

Investigation on Learning Situation of Primary and Middle School Students in Minority Areas in Northern Guangdong

Jianlan Wang, Suqun Liao, Lina Zhang, Cui Yang, Chenglin Zhang

Guangdong Shaoguan University, Guangdong, Shaoguan 512005,

China

Abstract: The research group investigates 2,231 primary and middle school students from 11 schools in minority areas in Northern Guangdong through questionnaires with minority students occupying 43%. According to investigation results, in terms of satisfaction with school infrastructure, home learning environment and resources, course learning, learning motivation and ideal, academic attribution, and acceptance of others etc, primary and middle school students have generally smaller ethnic difference than gender difference and learning stage difference; middle school students have more significant difference than primary students from many aspects; and difference between male and female students is basically consistent with traditional gender concept and performance.

Key words: Northern Guangdong, minority, primary and middle school students, learning, investigation

Through investigation on current situation of basic education for ethnic minorities in less developed areas in an economically developed province, this paper discusses about the development of basic education for ethnic minorities in Northern Guangdong. The author mainly uses questionnaire survey with research objects of a total of 11 senior middle schools, middle schools and primary schools mainly for minority students in Ruyuan Yao Autonomous County in Shaoguan City, Shixing County in Shaoguan City, Lianshan Zhuang-Yao Autonomous County in Qingyuan City, and Liannan Yao Autonomous County in Qingyuan City, where ethnic minorities mainly gather. The questionnaire mainly consists of closed and open questions, and the former is dominant. 2,231 valid questionnaires are recovered, and minority students account for 43% of the total number of investigated students. Questionnaire data is processed by SPSS software. Differences in statistical results of this paper, such as more or less etc, are significant statistical differences.

I. Investigation results and analysis

This paper classifies questionnaire data statistics into several dimensions, including satisfaction with school infrastructure, home learning environment and resources, course learning, learning motivation and ideal, academic attribution,

and acceptance of others etc, and compares in terms of ethnic minorities, learning stage and gender. Results of comparison by dimension are as follows.

(I) Satisfaction with school infrastructure

Most of students are satisfied with school infrastructure, 88.6%, 75.9% and 69.3% of students mention that school sports facilities, dormitory environment and canteen conditions can meet their needs respectively, while 25%, 18.6% and 18.3% of students feel “very satisfied” respectively. In addition to gender difference, there is significant difference among students from different ethnic minorities and between primary and middle school students according to comparative results. As indicated in data of table 1, minority students and primary students are more satisfied with school infrastructure than Han students and middle school students respectively, and it can be arranged as sports facilities, canteen conditions and dormitory environment according to proportions of students.

In recent years, all levels of government stress input into infrastructure construction of schools in minority areas, and have built a number of spacious, bright and comfortable teaching buildings to guarantee good teaching.

(II) Home learning environment and resources

The general situation of this investigation is: students have good home learning environment and rich learning resources. Proportions of students with independent rooms and desks, extracurricular materials, computers and other learning tools are 65.6%, 41.6% and 28.8% respectively. Table 1 shows comparison results of each category of students: Han students, middle school students and female students have more extracurricular materials than non-Han students, primary students and male students respectively; Han students, middle school students and male students have more computers and other learning tools than non-Han students, primary students and female students; besides, middle school students have more independent rooms and desks than primary students, and their proportions are 66.9% and 50.9% ($t=5.024$ $P=0.008$) respectively.

Table 1 Comparison of home learning environment and resources (percentage)

Comparison	Have extracurricular materials	t-test	Have learning tools like computers etc	t-test
Han students	41.2		29.3	
Non-Han students	36.3	t=-2.651 P=0.008	23.8	t=-3.182 P=0.001
Primary students	21.4		21.9	
Middle school students	48.1	t=9.56 P=0.008	29.5	t=2.603 P=0.009
Male students	33.4		31.0	
Female students	42.7	t=-3.278 P=0.001		t=4.123 P=0.000

P≤0.05 * significant difference

(III) Course learning

In terms of course learning, students generally love courses that they are good at, including Chinese, mathematics, English, sports, politics, history, geography, physics and chemistry, proportions of students of which are 49.7%, 29.2%, 25.5%, 21.7%, 19.2%, 14.5%, 11.5%, 10.5% and 8.1% respectively. Comparison results: more primary students love and learn Chinese and mathematics well than middle school students; more female students love and are good at Chinese, English and politics, while more male students love and are good at mathematics, physics, chemistry and sports. Comparison results of poor course learning: more primary students learn Chinese and mathematics poorly than middle school students, more female students learn mathematics poorly than male students, and more male students learn English poorly than female students. The investigation also finds that more female students complete assignment timely than male students with proportions of 74.4% and 61.0% respectively. All these results are basically consistent with results of investigation that the author did before. [1]

(IV) Learning motivation and ideal

Statistical results of investigation on learning motivation: proportions of students who learn in order to be filial to parents and relatives, have a bright future,

learn skills, earn money, be successors of society and get jobs are 67.6%, 54.8%, 41.8%, 36.9%, 24% and 23.8% respectively. Comparison results among each category of students: more minority students and female students choose “be filial to parents and relatives”, more middle school students and female students choose “have a bright future”, more Han students and middle school students choose “learn skills” and “earn money”, more minority students and middle school students choose “be successors of society”, and some middle school students choose “get jobs”.

According to statistical results of question “I hope to learn until...”, 6%, 15.4%, 8.5%, 34.9%, 8.6% and 26.6% of students would like to learn until middle school, high school, junior college, undergraduate college, graduate college and doctor college respectively. Comparison results show no difference among primary and middle school students, and table 2 reflects specific situations of gender difference and ethnic difference: more minority students and female students expect for a bachelor’s degree, while more Han students expect for a master’s degree.

Table 2 Comparison of degree expectation (percentage)

Comparison	Han students	Non-Han students	t-test	Male students	Female students	t-test
Complete compulsory education	5.6	6.4		8.6	4.3	
Graduate from high school	16.6	14.2		17.2	13.7	
Graduate from junior college	8.5	8.3		9.3	7.8	
Graduate from undergraduate college	30.8	38.2	t=2.082 P=0.037	30.1	38.6	t=-2.064 P=0.039
Graduate from graduate college	8.2	9.0		7.0	10.0	
Graduate from doctor college	30.3	23.9		27.8	25.6	

P≤0.05 * significant difference

Statistical results of professional ideals: 28.9%, 20.4%, 15.7%, 13.4%, 9.8%, 6.7%, 3.2% and 1.9% of students would like to be entrepreneurs, civil servants, teachers, soldiers, doctors, self-employed entrepreneurs, workers and peasants respectively. Comparison results: there is not ethnic difference in professional ideal, and table 3 reflects specific situations of learning stage difference and gender

difference: more primary students choose teachers and soldiers, more middle school students choose entrepreneurs and civil servants, more male students choose entrepreneurs and soldiers, while more female students choose civil servants, teachers and doctors.

Table 3 Comparison of professional ideal (percentage)

Comparison	Primary students	Middle school students	t-test	Male students	Female students	t-test
Civil servants	11.8	21.0		15.5	19.6	
Teachers	21.3	9.0	t=3.176	6.2	19.1	t=6.558
Doctors	9.4	7.8	P=0.002	5.3	10.9	P=0.000
Soldiers	17.3	8.2		18.9	5.9	
Entrepreneurs	18.4	28.9		30.9	20.5	

P<0.05 * significant difference

(V) Academic attribution

Statistical results of attribution of academic success are shown in figure 1. Comparison results: middle school students and female students mostly stress “hard work”; primary students mostly stress “good teaching”; Han students and middle school students mostly emphasize “good luck” and “easy examination”; while middle school students and male students mostly attribute to “cleverness”. While for attribution of academic failure, 69.7%, 42.3%, 8.7%, 5.1% and 3.8% of students attribute to inadequate efforts, insufficient seriousness, inadequate cleverness, difficult examination, and bad teaching respectively. Through comparison, middle school students and female students stress more “inadequate efforts”, and middle school students also emphasize “insufficient seriousness”.

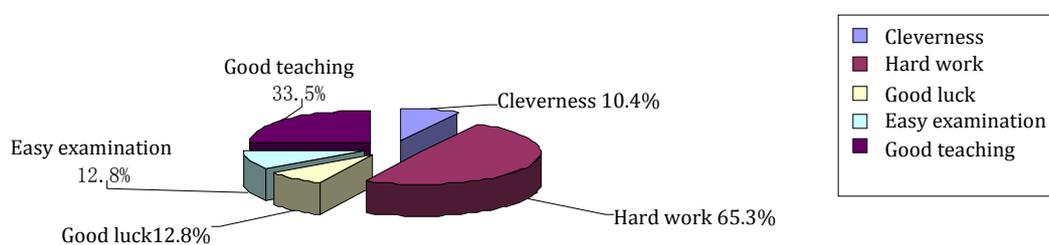


Figure 1 Attribution of academic success

(VI) Acceptance of others

According to questionnaire statistics of students, most of students are “very satisfied” or “generally satisfied” with teachers with proportions of 46.6% and 49.6% respectively. 37.1% and 54.6% of students love and would like to

communicate with teachers respectively. As can be seen from comparison results in table 4: more minority students and primary students are “very satisfied” with teachers, and minority students, primary students and female students love more to communicate with teachers.

Table 4 Comparison of students’ acceptance of teachers (percentage)

Comparison	Han students	Non-Han students	t-test	Primary students	Middle school students	t-test	Male students	Female students	t-test
Very satisfied	44.2	49.6	t=-	72.8	32.9	t=1	49.3	44.5	t=-
General	51.2	47.8	3.0	25.4	62.3	8.0	46.1	52.3	1.2
y satisfied			77			26			57
Dissatisfied	4.6	2.6	P=0	1.8	4.8	P=0	4.6	3.2	P=0
Love	34.7	40.5	.00	54.4	28.0	.00	34.6	38.5	.20
General	57.0	51.1	2*	39.8	62.4	0*	54.6	54.8	9
Dislike	8.3	8.4	t=-	5.8	9.6	t=1	10.8	6.7	t=3
			2.0			1.3			.11
			31			93			2
			P=0			P=0			P=0
			.04			.00			.00
			2*			0*			2*

P≤0.05 * significant difference

According to investigation statistics, 28.7% of students feel very happy, 63.3% of students sometimes feel very happy, while 8% of students feel unhappy. More primary students are “happy” than middle school students, and proportions of both are 37.% and 24.5% respectively, and also feel “happy because of teachers’ care” with proportions of 49% and 22.5% respectively. 65.8% of students love to interact with companions, and more minority students love to interact with students than Han students with proportions of 69.2% and 63.5% respectively. Students would first think of companions when unhappy, see figure 2 for details. Comparison results: more middle school students and female students “turn to companions”, more middle school students and Han students “watch movies and listen to music”, more middle school students and male students “play games”, more middle school students and female students “write letters or diaries”, more primary students, Han students and female students “turn to parents”, middle school students mostly “keep in mind”, and primary students mostly “turn to teachers”.

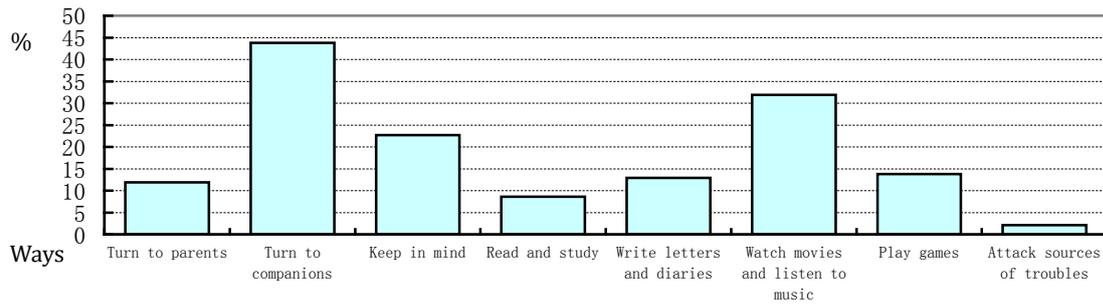


Figure 2 Main ways that students vent negative emotions

According to statistical results, factors that students feel troubled are: “academic performance” for 80.2% of students, “bad family economic condition” for 25.1% of students, “few friends”, “discipline of teachers” and “bad looking” for 16.9%, 16.8% and 13.4% of students respectively. There is no ethnic difference in comparison results. According to data in table 5: middle school students and female students are mostly troubled with “academic performance” and “bad looking”; middle school students and male students are mostly troubled with “discipline of teachers”; besides, middle school students are also troubled with “family economy” and “few friends”.

Table 5 Comparison of students’ troubles (percentage)

Comparison	Primary student	Middle school student	t-test	Male students	Female students	t-test
Academic performance	69.5	84.5	t=8.309 P=0.000*	70.8	85.2	t=-8.587 P=0.000*
Discipline of teachers	8.8	20.8	t=6.696 P=0.000*	19.8	14.7	t=2.238 P=0.025*
Few friends	14.3	18.0	t=2.142 P=0.032*	16.1	17.1	t=-0.641 P=0.521
Bad looking	6.8	16.7	t=6.568 P=0.000*	11.4	14.4	t=-2.065 P=0.039*
Bad family economic condition	16.9	28.9	t=6.236 P=0.000*	23.2	26.1	t=-1.578 P=0.115

P≤0.05 * significant difference

II. Problems and discussion

(I) Primary and middle school students have generally smaller ethnic difference than gender difference and learning stage difference

Primary and middle school students have small or even no ethnic difference, indicating that minority policies have been well implemented in Northern Guangdong, which is consistent with results of investigation by the research group [2]. With complete sports facilities, comfortable dormitory environment, rich nutritional meals, and good teaching conditions, minority students love schools, teachers and students in their hometowns, and have physical and mental health and almost the same words and deeds with students of the same ages and genders, such as courses that they learn well or poorly, selection of ideal career and troubles etc. Compared with Han students, minority students love more to interact with students, feel more satisfied with teachers and love more to communicate with teachers. Besides, more minority students take “be filial to parents and relatives” and “be successors of society” as top and the fifth important learning motivations respectively, and expect a bachelor’s degree. Such national culture heritage education has significant influence.

Han students have richer home learning environment and resources, such as extracurricular learning materials and computer etc, which also provide convenience for venting emotions through “watching movies and listening to music”. More students have learning motivations of “learn skills” and “earn money” which rank the third and fourth, have expectation of a master’s degree, have attribution of success to “good luck” and “easy examination”, and vent emotions by “turning to parents”, which are directly related to the situation that Han students are mostly the only children of their families.

(II) Middle school students have significantly more complex performances in various aspects than primary students

With a small scope of communication, primary students are more satisfied with school environmental facilities and teachers, love more to interact with teachers, rely more on parents and teachers, turn to teachers and parents in case of troubles and attribute their academic progresses to good teaching. Primary students feel happier with few troubles. They mainly learn Chinese and mathematics, and thus courses they learn well or poorly are all Chinese and mathematics. Their ideal jobs are teachers, soldiers, entrepreneurs, and public servants etc, which are of a wide scope.

With changing learning environment, an increase of social interaction and enriching experience, middle school students have higher requirements for school environmental facilities and family learning environment, need more independent rooms and desks and richer learning resources and tools, and have wider learning interests and stronger and more diversified learning motivations, such as “have a bright future”, “learn skills”, “earn money”, “be successors of society” and “get jobs” etc. Their professional ideals are entrepreneurs and civil servants with clear directions. They have more rational attribution of academic success and failure, and regard hard work as the premise of success and luck, and difficulty and talent etc as influencing factors; inadequate efforts and insufficient seriousness are main causes of failure. With sources of troubles like academic performance, family economy, discipline of teachers, few friends and bad looking etc, they have a wide range of ways to vent emotions: turn to companions, watch movies and listen to music, keep in mind, play games, and write letters or diaries etc.

(III) Difference between male and female students is basically consistent with traditional gender concept and performance

In terms of home learning resources, female students have more extracurricular materials than male students, more of them have learning motivations of “be filial to parents and relatives” and “have a bright future”, study harder, complete assignment timely, and love to communicate with teachers. Female students have good performance in liberal arts courses like Chinese, English and politics etc and poor performance in mathematics course, and more of them enter ideal undergraduate colleges than male students, and have ideal jobs such as public servants, teachers and doctors. They attribute academic success to hard work and academic failure to inadequate efforts. Female students mainly have troubles in terms of academic performance and looking, and vent emotions by turning to companions, writing letters or diaries, and turning to parents.

In terms of home learning resources, compared with female students, male students have more learning tools like computers etc, which also provide convenience for venting negative emotions by playing games. Male students mainly have good performance in science courses like mathematics, physics, chemistry and sports etc and poor performance in English. They have ideal jobs of entrepreneurs and soldiers, attribute academic success to cleverness and often feel troubled with discipline of teachers.

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