A STUDY OF THE IMPACT OF FAMILY SOFT ENVIRONMENT ON THE ACADEMIC PERFORMANCE OF RURAL JUNIOR HIGH SCHOOL STUDENTS: HEZE EXPERIMENTAL MIDDLE SCHOOL

WU CAIYI
6617195729

AN INDEPENDENT STUDY SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION
GRADUATE SCHOOL OF BUSINESS
SIAM UNIVERSITY
2025

A STUDY OF THE IMPACT OF FAMILY SOFT ENVIRONMENT ON THE ACADEMIC PERFORMANCE OF RURAL JUNIOR HIGH SCHOOL STUDENTS: HEZE EXPERIMENTAL MIDDLE SCHOOL

WU CAIYI

This Independent Study Has Been Approved as a Partial Fulfillment of the Requirements for the Degree of Master of Business Administration

Advisor.....
(Dr. Zhang Li)

Date: 30/5/2025

.....
(Associate Professor Dr. Jomphong Mongkhonvanit)
Dean, Graduate School of Business

Date 21/5/2025

Title: A STUDY OF THE IMPACT OF FAMILY SOFT ENVIRONMENT ON THE ACADEMIC PERFORMANCE OF RURAL JUNIOR HIGH SCHOOL STUDENTS: HEZE EXPERIMENTAL MIDDLE SCHOOL

Researcher: WU CAIYI

Degree: Master of Business Administration

Major: Educational Management

Advisor: .....

(Dr. Zhang Li)

30 / 5 / 2025

ABSTRACT

In the context of rural education in China, students often face disadvantages arising from unstable family environments and limited learning resources. This study explores how the family soft environment influences the academic performance of junior high school students. In addition, it investigates the mediating role of learning adaptability, which refers to students' ability to adjust learning strategies and regulate motivation, and manage learning behavior in response to challenges. The research objectives of this study are: 1) To examine the impact of the family soft environment on rural junior high school students' academic performance. 2) To examine the direct effect of learning adaptability on academic performance. 3) To explore the mediating role of learning adaptability in the relationship between family soft environment and academic performance.

A quantitative research method was used in this study and data were collected by distributing questionnaires. The study surveyed 434 students from Heze Experimental Middle School, a rural junior high school in Shandong Province. A structured questionnaire was designed to measure parenting style, family structure, learning adaptability, and academic performance using a 5—point Likert scale. Data were analyzed using descriptive statistics, Pearson correlation analysis, multiple linear regression, and structural equation modeling.

Results indicate that parenting style has a significant positive effect on academic performance, while family structure instability has a negative effect. Learning adaptability emerged as the strongest predictor of academic performance and was found

to partially mediate the effects of both parenting style and family structure. These findings suggest that improving family engagement and enhancing students' adaptability can help close rural achievement gaps.

Keyword: family soft environment, parenting style, family structure, learning adaptability, academic performance

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to my advisor for his invaluable guidance, support, and encouragement throughout my Independent Study. His insightful comments and constructive criticism have significantly improved the quality of my work.

Additionally, I am grateful to Associate Professor Dr. Jomphong Mongkhonvanit, Dean, Graduate School of Business, for his support and encouragement throughout my studies. His dedication to the graduate program and commitment to excellence have inspired me to strive for academic excellence.

Finally, I would like to extend my appreciation to all the faculty members and staff of Siam University who have contributed to my growth and development as a student. Their unwavering support and encouragement have been a source of inspiration and motivation to me.

WU CAIYI

DECLARATION

I, WU CAIYI, hereby declare that this Independent Study entitled “A STUDY OF THE IMPACT OF FAMILY SOFT ENVIRONMENT ON THE ACADEMIC PERFORMANCE OF RURAL JUNIOR HIGH SCHOOL STUDENTS: HEZE EXPERIMENTAL MIDDLE SCHOOL” is an original work and has never been submitted to any academic institution for a degree.

(WU CAIYI)
May 02, 2025

CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1 Introduction

1.1 Background of the Study

Academic achievement is widely recognized as a critical predictor of a student's future opportunities in higher education, employment, and social mobility (Wang & Tang, 2018). In the context of rural China, students face multiple challenges, including economic hardship, limited school resources, and fragmented family structures, all of which can impede academic success (Liu et al., 2017). These factors are especially prevalent in rural regions such as Shandong Province, where educational inequality persists despite national policies aimed at promoting equity.

Among the many determinants of student performance, family environment stands out as a particularly influential factor. Traditionally, family environment has been divided into two components: the hard environment, which includes income, parental education level, and physical living conditions, and the soft environment, which consists of emotional support, parenting style, family interactions, and psychological atmosphere (Wu, 2003). While considerable attention has been given to material and economic conditions, the role of family soft environment in influencing educational outcomes has been comparatively underexplored, especially in rural contexts (Zhang & Qin, 2020).

Parenting style—a core component of the soft environment—plays a crucial role in shaping children's emotional development, learning behavior, and motivation. Baumrind's (1971) foundational work categorized parenting into three styles: authoritarian, permissive, and authoritative. More recent studies in the Chinese context have found that supportive and democratic parenting contributes positively to students' self—regulation and academic confidence (Chen et al., 2018). Conversely, authoritarian or neglectful parenting, often associated with traditional rural values or parental absence, may suppress independent thinking and reduce academic engagement (Guan & Lin, 2014).

Family structure also significantly affects academic development. In many rural Chinese families, fathers work in distant cities as migrant laborers, leaving children to be raised by mothers or grandparents—thus forming a large population of so—called "left—behind children" (Zhao, 2013). Research has shown that these children often experience emotional neglect, limited supervision, and psychological insecurity, which may negatively influence their learning outcomes (Cai & Wang, 2014). While the economic benefits of migrant labor cannot be dismissed, the psychological costs of

long—term parental absence are increasingly acknowledged in the literature (Wang, 2020).

In addition to external influences, students' internal psychological traits also matter. One of the most critical is learning adaptability, which refers to student's ability to adjust learning strategies, maintain motivation, and effectively manage academic challenges (Cai et al., 2021). Highly adaptable learners tend to be more resilient and capable of achieving good academic outcomes even in unfavorable environments. Emerging evidence suggests that learning adaptability may mediate the impact of family conditions on academic performance, acting as a protective factor (Zhai & Ji, 2022).

Given the complex interplay between family context and personal coping mechanisms, this study focuses on how the family soft environment—measured through parenting style and family structure—influences academic performance among rural junior high school students. Furthermore, it examines whether learning adaptability serves as a mediating variable, offering new insight into how students overcome structural disadvantages to succeed academically. The study was conducted in Heze Experimental Middle School, a rural public school in Shandong Province, which serves a high proportion of students from low—income and migrant families. The findings are expected to inform educational policy, school—family collaboration, and psychological support programs for rural students.

1.2 Questions of the Study

In rural China, the academic development of junior high school students is shaped not only by limited educational resources but also by complex family dynamics. With the rise of internal labor migration, many children are raised in households where one or both parents are absent for extended periods, leading to emotional instability and reduced academic supervision.

Against this background, this study seeks to address the following research questions:

1. How does the family soft environment affect the academic performance of rural junior high school students?

2. What is the direct impact of learning adaptability on students' academic performance?

3. Does learning adaptability mediate the relationship between family soft environment and academic performance?

1.3 Objectives of the Study

1.To examine the impact of family soft environment on rural junior high school students' academic performance.

2.To examine the direct effect of learning adaptability on academic performance.

3.To explore the mediating role of learning adaptability in the relationship between family soft environment and academic performance.

1.4 Scope of the Study

This study focuses on students enrolled in Heze Experimental Middle School, located in a rural area of Shandong Province, China in 2025. The research targeted junior high school students (Grades 7 to 9) and investigateed the impact of the family soft environment—operationalized through two components: parenting style and family structure—on their academic performance. The findings are specific to the context of rural Chinese junior high school students. They offer important insights into how family dynamics and student agency interact to shape academic outcomes in resource—constrained settings.

1.5 Significance of the Study

Theoretical Significance: First, it expands the concept of family soft environment by empirically examining its subcomponents—parenting style and family structure—in the context of rural China, where research on non—material family influences remains limited. Second, it introduces and empirically tests learning adaptability as a mediating variable, offering a new mechanism—level explanation for how internal student traits can mitigate the negative effects of external family risk factors. Third, by using structural equation modeling (SEM), the study validates a multi—path theoretical model that integrates environmental and psychological variables, reinforcing the ecological perspective of student development (Bronfenbrenner, 1979). Finally, the findings contribute to the cross—cultural validation of widely used constructs such as parenting style, learning adaptability, and perceived academic performance, using psychometrically sound instruments in a rural Chinese setting.

Practical Significance: For schools, the findings highlight the importance of screening for family risk factors (such as parental absence) and providing targeted academic and emotional support to vulnerable students. For teachers, understanding students' family backgrounds and enhancing their learning adaptability through instruction in self—regulation, motivation, and time management could improve academic outcomes. For policymakers, the study offers evidence supporting

community—based parental training programs, especially in rural areas, to promote more effective and supportive parenting styles. For rural parents and guardians, the study reinforces the message that parental involvement and communication—even when geographically separated—can positively influence children's academic growth. Finally, the findings support the development of integrated rural education interventions, combining home—school collaboration, psychological services, and socio—emotional learning, to build a more equitable educational system.

1.6 Definition of Key Terms

Family Soft Environment: The emotional and psychological aspects of family environment, including parenting behavior and household stability.

Parenting Style: The behavioral approach parents adopt in guiding and disciplining their children, including levels of warmth, communication, and support.

Family Structure: The physical presence or absence of parental figures in the household, particularly in relation to long—term migrant work.

Learning Adaptability: A student’s ability to adjust strategies, maintain motivation, and manage learning behavior in response to challenges.

Academic Performance: A student’s subjective assessment of academic success, including self—confidence, peer comparison, and perceived achievement.

Chapter 2 Literature Review

This chapter reviews the key variables and concepts that frame this study: family soft environment, learning adaptability, and academic performance. It explores how these variables are defined, measured, and interrelated in the literature. The chapter concludes with a discussion of the theoretical framework—Ecological Systems Theory—that underpins the research, followed by the conceptual framework used in hypothesis development.

2.1 Family Soft Environment

Family soft environment is a multifaceted construct that refers to the emotional, relational, and psychological qualities of the home in which a child grows up. Unlike the "hard" environment—measurable factors such as income level, parental education, and housing conditions—the soft environment emphasizes subjective, dynamic, and interactional processes between parents and children (Wu, 2003). These include parental attitudes, emotional bonds, behavioral expectations, communication quality, and family climate (Belsky, 1984).

According to Li and Zhang (2018), soft environment exerts a profound influence on children's social adaptation, psychological development, and learning motivation. It shapes not only what children learn but also how they approach learning, regulate emotions, and form self—identity.

In the Chinese cultural context, especially in rural areas, family soft environment often takes on particular characteristics. Traditional Confucian values emphasize parental authority, discipline, and filial piety, which may lead to more hierarchical and less emotionally expressive parenting (Guan & Lin, 2014). At the same time, modernization and labor migration have disrupted many rural households, creating emotional distance and structural instability.

For research purposes, family soft environment is typically broken down into measurable dimensions. This study follows prior empirical work in conceptualizing it through two key dimensions: parenting style and family structure.

2.1.1 Parenting Style

Parenting style refers to the consistent ways in which parents interact with and guide their children. It encompasses emotional tone, disciplinary strategies, and communication patterns. Baumrind's (1971) classic typology—authoritative, authoritarian, and permissive—has been widely validated across cultures. Authoritative

parenting, marked by high warmth and high control, is consistently linked to higher academic achievement (Chen et al., 2018).

In rural China, authoritarian parenting is often more prevalent, characterized by strict discipline, limited autonomy, and low emotional expressiveness (Guan & Lin, 2014). While such parenting may foster compliance, it can also stifle self—confidence and internal motivation, especially in adolescence. Studies have shown that supportive and democratic parenting styles, which include encouragement, respect, and emotional availability, are more conducive to learning adaptability and academic engagement (Zhang & Qin, 2020).

Moreover, parenting practices in rural areas are influenced by educational attainment and availability of time, especially when one or both parents are engaged in migrant labor (Wang, 2020). This adds variability to parenting quality and consistency, even within two—parent households.

2.1.2 Family Structure

Family structure pertains to the physical presence, roles, and functional relationships among family members. In traditional settings, a two—parent nuclear family has been considered ideal for providing consistent emotional and academic support (Liu et al., 2017). However, in China's rural regions, a significant number of families experience structural disruption due to internal labor migration.

According to Zhao (2013), over 60 million children in China are "left—behind," meaning one or both parents work away from home for extended periods. This phenomenon creates a context in which children may lack direct parental guidance, supervision, and emotional intimacy, relying instead on grandparents or single caregivers.

Cai and Wang (2014) found that such structural instability negatively affects not only academic supervision but also children's emotional development, self—discipline, and school engagement. Although some argue that the economic benefits of remittances can compensate for parental absence (Wang, 2020), a growing body of research suggests that emotional deprivation often has a stronger influence on learning outcomes.

In this study, family structure is operationalized primarily through the father's long—term absence, which is typical in rural migrant—worker families. This allows for a focused analysis of how structural disruption within the household affects students' adaptability and academic performance.

2.2 Learning Adaptability

Learning adaptability refers to a student's capacity to flexibly adjust their cognitive strategies, emotional regulation, and motivational orientation in response to academic demands and challenges. It involves three core components: learning motivation, attitude toward learning, and behavioral self—regulation (Cai, Zhao, & Li, 2021). This concept is particularly relevant in rural educational settings, where students may lack consistent external support and must rely on their own learning initiative.

Adaptable learners tend to set goals, plan their time effectively, stay focused, and exhibit perseverance when encountering setbacks. These attributes allow them to compensate for disadvantages in their environment, such as poor family supervision or inadequate educational resources (Zhai & Ji, 2022).

Empirical studies have confirmed the positive relationship between learning adaptability and academic performance. For instance, Wang and Liu (2019) found that rural students with high adaptability were more likely to complete assignments on time, participate in class discussions, and maintain academic engagement. In addition, learning adaptability has been shown to mediate the effects of family factors, suggesting that students with strong internal regulation are better equipped to thrive despite structural or emotional disadvantages (Li & Sun, 2018).

From an educational psychology perspective, learning adaptability is closely aligned with self—regulated learning theory and is often cultivated through teacher feedback, peer modeling, and supportive family practices. Therefore, it serves as both an outcome of family soft environment and an internal resource for overcoming academic obstacles.

2.3 Academic Performance

Academic performance is a widely accepted indicator of student learning outcomes and educational attainment. Traditionally measured through grades or standardized test scores, academic performance reflects not only students' cognitive abilities but also their motivation, effort, and learning context (Wang & Tang, 2018).

In recent years, particularly in studies involving adolescents, researchers have increasingly adopted self—reported academic performance as a valid and useful measure. This approach captures students' subjective perceptions of their achievement, which are strongly linked to self—efficacy, academic motivation, and peer comparison (Zhang, 2019). Self—perceived performance is especially meaningful in rural areas where exam data may be inaccessible, unreliable, or decontextualized.

Several studies have highlighted the multifactorial nature of academic achievement, pointing to the combined influence of family, school, peer, and personal factors (Chen et al., 2018). For example, a study by Liu and Hu (2020) found that students who perceived their families as emotionally supportive tended to report higher academic satisfaction and stronger intentions to pursue further education.

Moreover, academic performance is not a static outcome but a dynamic construct shaped by continuous feedback between internal attributes (e.g., learning adaptability) and external conditions (e.g., parenting style, family structure). Understanding performance from this systems perspective provides a more holistic framework for analysis and intervention.

2.4 Related Research

The interplay between family soft environment, learning adaptability, and academic performance has attracted growing attention in the field of educational psychology. Research shows that family soft environment exerts both direct and indirect effects on academic outcomes, and learning adaptability often serves as a key mediating mechanism (Chen, 2017).

Supportive parenting enhances emotional security, which in turn fosters self—discipline and learning motivation (Zhang & Qin, 2020). Meanwhile, children in stable family structures tend to experience less stress and better focus in their studies (Zhao, 2013). However, even in less favorable family contexts—such as when a parent is absent—students with high learning adaptability can demonstrate academic resilience, maintaining or improving their academic performance (Zhai & Ji, 2022).

These findings suggest a mediated pathway in which the family soft environment shapes the development of learning adaptability, which then translates into academic achievement. This model is consistent with ecological systems theory, which posits that individual outcomes are co—determined by environmental conditions and personal characteristics (Bronfenbrenner, 1979).

The current study builds on this framework to examine whether learning adaptability significantly mediates the relationship between family soft environment (parenting style and family structure) and students' self—reported academic performance in a rural Chinese junior high school setting.

2.5 Ecological Systems Theory

The theoretical foundation of this study is grounded in Ecological Systems Theory, originally developed by Urie Bronfenbrenner (1979), and later expanded into the

Bioecological Model of Human Development (Bronfenbrenner & Morris, 2006). This theory posits that individual development is influenced by nested environmental systems that interact dynamically with personal characteristics. In education, it offers a comprehensive framework for examining how family, school, and individual traits influence learning outcomes over time.

Bronfenbrenner outlined five interrelated systems:

Microsystem

The microsystem refers to the immediate environment where face—to—face interactions occur, most notably the family and school. In adolescence, the family remains the most influential microsystem, especially in shaping academic behavior, emotional security, and motivation (Bronfenbrenner, 1986). Positive parenting practices and family cohesion are consistently associated with improved school performance and emotional stability (Moen et al., 1995; Chen, 2017).

In the Chinese context, Guo and Ma (2019) demonstrated that family warmth and communication within the microsystem significantly enhanced students' classroom engagement and academic aspirations.

Mesosystem

The mesosystem involves the interconnections among two or more microsystems—such as the relationship between home and school. Effective home–school collaboration has been shown to reinforce learning behaviors and foster academic resilience, especially in rural environments (Epstein, 2001; Zhang & Qin, 2020). In families where parental presence is limited, lack of mesosystemic reinforcement may lead to decreased teacher–parent alignment and weaker student motivation (Cai & Wang, 2014).

Exosystem

The exosystem refers to settings that do not involve the student directly but affect them indirectly. In rural China, a prominent exosystemic influence is parental migrant labor—while children are not part of the workplace, the absence of a parent changes caregiving dynamics and family structure (Zhao, 2013; Wang, 2020). Studies have found that such disruptions can lead to emotional detachment and reduce academic support, particularly in father—absent families (Liu et al., 2017).

Macrosystem

The macrosystem includes overarching cultural values, belief systems, and policies. Confucian norms about hierarchy, discipline, and educational achievement shape parenting style and family expectations in China (Guan & Lin, 2014). In rural

areas, limited educational resources and traditional gender roles further condition how children perceive and respond to academic challenges (Luo & Li, 2021).

Chronosystem

The chronosystem encompasses change over time, both in the individual's life and in the sociohistorical context. Longitudinal studies show that early parental absence or inconsistent care can have lasting effects on academic performance and social adaptation (Sun et al., 2019). In addition, reforms in education policy, rural—urban migration trends, and digital learning access over the past decade have altered the environment in which rural students grow and learn.

Application to this Study

This theory provides the best fit for the multi—layered structure of this research, for several reasons:

1. It emphasizes the dynamic interaction between individual adaptability and environmental structures, which aligns with the role of learning adaptability as a mediator in this study (Tudge et al., 2009).

2. It supports a model that links proximal factors (e.g., parenting style, family presence) with distal outcomes (academic performance), filtered through internal student characteristics (Zhai & Ji, 2022).

3. It allows us to situate family soft environment at the microsystem/exosystem level, while understanding learning adaptability as a student—level internal response, and academic achievement as an integrative outcome across systems.

In summary, Ecological Systems Theory not only explains how different layers of the environment influence learning outcomes, but also highlights why students from similar environments perform differently, due to varying levels of adaptability and internal regulation.

2.6 Conceptual Framework

Based on the reviewed literature and theoretical rationale, the following conceptual framework is proposed:

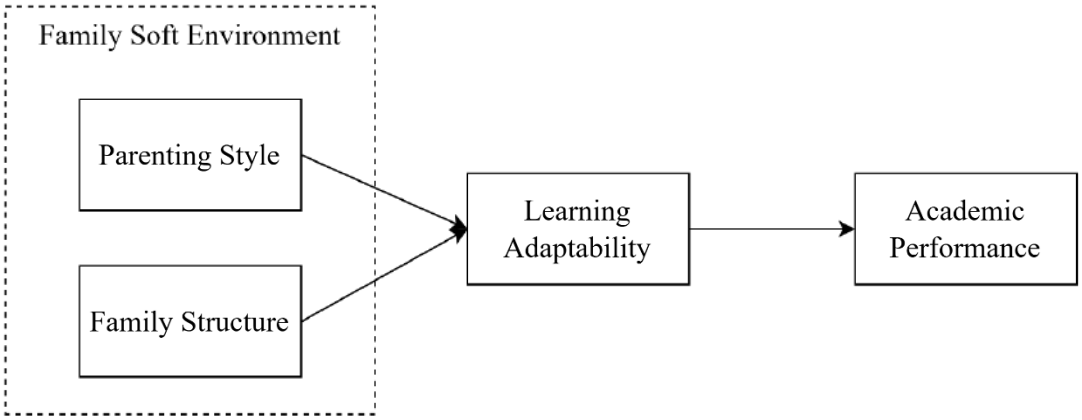

Figure 2.1 Conceptual Framework

This model assumes that family soft environment has effect on academic performance, with learning adaptability serving as a mediating factor.

Chapter 3 Research Methodology

3.1 Research Design

This study adopted a quantitative research to investigate the relationships between family soft environment, learning adaptability, and academic performance of junior high school students in rural China.

3.2 Questionnaire Design

The questionnaire used in this study was designed to measure four key latent variables: Family Soft Environment, Learning Adaptability, and Academic Performance. Family Soft Environment was further divided into two sub—dimensions: Parenting Style and Family Structure. Each variable was operationalized using a 5—point Likert scale, where 1 = Strongly Disagree and 5 = Strongly Agree.

Parenting Style (PS1–PS5): This dimension evaluates the emotional and educational behaviors of parents toward the child, including communication, support, encouragement, and rule—setting.

Family Structure (FS1–FS5): This set of items reflects the physical presence and caregiving arrangement within the household, especially focusing on the potential absence of parents due to migrant work or separation.

Learning Adaptability (LA1–LA5): These items assess the student's ability to adjust to academic demands through self—regulation, focus, motivation, and time management strategies.

Academic Performance (AP1–AP5): This dimension captures students' self—assessed performance in school, including their perceived achievement, understanding of classroom content, and peer recognition.

Table 3.1 Variable Scale

Variable		No.	Item
Family Soft Environment	Parenting Style	PS1	My parents usually communicate with me in a friendly and respectful manner.
		PS2	My parents actively ask about my learning progress and problems.
		PS3	My parents often set clear rules and explain their reasons.
		PS4	My parents often encourage me to study hard and do my best.

		PS5	My parents help me solve problems when I encounter learning difficulties.
	Family Structure	FS1	My parents live together and share responsibility for my upbringing.
		FS2	I live with both of my parents for most of the year.
		FS3	One of my parents (often my father) works far from home for a long time.
		FS4	My parents are rarely at home at the same time.
		FS5	I often feel that I lack support from at least one parent.
Learning Adaptability		LA1	I can adjust my learning strategy when I encounter difficult tasks.
		LA2	I can stay focused for most of the class period.
		LA3	I am motivated to achieve good academic results.
		LA4	I can manage my study time effectively.
		LA5	I always review and summarize after class.
Academic Performance		AP1	I often perform well in my school tests.
		AP2	I understand most of what the teachers explain in class.
		AP3	I feel satisfied with my current academic results.
		AP4	My classmates often ask me for help in learning.
		AP5	I believe I am one of the top students in my class.

3.3 Hypothesis

H1: Family soft environment significantly influences academic performance.

H1a: Parenting style positively influences academic performance.

H1b: Family structure negatively influences academic performance.

H2: Learning adaptability positively influences academic performance.

H3: Learning adaptability mediates the relationship between family soft environment and academic performance.

3.4 Population and Sample

The study was conducted at Heze Experimental Middle School, located in a rural area of Shandong Province, China. The range population was the students enrolled Grades 7-9 in 2025. A stratified cluster sampling method was used. Students from

Grades 7 to 9 were divided into strata, and four classes per grade were randomly selected. A total of 500 students were selected for questionnaire distribution.

3.5 Data Collection

A total of 500 students were selected for questionnaire distribution. Questionnaires were administered during regular class time with the assistance of teachers. After excluding incomplete responses, 434 valid questionnaires were retained, resulting in an effective response rate of 86.8%.

3.6 Data Analysis

This study used three steps to analyze the data, which were data collection, data description and data inference. Based on the research questions, this study screened out relevant variables from these data, and cleaned and organized the data to prepare for the subsequent analysis. In the data description stage, this study used descriptive statistical analysis and content analysis to provide a basic description and generalization of the data. Descriptive statistical analysis was used to process the quantitative data by calculating statistical quantities such as mean, standard deviation, maximum and minimum values for each variable. Content analysis was used to deal with qualitative data, and the key information and ideas in the data were summarized and compared and corroborated with quantitative data through coding, classification and theme extraction. In the data inference stage, this study utilized inferential statistical analysis to explore and test the data in depth. Inferential statistical analysis was used to deal with the quantitative data and several methods were employed: correlation analysis: this study used the Pearson correlation coefficient to measure the degree of linear correlation between the variables. The closer the correlation coefficient is to 1 or —1, the stronger the correlation; the closer the correlation coefficient is to 0, the weaker the correlation. Regression analysis: this study used a multiple linear regression model to estimate the degree and direction of the influence of the independent variable on the dependent variable. The regression coefficients represent the amount of change expected in the dependent variable for each unit change in the independent variable; the regression equation represents the functional relationship between the independent variable and the dependent variable.

3.7 Reliability and Validity Analysis of the Scale

3.7.1 Reliability Analysis

Reliability was assessed using Cronbach's alpha coefficient, which evaluates the internal consistency of items within each scale. As shown in Table 3.2, all four scales achieved alpha values above the recommended threshold of 0.70, indicating good reliability.

Table 3.2 Reliability Scale Analysis

Variable	Cronbach's α
Parenting Style	0.85
Family Structure	0.78
Learning Adaptability	0.83
Academic Performance	0.87

The overall internal consistency across scales suggests that the items are cohesive and measure their respective constructs reliably. Among them, the Academic Performance scale showed the highest reliability ($\alpha = 0.87$), followed closely by Parenting Style and Learning Adaptability.

3.7.2 Validity Analysis

Construct validity was tested through Kaiser—Meyer—Olkin (KMO) measures and Bartlett's Test of Sphericity. The KMO statistic assesses the adequacy of the sample size for factor analysis, with values above 0.70 considered acceptable. Bartlett's Test evaluates whether the correlation matrix is significantly different from an identity matrix, with $p < 0.05$ indicating suitability for factor analysis.

As shown in Table 3.3, all KMO values ranged from 0.732 to 0.821, and all Bartlett's tests were highly significant (Sig. = 0.000), indicating excellent sampling adequacy and factorability.

Table 3.3 Validity Scale Analysis

Variable	KMO	Sig.
Parenting Style	0.821	0.000
Family Structure	0.732	0.000
Learning Adaptability	0.792	0.000
Academic Performance	0.803	0.000

The reliability and validity results demonstrate that the measurement instrument used in this study is both statistically sound and theoretically grounded. The high internal consistency and solid factor structure ensure that the scales can reliably capture the intended constructs for further analysis.

Chapter 4 Findings and Discussion

4.1 Findings

4.1.1 Demographic Characteristics of Respondents

Table 4.1 Demographic Characteristics of Sample

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	228	52.5%
	Female	206	47.5%
Grade Level	Grade 7	156	35.9%
	Grade 8	130	30.0%
	Grade 9	148	34.1%
Father Migrant Worker	Yes (Father works away from home)	252	58.1%
	No (Father stays at home)	182	41.9%
Annual Family Income	Below 50,000 RMB	2	0.5%
	50,000–100,000 RMB	92	21.2%
	100,000–150,000 RMB	230	52.9%
	150,000–200,000 RMB	80	18.4%
	Over 200,000 RMB	30	6.9%
Education Expenditure	Less than 10,000 RMB/year	350	80.6%
	10,000–50,000 RMB/year	83	19.1%
	Over 50,000 RMB/year	1	0.2%
Father's Education	Primary school or below	34	7.8%
	Junior high school	297	68.4%
	High school or technical secondary school	92	21.2%
	College degree or above	11	2.5%
Mother's Education	Primary school or below	94	21.6%
	Junior high school	277	63.8%
	High school or technical secondary school	52	12.0%

Variable	Category	Frequency (n)	Percentage (%)
	College degree or above	11	2.5%
Number of Siblings	1 child	48	11.1%
	2 children	269	61.9%
	3 children	110	25.3%
	4 or more children	7	1.6%

Out of 434 valid respondents, the gender distribution included 228 males (52.5%) and 206 females (47.5%). Grade levels were fairly balanced, with 156 students in Grade 7 (35.9%), 130 in Grade 8 (30.0%), and 148 in Grade 9 (34.1%).

In terms of family income, about 21.2% of families earned between 50,000–100,000 RMB annually, and 52.9% earned between 100,000–150,000 RMB. A large majority (80.6%) spent less than 10,000 RMB annually on education. Most parents had only junior high school education, with only 2.5% of fathers and mothers having college degrees or higher. Regarding number of siblings, 61.9% of students came from two—child families.

4.1.2 Descriptive Statistics of Variables

Descriptive statistics were calculated to summarize the distribution of responses across the four key variables: Parenting Style, Family Structure, Learning Adaptability, and Academic Performance. The results, as shown in Table 4.2, include the mean (M), standard deviation (SD), and the observed range (minimum and maximum scores) for each variable.

Table 4.2 Descriptive Statistics of Variables

Variable	Mean	Std. Deviation	Minimum	Maximum
Parenting Style	3.82	0.68	1.60	5.00
Family Structure	3.02	0.73	1.00	5.00
Learning Adaptability	3.67	0.71	1.40	5.00
Academic Performance	3.55	0.79	1.00	5.00

The mean score for Parenting Style (M = 3.82) indicates that most students perceived their parents as moderately supportive and engaged in their learning, suggesting generally positive parenting behaviors in the sample. In contrast, Family Structure has a lower mean (M = 3.02), reflecting a degree of family instability or partial parental absence, which is common in rural families with labor migration backgrounds.

The relatively high mean for Learning Adaptability (M = 3.67) implies that students possess a moderate to strong capacity to regulate their learning processes,

while Academic Performance (M = 3.55) shows that students generally rate their school performance positively. Standard deviations ranging from 0.68 to 0.79 suggest acceptable levels of variation across individual responses, suitable for inferential analysis.

4.1.3 Correlation Analysis

To examine the relationships among the main constructs, Pearson correlation coefficients were computed. As shown in Table 4.3, all correlations were statistically significant at the 0.01 level, indicating meaningful associations between the variables.

Table 4.3 Correlation Analysis

Variable	1	2	3	4
Parenting Style	1			
Family Structure	—0.276**	1		
Learning Adaptability	0.472**	—0.183**	1	
Academic Performance	0.408**	—0.229**	0.527**	1
Note: $p < 0.01$				

The analysis reveals several important relationships. Parenting Style is positively and significantly correlated with both Learning Adaptability (r = 0.472) and Academic Performance (r = 0.408), indicating that supportive parenting behaviors contribute to better learning regulation and self—perceived success in school.

Conversely, Family Structure shows a negative correlation with Learning Adaptability (r = —0.183) and Academic Performance (r = —0.229), suggesting that family instability or parental absence is associated with lower learning effectiveness and reduced academic confidence.

The strongest correlation is observed between Learning Adaptability and Academic Performance (r = 0.527), supporting the hypothesis that students with higher adaptability tend to perform better academically. This also provides preliminary evidence for a potential mediating role of Learning Adaptability in the relationship between family environment and academic outcomes.

4.2 Regression Analysis

To further examine the direct influence of family soft environment and learning adaptability on students' academic performance, a multiple linear regression analysis was conducted. The independent variables were Parenting Style, Family Structure, and Learning Adaptability, while the dependent variable was Academic Performance.

The regression model was statistically significant ($F = 52.41$, $p < 0.001$), with an adjusted R^2 of 0.36, indicating that approximately 36% of the variance in academic performance can be explained by the three predictors.

Table 4.4 Multiple Linear Regression Analysis

Predictor	**Unstandardized β**	**Standardized β**	**t**	**Sig.**
Parenting Style	0.237	0.261	5.784	0.000
Family Structure	—0.156	—0.182	—4.328	0.000
Learning Adaptability	0.428	0.468	9.662	0.000
$R^2 = 0.367$, Adjusted $R^2 = 0.361$, $F = 52.41$, $p < 0.001$				

Parenting Style has a significant and positive impact on Academic Performance ($\beta = 0.261$, $p < 0.001$), suggesting that supportive, communicative, and structured parenting promotes better academic outcomes.

Family Structure has a significant negative impact ($\beta = —0.182$, $p < 0.001$), indicating that students experiencing parental absence or instability tend to report lower academic performance.

Learning Adaptability shows the strongest effect ($\beta = 0.468$, $p < 0.001$), reinforcing its crucial role in enabling students to perform better regardless of family context.

These results suggest both environmental (external) and psychological (internal) factors independently influence academic success, with learning adaptability playing a particularly important role.

4.3 Mediating Effect Test

A Structural Equation Model was constructed using AMOS to assess whether learning adaptability mediates the relationship between the family soft environment and academic performance.

Table 4.5 Model Fit

Fit Index	**Threshold**	**Model Value**
χ^2/df	< 3	1.983
RMSEA	< 0.08	0.047
GFI	> 0.90	0.923
CFI	> 0.90	0.957
TLI	> 0.90	0.943

All values indicate a good model fit, supporting the proposed mediation structure.

4.3.1 Path Coefficients and Mediation Effects

Table 4.6 Standardized Path Coefficients

Path	Standardized β	p—value
Parenting Style → Learning Adaptability	0.49	<0.001
Family Structure → Learning Adaptability	—0.22	<0.01
Learning Adaptability → Acad. Perf.	0.53	<0.001
Parenting Style → Academic Performance	0.25	<0.01
Family Structure → Academic Performance	—0.17	<0.05

Indirect effect of Parenting Style via Learning Adaptability: $\beta = 0.26$, Sobel = 3.98, $p < 0.001$. Indirect effect of Family Structure via Learning Adaptability: $\beta = —0.12$, Sobel = 2.91, $p < 0.01$. These results confirm that learning adaptability partially mediates the effect of both parenting style and family structure on academic performance.

4.3.2 Mediation Test

To evaluate the indirect effects, a Sobel test was conducted:

Parenting Style → Learning Adaptability → Academic Performance

Indirect effect $\beta = 0.26$, Sobel $z = 3.98$, $p < 0.001$

Family Structure → Learning Adaptability → Academic Performance

Indirect effect $\beta = —0.12$, Sobel $z = 2.91$, $p < 0.01$

These findings confirm that Learning Adaptability partially mediates the effects of both Parenting Style and Family Structure on Academic Performance. The mediation is statistically significant, indicating that the psychological capacity to adapt to learning demands plays a buffering role against negative environmental influences.

4.4 Discussion

Based on the results of correlation analysis, multiple regression, and structural equation modeling, the following conclusions regarding the research hypotheses can be drawn:

H1: Family soft environment significantly influences academic performance. → Supported

The analysis confirmed that the overall family soft environment plays a meaningful role in shaping students' academic outcomes. Specifically, positive

parenting promotes achievement, while structural instability (e.g., parental absence) undermines it.

H1a: Parenting style positively influences academic performance. → Supported

Students who perceived their parents as supportive and involved reported significantly higher academic performance, indicating the importance of emotional and behavioral guidance.

H1b: Family structure negatively influences academic performance. → Supported

The absence of one or both parents was associated with lower academic performance, highlighting the adverse effects of family separation or instability.

H2: Learning adaptability positively influences academic performance. → Supported

Students with higher levels of learning adaptability demonstrated significantly better academic outcomes, confirming its role as a key personal strength.

H3: Learning adaptability mediates the relationship between family soft environment and academic performance. → Supported

The mediation effect was statistically significant. This suggests that a favorable family environment enhances academic performance both directly and indirectly by fostering students' adaptability.

In summary, the findings validate all hypotheses and demonstrate that both external family conditions and internal adaptability are critical in explaining academic success. Learning adaptability serves as a psychological mechanism that helps students navigate the influence of their home environment on their school performance.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

This study investigated the influence of family soft environment, specifically parenting style and family structure, on the academic performance of rural junior high school students in Heze Experimental Middle School, China. Furthermore, the study examined whether learning adaptability plays a mediating role in this relationship.

A structured questionnaire was distributed to 434 students, and the data were analyzed using descriptive statistics, correlation analysis, and structural equation modeling. The findings reveal several key conclusions:

Parenting style has a significant and direct positive effect on students' academic performance. Supportive and communicative parenting encourages better learning behavior, emotional stability, and academic focus.

Family structure, particularly the long - term absence of a parent (often the father), exerts a negative effect on academic performance. This highlights the emotional and supervisory gaps that migrant work can introduce.

Learning adaptability—the ability of students to manage their motivation, strategies, and behaviors—is found to significantly mediate the relationship between both parenting style and family structure and students' academic performance.

Students with high learning adaptability are more resilient in the face of family—related disadvantages and perform better academically regardless of structural limitations.

These findings support the theoretical underpinnings of the behaviorist learning theory, the social stratification theory, and the stakeholder theory, emphasizing the need for collaborative efforts between schools and families to enhance the learning environment for rural students.

5.2 Recommendation

Based on the results of the study, several practical and policy—related recommendations are proposed:

1. Promote Positive Parenting Programs in Rural Communities

Schools and local governments should collaborate to deliver parenting workshops that emphasize supportive communication, academic encouragement, and emotional stability. These programs should be tailored to rural contexts where educational levels and awareness may be lower.

2. Provide Support for Children in Migrant Worker Families

Schools should identify students from "left—behind" families and offer psychological counseling, tutoring services, and mentorship programs. Local policies could consider creating incentives for family reunification or flexible job arrangements.

3. Integrate Learning Adaptability Training into School Curriculum

Teachers should be trained to cultivate students' self—regulation skills, time management, and problem—solving abilities. Activities that enhance metacognition and self—motivation should be incorporated into classroom routines.

4. Strengthen Home—School Communication Mechanisms

Schools should establish consistent and accessible platforms to ensure that parents, whether at home or working afar, remain actively involved in their child's education.

5. Focus Resource Allocation on High—Need Students

Education departments should provide financial and material support for students from low—income or structurally disadvantaged households to reduce disparities and level the academic playing field.

5.3 Further Study

While this study provides valuable insights, several limitations suggest directions for future research:

The study focused on a single rural middle school in Heze, which limits the generalizability of the findings. Future research should include a larger, more diverse sample across multiple regions.

Academic performance was measured through self—reported perceptions, which may introduce bias. Subsequent studies should consider using objective academic records to enhance data validity.

The mediating role of learning adaptability could be further examined alongside other psychological factors such as self—efficacy, resilience, or peer influence, to develop a more holistic understanding.

A longitudinal research design may better capture the evolving effects of parenting and structural changes over time.

In conclusion, enhancing the family soft environment and strengthening students' adaptability are both effective and practical ways to promote academic success among rural students. These efforts require not only educational interventions but also broader social policies that support family integrity and child development in rural China.

References

Baumrind, D. (1971). *Current patterns of parental authority*. *Developmental Psychology Monograph*, 4(1), 1–103.

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55(1), 83–96.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723–742.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner (Ed.), *Handbook of child psychology* (6th ed., Vol. 1, pp. 793–828). Wiley.

Cai, W., Zhao, Y., & Li, F. (2021). Learning adaptability and academic outcomes: A rural Chinese school study. *Journal of Educational Research and Practice*, 11(3), 112–123.

Cai, Y., & Wang, L. (2014). The educational consequences of parental migration: A longitudinal study. *Chinese Journal of Sociology*, 30(2), 99–114.

Chen, L. (2017). Family climate and student achievement: A mediational model of self—regulated learning. *Chinese Journal of Developmental Psychology*, 25(2), 75–84.

Chen, L., Zhang, X., & Zhao, Y. (2018). Parental warmth and student achievement: Evidence from Chinese middle schools. *International Journal of Educational Psychology*, 7(1), 14–29.

Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Westview Press.

Guan, Y., & Lin, L. (2014). Parenting practices and their influence on academic outcomes in rural China. *Chinese Education & Society*, 47(5), 75–89.

Guo, M., & Ma, J. (2019). The influence of family emotional environment on rural adolescents' learning involvement. *Rural Education Research*, 10(3), 52–60.

Li, M., & Zhang, J. (2018). Family soft environment and adolescent psychological development: A structural equation modeling approach. *Journal of Psychological Research*, 12(3), 45–52.

Li, Y., & Sun, M. (2018). Learning motivation and adaptability in rural adolescents: The role of family and school factors. *Education Studies*, 6, 85–94.

Liu, X., Wang, Z., & Li, Y. (2017). Family structure and academic achievement in rural China: A comparative analysis. *Asian Education Studies*, 5(2), 48–61.

Liu, Y., & Hu, M. (2020). Family emotional support and academic aspirations among rural junior high school students. *Journal of Chinese Youth Research*, 5, 33–40.

Luo, J., & Li, Y. (2021). Cultural capital and educational aspirations: Evidence from rural junior high students in China. *Modern Education Science*, 12, 44–53.

Moen, P., Elder, G. H., & Lüscher, K. (Eds.). (1995). *Examining lives in context: Perspectives on the ecology of human development*. American Psychological Association.

Sun, L., Tao, X., & Deng, J. (2019). Longitudinal effects of early family risk factors on middle school academic outcomes. *Chinese Journal of Mental Health Education*, 8(1), 63–72.

Tudge, J. R. H., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory & Review*, 1(4), 198–210.

Wang, H. (2020). Does father absence always harm? Migrant work, income, and rural child development. *Rural Sociology Review*, 42(4), 23–39.

Wang, S., & Liu, C. (2019). The predictive power of learning adaptability on classroom engagement. *Modern Educational Science*, 9, 41–48.

Wang, S., & Tang, L. (2018). The validity of self—reported academic performance in adolescent surveys. *Chinese Journal of Education Measurement*, 6(2), 37–45.

Wu, Z. (2003). A theoretical framework of family environment and child development. *Journal of Psychological Development and Education*, 19(3), 45–51.

Zhai, K., & Ji, C. (2022). Learning adaptability as a buffer: Evidence from low—SES families. *Educational Psychology International*, 39(2), 143–160.

Zhang, M. (2019). The correlation between self—efficacy and academic performance among junior high school students. *China Youth Research*, 7, 58–65.

Zhang, Q., & Qin, L. (2020). Parental involvement and middle school students' achievement. *Modern Education Science*, 6, 75–81.

Zhao, L. (2013). The silent classroom: The educational risks of China's left—behind children. *China Social Science Review*, 22(1), 99–116.

Appendix

Student Questionnaire on Family Environment, Learning Adaptability, and Academic Performance

Instructions: Please fill in or check the appropriate boxes. For questions 9–28, please rate each statement on a scale from 1 to 5.

Scale: 1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

Part I: Demographic Information

Item	Options
1. Gender	☐ Male ☐ Female
2. Grade Level	☐ Grade 7 ☐ Grade 8 ☐ Grade 9
3. Number of Siblings	☐ 0 ☐ 1 ☐ 2 ☐ 3 or more
4. Father's Education Level	☐ Primary or below ☐ Junior High ☐ High School ☐ College+
5. Mother's Education Level	☐ Primary or below ☐ Junior High ☐ High School ☐ College+
6. Father's Work Status	☐ Works locally ☐ Works away from home
7. Annual Family Income (RMB)	☐ <50k ☐ 50–100k ☐ 100–150k ☐ 150–200k ☐ >200k
8. Annual Education Expenditure	☐ <10k ☐ 10–50k ☐ >50k

Part II: Scale Items

No.	Item	1	2	3	4	5
Parenting Style						
9	My parents often praise and encourage me when I make progress.	☐	☐	☐	☐	☐
10	I can communicate freely with my parents about school matters.	☐	☐	☐	☐	☐
11	My parents care about my academic performance.	☐	☐	☐	☐	☐
12	My parents set reasonable rules and boundaries for me.	☐	☐	☐	☐	☐
13	My parents help me solve problems when I am in trouble.	☐	☐	☐	☐	☐

No.	Item	1	2	3	4	5
Family Structure						
14	I live with both of my parents.	☐	☐	☐	☐	☐
15	My parents are always available when I need them.	☐	☐	☐	☐	☐
16	I often miss one of my parents due to long—term work away from home.	☐	☐	☐	☐	☐
17	I feel that my family gives me sufficient emotional support.	☐	☐	☐	☐	☐
18	I receive adequate supervision at home.	☐	☐	☐	☐	☐
Learning Adaptability						
19	I can stay focused when I study.	☐	☐	☐	☐	☐
20	I am motivated to achieve better academic results.	☐	☐	☐	☐	☐
21	I can adjust my learning methods when I encounter difficulties.	☐	☐	☐	☐	☐
22	I plan and manage my study time well.	☐	☐	☐	☐	☐
23	I actively seek help or resources when I don’t understand something.	☐	☐	☐	☐	☐
Academic Performance						
24	I am satisfied with my academic performance.	☐	☐	☐	☐	☐
25	I perform better than most of my classmates.	☐	☐	☐	☐	☐
26	I understand the content taught in class.	☐	☐	☐	☐	☐
27	I get good feedback from teachers.	☐	☐	☐	☐	☐
28	I feel confident about my future academic path.	☐	☐	☐	☐	☐

บันทึกข้อความ

ส่วนงาน บัณฑิตวิทยาลัย สาขาบริหารธุรกิจ โทร.ภายใน 5336

ที่ มส 0210.01 / 0229 วันที่ 21 สิงหาคม 2568

เรื่อง ขออนุมัติสำเร็จการศึกษาประจำปีการศึกษา 2567

เรียน ท่านอธิการบดี

<u>เรื่องเดิม</u> นักศึกษาหลักสูตรบริหารธุรกิจมหาบัณฑิต MISS. WU CAIYI รหัสนักศึกษา 6617195729 ได้ศึกษารายวิชาครบถ้วนสมบูรณ์ และได้ปฏิบัติตามเกณฑ์สำเร็จการศึกษาตามที่มหาวิทยาลัยสยาม กำหนดเรียบร้อยแล้ว ทั้งนี้พร้อมยื่นเรื่องขออนุมัติสำเร็จการศึกษา โดยมีรายละเอียดดังต่อไปนี้

1. ผ่านการตรวจสอบความซ้ำซ้อนด้วยโปรแกรม Grammarly เมื่อวันที่ 22 พฤษภาคม 2568
2. ผ่านการสอบประมวลความรู้ข้อเขียน เมื่อวันที่ 26 เมษายน 2568
3. ผ่านการสอบปากเปล่าขั้นสุดท้ายวิชาการค้นคว้าอิสระ เมื่อวันที่ 8 พฤษภาคม 2568
4. ผ่านเกณฑ์มาตรฐานความรู้ภาษาอังกฤษ Oxford Placement Test score 67 CEFR B2 เมื่อวันที่ 15 มีนาคม 2568
5. ผ่านการประชุมวิชาการระดับนานาชาติ at the International Institute of Academic Research & Publications In association with : Glovento Conference on " Social Sciences Research & Business Management" Subject: "A Study on the Influence of Family Soft Environment on the Academic Performance of Rural Junior High School Students-Taking Heze Experimental Middle School as an Example " on February 23, 2025 at , Toronto , Canada

<u>เรื่องพิจารณา</u> เพื่อพิจารณาเข้าประชุมสภามหาวิทยาลัย และอนุมัตินักศึกษาสำเร็จการศึกษา ประจำปีการศึกษา 2567 ดังรายละเอียดเอกสารประกอบการสำเร็จการศึกษาตามที่แนบมา

จึงเรียนมาเพื่อพิจารณาอนุมัติ และให้ดำเนินการต่อไป

(รศ.ดร.จอมพงศ์ มงคลวนิช)
คณบดีบัณฑิตวิทยาลัย สาขาบริหารธุรกิจ

สำนักงานอธิการบดี
เอกสารฉบับนี้สามารถสืบค้นข้อมูลได้
ลงชื่อ
วันที่ 28 ส.ค. 68

22 ส.ค. 68