ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

Survey on the Student Adaptability of Xinjiang High School Classes in the Hinterland

Limin Wang, Lejie Yang

School of Economics and Management, Zhongyuan University of Technology, Zhengzhou, 450007, China

Abstract

This paper investigates the adaptability of students from Xinjiang high school classes in the Hinterland, focusing on S Middle School as a case study to carry out a field survey and establish a single-element evaluation model to conduct statistical analysis. The findings indicate that initial adaptability challenges have been progressively resolved. Students have demonstrated strong overall adaptability, as well as improvements in environmental adaptability, learning adaptability, and interpersonal adaptation. Difference tests of student adaptability are performed by using independent sample T-test and one-way analysis of variance from gender, region, and grade. Based on the findings in the survey, targeted suggestions and measures are proposed to promote the better development of Xinjiang high school classes in the Hinterland.

Keywords

Xinjiang high school classes in the Hinterland; Adaptability; Student management.

1. Literature Review and Problem Formulation

To meet the demand for human capital in Xinjiang's social and economic development and accelerate the cultivation of talent from all ethnic groups in Xinjiang, China launched the Xinjiang high school classes, which referred to as Hinterland High School Classes (HHSCs), in 12 select economically developed inland cities in 2000. These classes began enrolling students in the fall of 2000, with 13 high schools in 12 economically developed inland cities including Beijing, Shanghai, and Shenzhen, accepting approximately 1,000 students. Following the 18th National Congress of the Communist Party of China, the State Council issued several documents, such as *The Decision on Accelerating the Development of Ethnic Education* and *The Guiding Opinions on Accelerating the Development of Education in the Central and Western Regions*, to provide the enhanced guidance for the development of the HHSCs. These policies further refined the form, scale, and type of the program of HHSCs, resulting in substantial progress[1]. By 2023, more than 150,000 recent junior high school graduates of all ethnic groups from 24 classes had participated in the program. Currently, 93 high schools across 45 cities in 14 provinces and municipalities in China offer HHSCs, with a total enrollment of 36,400 student. The HHSCs have significantly improved the quality of talent training in Xinjiang and have fostered positive outcomes promoting ethnic unity and social stability in this region[2-3].

Students in the HHSCs face the challenge of studying in a cultural environment significantly different from their own, with notable differences in language, customs, and habits. From the moment they leave their hometown to study in the inland cities, they inevitably encounter adaptation challenges during the learning process[4]. These challenges extend beyond cultural and emotional adaptation to include issues related to the management system of the HHSCs and academic adjustment of students[5]. When these problems are not effectively addressed, they can negatively affect the students' future academic performance, personal development and mental health, with some students even discontinuing their studies due to difficulties in

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

adapting to these classes' environment[6]. Scholars have conducted comprehensive investigations into the adaptability of students in the HHSCs from three perspectives: cultural adaptation, emotional adaptation, and learning adaptation[7]. Cultural interaction between ethnic groups and boarding school environment are key factors influencing students' acculturation in the HHSCs[8]. Frequent and positive interactions between cultural groups foster mutual respect, accelerating students' adaptation and integration into their new environment[9]. Li Xue's study supports this conclusion, highlighting that cultural maladjustment among students in the HHSCs is not solely determined by students' psychological adjustment abilities but is also shaped by external factors as school management practices and government policies[10]. Guo Xuejun's qualitative study delves into the emotional adaptation of students in the HHSCs, focusing on aspects like the strengths and weaknesses of their emotional adaptation in key areas such as the concept of "school within a school," and "second hometown"[11]. In terms of academic adaptation, students' ethnic identity and their associated psychological and cultural characteristics in the HHSCs significantly influence their adjustment to the academic environment, which in turn affects their academic performance[12].

Prior to 2010, Xinjiang High School Classes in the Hinterland primarily operated under an independent teaching and management model. To address the adaptation challenges faced by students in the HHSCs and help them integrate more effectively into studies and daily lives, The Ministry of Education introduced the requirements for mixed teaching, integrating students from the HHSCs with local students in 2010. Following this directive, educational institutions hosting the HHSCs began exploring mixed class teaching approaches, initiating a new phase in the development of the educational methods and management practices for the program. To further promote interaction, communication, and integration between students in the HHSCs and their local peers, while fostering ethnic unity and strengthening the sense of community among the Chinese nation, the Ministry of Education issued a special notice in 2018. This notice mandated the implementation of "three mixed" -- mixed classes, mixed lodgings, and mixed meals -- across all schools offering HHSCs, effective from the fall semester of 2019. As the education management of the HHSCs has entered a new era, and with nearly five years of "three-mixed" policy implementation, what is the current level of adaptability among students in the HHSCs? Have there been measurable improvements compared to earlier periods? The existing literature provides limited insights into this issue. This study aims to address this gap by conducting a detailed survey and analysis at Zhengzhou S Middle School. Seeking to gain a comprehensive understanding of the current situation of students' adaptation in terms of their environment, learning and interpersonal interactions. The findings will serve as a reference and foundation for further enhancing the education and management of the HHSCs.

2. Research Subjects and Methods

The thesis focuses on the Xinjiang students of Zhengzhou S Middle School as the research subjects. Zhengzhou S Middle School began hosting the HHSCs in 2011, taking the Xinjiang classes as a significant political task. The school appointed a team of highly qualified teachers with strong political and ideological qualities and conscientious and dedication to their responsibilities as part of the management and teaching staff for the Xinjiang high school classes and set up a specialized Xinjiang department. Currently, the enrollment in the HHSCs has grown from 86 to 664, representing 14 ethnic groups. The program' s scale of the HHSCs ranks among the largest of this kind in China. Following principles of ethnic integration and individualized teaching, the school randomly assigns Xinjiang students to classes alongside local students, using the same teaching materials, faculty, and instructional methods. For ease of management, the students from HHSCs are housed centrally in a dedicated dormitory building while classes are integrated. Meals are shared with local students in the same dining

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

hall, and a special service window accommodates the dietary preferences of ethnic minority students.

The research employed a combination of one questionnaire and individual interviews to conduct a field survey of Xinjiang students across all grades (Grade 10, Grade 11 and Grade 12). A total of 664 questionnaires were distributed, with 598 valid responses collected, yielding a response rate of 90.06%.

This survey mainly investigated the adaptability of HHSCs from three aspects: environmental adaptation, learning adaptation and interpersonal adaptation. The questionnaire included 14 questions. Apart from collecting basic demographic information of the respondents, the other questions were designed using a Likert scale, with scores ranging from 1("strongly disagree") to 5("strongly agree"). Higher scores indicated stronger agreement and, consequently, better adaptability. Additionally, the questionnaire included two multiple-choice questions to identify the main difficulties students encountered in their learning process and the methods they used to resolve these challenges.

3. Analysis of Research Results

3.1. Questionnaire Reliability and Validity Analysis

To assess the reliability and validity of the data collected in this study, the survey data from the scale section of the questionnaire were analyzed. The reliability of the questionnaire was evaluated using Cronbach's α coefficient. The results indicates an overall Cronbach's α coefficient of 0.837, with each variable scoring over 0.8, this demonstrates high reliability and strong internal consistency in the questionnaire design.

The validity of the questionnaire was analyzed using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity. The overall KMO value of the questionnaire was 0.841, and Bartlett's test yielded a significance level of 0.000. These results indicate a high degree of overall correlation and strong structural validity of the questionnaire. Together, these findings confirm that the data quality of this survey is reliable and valid, meeting the requirements for subsequent data analysis.

3.2. Analysis of the Overall Adaptability of Students in the HHSCs

To gain a clear understanding adaptation of the HHSCs students' adaptability across dimensions of environmental, learning and interpersonal adaptation, a single-factor assessment model was constructed. The adaptation scores for each dimension were calculated, as shown in Table 1.

Table 1. Adaptation scores of HHSCs students

Dimension	Content of the Question	Average Value	Standard Deviation
Environmental Adaptability	School environment	4.22	0.702
	Learning environment	4.15	0.749
	Living environment	4.11	0.794
Learning Adaptability	Chinese language proficiency	4.14	0.803
	Academic performance	3.02	0.941
	Relationships with classmates	4.13	0.695
Interpersonal Adaptation	Do you like to be friends with non-Xinjiang classmates?	4.52	0.575
	Do you often realize that you are from Xinjiang?	3.35	0.977

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

The results from Table 2 reveal that the students in the HHSCs exhibit high levels of environmental adaptability. Scores for school, learning, and living environments were 4.22, 4.15, and 4.11, respectively approaching the criterion of "strongly agree". This can be attributed to the significant emphasis Zhengzhou S Middle School has placed on managing the HHSCs since their inception in 2011. S Middle School has tailored its moral education and teaching methods to align with ethnic policies, cultural customs and students' characteristics. Mixed-class teaching is supplemented by the appointment of specialized tutors to ensure effective instruction. In terms of logistical management, the school has taken several measures to enhance student comfort. These include setting up a special service window in the canteen, the provision of appropriate service vehicles, and well-equipped dormitories with facilities such as telephones, water heaters and air conditioners, to provide a comfortable living environment for students. These meticulous arrangements help students who are far from home to settle into their new learning and living environment as quickly as possible resulting in the high adaptability ratings.

The State's efforts to strengthen universal language education have also been reflected in the school's practices. Activities held by S Middle School such as poetry recitation, debates and the National Unity and Family Speech Contest have significantly improved students' Chinese language skills in the HHSCs. This is evidenced by a high adaptability score of 4.14 in their use of the national common language across various courses. However, when asked about satisfaction with their academic performance, students provided a comparatively lower rating of 3.02. At first glance, this might suggest challenges in academic adaptation. Nevertheless, further in-depth interviews revealed that the low score stems from the students' high self-expectations. Many students feel a strong sense of responsibility to meet the high-quality learning and living conditions provided by the State, motivating them to set ambitious academic goals. Despite these perceived shortcomings, students have adapted well to current teaching and learning methods, and their academic performance has improved significantly compared to their past performance.

S Middle School places the enhancement of national unity education at the forefront of its mission. Through diverse and engaging national unity education activities, the school fosters exchanges and interactions between students from the HHSCs and their local counterparts. These efforts subtly unify students under the harmonious concept that the Chinese nation is one big family. This approach has profoundly resonated with the students, who have demonstrated strong adaptability in interpersonal interactions. When asked about their "relationship with classmates" and "Do you like to be friends with non-Xinjiang classmates?", the HHSCs students gave high scores of 4.13 and 4.52 respectively, reflecting a positive attitude toward forming connections with peers outside their immediate cultural group. However, when asked "Do you often realize that you are from Xinjiang?", the students still gave a moderately high score of 3.35.

Further interviews revealed two primary factors contributing to this sentiment. First, S Middle School's emphasis on the HHSCs has led to higher standards for their daily management and better living facilities such as the dormitory, compared to local students. While these efforts aim to provide enhanced support, they inadvertently highlight differences, fostering a sense of otherness. Second, during weekends and holidays, local students return home, leaving only the HHSCs students on campus. Despite the school's organization of various activities to enrich the weekend and holiday life, these moments frequently remind students of their homes in Xinjiang.

3.3. Analysis of the Differences in the HHSCs Students

To gain deeper insight into the adaptability of students in the HHSCs, statistical tests were conducted to analyze differences in adaptability based on gender, region and grade, respectively.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

3.3.1. Gender Differences

An independent samples t-test was performed to determine whether significant disparities existed between male and female students. The independent samples t-test is for independent samples from two groups, assesses whether the means of the groups differ significantly.

The results, presented in Table 2, indicate that male and female students in the HHSCs displayed similar adaptability scores across all dimensions -- environmental adaptability, learning adaptability and interpersonal adaptation -- as well as in overall adaptability. The differences between the two groups were minimal and statistically insignificant. These findings suggests that gender does not significantly influence the adaptability of students in the HHSCs.

Table2. Test of gender differences in the HHSCs students adaptability (N=598)

Gender	Male (M+SD)	Female (M+SD)	T	P
Total Adaptation Score	30.524±4.377	30.205±3.554	0.679	0.497
Environmental Adaptability	12.476±2.222	12.480±2.006	-0.015	0.988
Learning Adaptability	7.282±1.382	7.102±1.257	1.134	0.258
Interpersonal Adaptation	10.767±1.772	10.641±1.419	0.623	0.534

3.3.2. Regional Differences

Students in the HHSCs come from across Xinjiang, encompassing both urban areas and rural or pastoral areas. As mandated by the Ministry of Education, the program prioritizes enrollment from the four southern Xinjiang prefectures, areas with less developed educational infrastructure. This focus ensures that children of farmers and herders from remote regions can access quality education through the HHSCs program and improve their prospects. Therefore, the majority of the HHSCs come from the more remote rural and pastoral areas, are there any differences in the adaptability between these students and those from the cities? Given these disparities, the study examined whether significant differences existed in adaptability between students from cities and those from rural or pastoral areas.

Using an independent samples t-test, students were grouped into two categories—urban and rural/pastoral—and tested for differences in adaptability. The results, displayed in Table 3, revealed significant differences across multiple dimensions: overall adaptability($P<0.001$), learning adaptability($P<0.001$), and interpersonal adaptability($P< 0.01$). Urban students consistently scored higher than their rural or pastoral counterparts.

Table 3. Test of regional differences in the HHSCs students adaptability (N=598)

Region	City(M+SD)	Town(M+SD)	T	P
Total Adaptation Score	31.360±3.683	29.788±3.839	3.383	0.001***
Environmental Adaptability	12.710±2.007	12.362±2.111	1.368	0.172
Learning Adaptability	7.570±1.139	6.960±1.333	3.915	0.000***
Interpersonal Adaptation	11.080±1.662	10.485±1.452	3.180	0.002**

Note: ** indicates $P<0.01$, *** indicates $P<0.001$.

This disparity is likely due to several factors. Urban students often benefit from superior educational opportunities, better learning environments, and broader exposure to the outside world. These advantages equip them with a more expansive worldview and stronger adaptability, enabling them to adjust more quickly to new academic and social settings. In contrast, students from remote areas may struggle with limited prior exposure to such environments, leading to relatively lower adaptability scores.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

3.3.3. Grade Level Differences

The thesis used a one-way ANOVA to explored difference in adaptability across grade levels of the HHSCs students, and the results are shown in Table 4. The results indicated significant differences in overall adaptability($p<0.001$), environmental adaptability($p<0.01$), academic adaptability ($p<0.01$) and interpersonal adaptation ($p<0.001$) among the students of different grades of the HHSCs. Grade 10 students displayed the highest scores in overall, academic, and interpersonal adaptability, followed by Grade 11 students, with Grade 12 students scoring the lowest. This trend can be attributed to two main factors:

Table 4. Tests of grade level differences in the HHSCs students adaptability (N=598)

Grade	Grade 10(M+SD)	Grade 11(M+SD)	Grade 12(M+SD)	F	P
Total Adaptation Score	30.943±4.108	30.639±3.422	28.271±3.199	11.259	0.000***
Environmental Adaptability	12.678±2.357	12.680±1.668	11.661±1.777	5.862	0.003**
Learning Adaptability	7.294±1.305	7.258±1.218	6.695±1.342	4.918	0.008**
Interpersonal Adaptation	10.993±1.461	10.701±1.640	9.915±1.343	10.764	0.000***

Note: ** indicates P<0.01, *** indicates P<0.001.

Firstly, increasing academic pressure: In Grade 10, academic tasks are relatively manageable, allowing students to adapt more quickly. However, as students' progress, the complexity and depth of the curriculum intensify, requiring greater mastery of knowledge. The increased workload leads to higher stress levels and diminished adaptability, particularly in Grade 12.

Secondly, declining novelty and growing pressure. For new students, the transition to a Hinterland high school often brings excitement and a desire to embrace the change, fostering quick adaptation. However, as the novelty fades and pressures like the college entrance examination mount, students—especially those in Grade 12—experience greater challenges and a heightened sense of maladjustment.

4. Conclusions and Recommendations

4.1. Conclusions

The study focused on the adaptability challenges faced by students in the HHSCs under the new era of education and management reforms. Using Zhengzhou S Middle School as a case study, field surveys and a single-factor evaluation model were employed to analyze the data statistically. The findings revealed significant improvements in the adaptability of these students. Students gave high scores for overall adaptability, environmental adaptability, learning adaptability and interpersonal adaptation. These results demonstrate the establishment of effective management mechanisms and teaching systems tailored to the unique needs of HHSCs students. Under the careful care and attention of the schools, the students have shown remarkable progress in the national common language and academic performance. The HHSCs is becoming an important platform for cultivating expectional talent in Xinjiang.

We also examined differences based on gender, region, grade, and ethnicity. Gender differences in adaptability were found to be negligible. However, regional differences revealed that urban students performed better in overall, learning, and interpersonal adaptability compared to their rural counterparts. Grade-level differences showed Grade 10 students as the most adaptable, followed by Grade 11 and Grade 12 students.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

4.2. Recommendations

First, set reasonable goals and foster gratitude. Students should be guided to set realistic learning goals that encourage self-comparison and progressive improvement. Educators should emphasize that success is measured by effort and growth, not merely by comparison to others. At the same time, instilling a sense of gratitude can help students maintain a positive outlook, reduce feelings of guilt over academic struggles, and motivate them to give back to their country and society.

Second, innovate the one-to-one assistance mechanism. While S Middle School already implements a teacher-student mentoring program, a one-to-one student pairing mechanism could be introduced. Pairing HHSCs students with local students would allow for mutual sharing of experiences and support. On weekdays, such pairings can improve academic performance through collaborative learning. On weekends and holidays, local students could voluntarily host their counterparts, fostering cultural exchange and emotional bonding. This system could promote integration, enhance friendships, and strengthen national unity.

Third, develop self-adjustment skills and build resilience. Many students from rural and pastoral areas experience a significant cultural and academic gap when transitioning to urban school environments. They should be taught how to maintain a positive mental state, seek help when needed, and overcome adjustment challenges. Students should understand that adaptation is a cyclical process involving setbacks and self-improvement. Schools can support this by organizing psychological counseling sessions and stress management workshops. These resources can help students manage immediate challenges while setting achievable goals for long-term success.

Acknowledgements

The authors would like to thank General Projects of China National Social Science Foundation: Research on the mode construction and operation mechanism of group aids to Xinjiang with higher vocational education (No. 20BMZ070) for supporting this research.

References

[1] N.Wu, X.N. Wang. Educational achievements and experience in the cultivation of ethnic minority talents since the 18th National Congress of the Communist Party of China, Ethnic Education of China, (2022), No.Z1, p.31-34. (In Chinese)

[2] Oudengcaowa. Local practice of Xinjiang classes in hinterland senior high school policy, Qinghai Journal of Ethnology, Vol.28(2017), No.1, p.53-60. (In Chinese)

[3] L.Qiao. On review and prospect of inter-ethnic interactions among ethnic students in hinterland high school classes, Journal of Research on Minzu Higher Education, (2020), No.1, p.63-65. (In Chinese)

[4] H.B.Lv. Mainland Xinjiang high school class research: current situation, characteristics and prospects, Ethnic Education of China, (2021), No.2, p.19-23. (In Chinese)

[5] S.Qian. Research on the cultural adaptation of high school students in Xinjiang: Take a middle school in Hangzhou as an example, Journal of Kaifeng Vocational College of Culture & Art, Vol.35(2015), No.8, p.211-212. (In Chinese)

[6] Oudengcaowa. A study on school dropout of Xinjiang classes in hinterland senior high schools, Journal of Northwestern Ethnic Studies, (2016), No.1, p.49-58. (In Chinese)

[7] H.B.Lv. Review of researches on Xinjiang high school classes in the hinterland in the past 20 years, Journal of Research on Ethnic Higher Education, Vol.9(2021), No.1, p.47-54. (In Chinese)

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202503_8(3).0006

[8] T.K.Yuan, X.X.Zhu. Analysis of the cultural adaptation of high school students in Xinjiang in the mainland, Journal of South-Central Ethnic University (Humanities and Social Sciences), Vol.36 (2016), No.3, p.51-56. (In Chinese)

[9] Y.Zhang. Beyond cultural difference: ethnography of Uighur-Han cultural interaction in Xinjiang class, Education Research Monthly, (2014), No.11, p.15-24. (In Chinese)

[10] X.Li. Research on the cultural adaptation of high school students in mainland Xinjiang, Qingdao University, 2023. (In Chinese)

[11] X.J. Guo. Where my heart is at peace where my self is at home: A qualitative research of emotional adaptation of ethnic high school students in the hinterland, Journal of Research on Education for Ethnic Minorities, (2019), No.1, p.107-114. (In Chinese)

[12] D.Zhang. Survey on the learning adaptability of different graders in Xinjiang high school classes in China's mainland, Journal of Educational Development, (2012), No.6, p.37-40. (In Chinese)