are used to operate proven academic success research. First, the main definitions of terms are evaluated conceptually using Astin's I-

E-O model, Secondly, The peer-reviewed papers having the greatest citation rate among the works found during the initial literature search were found using the Web of Science Citation Index. According to the findings, grades and GPA are the most often utilized indicators of academic performance.

2. Learning Motivation

2.1 Definition of Learning Motivation

Karim (2012) Learning motivation is defined as the innate idea that directs individual learning goals, encourages learners to put in consistent effort, reinforces prior knowledge, and strengthens and improves learning outcomes.

Koff & Mullis (2011) defined learning motivation as the purpose or desire of the student to engage in and put forth effort in the process of learning, as demonstrated by the student's selection of a particular learning activity and their efforts in pursuing it.

Huang (2017) defined learning motivation was to guide students to continue learning and strive to achieve the learning goals set by teachers in the learning process.

According to the theory of human needs, motivation in learning refers to meeting the needs (Maslow, 1981).

Winkel (2003) defined motivation to learn as the overall drive of a student who leads activities and provides direction for learning activities.

Learning motivation is the driving force to conduct learning activities and maintain them without being asked by others (Tentama et al., 2019).

In conclusion, learning motivation is the drive for self-satisfaction and pursuit. Learning Motivation is a kind of continuous power, it is a kind of behavioral power determined by motivation. The learner's success or failure is decided by the learner's autonomy. Learning Motivation is a kind of behavior that determines the realization of human goals through motivation and guidance. Learning motivation is an internal process or mental state that causes people to engage in or continue to engage in learning activities and to direct their behavior toward certain learning objectives. study

by a certain internal desire, and there is a need to encourage and direct pupils to do so.

2.2 Component

A multi-component structure consists of components such as intrinsic motivation, extrinsic motivation, self-determination, and self-efficacy (Eccles JS, Wigfield A 2002).

According to several authors (Glynn SM et al., 2011 Eccles JS, et al., 2006). extrinsic motivation refers to learning science as a means to an end; intrinsic motivation refers to the innate satisfaction produced by acquiring new scientific information. (Mazlo J, et al., 2002). self-determination refers to the control that students think they have over their science learning (Black AE, Deci EL 2000). additionally, self-efficacy is the pupils' belief that they can succeed in science (Baldwin J, et al., 1999 Lawson AE, et al., 2007).

2.3 Importance

Learning motivation is very important in education. Students must become motivated to learn in order to build a desire to learn. Learning motivation motivates students to think effectively and focus on learning. learning motivation can improve students' learning efficiency. Learning is a process that requires active participation, which affects the efficiency and desire of learning (Bakar 2014).

What students will focus on and how well they digest information are both influenced by their learning motivation. Students that are driven make an attempt to comprehend what they are learning, and they even push themselves to think critically about how they could use what they have learned in the future (Pintrich & Schunk, 2002; Pugh & Bergin, 2006). People who are highly learning motivation typically have a strong desire to complete tasks, the ability to strive for learning, tenacity in learning, and enthusiasm for learning (Setiani et al., 2019).

As a result of its positive effects on academic achievement, wellbeing, and satisfaction in addition to assisting students in developing into competent professionals,

motivation is acknowledged as a crucial factor of health science education. (Kusurkar RA et al., 2011) (Mann KV. Motivation in medical education 1999) (Crossley ML, Mubarik A 2002). (Hadre et al 2007) suggested that one of the most significant factors affecting pupils' academic success or failure is motivation.

According to (Baron and Donn 2000), students with a high level of motivation exhibit traits like initiative, diligence, being actively engaged in their studies, being difficult to satisfy, being punctual and disciplined, and consistently attempting to learn with the greatest outcome. Additionally, motivated students succeed academically by acting in ways like researching, asking questions, seeking guidance, and participating in lessons, labs, and study groups (Schunk et al., 2008).

Learning motivation is a vital component of a student's academic success that can be triggered by various factors such as their desire to succeed, expectations, and rewards (Almighty C. et al., 2021).

The most crucial element that educators can work to promote learning and aid pupils in their academic success is undoubtedly learning motivation (Williams, 2013). One of the most important factors in an individual's academic success is their motivation to learn (Rahardjanto et al., 2019).

2.4 Measurement method

In Caroline Letshego Keamogetswe's (2017) Stofile's research paper, The selected sample consisted of 55 admitted sophomores. Respondents were chosen using probability sampling in the form of simple random sampling. A standardized self-administered questionnaire was used by the researcher to gather information on students' learning motivation, namely the Students' Motivation Towards Physics Learning (SMTPL) questionnaire. The Students' Motivation Towards Science Learning (SMTSL) questionnaire was created by Tuan, Hsiao, Chin, and Shieth (2005), and the SMTPL questionnaire is an adaption of that tool. To assess students' motivation for learning

science, the SMTSL questionnaire was created (Tuan et al., 2005). The six scales created for this questionnaire are (A) self-efficacy; (B) active learning techniques; (C) the value of science learning; (D) performance objective; (E) attainment goal; and (F) learning environment stimulation. The main tools used by the researcher to gauge students' interest in learning science are these scales (Tuan et al., 2005). 35 questions make up the SMTPL questionnaire, which collects pertinent data using a 7-point Likert scale with a range of 1 to 7.

3. Student Participation

...... 3.1 Definition of Student Participation

The definition of student participation is the student's enthusiasm for the classroom, Students' opinions about the design of the curriculum and their sense of community are both influenced by them (Bovill et al., 2011; Cook-Sather et al., 2014; Masika et al., 2016; Zepke, Citation 2015).

(Potvin, 2007) Student participation was described as activities involving cooperation between students and diverse groups of actors on health-related topics in order to impact choices made about the creation, planning, execution, or assessment of health promotion strategies.

Genuine student participation is defined as having input on processes for school health promotion choices and activities rather than just participating in them (Simovska, 2007; Hart, 2008).

(cf. Arnstein, 1969; Foucault, 2002) Describe student participation as participation that includes a fair opportunity to affect the students' learning participation and participation, Students who take part get involved in the decision-making process and find this valuable.

In conclusion, student participation in learning refers to the concentration of students in the learning process and the degree of harmony with classmates or colleagues. Student participation is related to success, increasing student participation can promote success, student participation is critical to student success because success is built on participation. Students' participation in learning activities in class, a sense of belonging, and total commitment to learning may lead to student success. Student participation is the amount of enthusiasm and psychological energy invested in learning activities, and the external expression of student participation is the stable and continuous learning behavior accompanied by positive emotion. The willingness of pupils to participate in school activities is referred to as student participation, such as whether they like classes, whether they can timely complete the homework assigned by teachers, and whether they actively communicate with teachers in class.

3.2 Component

Students and instructors collaborate in partnerships as part of student participation; Students work as agents of educational change and actively participate in the co-creation of the curriculum with the teachers (Bergmark et al.,2015; Bovill et al.,2013; Cook-Sather et al., Citation2014). According to Masika and Jones (2016), a key component of student participation is belonging.

Participation includes metacognitive strategies used by students and the management of time and learning environments (Crede & Kuncel, 2008; Greene, 2015).

3.3 Importance

According to Korobova and Starobin (2015) student success is linked to student participation. Student participation is fundamental for student success in college. It has been noted that the more involved a learner is, the more they will comprehend and learn from the learning process (Snyder, 2003) Consequently, if students participate in frequent classroom discussions, they will have a greater comprehension of the subject. (Hansen et al., 2002).

Based on a study conducted by Ferguson-Hessler de Jong (in Theberge, 1994), It was discovered that children that participate actively typically achieve more

academically. As Astin (1999), stated that participation in class by students increased their level of learning satisfaction.

3.4 Measurement method

In the (Bethany C et al., 2018) Gender and Student Participation study, the BSRI-S. Bem Gender Role Inventory was first used for student surveys - abbreviated (BSRI-S; Bem, 1974). Determine the psycho-gender of the participant. There were 30 items in the BSRI-S, The application of the items was then rated by the participants on a seven-point Likert scale (1=never true, 7=always true). Using continuous ratings to calculate masculinity and femininity scores, This study demonstrated a relationship between more classroom participation and masculinity and androgyny, while interactions between students and professors outside of the classroom were connected to femininity and androgyny.

4. Learning effort

4.1 Definition of Learning effort

Zimmerman and Rosenberg (1997) "The total amount of energy spent in the process of studying" as how learning effort is defined, While Carbonaro (2005) Definition "The student is able to meet the learning requirements set out in the school" as "the amount of time and energy that students expend".

Learning effort is described as the readiness to handle demanding tasks and errands as well as accept novel and difficult concepts (Gülten GENÇ & Dinçay KÖKSAL 2021).

According to Soper (1976), learning effort is the effective use of human resources by students in the course. Many definitions that have been developed over time refer to learning effort as the energy expended when learning (Pintrich et al., 1993), in the midst of studying (Zimmerman & Risemberg, 1997), Meet the teacher's requirements for learning (Carbonaro, 2005), and be able to respond to learning

requirements in a timely manner (Buenz & Merril, 1968). learning effort is defined as the quantity of labor done in relation to studies or courses (Schuman et al., 1985); the ability to persevere in difficult circumstances and be receptive to novel and challenging challenges (Richter et al., 2015); the volume of learning-related work done (Schau et al., 1995); a group of actions taken by pupils to finish a task or master a skill (Bozick, R. 2010); the initiatives made by students to advance their abilities (Utami, R. 2015); persistent efforts to finish academic assignments (Kuh, 2001); interactions between students and learning activities that are reenergized, enthusiastic, emotionally pleasant, and concentrated (Kindermann, 2007); learning level (Schuman et al., 1985); and participation in learning (Johnson et al., 2001).

Learning effort is defined as the readiness to handle demanding tasks and errands as well as accept novel and difficult concepts (Gülten et al., 2021).

In conclusion, The amount of time and energy you devote to studying is referred to as a learning effort. People with more perseverance, work harder in study and work, are willing to put in longer hours at work and in school, and ultimately achieve success. Study effort is to do their best energy, put their energy into learning, The time and energy invested in achieving a goal is known as the learning effort.

4.2 Importance

Learning effort is an internal construct that is thought to enhance the controllability of educational outcomes, student learning effort has long been recognized by educators and researchers as a key factor in education. Learning effort can simply refer to the will to persist in finishing a task or mental effort. Indicators of learning effort have included attending classes, engaging in them, and completing assigned homework and classwork (Özer, S. 2020).

4.3 measurement method

Using survey and quantitative research in the dissertation research (Özer, S. 2020). Quantitative research and investigation methods were used in this study Data were gathered using the Foreign Language Learning Effort Scale (FLLES). *To gauge the level of effort expended by tertiary-level foreign language learners, Karabyk and Mirici (2018) Self-developed Foreign Language Learning Effort Scale (FILES).* The scale comprised 17 items. The Likert scale has five categories: "never," "rarely," "sometimes," "often," and "always."

5. Self-regulation

5.1 Definition of Self-regulation

Self-regulation is the ability to control your own behavior and thoughts while pursuing your goals (Gillebaart M 2018).

Self-regulation is a wide notion that is typically explained as behavior that is goal-directed or that is modified to comply with external standards (Bridgett et al., 2015).

Self-regulation is the capacity to manage one's feelings, actions, and thoughts (McClelland & Cameron, 2012). Self-regulation refers to the ability to direct or manage one's feelings, thoughts, attention, and behavior (McClelland & Cameron, 2012).

The capacity to self-regulate in emotionally charged settings is referred to as self-regulation (Denham et al., 2012).

In conclusion, self-regulation is a process that involves participation. The application of diverse learning strategies in learning is referred to as self-regulation. as well as the effective regulation of learning time and learning environment to achieve the specified learning objectives. Self-regulation is the ability and sense of responsibility of students to control their emotions, thoughts, and behaviors as well as the pursuit of long-term goals in the learning process. Self-regulation is a dynamic process that helps people's minds transition from imbalance to equilibrium. Self-regulation is the process

through which individuals establish behavioral norms for themselves and employ controllable rewards or punishments to reinforce, sustain, or modify their behavior.

5.2 Definition of Learning self-regulation

The capacity to comprehend and manage one's learning environment is referred to as self-regulated learning. Goal-setting, self-monitoring, self-instruction, and self-reinforcement are examples of self-regulation talents. (Harris & Graham, 1999; Schraw, Crippen, & Hartley, 2006; Shunk, 1996).

Pintrich (1990) gives a semi-complete definition of learning self-regulation. He sees learning as an active and systematic process in which learners specify the goals of their own learning and then attempt to govern it. control and supervise their thoughts, motivation, and conduct.

Zimmerman (2001) considers self-regulation learning to be a self-controlled process in which students transform their mental ability to practical skills connected to their schoolwork.

Self-regulation learning (SRL) is defined as "an active creative process in which learners set learning goals and then seek to monitor, govern and control their cognition, motivation, and conduct, guided and controlled by their goals and contextual aspects of their surroundings" (Boekaerts et al., 2000, p. 435).

Self-regulated learning (SRL) requires learners to be able to set goals, plan, monitor, and reflect on their learning process (Azevedo & Gaševic, 2019; Broadbent & Poon, 2015; Zimmerman, 2008).

Zimmerman (1990) claimed that Self-regulated learning stems from a student's own thoughts, feelings, and behavior that are guided toward reaching predetermined goals.

5.3 Component

According to Roy Baumeister (2007), a current SRT expert, there are four components involved:

Desirable behavioral standards Motivation to meet expectations Monitoring of conditions and thoughts preceding violations of standards Willpower is the ability to use one's internal strength to control one's urges.

These four components work together to decide our self-regulatory activity at any given time.

Setting explicit goals; using task techniques such as developing, organizing, and rehearsing; demonstrating high levels of self-efficacy and intrinsic interest; and self-monitoring and self-reflecting on performance outcomes are all examples of self-regulation (Zimmerman & Schunk, 2008).

5.4 Importance

A significant body of evidence suggests that disparities in academic achievement between low- and high-achieving pupils are closely related to an individual's level of self-regulation (Zimmerman & Schunk, 2008). Self-regulation allows us to deal with stress and conflict while also improving our relationships and overall well-being. Mentally, self-regulation is required for learning and performance at school or on the job. Socially: By not allowing powerful emotions or urges to control their behavior, self-regulation allows people to behave in socially acceptable ways and create connections.

Students must be motivated to regulate their cognition, effort, and emotional reactions to classroom performance in order to be academically successful. Self-regulation is crucial to understand since it regulates motivation, thinking processes, emotional states, and behavior (Duru, et al., 2014). In general, people with high self-regulation are better able to adapt to the demands of the environment, are more successful at school and work, and have better mental health than those with low self-

regulation (Duru, et al., 2014).

According to the study's findings (Zimmerman, 2005), there is a significant relationship between self-regulation and academic success. Pintrich (2000) found kids with self-regulation abilities are more driven to succeed academically and study more effectively than other kids (Zimmerman & Schunk, 2012). It has been established that students that use self-regulated learning strategies throughout the learning process outperform other students academically (Zimmerman & Martinez Pons, 1986, 1988, 1990).

5.5 Measurement method

In (Anastasia Kitsantas & Adam Winsler Faye Huie 2008) study

A Predictive Validity Study of motivational strategies using learning questionnaires in Literature. (MSLQ; Pintrich et al., 1993) Motivational beliefs (task value, self-efficacy, and test anxiety) and self-regulation (metacognitive self-regulation and time management) of students were evaluated. The MSLQ is a commonly used self-report measure that evaluates student motivation and learning strategies for college students using a 7-point Likert scale (1 = not at all true of me and 7 = very true of me).

6. Achievement goal

6.1 Definition of Achievement Goal

According to Ames, C. (1992). The objective and direction of achievement behavior is referred to as an achievement goal. It is a combination of cognitive and emotional variables that is an organic system formed of people's beliefs, attributions, and emotions about achievement behavior.

Elliott and Dweck et al. argue that achievement goals are the purpose of competency-based activities. They define achievement goals as "cognitive process plans with cognitive, emotional, and behavioral outcomes" (Dweck et al, 1986).

Achievement goals are cognitive representations of what people are

attempting to do, and they can lead and control achievement behavior (Linnenbrink & Pintrich, 2000). "Pintrich, on the other hand, believes that achievement goals are "cognitive representations of the individual's reasons and purposes for pursuing achievement tasks".

The objective or motivation for people's competence-related behaviors is referred to as their achievement goals (Elliot, 2005).

The causes or justifications for a person's pursuit of an achievement situation are referred to as achievement goals. Different goals produce distinct patterns of cognition, affect, and behavior (Anderman & Patrick, 2012). Goal achievement entails "cognitive behaviors aimed at a competence-related end state that an individual is committed to approaching or avoiding" (Alrakaf et al., 2014, p. 1).

Individuals' pursuits are characterized by their achievement goals (Roebken, 2007).

In conclusion, achievement goal is the purpose and direction to achieve a certain behavior, and it is the belief, belonging, and emotion to the achievement behavior. The achievement goal is the reason and purpose of the pursuit of the achievement task. Students with achievement goals are able to improve and demonstrate competence in their field of study and the ability to excel in others. Achievement goals are goals that individuals desire to achieve in an achievement situation. Achievement goals are the goals or reasons why students strive to achieve academic success. In short, it is the purpose of students' efforts to succeed in their studies, such as proving that they are smart, getting compliments from others, and getting high grades.

6.2 Component

The goals were classified into three sorts or categories (Elliot & McGregor, 2001):

- 1. Mastery goals. 2. Performance-approach goals. 3. Performance-avoidance goals.
- 1. A mastery goal is a goal that someone sets in order to achieve or master something, such as "I will score higher in this event next time."
- 2. A performance-approach aim is one in which someone strives to outperform his or her peers. This type of aim could be to look better by dropping 5 pounds or to improve one's performance review.
- 3. performance-avoidance A goal is one in which someone strives to avoid doing worse than their peers.

6.3 importance

Academic processes are influenced by achievement goals, which are important influencers of students' learning processes (Hulleman et al., 2010; Goetz and Hall, 2013). Learners can use achievement goal theory to understand how students feel about academic engagement (Van Yperen NW, Elliot AJ, Anseel F 2009) Academics may aim to establish an environment that encourages beneficial goals while limiting non-productive ones by knowing students' achievement goals.

those who have goals can achieve more academic success than those who do not have goals (Verner-Filion & Gaudreau, 2010).

6.4 Measurement method

In the (Saleh Alrakaf et al., 2014) study. Data were collected using the Achievement Goal Questionnaire (AGQ). which includes 12 items designed to assess the four types of achievement goals on a 7-point Likert scale (15 not at all true of me to 75 very true of me).

7. Self-efficacy

7.1 Definition of Self-efficacy

Self-efficacy is an individual's belief in his or her ability to carry out the actions

required to achieve specified performance goals (Bandura, 1977, 1986, 1997). Self-efficacy is described as a student's belief that he or she is capable of completing a task under particular conditions (Bandura, 1997). Bandura's (1977) Self-efficacy is described as an individual's belief in one's ability to accomplish and achieve a predetermined level of performance. Bandura's Self-efficacy is defined as people's belief in their capacity to execute desired functions, It determines how people think and react (Bandura A 2001). Self-efficacy refers to an individual's belief in their capacity to perform tasks in unusual, unexpected, or possibly stressful conditions (Bandura, 1977; Schunk, 1985). Self-efficacy is defined as a person's self-belief and judgment about their ability to begin, continue, and successfully complete the essential actions to achieve a result (Bandura 1991). Bandura (1997), Self-efficacy is a person's confidence in his or her capacity to plan and carry out the steps necessary to attain goals. Bandura (1982) describes it as an individual's belief in his or her own ability to master specific tasks, situations.

Self-efficacy is the belief in one's ability to carry out a management plan and is the belief in one's ability to succeed (Onwubiko, Emmanuel Chidiadi 2022).

In conclusion, self-efficacy refers to the ability to control one's own movements and behaviors, as well as the ability to strive for goals. Self-efficacy is a belief in one's own ability to perform or be competent for a certain task and achieve good results. Students with self-efficacy beliefs are more confident, are willing to study hard and work hard, and are more likely to achieve high results. Self-efficacy refers to a person's capacity to perform a certain action in a specific environment and achieve the desired results. It primarily refers to an individual's view of his or her own skills. People's confidence or belief in their ability to attain their behavioral goals in a certain field is sometimes referred to as self-efficacy.

7.2 Definition of Learning Self-efficacy

Learning self-efficacy is described as learners' beliefs and confidence in their ability to achieve specific outcomes (Bandura A.1997).

Learning self-efficacy is described as learners' belief in their abilities to study specific subjects (Yi-No Kang et al., 2019).

Learning self-efficacy is its reflection in the learning area, and it relates to an individual's belief in her/his learning ability, self-evaluation of whether he/she is capable of completing learning activities based on his/her learned abilities and skills, as well as a subjective estimate of his/her control over his/her study practices and performance (Bian, Y.2004).

7.3 Importance

Human motivation, well-being, and personal accomplishment are all built on self-efficacy beliefs (Pajares, 2002).

A high sense of self-efficacy improves human achievement and personal well-being. A person with strong self-efficacy sees problems as things to master rather than threats to avoid. These people recover from failure more quickly and are more prone to blame failure on a lack of effort. They approach potentially dangerous circumstances with the notion that they can exert control over them. These factors have been related to reduced levels of stress and a lower risk of depression_(Bandura, Albert 2010).

People with poor self-efficacy, on the other hand, perceive challenging jobs as personal dangers and avoid them. Difficult assignments cause individuals to focus on the skills they don't have rather than the ones they do. After a failure, it is simple for them to lose faith in their own talents. Low self-efficacy has been linked to increased stress and sadness (Bandura, Albert 2010).

Those with high levels of self-efficacy are more likely to rely on themselves to solve complex problems, as well as to be patient during the process, make more efforts,

and persevere longer to conquer the challenges (Schunk, D.H., 2000; Pintrich, P.R. 2003 and Chin et al., 2017).

This means that one of the most essential aspects of a student's achievement is self-efficacy. People who have a high sense of self-efficacy can plan and execute tasks effectively and successfully (Bandura, 1982). People with high self-efficacy are competent and successful in organizing their activities, while those with low self-efficacy are unable to complete tasks (Bandura, 1982).

Self-efficacy is prized not because individuality is revered, but because a strong feeling of self-efficacy is required for successful adaptation and transformation (Bandura, 1997, p.32). Self-efficacy beliefs are extremely important in academic success (Dennissen, et al, 2007; Multon et al, 1991; Pajares, 1996).

Individuals' sense of effectiveness is crucial to their academic accomplishment and lifelong path. Taking all of the evidence on self-efficacy and academic achievement into account, researchers, educators, and teachers should not dismiss students' ideas about their own abilities because they are important components of motivation and academic success (Filiz Yalcin Tilfarlioglu 2011).

Academic success is predicted by self-efficacy, Self-efficacy is a key predictor of academic achievement (Filiz Yalcin Tilfarlioglu 2011).

According to numerous researches, students with high self-efficacy views persevered more than those with low self-efficacy beliefs when faced with problems and hurdles and were more effective in academic attainment (Li & Wang, 2010). Self-efficacy beliefs are an important predictor of academic success (Wong, 2005; Yang 2004). Self-regulation can moderate the influence of self-efficacy on academic success (Pajares, 2008). Self-regulation is the ability to manage one's emotions and behaviors in order to achieve one's goals (Farrington et al., 2012).

Self-efficacy is one of the best predictors of academic success (Stajkovic et al., 2018). Self-efficacy is the belief in being able to do something. Stajkovicet al. examined

the Big Five traits on academic success and discovered that conscientiousness and emotional stability were predictors of self-efficacy in more than half of their investigations. In all of the analyses, however, self-efficacy was more predictive of academic performance than personality. This suggests that parents who want their children to succeed academically should work to boost their child's sense of self-efficacy at school.

Previous study has found that learners who have high learning self-efficacy for their abilities appear to set higher learning goals, persist for longer periods of time, and adapt more appropriately to changes in the learning environment than those who have low learning self-efficacy (Aurah CM.2013).

7.4 Measurement method

In Dalyal Alosaimi's (2021) study This study used a descriptive correlation approach. An online survey of L-SES and professional and clinical abilities was used to collect data from a sample of 296 students recruited through the convenience sampling approach. Learning self-efficacy was measured using the L-SES (Kang et al., 2019). L/SES is a 12-item questionnaire that assesses clinical skills self-efficacy in three domains: cognitive, behavioral, and social, with 4 items; affective domain, with 4 items; and psychomotor domain, with 4 items. A five-point Likert scale was used with the following response categories: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. The higher the score the more self-efficacy was indicated.



CHAPTER 3

RESEARCH METHODOLOGY

This section described the methods used in the study and the procedures for collecting and analyzing the data.

1. Research Methodology

Using quantitative research, this study investigated the factors that influence the academic success of high school students. Quantitative studies usually take the form of data, explaining educational phenomena. In the form of a questionnaire survey, data on factors influencing student academic success were obtained.

2. Research Background

The research background was the tenth-grade students of Chenzhou No.3 Middle School in Hunan Province. Hunan Province is located in the central part of China. It is a major education province in my country. In the past three years, more than 500,000 students have participated in the national college entrance examination, and the number of students has increased by 30,000 to 50,000 each year. Therefore, it may lead to greater learning pressure for middle school students in this province, and there may be more learning problems.

3. Participant

The survey was conducted on tenth-grade students of Chenzhou No. 3 Middle School. The tenth grade has a total of 600 students among students from four classes who were randomly selected as the research sample, with a total of 234 students.

4. Research Instruments

The research tool is in the form of a questionnaire. A questionnaire was developed according to the actual situation of Chenzhou No. 3 Middle School.

The 5-point Likert scale was used to design the questionnaire, and the questionnaire was divided into seven parts.

- 1. Academic Success Questionnaire
- 2. Learning Motivation Questionnaire
- 3. Student Participation Questionnaire
- 4. Learning Effort Questionnaire
- 5. Learning Self-Regulation Questionnaire
- 6. Achievement Goals Questionnaire
- 7. Learning Self-Efficacy Questionnaire

Quality inspection of measuring tools

The measurement tools had undergone two rounds of evaluation: First, Three experts evaluated the content and terminology of the questionnaire, and the questionnaire has been revised. Secondly, the questionnaire was collected data from 50 students and was analyzed by Cronbach's Alpha, the reliability results revealed in Table 2:

Table 1 The results of Cronbach's Alpha of the research questionnaire

Questionnaires	Cronbach's Alpha
Academic success (Y)	0.911
Learning motivation (X ₁)	0.940
Student Participation (X ₂)	0.945
Learning effort (X ₃)	0.849
Learning self-regulation (X ₄)	0.860
Achievement goal (X ₅)	0.932
Learning self-efficacy (X ₆)	0.936

SECTION 1 Academic Success Scale

lot of time on studying.

The questionnaire was adapted from Bayat and Salehiniya, (2019).

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion. Strongly agree You agree with the opinion in the question very mean much, and you agree with it. Agree mean You agree with the opinions in the question, but you may reserve some opinions of your own. You neither agree nor disagree with your point Neither agree nor disagree mean of view on the issue. Disagree mean You disagree with the opinion in the question. You strongly disagree with the opinions in the Strongly disagree mean question and have your own related thoughts and opinions. Neither Strongly Strongly agree Agree Item Question Disagree disagree nor disagree 1 My academic performance good because my learning ability has improved. 2 If I get good grades, it proves that I have spent a

SECTION 2 Learning motivation Scale.

The questionnaire was adapted from Stofile (2017).

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion.

Strongly agree mean You agree with the opinion in the question very

much, and you agree with it.

Agree mean You agree with the opinions in the question, but

you may reserve some opinions of your own.

disagree of view on the issue.

Disagree mean You disagree with the opinion in the question.

Strongly disagree mean You strongly disagree with the opinions in the

question and have your own related thoughts

and opinions.

ITEM	QUESTION	Strongly		Neither		Strongly
		Strongly				Strongly
			Agree	agree nor	Disagree	
		3 9 1.00	, .g	0.9.00	2.00.9.00	alia a ausa a
		agree				disagree
				disagree		
				223.9100		

- I study hard because it allows me to acquire more knowledge.
- I am satisfied with the new knowledge gained in my study, which makes me more motivated to do well in this course.

SECTION 3 Student Participation Scale.

The questionnaire was adapted from Bethany C et al. (2018).

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion.

Strongly agree mean You agree with the opinion in the question very

much, and you agree with it.

Agree mean You agree with the opinions in the question, but

you may reserve some opinions of your own.

Neither agree nor disagree mean You neither agree nor disagree with your point

of view on the issue.

Disagree mean You disagree with the opinion in the question.

Strongly disagree mean You strongly disagree with the opinions in the

question and have your own related thoughts

and opinions.

ITEM	QUESTION			Neither		
		Strongly	Agree	agree	Disagree	Strongly
		agree	Agree	nor	Disagree	disagree
				disagree		

1 After class, I will take the

initiative to discuss

homework with my

classmates.

2 I will actively raise my

hand to answer the

teacher's questions in

class.

SECTION 4 Learning effort Scale.

The questionnaire was adapted from Ozer (2020).

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion. Strongly agree You agree with the opinion in the question very much, and you agree with it. ean Agree You agree with the opinions in the question, but you may reserve some opinions of ean Neither agree nor You neither agree nor disagree with disagree your point of view on the issue. ean Disagree You disagree with the opinion in the question. ean Strongly disagree strongly disagree You with the opinions in the question and have your own ean related thoughts and opinions.

ITEM	QUESTION	Strongly		Neither		Strongly
		agree	Agree	agree nor	Disagree	disagree
		ag. se		disagree		
1	During the study period, I will					
	devote a lot of time to study.					
2	I am willing to accept					
	challenging learning tasks.					

SECTION 5 Learning self-regulation Scale.

The questionnaire was adapted from Kitsantas and Huie (2008).

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion.

Strongly agree	mean	You agree with the opinion in the question very
		much, and you agree with it.
Agree	mean	You agree with the opinions in the question, but
		you may reserve some opinions of your own.
Neither agree nor disagree	mean	You neither agree nor disagree with your point
		of view on the issue.
Disagree	mean	You disagree with the opinion in the question.
Strongly disagree	mean	You strongly disagree with the opinions in the
		question and have your own related thoughts
		and opinions.

			W. 166			
ITEM	QUESTION			Neither		
		Strongly	Agroo	agree	Disagrae	Strongly
		agree	Agree	nor	Disagree	disagree
				disagree		
1	When I get bad grades, I will do			3/		
	schedule study so that I can get					

2 I can adjust the relationship between recreational activities and learning.

good grades next time.

SECTION 6 Achievement goal Scale.

The questionnaire was adapted from Alrakaf et al. (2004).

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion.

Strongly agree mean You agree with the opinion in the question very

		much, and you agree with it.
Agree	mean	You agree with the opinions in the question, but
		you may reserve some opinions of your own.
Neither agree nor disagree	mean	You neither agree nor disagree with your point
		of view on the issue.
Disagree	mean	You disagree with the opinion in the question.
Strongly disagree	mean	You strongly disagree with the opinions in the
		question and have your own related thoughts
		and opinions.

ITEM	QUESTION	Strongly	Agree	Neither	Disagree	Strongly	
		agree		agree		disagree	
				nor			
				disagree			
1	My learning goal is to be		1.0				
	praised and affirmed by the						
	teacher.						
2	My goal is to get an A+ in the						
	final exam.						

SECTION 7 Learning self-efficacy Scale.

The questionnaire was adapted from Alosaimi (2021).

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion.

Strongly agree mean You agree with the opinion in the question very

much, and you agree with it.

Agree mean You agree with the opinions in the question, but

		you may reserve some opinions of your own.
Neither agree nor disagree	mean	You neither agree nor disagree with your point
		of view on the issue.
Disagree	mean	You disagree with the opinion in the question.
Strongly disagree	mean	You strongly disagree with the opinions in the
		question and have your own related thoughts
		and opinions.

ITEM	QUESTION	Strongly	Agree	Neither	Disagree	Strongly
		agree		agree		disagree
				nor		
				disagree		
1	I will calmly face any problems			7		
	in my studies because I					
	believe I have the ability to					
	deal with them.					
2	I believe that I have the ability					
	to complete the study tasks of					
	each semester and get good					
	grades.					

5. Data Collection

The questionnaires were given to the students by the teachers of each class in the school. In the first round of academic success questionnaires and factors affecting academic success, as well as the investigation of each student's academic success and academic success influencing factors, a total of 234 questionnaires were distributed in the form of field questionnaires, and 234 questionnaires were collected.

6. Data analysis

The data were analyzed the descriptive statistic, including mean and standard deviation, with the SPSS program. Analyze the relationship between learning motivation, student participation, learning effort, learning self-regulation, achievement goal, learning self-efficacy, and academic success by using Correlation and analyzed the effect of learning motivation, student participation, learning effort, learning self-regulation, achievement goal, learning self-efficacy on academic success by using Stepwise Multiple Regression.



CHAPTER 4

RESEARCH RESULTS

Symbols used in data analysis and interpretation The researchers defined the symbols used in the interpretation as follows.

N represents the number of experimenters.

R stands for coefficient of determination.

DF stands for degrees of freedom.

F stands for statistics.

SIG stands for Significance.

 $\boldsymbol{\hat{Y}}$ represents the prediction equation.

Y stands for Academic Success.

X₁ stands for Learning motivation.

X₂ stands for Student Participation.

X₃ stands for Learning effort.

X₄ stands for Learning self-regulation.

X₅ stands for Achievement goal.

X₆ stands for Learning self-efficacy.

According to research, there are seven variables in the study of high school students' academic success factors, namely: academic success, learning motivation, student participation, learning effort, learning self-regulation, achievement goals, and learning self-efficacy.

Completed questionnaires were analyzed by the basic method as followed.

- 1. Use the SPSS program to analyze descriptive statistics, including mean and standard deviation.
- 2. Analyze the relationship between high school students' academic success and learning motivation, student participation, learning effort, learning self-regulation, achievement goal, and learning self-efficacy.
- 3. Analyze the learning motivation, student participation, learning effort, learning self-regulation, achievement goal, and learning self-efficacy that affect high school student's academic success.

Table 2 Descriptive statistics analysis

Variables	Min	Max	Mean	S.D.
Academic success (Y)	1.60	4.27	2.6524	.78997
Learning motivation (X ₁)	1.00	4.80	2.4594	1.16749
Student Participation (X ₂)	1.70	4.40	2.7316	.75378
Learning effort (X ₃)	1.30	4.60	2.6179	1.00728
Learning self-regulation (X ₄)	1.20	4.50	2.6214	.99417
Achievement goal (X ₅)	1.00	4.80	2.4983	1.23674
Learning self-efficacy (X ₆)	1.00	4.80	2.4299	1.17391

This is a summary of descriptive statistics for a data set consisting of seven different sections (academic success (Y) to Learning self-efficacy (X_6)), each with 234 students. For each section, we provide the minimum, maximum, mean, and standard deviation information.

- 1. The value of academic success (Y) is between 1.60 and 4.27, with a mean of 2.6524 and a standard deviation of .78997. The standard deviation is relatively small, indicating that the data distribution in this part is more concentrated.
- 2. The value of learning motivation (X_1) is between 1.00 and 4.80, with a mean of 2.4594 and a standard deviation of 1.16749. The standard deviation is greater than section 1 academic success (Y), indicating that this part of the data is widely distributed.
- 3. The value of student participation (X_2) is between 1.70 and 4.40, with an average of 2.7316 and a standard deviation of .75378. Compared with the first two parts, the standard deviation is the smallest, indicating that the distribution of this part of the data is more concentrated.
- 4. The value of Learning effort (X_3) is between 1.30 and 4.60, with an average of 2.6179 and a standard deviation of 1.00728.
- 5. The value of Learning self-regulation (X_4) is between 1.20 and 4.50, with a mean of 2.6214 and a standard deviation of .99417. Indicates that the data distribution in this part is narrow.
- 6. The value of the Achievement goal (X_5) is between 1.00 and 4.80, with an average of 2.4983 and a standard deviation of 1.23674. A larger standard deviation indicates a wider distribution of this part of the data.
- 7. The value of Learning self-efficacy (X_6) is between 1.00 and 4.80, with an average of 2.4299 and a standard deviation of 1.17391. This part of the data has the smallest average value, indicating that the data is more concentrated.

Finally, all sections have complete observations, 234 in total. Overall, the distributions and means of these seven parts are different, indicating that the data sets have some differences among the seven parts.

	Υ	X_1	X_2	X_3	X_4	X_5	X_6
Υ	1	.462**	.443**	.436**	.437**	.429**	.467**
X_1		1	.303**	.385**	.284**	.347**	.403**
X_2			1	.267**	.335**	.207**	.334**
X_3				1	.355**	.256**	.350**
X_4					1	.271**	.330**
X_5						1	.293**
X ₆			131	1817			1

This is a matrix of Pearson correlation coefficients between 7 parts (Y to X_6). The number in each cell indicates the degree of correlation between the two parts. Values range from -1 to 1, where close to 1 indicates a strong positive correlation, close to -1 indicates a strong negative correlation, and close to 0 indicates no or weak correlation. In this case, all correlation coefficients are positive, which means that there is some degree of positive correlation between all components, and the correlations are all significant. The specific description is as follows:

- 1. The correlation coefficient between Y and all other parts is between 0.429 and (X_5) to 0.467 (X_6) , indicating that there is a moderate degree of positive correlation between X_1 and other parts.
- 2. The correlation coefficient between X_1 and other parts is between 0.284 and (X_4) to 0.462 and (Y), showing a moderate degree of positive correlation.
- 3. The correlation coefficient between X_2 and other parts is between 0.207 and (X_5) to 0.443 and (Y), and the correlation with X6 is weak, but it shows a moderate positive correlation with other parts.
 - 4. The correlation coefficient between ${\rm X_3}$ and other parts is between 0.256 and

- (X_5) to 0.436 and (Y), the correlation with X_5 is weak, and it shows a moderate positive correlation with other parts.
- 5. The correlation coefficient between X_4 and other parts is between 0.271 and (X_5) to 0.437 and (Y), and the correlation with X6 is weak, while it shows a moderate positive correlation with other parts.
- 6. The correlation coefficient between X_5 and other parts is between 0.207 and (X_2) to 0.429 and (Y), the correlation with X_3 is the weakest, and it shows a moderate degree of positive correlation with other parts.
- 7. The correlation coefficient between X_6 and other parts is between 0.293 and (X_5) to 0.467 and (Y), the correlation with X_5 is weak, and it shows a moderate positive correlation with other parts.

In general, all parts exhibit some degree of positive correlation among them, among which Y has a relatively high correlation with other parts, while X_5 has a relatively low correlation with other parts. This may suggest that the X_1 shares more in common with the rest, while the X_5 may differ in some ways.

Table 4 Results of Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682ª	.465	.451	.58542

a. Predictors: (Constant), Learning self-efficacy, Achievement goal, Student Participation, Learning effort, Learning self-regulation, Learning motivation

This is a model summary of a multiple linear regression analysis using academic success (Y), Student Participation (X_2) , Learning effort (X_3) , Learning self-regulation (X_4) , Achievement goal (X_5) , and Learning self-efficacy (X_6) as predictor variables (independent variables). The specific results are as follows:

- 1. R Square: The coefficient of determination (R²) of this model is 0.465, which means that the predictor variable (Learning motivation (X_1) to Learning self-efficacy (X_6)) can explain the predicted variable (probably Academic success (Y), although it is not explicitly stated) 46.5% variance. In other words, about 46.5% of the output variation in the model can be explained by the input (Learning motivation (X_1) to Learning self-efficacy (X_6)).
- 2. Adjusted R Square: The adjusted coefficient of determination is 0.451. Unlike the coefficient of determination, the adjusted coefficient of determination takes into account the number of predictor variables in the model. This value will be adjusted according to the number of predictor variables, especially in the case of more predictor variables, if the new predictor variables do not significantly improve the model interpretation, then the adjusted coefficient of determination may decrease. In this model, the adjusted coefficient of determination is not much different from the coefficient of determination, indicating that all the predictors added contribute somewhat to the model.
- 3. Std. The error of the Estimate: The estimated standard error of the model is 0.85223. This indicator provides a measure of the prediction error of the model, and the smaller the value, the higher the prediction accuracy of the model. In this model, this value is 0.58542, which means that the deviation of the model's predicted results from the actual results is about 0.58542 on average.

In general, this multiple regression model can explain the changes in the predicted variables to a certain extent, but there are also some prediction errors.

Table 5 Results of Anova

Model	Sum of	Df	Mean	F	P-value	
	Squares		Square			
1	Regression	67.607	6	11.268	32.878	<0.001
	Residual	77.797	227	.343		
	Total	145.404	233			

- a. Dependent Variable: Academic success (Y)
- b. Predictors: (Constant), Learning self-efficacy (X_5) , Learning self-regulation (X_4) , Learning motivation (X_1) , s Student Participation (X_2) , Learning effort (X_3) , Learning motivation (X_1)

This is an ANOVA table for evaluating linear regression models. ANOVA is used to test whether at least one of all predictor variables (independent variables) in the model has a significant effect on the dependent variable (predicted variable). The specific description of the form is as follows:

- 1. Regression: This line provides the information predicted by the model. The "Sum of Squares" value is 67.607, which is the sum of squares between the predicted values produced by all predictor variables (Learning motivation (X_1) to Learning self-efficacy (X_6)) on the dependent variable (Academic success (Y)) and the mean of the dependent variable. A "df" value of 6 means there are 6 predictors in the model. The "Mean Square" value is 11.268, which is the result of dividing the "Sum of Squares" by "df", indicating the amount of variance that each predictor variable can explain on average.
- 2. Residual: This row provides information that the model failed to predict. The "Sum of Squares" value is 77.797, which is the sum of squares between the actual value of the dependent variable and the value predicted by the model, representing the

variance that the model fails to explain. The "df" value is 227, which is the total number of observations (233) minus the number of predictors (6) minus 1 (the constant term). The "Mean Square" value is 0.343, which is the result of dividing the "Sum of Squares" by "df" and represents the average error for each observation in the model's predictions.

- 3. Total: This line gives the sum of the "Sum of Squares" (145.404) and the total degrees of freedom (233).
- 4. F value and significance (P-value): The F statistic is the result of dividing the regression Mean Square by the residual Mean Square, which is 32.878. A significance level of .000 indicates that the F value of this model is statistically significant, that is, at least one predictor variable has a significant effect on the dependent variable.

Overall, the ANOVA results for this model show that at least one predictor variable (Learning motivation (X_1) to Learning self-efficacy (X_6)) has a significant effect on the dependent variable (Academic success (Y)), and this model explains part of the variance, but There is still a part of the variance that the model fails to explain.

Table 6 Results of Coefficients for a multiple linear regression model

		Unstar	Unstandardized			
		Coe	Coefficients			
	Model	В	Std. Error	Beta	t	P-value
1	Υ	.565	.166	-	3.399	0.01
	X_1	.108	.039	.159	2.773	.006
	X_2	.211	.057	.201	3.724	<0.001
	X_3	.120	.044	.153	2.735	.007
	X_4	.127	.044	.160	2.896	.004
	X_5	.127	.034	.199	3.729	<0.001
	X ₆	.115	.038	.171	3.016	.003

a Dependent Variable: Academic success (Y)

This is a table of coefficients for a multiple linear regression model, listing each predictor variable (X_1 to X_6) along with Constant's coefficient (B), standard error, Beta, t-statistic, and significance level (P-value).

- 1. Constant: The B value is 0.565, and the standard error is 0.166. The t statistic is 3.399, corresponding to a significance level of 0.001, much greater than 0.05. This means that the constant term has a significant effect, and if all predictors have a value of 0, then the expected value of the dependent variable (Y) will be close to 0.
- 2. Learning motivation(X_1): The B value is 0.108, the standard error is 0.039, and the Beta value is 0.159, which means that when X_1 changes by one standard deviation, Y is expected to change by 0.159 standard deviations. The t statistic is 2.773, and the corresponding significance level is 0.006, which is lower than 0.05, which means that X_1 has a significant impact on Y.
- 3. Student Participation (X_2) : The B value is 0.211, the standard error is 0.057, and the Beta value is 0.201, which means that when X_2 changes by one standard deviation, Y is expected to change by 0.201 standard deviations. The t statistic is 3.724, and the corresponding significance level is 0.000, which is lower than 0.05, which means that X_2 has a significant impact on Y.
- 4. Learning effort (X_3) : The B value is 0.120, the standard error is 0.044, and the Beta value is 0.153, which means that when X_3 changes by one standard deviation, Y is expected to change by 0.153 standard deviations. The t statistic is 2.735, and the corresponding significance level is 0.007, which is lower than 0.05, which means that X_3 has a significant impact on Y.
- 5. Learning self-regulation (X_4): The B value is 0.127, the standard error is 0.044, and the Beta value is 0.160, which means that when X_4 changes by one standard deviation, Y is expected to change by 0.160 standard deviations. The t statistic is 2.896, and the corresponding significance level is 0.004, which is lower than 0.05, which means that X4 has a significant impact on Y.

6. Learning self-efficacy (X_5) : The B value is 0.127, the standard error is 0.034, and the Beta value is 0.199, which means that when X_5 changes by one standard deviation, Y is expected to change by 0.199 standard deviations. The t statistic is 3.729, and the corresponding significance level is 0.000, which is lower than 0.05, which means that X_5 has a significant impact on Y.

7. Learning self-efficacy (X_6) : The B value is 0.115, the standard error is 0.038, and the Beta value is 0.171, which means that when X_5 changes by one standard deviation, Y is expected to change by 0.171 standard deviations. The t statistic is 3.016, and the corresponding significance level is 0.003, which is lower than 0.05, which means that X_6 has a significant impact on Y.



CHAPTER 5

CONCLUSION AND DISCUSSION

Research objectives

- 1. To investigate the relationship between learning motivation, student participation, learning effort, learning self-regulation, achievement goal, learning self-efficacy, and academic success.
- 2. To investigate whether learning motivation, student engagement, learning effort, learning self-regulation, achievement goals, and learning self-efficacy are associated with academic success.

Research hypothesis

- 1. Learning motivation, Student participation, Learning effort, Learning self-regulation, Achievement goals, and Learning self-efficacy were related to the academic success of senior high school students in Chenzhou No.3 Middle School.
- 2. Learning motivation, Student participation, Learning effort, Learning self-regulation, Achievement goals, and Learning self-efficacy affected on the academic success of senior high school students in Chenzhou No.3 Middle School.

Research methods

Using a combination of quantitative research, this study investigates the factors that influence the academic success of high school students. Quantitative studies usually take the form of data, explaining educational phenomena. In the form of a questionnaire survey, Data on factors influencing student academic success were obtained.

Conclusion

- 1. According to the correlation analysis, it can be concluded that the academic success of high school students is significantly positively correlated with learning motivation, student participation, learning effort, learning self-regulation, achievement goals, and learning self-efficacy.
- 2. According to the regression results, there are six factors affecting high school students' academic success: learning motivation, student participation, learning effort, learning self-regulation, achievement goals, and learning self-efficacy.
- 3. A Significant Predictive Equation for the Academic Success of High School Students. At the .01 level were :

$$\boldsymbol{\hat{Y}} = 0.003 \boldsymbol{X}_1 + 0.200 \boldsymbol{X}_3 + 0.186 \boldsymbol{X}_6 + 0.182 \boldsymbol{X}_7 + 0.163 \boldsymbol{X}_2 + 0.158 \boldsymbol{X}_5 + 0.101 \boldsymbol{X}_4.$$

Discussion

In this study, there are 6 factors related to the academic success of high school students, namely, learning motivation, student participation, learning effort, learning self-regulation, achievement goals, and learning self-efficacy.

- 1. The correlation number of learning motivation is .462, which proves that as the value of learning motivation increases, its correlation with academic success increases. Learning motivation is positively correlated with high school student's academic success. Students learning motivation, including intrinsic motivation and extrinsic motivation, will have an impact on academic success. As Almighty et al., (2021) mentioned Learning motivation entails building and maintaining positive academic success expectations and actions. and Rahardjanto et al., (2019) mentioned learning motivation is one of the most important factors in a person's academic success.
- 2. The correlation number for student participation is .443 demonstrating that increasing the value of student participation increases its correlation to academic success. Student participation is positively correlated with academic success. Student participation has an impact on academic success. As Douglas et al., (2007) mentioned

student participation in class is a crucial aspect of academic success. and mentioned by Korobova and Starobin (2015), student success is related to student engagement.

- 3. The correlation number of learning effort is .436, demonstrating that the value of learning effort increases and its correlation to academic success increases. Learning effort is positively correlated with academic success. Learning effort has an impact on academic success. As Samuelsen, J. and Khalil, M. (2019) mentioned The amount of time a student spends studying hard is positively correlated with student academic success. Student effort over time and student success have a positive association.
- 4. The correlation number for learning self-regulation was .437 demonstrating that increasing the value of learning self-regulation increases its correlation to academic success. Learning self-regulation is positively associated with academic success. Students learning self-regulation has an impact on academic success. As Maude Guilmette et al., (2019) mentioned Self-regulation strategies were positively associated with higher levels of academic success. and Pintrich (2000) mentioned students with self-regulation abilities are more driven to succeed academically and study more effectively than other kids.
- 5. The correlation number for the achievement goal is .429 demonstrating that increasing the value of the achievement goal increases its correlation to academic success. Achievement goals are positively correlated with academic success. Achievement goals have an impact on academic success. As Verner-Filion & Gaudreau, (2010) mentioned Students with achievement goals have higher academic success. and Neubauer et al., (2022) mentioned argue that academic success is related to achievement goals.
- 6. The correlation number for learning self-efficacy is .467, which proves that as the value of learning self-efficacy increases, its correlation with academic success increases. Learning self-efficacy is linked to academic success. Academic success is influenced by learning self-efficacy. As Filiz Yalcin Tilfarlioglu (2011) mentioned showed

that self-efficacy positively impacts academic success. and Wong, (2005) and Yang, (2004) mentioned self-efficacy beliefs are a key determinant of academic success.

There are 6 factors affecting the academic success of high school students, which are statistically significant at the 0.01 level, namely learning motivation, student participation, learning effort, learning self-regulation, achievement goals, and learning self-efficacy. Among them, the B value of student participation is the highest, and the B value of student participation is 0.200.

- 1. Student participation affects the academic success of high school students with a B value of .200, the highest B value in this study. Student participation is an integral part of a student's learning process. Academic performance, learning outcomes, knowledge acquisition and understanding, and academic success all require students to participate in learning. student success is linked to student participation, as maintained by Korobova and Starobin. (Korobova and Starobin 2015) Student participation is fundamental for student success in college (Fredin et al., 2015). There is substantial evidence that class participation, no matter how crudely measured, is an important factor in academic success (Ian Douglas, Nicole D. Alemanne 2007). Students' activity, concentration, task completion, and sense of belonging in the classroom can improve students' academic performance, and student participation is also the basis for success. The more students participate in the activities, the more knowledge they understand, and they are often positive Students who participate have better grades and are more likely to succeed.
- 2. Achievement goals influence the academic success of high school students. The B value is .186. Achievement goals are a key determinant in the student learning process and have an impact on academic success. Set goals that are academically beneficial by understanding student achievement goals. students with goals can have higher academic success (e.g., better results on an exam) than students with other types of achievement goals (Verner-Filion & Gaudreau, 2010). Achievement goals can

realize the purpose of students in the learning process. Students with achievement goals can make students clearly understand the purpose and direction of the learning process, and they will have more belief in achievement in learning, that is to say, students who have achievement goals Can better grasp the direction of learning, the pursuit of the goal in the study, so as to achieve the goal. Achievement goals are also the purpose and reason for students to achieve academic success.

- 3. Learning self-efficacy influences the academic success of high school students. The value of B is .182. The higher the students' learning self-efficacy, the more confident they are in completing their academic tasks. In this way, you will be more confident in completing the good grades you want to achieve and the learning goals you want to achieve. self-efficacy predicts academic success, Self-efficacy is a significant predictor of academic success (Filiz Yalcin Tilfarlioglu 2011). Self-efficacy is one of the best predictors of academic success (Stajkovic et al., 2018). Learning self-efficacy is very important to students in learning. Learning self-efficacy makes students more confident in completing their studies in learning, and more willing to accept challenging learning tasks in the learning process. Learning self-efficacy makes students more willing to work hard Learning is more capable of solving the tasks and difficulties faced in learning, and it is more likely to achieve good grades, which also greatly improves the probability of students' academic success.
- 4. Learning motivation affects the academic success of high school students. The B value is .163. Learning motivation is one of the most important factors in a person's academic success (Rahardjanto et al., 2019). Learning motivation is very important in education. Learning needs to cultivate learning desire through learning motivation, and learning motivation will affect the content that students pay attention to in learning and the absorption and efficiency of knowledge. This is critical to a student's academic success. Learning motivation is a vital component of a student's academic success that can be triggered by various factors such as their desire to succeed,

expectations, and rewards (Almighty C et al., 2021). Students learning motivation in learning and the belief in individual learning goals to strive to achieve results in learning, that is to say, the driving force for students to carry out learning activities, and to continue learning without being asked by others, is a continuous force, through motivation to achieve the target behavior of learning, all help themselves to achieve academic success.

5. Learning self-regulation affects the academic success of high school students. The B value is .158. The self-regulation of students' learning is the ability to have goals and plans in the learning process and to be able to allocate the learning time reasonably. As Zimmerman (2000) there is a significant correlation between self-regulation and academic success. According to Pintrich (2000), students with self-regulation abilities are more driven to succeed academically and learn more effectively than other students. (Zimmerman & Schunk, 2012). Students with learning self-regulation have better self-control ability in learning, can use various learning strategies in learning, and can well adjust their learning status, learning time, and learning emotions in learning. It is clear that students have the ability to learn self-regulation to be more diligent and confident in the learning process. So learning self-regulation can promote academic success and has an impact on academic success.

6. Learning effort influences the academic success of high school students. The B value is .101. The student's learning effort is the time and energy that the student needs to invest in the learning process. In the learning process, students put a lot of time and energy into learning, which will greatly improve the probability of students acquiring knowledge and achieving satisfactory results. Student engagement in learning also positively impacts student academic success. The time and energy students put into the learning process are willing to spend more time learning for a certain goal in learning, students who study hard are more likely to succeed.

Recommendations

Propose relevant suggestions for my research on the factors that affect the academic success of high school students.

- 1. Educators should strengthen high school students' cognition and understanding of academic success. According to the development and changes in high school students' academic development, educators can carry out some relevant courses and educational activities that can help improve the academic success of high school students, and help high school students realize the importance of academic success.
- 2. The education department and education work should attach great importance to the studies of high school students. They can strengthen teachers' teaching and investment in high school students, formulate different work systems and teaching roles, and develop according to their different understandings and cognitions in their studies. Tailored courses and lectures.
- 3. As a high school student, you should attach great importance to your studies, actively cooperate with the courses and lectures related to academic success carried out by schools and educational institutions, and fully understand your academic status.

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Appendix Research Questionnaire

Theme. Factors affecting the academic success of senior high school students

There are seven questionnaires:

- 1. Academic Success Questionnaire
- 2. Learning Motivation Questionnaire
- 3. Student Participation Questionnaire
- 4. Study Effort Questionnaire
- 5. Learning Self-Regulation Questionnaire
- 6. Achievement Goals Questionnaire
- 7. Learning Self-Efficacy Questionnaire

Clarify

This questionnaire aims to study the factors that affect the academic success of high school students.

Students can answer the questionnaire according to their own practice, and there is no standard answer for the answer options of the questions. No signature is required when filling out the questionnaire, all questionnaire data collected will be kept confidential, and all information will only be used for this research.

Mr. CAO ZHIGANG

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SECTION 1 Academic Success Questionnaire.

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion. Mean You very much agree with the opinion in the Strongly agree question, and you agree with it. Mean Agree You agree with the opinions in the question, but you may reserve some opinions of your own. Generally Mean You neither agree nor disagree with your point of view on the issue. Disagree Mean You disagree with the opinion in the question. Strongly disagree Mean You strongly disagree with the opinions in the question

and have your own related thoughts and opinions.

		Strongly	Agree	Neither	Disagree	Strongly
ITEM	QUESTION	agree		agree nor		disagree
				disagree		
1	My academic performance					
	is good because my					
ı	learning ability has					
	improved.					
	If I get good grades, it					
2	proves that I have spent a					
	lot of time on studying.					
	I can master the knowledge	2 MI	U).			
	learned in class well and					
3	get excellent results in					
3	exams, which proves that I					
	am very serious in class					
	every time.					
	I perform better in class	-				
	than before because I have					
4	mastered the learning					
	methods taught by the					
	teacher.					
	Using the learning methods					
5	taught by the teacher, I can					
5	master new knowledge					
	faster and faster.					
6	I am satisfied with the use					
	of the multimedia					
	classroom.					
7	I am very satisfied with the					
7	knowledge taught by the					

	teacher.
	I am satisfied with the
8	learning steps my teacher
	taught me.
	I am satisfied with the
9	teacher's learning mode of
9	learning in small groups in
	the classroom.
	I am very satisfied with the
	learning atmosphere in the
10	class, because the students
	in the class are very active
	in learning.
11	Through the study of this
	course, I have mastered the
	classification of different
	knowledge points.
	Through practice, I can well
12	grasp and apply the
12	learning methods taught by
	the teacher in this course.
	I am getting faster and
13	faster in mastering the new
10	knowledge I have learned in
	this course.
	The knowledge I have
	learned in this course has
14	improved my ability to
	communicate with others in
	my life.
15	I have not mastered the

	learning methods and steps
	taught by the teacher in the
	study of this course.
	I encounter learning
16	difficulties, I will not give up,
	and I will keep going.
	I will always insist on
17	making a habit that is
	conducive to learning.
18	I can keep concentrating
10	and keep studying in class.
	I can't insist on finishing the
19	homework assigned by the
19	teacher before doing other
	things.
	I can't insist on studying for
20	more than two hours a day
	during the holiday.
	I did not set specific
21	learning goals for each
	subject.
	I feel that my learning goals
22	are not clear, which leads to
22	my poor academic
	performance.
	In order to get good
23	grades, I never ask for
	leave or skip classes.
	I study hard and try to get
24	into the top of the class in
	the final exam.

25	I study hard to be admitted
25	to a prestigious university.
	I study hard in order to be
26	able to engage in the
	career I like in the future.
	If I study hard, I can get a
27	satisfactory income in the
	future.
	I learn more knowledge for
28	achieving my self-value in
	my future work.
	The knowledge I have
29	learned can help me in my
	future work.
	If I master more
	professional skills, the
30	probability of getting
	promoted in my future work
	will be greater.

SECTION 2 Learning motivation Questionnaire.

For the following questions, please choose the option according to your actual situation, and use "\sqrt{"}" in the "\sqrt{"}" to choose the option that meets your opinion.

Strongly agree Mean You very much agree with the opinion in the question, and you agree with it.

Agree Mean You agree with the opinions in the question, but you may reserve some opinions of your own.

Generally Mean You neither agree nor disagree with your point of view on the issue.

Disagree Mean You disagree with the opinion in the question.

Strongly disagree Mean You strongly disagree with the opinions in the question and have your own related thoughts and opinions.

		Strongly	Agree	Neither	Disagree	Strongly
ITEM	QUESTION	agree		agree nor		disagree
				disagree		
1	I study hard because it allows					
ı	me to acquire more knowledge.					
	I am satisfied with the new	and the latest terms of th	3000	.3		
2	knowledge gained in my study,					
۷	which makes me more motivated					
	to do well in this course.					
3	If I don't study hard, it will be my		T	2:		
3	academic loss.					
	If I study hard, I can get	TI				
4	excellent grades in the final					
	exam.					
5	I am confident that I will excel in					
3	my current course of study.					
6	I want to get good grades					
Ü	because I can get a scholarship.					
	I study hard and get high marks					
7	in my exams because I want to					
	be thought smart.					
	I need to study hard to get good					
8	grades, because I can get					
	rewards from my parents.					
9	I study hard and get good					

	grades so that I can find a job
	that I am satisfied with in the
	future.
	I work hard to learn knowledge,
10	which will be very helpful to my
	future career.

SECTION 3 Student Participation Questionnaire.

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion. Strongly agree Mean You very much agree with the opinion in the

question, and you agree with it.

Agree Mean You agree with the opinions in the question, but you

may reserve some opinions of your own.

Generally You neither agree nor disagree with your point of

view on the issue.

Disagree Mean You disagree with the opinion in the question.

Strongly disagree Mean You strongly disagree with the opinions in the

question and have your own related thoughts and

opinions.

		Strongly	Agree	Neither	Disagree	Strongly		
ITEM	QUESTION	agree		agree nor		disagree		
				disagree				
	After class, I will take the							
1	initiative to discuss homework							
	with my classmates.							
2	I will actively raise my hand to							
	answer the teacher's questions in							

	class.
	I study and discuss in groups with
3	my classmates in class, which is
5	conducive to my participation in
	class.
	After class, I will take the
4	initiative to find the teacher to
4	discuss the problems that have
	not been solved in class.
	In order to complete the
E	classroom tasks, I actively and
5	enthusiastically cooperate with
	my classmates.
	When I have doubts, I will take
6	the initiative to raise my hand
	and ask the teacher.
7	I often lose concentration or fall
ı	asleep in class.
	In class, I will write down all the
8	knowledge the teacher has
	taught in my notebook.
	In order to solve my learning
9	problems, I will take the initiative
9	to seek help from my classmates
	after class.
	I often discuss topics that are not
10	related to the class with my
	classmates.

SECTION 4 Learning effort Questionnaire.

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion.

Strongly agree	Mean	You very much agree with the opinion in the question,
		and you agree with it.
Agree	Mean	You agree with the opinions in the question, but you
		may reserve some opinions of your own.
Generally	Mean	You neither agree nor disagree with your point of view
		on the issue.
Disagree	Mean	You disagree with the opinion in the question.
Strongly disagree	Mean	You strongly disagree with the opinions in the question
		and have your own related thoughts and opinions.

			- COL			_
		Strongly	Agree	Neither	Disagree	Strongly
ITEM	QUESTION	agree		agree nor		disagree
				disagree		
4	During the study period, I will		-	70		
1	devote a lot of time to study.					
2	I am willing to accept	-	- //	100		
2	challenging learning tasks.					
	I will spend a lot of time on	24.11	9.0			
0	homework when I encounter					
3	knowledge that I don't					
	understand.					
	I will check the knowledge					
4	related to my study on the					
	Internet and in the library.					
5	I spend a lot of my spare time					
5	studying.					
6	Even if the teacher assigns a lot					
	of homework, I will do it well.					
7	In addition to class time, I will					

	spend at least 2 hours a day
	studying.
8	I did not master the knowledge
	taught by the teacher because of
	inattention in class, and I will
	make up for it by myself after
	class.
9	When I encounter difficulties, I
	actively try to find ways to solve
	them.
10	Before the exam, I will actively
	review and prepare for the exam.

SECTION 5 Learning self-regulation Questionnaire.

question and have your own related thoughts and

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion. Strongly agree Mean You very much agree with the opinion in the question, and you agree with it. Mean You agree with the opinions in the question, but you Agree may reserve some opinions of your own. Generally You neither agree nor disagree with your point of Mean view on the issue. You disagree with the opinion in the question. Disagree Mean Strongly disagree You strongly disagree with the opinions in the Mean

		Strongly	Agree	Neither	Disagree	Strongly
ITEM	QUESTION	agree		agree nor		disagree
				disagree		

opinions.

1	When I get bad grades, I will do
	schedule study so that I can get
	good grades next time.
	I can adjust the relationship
2	between recreational activities
	and learning.
	I was able to adjust my emotions
	well and return to the state of
3	study when I knew that I had not
	achieved my expected results in
	the exam.
	I will take a serious attitude in
4	learning and have the ability to
	persevere.
	When I realize my limitation, I can
5	make adjustments and
3	responses immediately for the
	better grade.
	When I realize that I have a
6	problem with my basic skills, I
O	will practice for an extra hour
	every night.
	When I get poor grades, I review
7	what I have learned every day
	before going to bed.
	I will set daily learning tasks and
8	learning goals for myself, and
	use notebook records to self-
	supervise.
9	When I am in class, I am always
9	thinking about things that have
-	

	nothing to do with the class.
	I often do not pay attention to
10	what I am doing in class and
10	always need to be reminded by
	the teacher.

SECTION 6 Achievement goal Questionnaire.

opinions.

For the following questions, please choose the option according to your actual situation, and use " $\sqrt{}$ " in the " \square " to choose the option that meets your opinion. You very much agree with the opinion in the Strongly agree question, and you agree with it. Mean You agree with the opinions in the question, but you Agree may reserve some opinions of your own. Generally Mean You neither agree nor disagree with your point of view on the issue. You disagree with the opinion in the question. Disagree You strongly disagree with the opinions in the Strongly disagree Mean question and have your own related thoughts and

ITEM		Strongly	Agree	Neither	Disagree	Strongly
	QUESTION	agree		agree nor		disagree
				disagree		
1	My learning goal is to be praised					
	and affirmed by the teacher.					
2	My goal is to get an A+ in the					
	final exam.					
3	My goal is to achieve excellent					
	grades in all subjects.					

4	I can fully grasp all the
	knowledge taught by the teacher
	from this course.
5	My goal is to pass all the exams
	at the end of the semester.
	I study hard to gain more
6	knowledge and master more
O	abilities so that I can work better
	in the future.
	In order to thoroughly understand
	the knowledge learned in class
7	and achieve better grades, I will
	preview and review before and
	after class.
	My learning goal is to apply what
8	I have learned in the classroom
	to my life.
9	I study hard because I want to be
9	admitted to an ideal university.
	In the process of learning, I
10	always want to show my ability
	and hope to be recognized by
	teachers and classmates.

SECTION 7 Learning self-efficacy Questionnaire.

For the followi	ng quest	tions, please choose the option according to your actual
situation, and use " $$ "	in the "	☐" to choose the option that meets your opinion.
Strongly agree	Mean	You very much agree with the opinion in the
	question	n, and you agree with it.
Agree	Mean	You agree with the opinions in the question, but you

may reserve some opinions of your own.

Generally You neither agree nor disagree with your point of

view on the issue.

Disagree Mean You disagree with the opinion in the question.

Strongly disagree Mean You strongly disagree with the opinions in the

question and have your own related thoughts and opinions.

-		Strongly	Agree	Neither	Disagree	Strongly
ITEM	QUESTION	agree		agree nor		disagree
				disagree		
	I will calmly face any problems	STATE OF THE PERSON.	0			
1	in my studies because I believe					
'	I have the ability to deal with					
	them.		-	1 :		
	I believe that I have the ability to	_	1	R:		
2	complete the study tasks of					
۷	each semester and get good					
	grades.		3	• /		
3	I believe I can answer all the					
	questions in the teacher's class.					
	I believe that I can use the					
4	knowledge I have learned to					
٦	solve the problems I encounter					
	in life and study.					
5	In terms of study, I can acquire					
	a wider range of knowledge.					
	I enjoy challenging learning					
6	tasks and believe that I can do					
	them well.					
7	I can accurately grasp difficult					

	knowledge learned in class.				
	I have the ability to complete all				
8	the homework assigned by the				
	teacher well.				
	I think that when I encounter				
9	difficult problems that I haven't				
9	encountered before, I have the				
	ability to solve them.				
	Even if I don't do well in the test				
10	this time, I believe I can get a				
	good result in the next test.				

