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LEARNING MOTIVATION AS A MEDIATOR BETWEEN ETHNIC IDENTITY, FAMILY ENVIRONMENT, AND ACADEMIC PERFORMANCE AMONG GUANGXI MINORITY COLLEGE STUDENTS



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Kampus Sultan Abdul Jalil Shah

LI FANGHONG



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SULTAN IDRIS EDUCATION UNIVERSITY

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GUANGXI MINORITY COLLEGE STUDENTS

LI FANGHONG

THESIS PRESENTED TO QUALIFY FOR A DOCTOR OF PHILOSOPHY

FACULTY OF HUMAN DEVELOPMENT
SULTAN IDRIS EDUCATION UNIVERSITY

2025

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Pensyarah Kanan
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Coming from China, a country with vast territory and abundant resources, to study in this beautiful country of Malaysia is a valuable personal experience that has allowed me to experience more aspects of the world and the way of life and thinking of people with different skin colour from different regions. At the same time, it has allowed me to experience the exotic climate, food, and culture. Throughout the entire study period, life was indeed monotonous, but the friendliness and sincerity of Malaysians have made me feel the beauty of the world. During these four years of study, I encountered many difficulties along the way, but I never thought of giving up. The reasons why I can successfully complete my study are the continuous guidance of my tutor, the support of my family, and the understanding of my friends.

Firstly, I would like to express my sincerest appreciation to my two supervisors, Dr. Mohd Muslim bin Md Zalli and Dr. Norliza binti Abdul Majid for their patience, kindness, support, and advice throughout my study. Without their continuous guidance and supervision, this study would not be completed successfully.

I would also like to express my gratitude to my family. The spiritual support and material security provided by my family ensured me to study abroad with peace of mind. They are the ones who enabled me to successfully complete my study. I would like to dedicate this thesis to my family.

My heart overflows with gratitude to all my friends for being supportive and understanding. I would also like to extend my appreciation to everyone who provided me a helpful hand in ensuring the success of this study.

ABSTRACT

This study examined relationships between ethnic identity, family environment, learning motivation, and academic performance among ethnic minority undergraduates in Guangxi Province, China. A cross-sectional survey involved 828 students from three colleges. Data were collected using a self-administered questionnaire. The instrument measured four latent constructs: (i) ethnic identity, using items adapted from established ethnic identity instruments; (ii) family environment, using items adapted from the Family Environment Scale; (iii) learning motivation, using items adapted from the Academic Motivation Scale; and (iv) academic performance, using self-reported indicators of grades, academic engagement, recognition, and academic-related experiences. Data analysis involved descriptive statistics in IBM SPSS (version 27), and Confirmatory Factor Analysis (CFA) and Structural Equation Modelling (SEM) in SmartPLS4. SEM results showed that ethnic identity ($\beta = 0.366$, $p = 0.000$) and family environment ($\beta = 0.475$, $p = 0.000$) significantly predicted learning motivation, and that learning motivation significantly predicted academic performance ($\beta = 0.641$, $p = 0.000$). The direct paths from ethnic identity ($\beta = -0.048$, $p = 0.311$) and family environment ($\beta = 0.051$, $p = 0.358$) to academic performance were not significant. However, learning motivation significantly mediated both effects ($\beta = 0.235$; $\beta = 0.305$; $p < 0.05$), indicating that motivation is the key mechanism linking sociocultural and family factors to achievement. Theoretically, the findings clarify that ethnic identity and family environment shape academic performance mainly through learning motivation, supporting a model that connects sociocultural identity, family climate, and motivational processes. Practically, the findings suggest that culturally responsive, family-engaged interventions that strengthen learning motivation may most effectively improve academic outcomes for ethnic minority undergraduates and should guide targeted educational policy and support programmes in Guangxi Province.



MOTIVASI PEMBELAJARAN SEBAGAI PENGANTARA ANTARA IDENTITI ETNIK, PERSEKITARAN KELUARGA DAN PRESTASI AKADEMIK DALAM KALANGAN PELAJAR KOLEJ ETNIK MINORITI DI GUANGXI

ABSTRAK

Kajian ini meneliti hubungan antara identiti etnik, persekitaran keluarga, motivasi pembelajaran dan prestasi akademik dalam kalangan pelajar prasiswazah etnik minoriti di Wilayah Guangxi, China. Reka bentuk tinjauan keratan rentas digunakan melibatkan 828 orang pelajar daripada tiga buah kolej. Data dikumpulkan melalui soal selidik sendiri. Instrumen merangkumi empat konstruk laten: (i) identiti etnik, diukur menggunakan item yang diadaptasi daripada instrumen identiti etnik sedia ada; (ii) persekitaran keluarga, menggunakan item yang diadaptasi daripada *Family Environment Scale*; (iii) motivasi pembelajaran, menggunakan item yang diadaptasi daripada *Academic Motivation Scale*; dan (iv) prestasi akademik, diukur melalui pelaporan sendiri tentang gred, penglibatan akademik, pengiktirafan dan pengalaman berkaitan akademik. Analisis data melibatkan statistik deskriptif menggunakan IBM SPSS (versi 27), serta Analisis Faktor Pengesahan (*Confirmatory Factor Analysis*, CFA) dan Pemodelan Persamaan Berstruktur (*Structural Equation Modelling*, SEM) menggunakan SmartPLS4. Dapatan SEM menunjukkan bahawa identiti etnik ($\beta = 0.366$, $p = 0.000$) dan persekitaran keluarga ($\beta = 0.475$, $p = 0.000$) meramalkan motivasi pembelajaran secara signifikan, dan motivasi pembelajaran pula meramalkan prestasi akademik secara signifikan ($\beta = 0.641$, $p = 0.000$). Laluan langsung identiti etnik ($\beta = -0.048$, $p = 0.311$) dan persekitaran keluarga ($\beta = 0.051$, $p = 0.358$) kepada prestasi akademik tidak signifikan. Walau bagaimanapun, motivasi pembelajaran bertindak sebagai pengantara yang signifikan bagi kedua-dua hubungan tersebut ($\beta = 0.235$; $\beta = 0.305$; $p < 0.05$). Dapatan ini menjelaskan kesan identiti etnik dan persekitaran keluarga terhadap pencapaian akademik melalui motivasi pembelajaran, lalu menyokong model yang mengaitkan identiti sosiobudaya, iklim keluarga dan proses motivasi. Secara praktikal, kajian ini menegaskan keperluan intervensi yang peka budaya serta melibatkan keluarga untuk mengukuhkan motivasi pembelajaran sebagai laluan paling berkesan meningkatkan prestasi akademik pelajar etnik minoriti dan sebagai asas dasar serta program sokongan pendidikan yang disasarkan di Wilayah Guangxi.





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LIST OF ABBREVIATIONS

K-S	Kolmogorov-Smirnov
S-W	Shapiro-Wilk
S. E	Standard Error



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CHAPTER 1

INTRODUCTION



1.1 Introduction

This chapter details nine key sections: background of the study, problem statement, research objectives, research questions, conceptual framework, hypotheses, significance of study, and operational definitions of the key terms used in this study. Thesis organization and chapter summary is presented at the end of this chapter.

1.2 Background of Study

Globalization has significantly influenced educational systems worldwide, fostering cultural exchanges and reshaping educational practices and policies in various regions (Skálén et al., 2022). This global shift underscores the necessity for educational





institutions to adapt to multicultural realities, ensuring students are prepared to thrive in increasingly diverse environments. Countries recognizing this trend have emphasized inclusive policies, addressing educational inequalities among diverse ethnic and cultural groups. Such initiatives reflect broader efforts to integrate diverse populations into cohesive and productive societal structures (Lau et al., 2022).

In China, education has historically been a critical mechanism for national development, with educational policies adapted to meet regional socioeconomic demands. Specifically, ethnic minority education has gained strategic importance, aiming to cultivate talent essential for both regional and national prosperity (Zhang et al., 2021). This approach is particularly significant given China's diverse ethnic composition, requiring tailored strategies to foster educational equity across varied cultural landscapes. Such policies emphasize not only academic achievement but also the broader developmental and integrative roles education plays in fostering social cohesion (Cheng et al., 2022).

Guangxi Province, located in southern China, epitomizes the complexities and opportunities inherent in multiethnic educational development. As a key gateway connecting China and ASEAN nations, Guangxi has strategic geographical importance and considerable cultural diversity, home to ethnic groups such as the Zhuang, Yao, Miao and Dong (Chen et al., 2023; Li et al., 2021). This multicultural composition necessitates a nuanced educational approach that acknowledges and addresses the unique linguistic, cultural, and social contexts influencing educational experiences and outcomes.





Research highlights ethnic identity as a fundamental factor influencing psychological well-being, learning motivation, and overall educational engagement among ethnic minority students (Yuan & Li, 2019; Tao et al., 2020). A positive ethnic identity facilitates resilience and fosters a sense of belonging, essential for academic persistence and performance. Conversely, challenges such as identity conflicts arising from governmental policies that simultaneously support and pressure ethnic minorities complicate the educational experiences of these students, necessitating targeted support mechanisms (Kuang & Nishikawa, 2021).

Family environment plays an equally vital role in shaping students' academic trajectories, significantly influencing their educational aspirations and successes (Li & Wang, 2020). Parental involvement, socioeconomic status, and culturally embedded expectations collectively create a supportive environment essential for academic performance. In Guangxi province, where traditional family values remain influential, family support often mitigates educational disparities, empowering students to overcome structural and resource-related challenges (Wang & Liu, 2022).

The interplay between ethnic identity and family environment directly impacts students' learning motivation, a critical determinant of academic performance (Huang & Liu, 2021). Motivation is influenced by both internal factors such as ethnic pride and external influences including family support and cultural expectations. Ethnic minority students who experience robust familial encouragement and possess a strong ethnic identity typically display enhanced intrinsic motivation, driving improved academic outcomes (Ryan & Deci, 2020).





Nevertheless, ethnic minority students often encounter unique barriers to their academic progress, including linguistic difficulties, limited culturally relevant curricula, and socioeconomic hardships exacerbated by regional economic disparities (Chen et al., 2016). In Guangxi Province, despite its strategic importance, faces pronounced economic challenges, compelling many parents to migrate for employment opportunities, leaving children in the care of extended family members. This familial disruption potentially undermines the family environment, negatively affecting students' psychological stability and educational aspirations.

Government policies have attempted to address these educational disparities by establishing programs specifically designed to support ethnic minority students, such as targeted recruitment and specialized educational initiatives (Implementation Plan for Cultivating High Level Backbone Talents of Ethnic Minorities, 2020). Despite these efforts, substantial gaps remain, highlighting the need for continuous refinement of policies that effectively integrate family, cultural identity, and motivational dimensions into educational strategies. These policy refinements are critical to ensuring sustainable academic performance for ethnic minority students in Guangxi.

Globally, educational policies increasingly recognize the necessity of nurturing positive attitudes toward learning as pivotal for academic performance. For example, Malaysia's National Education Blueprint (2013–2025) exemplifies this trend, emphasizing the role of student engagement and motivation in educational success (Bakar, 2023). Comparative insights from such international frameworks offer valuable perspectives, informing policies designed to enhance ethnic minority





education in Guangxi by highlighting effective strategies for boosting student motivation and engagement.

Central to understanding student engagement and motivation is Bronfenbrenner's ecological systems theory, which asserts that development occurs through interactions within multiple contextual layers, including family, school, and broader community environments (Bronfenbrenner, 1977). Empirical evidence consistently supports this perspective, suggesting educational policies should adopt holistic frameworks that acknowledge the interconnected roles of these various contexts (Allen & Fraser, 2007; Smith, 2013). This holistic view emphasizes the need for integrative educational strategies addressing multiple facets of student experience simultaneously.



Given these theoretical and contextual considerations, this study investigates the relationships between ethnic identity, family environment, learning motivation, and academic performance among ethnic minority college students in Guangxi Province. By exploring these interconnected dimensions, the study aims to provide nuanced insights into the educational experiences of this unique student population. The findings are expected to contribute substantially to educational theory, particularly regarding the mediating role of motivation in ethnically diverse contexts.

Ultimately, the research outcomes seek to inform effective educational practices and policy making, aimed at fostering equitable academic environments. Enhanced understanding of the factors influencing ethnic minority students' academic performance is critical for developing targeted interventions and comprehensive



support systems. By addressing both individual and environmental dimensions, the study aims to facilitate improved academic outcomes, supporting long-term educational equity and regional development goals in Guangxi Province.

1.3 Problem Statement

Globally, educational systems have increasingly focused on addressing educational disparities among ethnic minority students to foster equity and inclusivity. Effective education for minority populations is recognized as essential for national development and social stability (Lau et al., 2022; Cheng et al., 2022; Dražanová et al., 2024; Wang, 2024). Nations that successfully promote educational equality often see improved socioeconomic outcomes, greater cultural integration, enhanced societal cohesion, and significant progress towards achieving Sustainable Development Goals (SDGs), particularly SDG 4, which emphasizes inclusive and equitable quality education for all (United Nations, 2023). However, disparities persist, underscoring the urgency for context-specific research to develop targeted strategies and policies (Alamer et al., 2023; Rusticus et al., 2023).

In China, ethnic minority education has been an important national concern, especially given its ethnic diversity and the substantial socioeconomic disparities across regions. Despite extensive government efforts to improve educational access and outcomes through preferential policies and targeted resource allocation, significant educational gaps remain between ethnic minority students and their Han Chinese counterparts (Chen & Morgan, 2023). Statistical data shows persistent

disparities in higher education enrollment and academic performance among ethnic minorities, highlighting the ongoing challenge of achieving educational equity. There are large gaps between ethnic minority students and national average. For example, for ethnic minority students, the college enrollment rate was quite higher than(52.4%) than national average(74.2%). At the same time, the ethnic minority students had a higher dropout rate(secondary education)(13.6%). To compare with students meeting academic standards, it also had a huge gap between ethnic minority students(61.8%) and national average(83.5%). Table 1.1 shows these disparities, highlighting the significant gaps between ethnic minority students and national averages.

Table 1.1

Academic Performance Disparities between Ethnic Minority Students and National Averages in Guangxi, China

Indicators	Ethnic Minority Students (%)	National Average (%)
College Enrolment Rate	52.4	74.2
Dropout Rate (Secondary Education)	13.6	7.8
Students Meeting Academic Standards	61.8	83.5

(Note: Data adapted from Guangxi Human Resources and Social Security Development Statistical Bulletin, 2023)

Guangxi Province, a strategic region connecting China with ASEAN, exemplifies these educational disparities due to its unique demographic and socioeconomic landscape. While the province serves as a crucial gateway for international trade and regional development, Guangxi faces pronounced economic difficulties characterized by higher rates of poverty and lower average income levels compared to national averages. For instance, recent statistics indicate that

approximately 13.14 million people from Guangxi migrate annually for employment, significantly disrupting local family structures and impacting the educational environment for ethnic minority students (Guangxi Human Resources and Social Security Development Statistical Bulletin, 2023).

Ethnic minority students in Guangxi, particularly the Zhuang population, face distinct cultural challenges that significantly impact their educational trajectories. These students often encounter identity conflicts stemming from dual cultural expectations, balancing their ethnic heritage with broader societal norms. Government policies intended to assist ethnic minority students, such as granting additional points in national examinations, paradoxically increase identity pressures, creating an unintended stigma and marginalization among their peers. Frequent ethnic festivals and cultural celebrations further exacerbate these issues by requiring students to prioritize cultural participation over academic responsibilities, resulting in frequent absences and disruptions to continuous academic engagement. Consequently, students often experience reduced motivation, increased academic stress, and compromised performance (Kuang & Nishikawa, 2021; Yuan & Li, 2019; Tao et al., 2020).

Moreover, family environment plays a crucial yet underexplored role in shaping academic motivation among ethnic minority students in Guangxi. Unlike Western contexts, where extensive research highlights the impact of family socioeconomic status and parental involvement on student achievement (Eccles & Roeser, 2011), there is limited understanding of how Guangxi's collectivist family values uniquely influence students' educational aspirations (Chen et al., 2016; Ding et al., 2024). Traditional familial expectations and parental guidance strongly dictate



students' motivation and academic performance in Guangxi, underscoring the need for targeted research within this specific cultural context (Wang , 2021).

Learning motivation, a well-documented predictor of academic performance globally, remains inadequately explored as a mediator within the unique context of Guangxi. Despite clear evidence from global research highlighting motivation as crucial for academic achievement (Ryan & Deci, 2021), the specific interplay of ethnic identity and family environment influencing motivation among Guangxi's ethnic minority students has not received sufficient attention. The absence of this context-specific knowledge prevents the formulation of effective strategies to enhance academic performance among minority students (Jafarkhani et al., 2019; Liu et al., 2019; Bagheri et al., 2019).



The consequences of these educational disparities are evident through limited academic performance among ethnic minority students (Ding et al., 2024; Tao, 2015), exacerbating socioeconomic inequalities (Sulasmi et al., 2023; Adeghe et al., 2024). Recent regional educational performance data reflect these gaps, showing that ethnic minority students from Guangxi generally achieve lower academic outcomes compared to national averages, with higher dropout rates and lower levels of college enrollment (Yuan & Li, 2019). Addressing these disparities is crucial for ensuring equitable educational outcomes and promoting regional socioeconomic stability.

Given these clear educational disparities, targeted interventions are urgently needed to address motivational and contextual challenges faced by ethnic minority students in Guangxi. Effective interventions require comprehensive analyses that





consider the intersectionality of cultural, familial, and motivational factors influencing students' academic experiences (Ryan & Deci, 2021; Eccles & Roeser, 2011). Research consistently highlights the critical role of intrinsic motivation in fostering sustained academic engagement and achievement, particularly within minority populations facing socioeconomic disadvantages (Alamer et al., 2023; Rusticus et al., 2023). Additionally, understanding the cultural dynamics associated with ethnic identity can illuminate strategies to mitigate identity-related pressures and enhance student resilience (Kuang & Nishikawa, 2021). Empirical evidence underscores that family support and parental involvement are pivotal in motivating students and promoting positive educational outcomes, particularly in collectivist cultural contexts such as Guangxi (Chen et al., 2016; Ding et al., 2024). Therefore, developing a nuanced comprehension of how ethnic identity, family environment, and learning motivation collectively shape academic performance is essential for crafting effective, culturally responsive strategies that significantly improve academic engagement and outcomes among Guangxi's ethnic minority students.

Building upon the need for targeted interventions identified previously, this study aims to fill critical research gaps by systematically exploring the relationships among ethnic identity, family environment, learning motivation, and academic performance within Guangxi Province. Specifically, it addresses how these intertwined factors uniquely influence educational outcomes for ethnic minority students in this culturally diverse and economically challenged region. Through detailed empirical analysis, the research will clarify the mediating role of motivation, providing evidence-based insights to inform contextually appropriate educational strategies and policies. This investigation is crucial given the region's distinctive





demographic dynamics and the multifaceted challenges identified, including identity conflicts, socioeconomic disruptions, and family-related motivational influences. Ultimately, this research aims to contribute substantially to the understanding of minority education in China, enhancing educational equity and supporting broader regional development goals.

1.4 Research Objectives

In general, this study focused on examining the mediator role of learning motivation between ethnic identity, family environment, and academic performance among Guangxi minority college students. The specific objectives of this study are as follows:



1) To examine the level of ethnic identity, family environment, learning motivation and academic performance among Guangxi minority college students.

2) To examine the direct effects of ethnic identity and family environment on learning motivation and academic performance among Guangxi minority college students.

3) To examine the relationship between learning motivation and academic performance among Guangxi minority college students.

4) To test the mediating role of learning motivation between ethnic identity, family environment, and academic performance among Guangxi minority college





students.

1.5 Research Questions

Based on the discussed problem statement, the following research questions were formulated to achieve the objectives of this study:

1) What is the level of ethnic identity, family environment, learning motivation and academic performance among Guangxi minority college students?

2) How does ethnic identity and family environment influence learning motivation and academic performance directly among Guangxi minority college students?

3) To what extent does learning motivation contribute to academic performance among Guangxi minority college students?

4) Does learning motivation significantly mediate the relationship between family environment, ethnic identity, and academic performance among Guangxi minority college students?





1.6 Research Hypotheses

This study hypothesized the significant relationships of ethnic identity, family environment, learning motivation, and academic performance among college students in Guangxi Province. Based on the study's objectives and research questions, several hypotheses were proposed for testing. With respect to the second objective, the following hypotheses were formulated:

H1: Ethnic identity significantly and positively influences academic performance.

H2: Ethnic identity significantly and positively influences learning motivation.



H3: Family environment significantly and positively influences learning motivation.

H4: Family environment significantly and positively influences academic performance.

With respect to the third research objective, this study hypothesized the following:

H5: Learning motivation significantly and positively influences academic performance.



With respect to the forth research objective, the following hypotheses were proposed for testing:

H6: Learning motivation mediates the relationship between ethnic identity and academic performance.

H7: Learning motivation mediates the relationship between family environment and academic performance.

In order to clarify the relationships between the proposed hypotheses and the study's objectives, all hypotheses are summarized in Table 1.3. This study identified three objectives and proposed seven hypotheses. In particular, four hypotheses (H1–H4) were presented in correspondence with the second objective. There was only one hypothesis (H5) in correspondence with the third objective. Lastly, two hypotheses (H6 and H7) were proposed in correspondence with the forth objective.

Table 1.2

List of Hypotheses

Research Objective	Hypothesis
1.To examine the level of ethnic identity, family environment, learning motivation and academic performance among Guangxi minority college students.	
2.To examine the direct effect of ethnic identity and family environment on learning motivation and academic performance	H1 Ethnic identity significantly and positively influences academic performance. H2 Ethnic identity significantly and positively influences learning motivation.



Research Objective	Hypothesis
among Guangxi minority college students.	H3 Family environment significantly and positively influences learning motivation.
	H4 Family environment significantly and positively influences academic performance.
3.To examine the relationship between learning motivation and academic performance among Guangxi minority college students.	H5 Learning motivation significantly and positively influences academic performance.
4.To test the mediating role of learning motivation between ethnic identity, family environment, and academic performance among Guangxi minority college students.	H6 Learning motivation mediates the relationship between ethnic identity and academic performance.
	H7 Learning motivation mediates the relationship between family environment and academic performance.

1.7 Conceptual Framework



Focusing on ethnic minority college students in Guangxi Province, this study examined four key constructs, namely ethnic identity, family environment, learning motivation, and academic performance. Understanding the relationships of these constructs was deemed essential for identifying factors that significantly contribute to students' academic performance, particularly in ethnically diverse regions.

Ethnic identity and family environment in this study were assessed as independent variables. In this context, ethnic identity referred to a student's sense of belonging to their cultural group, which can influence their engagement and motivation in learning. Meanwhile, family environment encompassed the support and values provided by the family, which significantly shapes a student's motivation and commitment to academics. On the other hand, learning motivation was measured as a



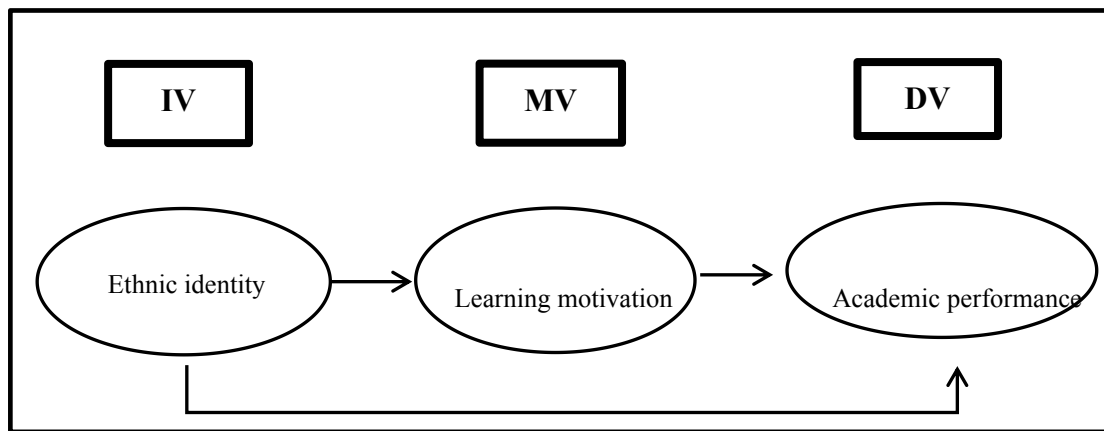
mediator. Learning motivation in this study reflected a student’s enjoyment of learning, focus on academic tasks, and expectations for personal growth. Intrinsic interest and extrinsic benefits, such as social integration, are important factors that drive students to study and achieve academic performance. Academic performance in this study was assessed as the dependent variable. This variable was measured in terms of students’ grades and educational attainment.

Ethnic identity, family environment, and learning motivation were hypothesized to influence academic performance. Table 1.2 details the key variables of this study, and Figure 1.1 displays the connections of these four key variables.

Table 1.3

Key Variables of Study

Types	Constructs	Description	References
Independent variable (IV)	Ethnic identity	Sense of belonging to an ethnic group and its impact on motivation and engagement	Phinney & Ong (2007); Smith (2013)
	Family environment	Family support and expectations impacting students’ motivation and outcomes	Eccles & Roeser (2011); Jones et al. (2023)
Mediating variable (MV)	Learning motivation	The drive to achieve educational goals, influenced by internal and external motives	Pintrich (1991); Vallerand et al. (1992); Ryan (1982); Ryan & Deci (2021)
Dependent variable (DV)	Academic performance	Students’ academic performance refers to satisfaction, recognition, rewards, feelings of performance	Vallerand et al. (1992); Gault et al. (2000); Bedewy & Gabriel (2015)

Figure 1.1*General Research Framework*

This study aimed to examine the relationships of ethnic identity, family environment, learning motivation, and academic performance. In particular, this study assessed the following direct relationships: (1) the relationship between ethnic identity and academic performance; (2) the relationship between ethnic identity and learning motivation; (3) the relationship between family environment and academic performance; (4) the relationship between family environment and learning motivation; (5) the relationship between learning motivation and academic performance. Besides that, this study assessed the mediating role of learning motivation in the relationships of ethnic identity, family environment, and academic performance.

In regards to the study's objectives, the research framework can be clarified as follows. This study examined the influence of ethnic identity and family environment on learning motivation and academic performance among minority college students in Guangxi Province. This study also examined the relationship between learning motivation and academic performance and the mediating role of learning motivation



in the relationships of ethnic identity, family environment, and academic performance among minority college students in Guangxi Province. The research framework adopted a quantitative approach, specifically the survey method, to collect data from Guangxi minority college students. Multiple regression analysis was performed to examine the direct and indirect effects of ethnic identity, family environment, and learning motivation on academic performance and the mediating role of learning motivation in the relationships of ethnic identity, family environment, and academic performance. The constructed research framework also included validated scales to measure the constructs of ethnic identity, family environment, learning motivation, and academic performance.

The formation of framework incorporated the analysis of the interrelationships of four key variables. The framework represented the main content of this study, allowing the comparison of four variables clearly. It also reflected a critical content in the thesis writing process. In the entire study, the content design must be aligned with the constructed framework. With the specific objectives, a research framework served as a guiding foundation of this study: (1) to conduct empirical research for an in-depth understanding of the academic performance of college students in ethnic minority regions; (2) to identify significant internal and external factors that influence the academic performance of college students in ethnic minority regions; (3) to assess the degree of influence that these factors exert on the academic performance of college students from ethnic minority backgrounds.

Finally, the study explored targeted recommendations to enhance academic performance and mental health of college students by considering these influencing

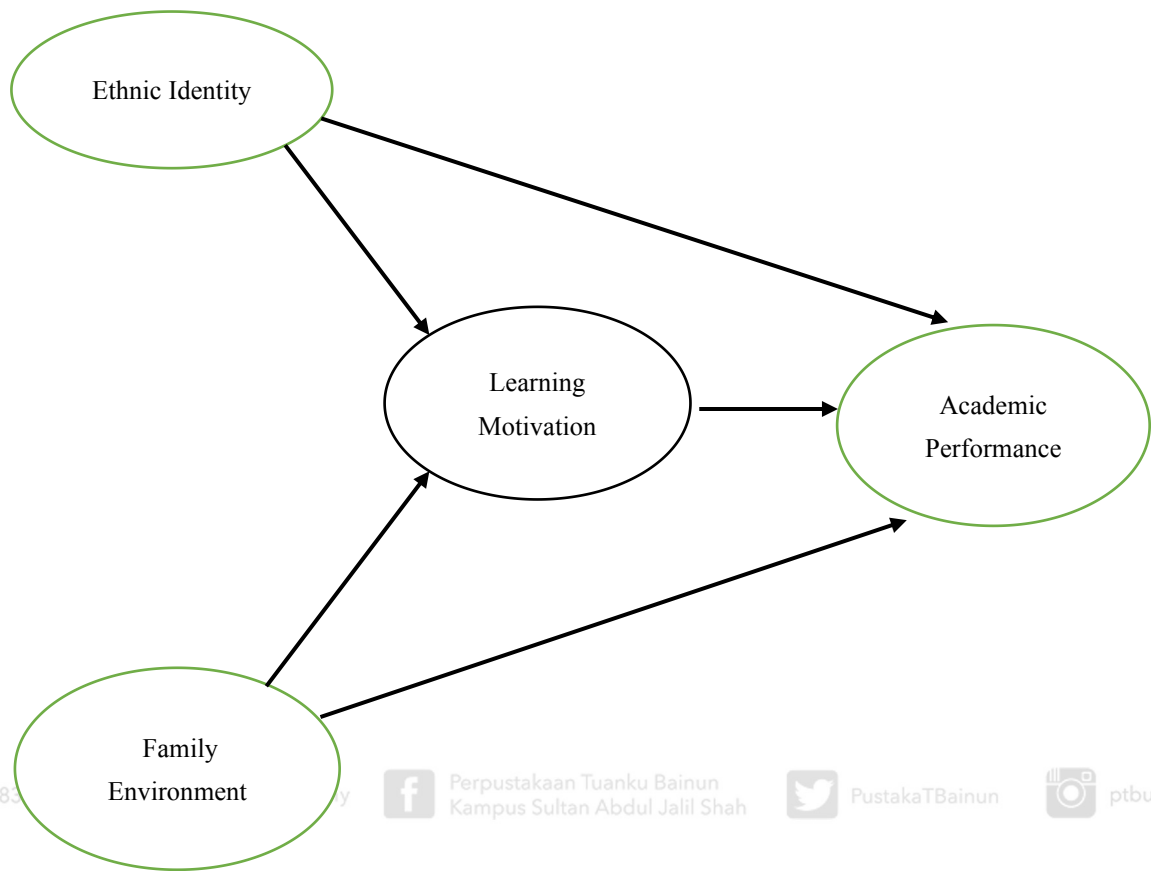




factors. The proposed recommendations ultimately serve to create favourable conditions for the growth of college students in ethnic minority regions, thereby improving the quality of talent training in colleges and universities located in these regions. Additionally, this study aimed to provide a solid foundation for regional economic and social development by effectively leveraging human resources, promoting talent-driven strategies, and ensuring that these resources support sustainable and high-quality development in the region.

Through this constructed framework, this study yielded valuable insights on pertinent factors that contribute to the academic performance of ethnic minority college students, along with recommendations for improving their outcomes and well-being. Figure 1.2 illustrates the relationships between the key variables in this study and the study's conceptual framework.



Figure 1.2*Conceptual Framework***1.8 Significance of Study**

This study provided valuable insights on the intricate relationships of ethnic identity, family environment, and academic performance among minority college students in Guangxi Province, with the emphasis on the mediating role of learning motivation. This study presented significant theoretical and practical implications. Gaining a deeper understanding of these dynamics is essential for several key reasons.

This study enhanced the theoretical frameworks of ethnic identity and learning motivation in educational psychology and provided practical insights for policymakers and teachers to design targeted interventions that can effectively improve academic performance among ethnic minority college students. Furthermore, this study was deemed significant for colleges and universities because educational institutions can only survive and succeed by providing high-quality talents and vital human resources for economic and social development. The study's findings on the influence of ethnic identity and family environment on academic performance via learning motivation were deemed highly significant in this context. Human resources in colleges and universities represent the key to a company's or an institution's performance and a country's future. Academic performance is based on students' quality and ability of learning motivation, whether from internal or external factors, using their experience and knowledge. Hence, motivating students to perform their best in their study is necessary. Meanwhile, employers' and the country's high levels of evaluation and satisfaction serve as the best test standard for academic performance.

1.8.1 Theoretical Significance

This study enhanced the theoretical frameworks concerning motivation and educational achievement by examining the mediating role of learning motivation. The obtained results and findings enhanced the current understanding of how sociocultural factors can impact motivation and learning outcomes, enriching the current educational psychology literature and cross-cultural studies (Ryan & Deci, 2021).



This study was conducted against the backdrop of the development of higher education in China, specifically among the ethnic minority college students. This study sampled 900 ethnic minority students from three colleges in Guangxi Province and assessed the underlying factors affecting their academic performance. By investigating these essential aspects, this study provided a comprehensive understanding of the significant factors that influence the academic performance of ethnic minority college students. This study specifically explored the interrelations among the key constructs of ethnic identity, family environment, learning motivation, and academic performance. The interconnected nature of these variables formed a complex web that influences educational outcomes. The comprehensive analysis of this study demonstrated how these variables interact and impact one another.



The first part of the study involved the development of questionnaire survey on the academic situation of ethnic minority college students in Guangxi Province and the statistical analysis of the returned questionnaire sets from four groups of ethnic minority students. The questionnaire survey comprised of two main sections. The first main section consisted of a total of 11 questions. For each question, respondents were required to select one option from six response options provided. This section focused on the basic information about the subject, including questions about gender, ethnicity, grade, major, general assessment ranking, place birth type, parents' education level, family income, and personal monthly consumption. The second main section incorporated four dimensions, namely ethnic identity, family environment, learning motivation, and academic performance. There were eight questions for each dimension. Respondents were required to provide their responses according to a seven-point Likert scale, with the endpoints of "strongly disagree" (score of 1) and





“strongly agree” (score of 7). The respondents of the study were Guangxi ethnic minority college students ($n = 900$) of various majors and from preparatory year to senior year. This quantitative study provided comprehensive and scientific conclusions on the influencing factors of ethnic minority students’ academic performance and presented rich first-hand materials for future research in the related field.

The second part of the study investigated the status quo, problems, attributions, and solutions related to ethnic minority college students, providing theoretical guidance for teaching reform in these colleges. In order to improve the quality of talent cultivation and cultivate a conducive learning environment, these colleges must pursue a path of “connotative” development, including reformation of educational concepts, training objectives, teacher ethics and conduct, and other aspects. Therefore, this study enriched the content of teaching research in colleges and provided “people-oriented” theoretical support for teaching reform.

The third part of the study significantly enhanced the theoretical framework of ideological and political education in colleges, which holds considerable importance for the tailored development of college students in Guangxi Province and the enhancement of community consciousness in China. These institutions’ noble mission involves “nurturing talents for the party and the nation”. Strengthening the “ethnic identity” of ethnic minority students is a vital strategy to overcome academic challenges and bolster their ideological confidence. It also plays an essential role in fostering national unity, ethnic harmony, and social stability. This study conducted a survey involving these ethnic minority college students, and the analysis revealed a





connection between ethnic identity and academic performance. As a result, this study offered a range of targeted solutions aimed at helping ethnic minority students to strengthen their ethnic identity, subsequently improving their academic performance.

1.8.2 Practical Significance

Ethnic minority students' thinking patterns, customs, family backgrounds, and educational backgrounds are different from those of Han students, and these factors potentially affect their academic performance. This study examined the obstacles of ethnic minority college students to identify patterns and propose targeted strategies that can effectively support these students to overcome academic, living, and psychological difficulties. During the critical stage of personal growth, ethnic minority students need to establish the right values, acquire solid knowledge, develop sufficient skills, and become valuable talents for the construction and development of the province.

Evidently, one of the most essential practical significance involved the support of ethnic minority students. The study's findings shed light on the unique challenges and strengths of students from ethnic minority backgrounds. By identifying how ethnic identity and family environment contribute to learning motivation and academic performance, policymakers and teachers can create more supportive and inclusive learning environments that cater to the diverse needs of ethnic minority students. The study also emphasized the importance of promoting the ethnic identity of these students, which is essential for their academic performance and personal





growth.

By enhancing their ethnic identity, ethnic minority students can develop a strong sense of belonging and confidence, which can help them overcome academic, living, and psychological difficulties. The study's findings would significantly benefit policymakers, teachers, and other key practitioners who strive to promote ethnic harmony, national unity, and social stability. This study significantly contributed to educational research by providing in-depth insights on the influencing factors of academic performance.

Moreover, this study presented pertinent practical implications for educational policies and practices. This study called for inclusive and culturally responsive educational policies, comprehensive student support programmes, and community and family interventions that acknowledge the diversity of student experiences. This study also advocated for an educational system that is inclusive, equitable, and responsive to the diverse needs of all students.

Other practical significance of this study involved the proposed solutions to address the obstacles faced by ethnic minority students in colleges and universities. With such background and development needs, it was deemed significant to explore this phenomenon from a narrower, more specific perspective to gain an in-depth understanding of the basic status quo and existing problems in the development process of higher education. The study provided a scientific basis for the formulation of effective teaching strategies and policies for the targeted development of ethnic minority students.





Besides that, this study would significantly benefit the aspects of educational policies and practices. By elucidating factors that influence academic performance in ethnically diverse regions, this study served to better inform educational policies and practices for the mitigation of related disparities. This study's findings significantly supported the development of culturally responsive curricula and targeted interventions that enhance educational equity and effectiveness in Guangxi Province and similar multicultural contexts.

Adding to that, this study presented practical implications for families and teachers. By highlighting the influential role of family environment in shaping students' academic performance, this study offered practical implications for families and teachers aiming to support students academically. Understanding the importance of ethnic identity and family support in students' motivation can guide both parents and teachers in fostering a conducive environment that bolsters educational aspirations (Kim, et al., 2003). This study also contributed to the transformation of the traditional family education concepts in the province by guiding parents and families in their support of children's academic development. The study's findings promoted the cultivation of appropriate values, attitudes, and expectations towards education, which can improve children's academic outcomes and career prospects. The study also presented practical suggestions and recommendations for parents and families to proactively involved in their children's education and growth.

Furthermore, the study's main findings on the interrelationships of multiple key variables presented several key insights of practical significance. Firstly, the respondents of this study demonstrated a strong sense of pride and a positive view of





their ethnic identity, with the willingness to maintain and promote their own ethnic culture. At the same time, they also demonstrated positive attitudes towards learning and experiencing other cultures. Secondly, this study observed a strong correlation between learning motivation and academic performance. This study demonstrated how family and social environments shape students' learning motivation. Parental involvement, socioeconomic status, and peer influence were some of the significant factors discussed in this study. Thirdly, a significant correlation was found between family support and academic performance. Students who reported higher levels of emotional and educational support from their family are more likely to demonstrate better academic performance. Finally, the respondents of this study were found to be proud of their academic performance, positive attitudes towards learning, and a balance between their study and personal life.



At the same time, this study's findings would significantly affect the perspectives of national higher education development. Since the 21st century, China's higher education has developed rapidly and achieved remarkable results. Data showed that China has the world's most extensive higher education system, with a total number of students exceeding 44.3 million. The gross higher education enrolment rate increased from 30.0% in 2012 to 57.8% in 2021, reflecting a historic leap. Higher education has entered the world-recognized popularization stage. According to the 2023 Government Work Report, China's gross enrolment rate in higher education increased to 59.6%, and higher education has begun connotative high-quality development and constantly moved forward from an educational country to an educational power. The 20th National Congress of the Communist Party of China (2023) highlighted the significance of education, science and technology, and





strategic talent support for the realization of a modern socialist country. Technology is recognized as the primary productive force, while talent serves as the primary resource, and innovation functions as the primary driving force. Emphasizing and developing education in remote and ethnic minority areas is of far-reaching significance in order to bridge the regional education gaps, effectively promoting the connotative development of higher education, and accelerating the modernisation of higher education in China.

From the perspective of higher education serving regional economic development, human resources in Guangxi Province still have room to promote economic development. This study observed a particular gap in regards to the overall development level of higher education nationwide. In 2022, the “14th Five-Year Plan for the Revitalization and Development of Higher Education in Guangxi” (referred to as the “Plan”) issued by the Department of Education of the Guangxi Zhuang Autonomous Region projected the gross enrolment rate of higher education in the region at 55% by 2025. The “Plan” focused on the overall economic and social development and has led to the implementation of the party’s education policy, promotion of moral education as a fundamental task and high-quality development as the theme, and enhanced supply-side structural reform. The main line of the “Plan” lies in its take on reform and innovation as the fundamental driving force in consideration of the scale expansion and quality improvement. The “Plan” also emphasized improving the levels of development and competitiveness of higher education to better serve the socioeconomic growth.





In summary, this study addressed significant gaps in literature by focusing on an underrepresented region and population in educational research. The obtained results and findings enhanced theoretical and empirical understanding, leading to more effective educational strategies that embrace diversity and promote academic performance for students of all backgrounds. The practical significance of this study encompassed practical recommendations and guidance to improve the academic performance and personal growth of ethnic minority students in colleges and universities. The study's findings promoted the development of Guangxi Province, which contributed to China's overall social and economic development. The study was of great significance for policymakers, teachers, and practitioners aiming to improve the quality of education and talent cultivation in the province.



1.9 Operational Definitions of Key Terms

1.9.1 Ethnic Identity

Ethnic identity refers to one's sense of belonging to a particular ethnic group, encompassing aspects of cultural heritage, values, and beliefs (Phinney & Alipuria, 1990). It is a specific manifestation of self-awareness in ethnic consciousness, including the cognition, evaluation, and expectations of one's own ethnicity, as well as expressions of ethnic pride, confidence, inferiority, superiority, aesthetic views, and national autonomy (Lee & Ashforth, 1996). The development of ethnic identity includes the identity formation in one's self-categorization in and psychological attachment to (an) ethnic group(s). Ethnic identity is characterized as part of one's



overarching self-concept and identification. It is distinct from the development of ethnic group identity (Kiang & Johnson, 2013).

In the context of this study, ethnic identity refers specifically to minority college students in Guangxi Province, particularly those from ethnic minorities such as the Zhuang, Yao, Miao, and Dong groups. The study focuses on how students' sense of ethnic belonging impacts their personal and academic development within a diverse cultural environment.

1.9.2 Family Environment

Family environment refers to the overall atmosphere of home, including parental involvement, socioeconomic status, and emotional support (Bronfenbrenner, 1979). It includes the situation and conditions of a family, including living conditions, family structure, family relations, and other related behavioral factors. It is a critical determinant of a child's developmental and educational outcomes, influencing motivation, self-esteem, and learning behaviors (Eccles & Roeser, 2011).

In the context of this study, family environment refers to factors such as the family structure, living conditions, socioeconomic status, and the education level of parents. These variables are considered in relation to their influence on college students' academic motivation, learning behaviors, and overall academic performance in Guangxi Province.



1.9.3 Learning Motivation

Learning motivation refers to the internal and external factors that stimulate the desire to engage in learning activities. It includes intrinsic motivation, such as interest and enjoyment, and extrinsic motivation, such as grades and rewards (Deci & Ryan, 1985). Learning motivation is instigated and sustained by a goal-directed learning activity (Zimmerman & Schunk, 2014). In general, explanations regarding the source(s) of motivation can be categorized as either extrinsic (external) or intrinsic (internal). The sources of learning motivation are diverse, which include intrinsic factors, such as individual self-identity, achievement needs, learning interests, and autonomy, and extrinsic factors, such as learning goals, external rewards and punishments, and teacher support and guidance.



In the context of this study, learning motivation encompasses both the internal and external motivators for minority college students in Guangxi Province. The internal factors are related to the students' self-identity and academic performance needs, while external factors primarily involve parental expectations and the desire for high grades.

1.9.4 Academic Performance

Academic performance refers to the extent to which a student has achieved their educational goals, which are commonly measured through grades, test scores, and overall academic achievement (Zimmerman, 2000). It is a multidimensional construct



that has been the focus of numerous studies in educational psychology. It is influenced by various internal and external factors, including cognitive abilities, motivation, learning strategies, and sociocultural environment (Richardson et al., 2017).

In the context of this study, academic performance is measured by some items, such as satisfaction, recognition, rewards, feelings of performance of college students, which reflect their success in academic endeavors.

1.9.5 Guangxi Minority College Student

In the context of this study, Guangxi minority college students refers to individuals enrolled at three colleges in Guangxi Province, all of whom are part of the ethnic minority populations of the region. These students speak local ethnic languages, are familiar with ethnic minority cultures, and actively participate in ethnic festivals and traditions. The students come from diverse family backgrounds and live in areas with varying levels of ethnic diversity.

1.10 Thesis Organization

Overall, this thesis is organized into five chapters. Chapter 1 introduced the background of the study, problem statement, specific objectives, research questions, conceptual framework, hypotheses, significance of study, and thesis organization.



Chapter 2 offers a review of relevant literature. Chapter 3 outlines the study's methodology. Chapter 4 presents the study's comprehensive data analysis and the obtained empirical results. Finally, Chapter 5 summaries the study's key findings and discusses the derived conclusions, implications of study, and recommendations for future research.

Chapter 1 consisted of several sections. The chapter discussed the background of the study and the problem statement. In addition, the chapter presented the research questions and objectives. With respect to these research questions and objectives, hypotheses and a conceptual research framework were developed. This chapter also elaborated on the significance of the study and presented the operational definitions of key terms used in this study.



Chapter 2 comprehensively reviews the existing literature, presenting clear definitions, underlying theories, and previous studies that were deemed relevant to the focus of the current study. This chapter delves into ethnic identity and family environment as this study's independent variables, learning motivation as a mediator, and academic performance as this study's dependent variable. Following that, this chapter details the development of hypotheses.

Chapter 3 discusses the development of the study's research framework, research design, and methodological framework. Apart from the study's population and sample, this chapter describes the development and translation of instrument, and pilot test. All details of data collection and data analysis are also included in this chapter.





Chapter 4 presents the results of the analysis and the results of the testing of hypotheses in this study. Specifically, the study discusses and compares the obtained results with the results and findings of previous studies. The results of confirmatory factor analysis are also presented. Besides that, this chapter details the assessment of the measurement model and structural model, including the testing of hypotheses in this study.

Chapter 5 presents the conclusions of the study. Following that, this chapter discusses the theoretical and practical implications of this study. In addition, this chapter describes the limitations of this study and proposes several recommendations for future research.



1.11 Chapter Summary

In summary, this chapter provided an overview of the study's background, highlighted the significant challenges encountered by ethnic minority students, and outlined the study's objectives and research questions. This chapter set the stage for the subsequent chapters by establishing the theoretical and practical significance of the study regarding the enrolment and education of ethnic minority students, as well as the challenges encountered by these students, including poor academic performance, loss of confidence, low enthusiasm for learning, and even psychological issues. At the same time, this chapter pointed out that most of the prior studies focused on a single discipline or perspective and lacked a comprehensive analysis.





Exploring the academic performance of ethnic minority students requires a series of measures, including the strengthening of interdisciplinary research and data sharing.

Focusing on Chinese ethnic higher education, this study targeted ethnic minority college students in Guangxi Province. Through a survey and individual case interviews, this study explored key factors that influence the academic development of ethnic minority college students and propose strategic recommendations. This study provided theoretical guidance for the teaching reform of colleges and universities in ethnic minority areas. This study was also deemed significant for the cultivation of a shared sense of community among college students in ethnic minority areas. In addition, this study contributed to the development of primary education in China's province and the transformation of the educational philosophy of ethnic minority students and their families.

