

Study on the perception of non-supportive social reaction status of high school students with hearing impairment in southwest China and its influencing factors

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Abstract: *In order to understand the status of non-supportive social responses among high school students with hearing impairment in Southwest China, 328 students from Southwest China were randomly selected for the investigation. The results show that the non-supportive social responses perceived by the respondents were generally at the middle and low level; there was no significant difference in scores whether they are male or female, and whether they are left-behind or not. Significant differences existing in invalid factor scores of students with different resident accounts; The difference in scores of perceptual keep distance, blame, and invalid factors of hearing-impaired high school students in different provinces and cities is extremely significant; There is also a significant difference in the perception of keep blame and unsupported social responses among students with different family monthly income. Students of different grades tend to score significantly different on the perceptual keep distance; there is a significant crossover effect between different family monthly incomes and grades in the factors of maintaining distance and blaming, too.*

Keywords: *southwest region, hearing-impaired senior high school students, non-supportive social response*

1 Introduction

A non-supportive social response is a stressful event which an individual perceives a non-supportive and disappointing response from others in life [1]. Members of the social system do not always response to face individuals who are in negative life events in a supportive way. The non-supportive social reactions perceived by individuals are often related to negative emotions, and negative social interactions always inducing individual negative self-evaluation, leading to negative emotional

reactions [2]. Studies have shown that people with higher non-supportive responses are more emotionally motivated, and interpersonal relationships are related to mental health [3]. Non-supportive social reactions are related to depressive symptoms and overall psychological distress [4]. The loss of social support may have an important effect on one's adaptability and health [5]. When an individual receives a lot of non-supportive reactions from others, he/she may have more anxiety and other emotional problems, and this may lead to a decrease in his/her social function [6]. At present, less research focuses on the negative reactions and effects of individuals from others on a specific life stress event; positive social interactions are often followed by most researchers, and negative interactions can explain a large amount of variation of individual health and well-being, so it is a subject worth studying [7]. The measurement of non-supportive social responses lacks a study of the perceived non-supportive social responses of high school students with hearing impairment. Therefore, this study will target the high school students with hearing impairment in the southwestern region of China, and understand the level of perceived non-supportive response and its influencing factors, in order to improve the mental health of high school students with hearing impairment.

2 Research methods

2.1 Research objects

The study used random cluster sampling to select 6 special education schools from Sichuan, Chongqing, Guizhou and Yunnan, and selected 328 high school students with hearing impairment as subjects. During the survey, 328 questionnaires were distributed and collected, and the questionnaire recovery rate was 100%. Through screening 309 valid questionnaires was selected, and the effective rate of the questionnaire was 94.21%. The basic situation of the respondents is shown in Table 1.

Table 1: Basic information of the survey object

N	percentage (%)	N	percentage (%)
Male147	47.6	Left-behind children 53	17.2
Female 162	52.4	Non-left-behind children 256	82.8
Rural 209	67.6	Senior one 151	48.9
Town 100	32.4	Senior two 158	51.1
Sichuan 90	29.1	Senior 121	39.2
Chongqing 85	27.5	1500 yuan or less 90	29.1
Yunnan 68	22	1501–3000 yuan 125	40.5
Guizhou 66	21.4	More than 3001 yuan 94	30.4

2.2 Research Tools

General information: compiled by the researcher, including gender, hookup nature, province and city, grade, family monthly income, whether left behind children, etc. The non-supportive social response questionnaire used the non-supportive social response questionnaire compiled by Lan Jumei et al. [8]. The questionnaire includes distance, blame, and invalidity dimensions blame and invalidity both includes 7 questions, and distance includes 6 questions. This questionnaire have 20 questions in sum. The scale uses the four-point scoring method, which is ranked in the order of “always, often, occasionally, never”. The scores are 4, 3, 2, and 1 respectively. The higher of the total score, the more non-supportive social reactions of individual perceived. After analysis, the internal consistency Cronbach’s α value of the scale used in this study were: 0.589, 0.736, 0.683; the Cronbach’s α value of the total scale was 0.841, and the KMO value was 0.870. The non-supportive social response scale has good reliability.

2.3 Statistical processing

The statistical software SPSS 18.0 was used for statistical analysis and processing. Descriptive statistics, t-test, F-test, cross-effect, simple effect analysis, etc. were used. The difference was statistically significant at $p < 0.05$.

3 Research results

3.1 The overall situation of non-supportive social responses in Southwest China

The survey suggests that the average scores of the three dimensions of non-supportive social responses of high school students with hearing impairment in the Southwest are between 2.131 and 2.330. The average scores of the three dimensions are ranked from high to low: “invalid” and “blame” and “keep distance”. The non-supportive social response scale has an average score of 2.264, which is between “occasionally so” (2 points) and “often so” (3 points). The overall bias is “occasionally so” and reacts with non-supportive societies. Median (The questionnaire used in this study used a four-point scoring method, which was recorded as 4 points, 3 points, 2 points, and 1 point respectively. Therefore, the median = $(4 + 3 + 2 + 1) / 4 = 2.5$, which is the value of the non-supportive social response at the middle level), compared with the non-supportive social response perceived by the hearing-impaired high school students in the Southwest. The overall level is at the lower middle level, see Table 2 for details.

Table 2: Overall situation of non-supportive social responses in Southwest China ($M \pm SD$)

	Keep distance	Blame	Invalid	Total amount
M	2.131	2.313	2.330	2.264
SD	0.505	0.591	0.549	0.461

3.2 Differences in demographic variables in non-supportive social responses

3.2.1 Independent sample T test of gender in non-supportive social responses

Table 3: Comparison of gender differences in non-supportive social responses ($M \pm SD$)

	Gender		t
	Male (N = 147)	Female (N = 162)	
Keep distance	2.155 $\pm$ 0.486	2.108 $\pm$ 0.522	0.822
Blame	2.323 $\pm$ 0.585	2.303 $\pm$ 0.598	0.286
Invalid	2.306 $\pm$ 0.538	2.352 $\pm$ 0.517	-0.371
Total amount	2.267 $\pm$ 0.471	2.262 $\pm$ 0.453	0.094

Note: * $P < 0.05$, ** $P < 0.01$, the same below

Table 3 shows that on the “keep distance”, “blame” factor and non-supportive social response totals, the average score of male students are higher than that of female students; in the “invalid” factor, the average score of female students is higher than that of male students. However, they have not reached the level of significance.

3.2.2 Independent sample T test of non-supportive social responses

The survey suggests that the high school students with hearing impairment in rural households score higher on the three dimensions and total scale of the non-supportive social response scale than the high school students in the urban hukou; the high school students with hearing impairment perceived much more invalid and unsupported social reaction level than those in urban district. Supportive social response level is significantly higher than urban hearing impaired high school students ($P = 0.011 < 0.05$, $P = 0.016 < 0.05$), see Table 4 for details.

Table 4: Comparison of differences in the nature of household registration in non-supportive social responses ($M \pm SD$)

	Account nature		t
	Rural (N = 209)	Town (N = 100)	
Keep distance	2.163 $\pm$ 0.500	2.063 $\pm$ 0.512	1.623
Blame	2.355 $\pm$ 0.582	2.223 $\pm$ 0.602	1.853
Invalid	2.385 $\pm$ 0.539	2.216 $\pm$ 0.554	2.557*
Total amount	2.308 $\pm$ 0.450	2.173 $\pm$ 0.474	2.433*

3.2.3 Independent sample T test for left-behind children in non-supportive social responses

Table 5: Comparison of differences in non-supportive social responses among left-behind children ($M \pm SD$)

	Whether left-behind children		t
	YES (N = 53)	NO (N = 256)	
Keep distance	2.233 $\pm$ 0.521	2.109 $\pm$ 0.500	1.623
Blame	2.380 $\pm$ 0.651	2.299 $\pm$ 0.578	0.914
Invalid	2.364 $\pm$ 0.580	2.323 $\pm$ 0.543	0.492
Total amount	2.330 $\pm$ 0.474	2.250 $\pm$ 0.458	1.147

Table 5 shows that the left-behind children with hearing-impaired high school students scored higher on the dimensions and total scale of the non-supportive social response scale than the non-left-behind children with hearing impairment, but none of them reached a significant level.

3.2.4 One-way analysis of variance in non-supportive social responses in the provinces and cities where they are located

The survey suggests that the scores of the “keep distance”, “blame”, “invalid” and “non-supportive responses” of the hearing-impaired high school students in different provinces and cities in the non-supportive social response are statistically significant ($P = 0.000 < 0.001$). After the LSD multiple comparative analysis, it was found that the high school students of the hearing-impaired in different provinces were ranked from high to low: Sichuan, Guizhou, Chongqing, Yunnan, and reached significant differences ($p < 0.05$). High school students with hearing impairment in different provinces and cities scored on the total level of perceived blame, ineffectiveness and non-supportive response, Sichuan < Chongqing < Guizhou < Yunnan, and both reached significant level ($p < 0.05$), see Table 6 for details.

Table 6: Comparison of differences in non-supportive social responses between provinces and cities ($M \pm SD$)

		Descriptive statistics		F	LSD
		N	($M \pm SD$)		
Keep distance	Sichuan (A)	158	1.889 $\pm$ 0.425	24.354***	A < C < B < D
	Chongqing (B)	85	2.116 $\pm$ 0.549		
	Guizhou (C)	66	2.088 $\pm$ 0.452		
	Yunnan (D)	68	2.510 $\pm$ 0.360		
Blame	Sichuan (A)	158	2.016 $\pm$ 0.479	29.881***	A < C < B < D
	Chongqing (B)	85	2.202 $\pm$ 0.639		
	Guizhou (C)	66	2.372 $\pm$ 0.520		
	Yunnan (D)	68	2.372 $\pm$ 0.402		
Invalid	Sichuan (A)	158	2.086 $\pm$ 0.438	34.122***	A < C < B < D
	Chongqing (B)	85	2.177 $\pm$ 0.567		
	Guizhou (C)	66	2.364 $\pm$ 0.472		
	Yunnan (D)	68	2.813 $\pm$ 0.402		
Total amount	Sichuan (A)	158	2.002 $\pm$ 0.354	46.842***	A < C < B < D
	Chongqing (B)	85	2.167 $\pm$ 0.520		
	Guizhou (C)	66	2.284 $\pm$ 0.355		
	Yunnan (D)	68	2.713 $\pm$ 0.206		

Note: A: Sichuan, B: Chongqing, C: Guizhou, D: Yunnan

3.2.5 One-way ANOVA of different monthly incomes in non-supportive social responses

Table 7 shows that the difference in scores of blame among high school students with different family monthly income is statistically significant ($p = 0.03 < 0.01$). Score differences in non-supportive social responses were also statistically significant ($p = 0.012 < 0.05$). After the LSD multiple comparative analysis, it was found that the perception level of blame of high school students with hearing impairment less than 1500 was significantly higher than that of students from the family whose monthly income is 1501–3000 yuan ($P = 0.031 < 0.05$), and it was extremely higher than students whose family monthly income is more than RMB 3001 ($P = 0.001 < 0.01$). The perceptual non-supportive social response level of hearing-impaired high school students whose family monthly income is less than 1,500 yuan was significantly higher than that of family monthly income of 1501–3000 yuan ($P = 0.046 < 0.05$), and was extremely significantly lower than the high school students with hearing impairment of more than 3001 yuan ($P = 0.003 < 0.01$).

Table 7: Comparison of differences in different monthly incomes among non-supportive social responses ($M \pm SD$)

		Descriptive statistics		F	LSD
		N	($M \pm SD$)		
Keep distance	1500 yuan or less (E)	90	2.215 $\pm$ 0.485	2.431	
	1501–3000 yuan (F)	125	2.129 $\pm$ 0.447		
	More than 3001 yuan (G)	94	2.051 $\pm$ 0.583		
Blame	1500 yuan or less (E)	90	2.473 $\pm$ 0.571	5.987**	E > F E > G
	1501–3000 yuan (F)	125	2.298 $\pm$ 0.570		
	More than 3001 yuan (G)	94	2.178 $\pm$ 0.606		
Invalid	1500 yuan or less (E)	90	2.416 $\pm$ 0.517	1.588	
	1501–3000 yuan (F)	125	2.303 $\pm$ 0.547		
	More than 3001 yuan (G)	94	2.284 $\pm$ 0.549		
Total amount	1500 yuan or less (E)	90	2.376 $\pm$ 0.418	4.461*	E > F E > G
	1501–3000 yuan (F)	125	2.249 $\pm$ 0.443		
	More than 3001 yuan (G)	94	2.177 $\pm$ 0.506		

Note: E: 1500 yuan or less, F: 1501–3000 yuan, G: more than 3001 yuan

3.3 Development of non-supportive social responses

Table 8 shows that the scores of non-supportive social responses, blame, and ineffectiveness of high school students with hearing impairment in different grades did not reach statistical significance ($p > 0.05$). Different grades tend to have significant differences in maintaining distance ($P = 0.051$). After multiple comparison analysis by LSD, it was found that the first grade of high school students with high hearing impaired perceived a significant distance compared with the second grade students ($P = 0.026 < 0.05$).

Table 8: Development of non-supportive social responses

		Descriptive statistics		F	LSD
		N	($M \pm SD$)		
Keep distance	Senior one (H)	121	2.218 $\pm$ 0.513	3.011	
	Senior two (M)	108	2.069 $\pm$ 0.475		
	Senior (N)	80	2.081 $\pm$ 0.518		
Blame	Senior one (H)	121	2.347 $\pm$ 0.561	0.579	
	Senior two (M)	108	2.265 $\pm$ 0.534		
	Senior (N)	80	2.325 $\pm$ 0.701		

Invalid	Senior one (H)	121	2.347±0.538	0.096	
	Senior two (M)	108	2.318±0.525		
	Senior (N)	80	2.321±0.601		
Total amount	Senior one (H)	121	2.308±0.450	0.986	
	Senior two (M)	108	2.225±0.418		
	Senior (N)	80	2.251±0.530		

Note: H: senior one, M: senior two, N: senior

From the perspective of the average score, the grades of the grades in the non-supportive social response scale and in all dimensions are ranked from high to low: high one, high third, and high two. This shows that the level of non-supportive social response perceived by high school students with hearing impairments had a tendency to decline first and then increase with the increase of grades.

3.4 Analysis of interaction effects and simple effects of non-supportive social responses

Analysis shows that the grade and monthly income had crossover effect on the factors of keep distance ($F = 3.025$, $p = 0.018 < .05$), blame ($F = 3.545$, $p = 0.008 < .01$) and non-supportive response ($F = 3.160$, $p = 0.014 < .05$), as shown in Figures 1–3.

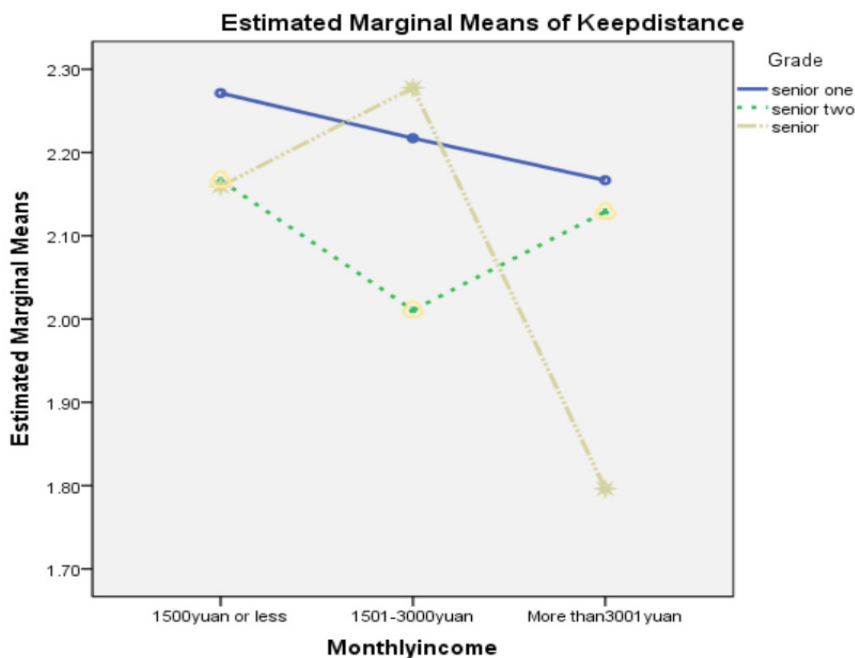


Figure 1: Gender and monthly income cross-effect

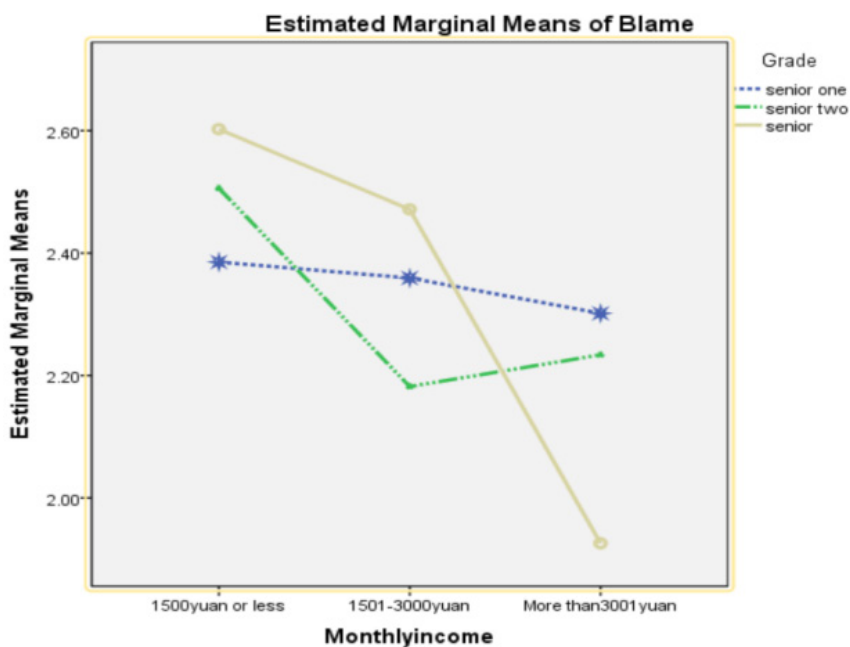


Figure 2: Grade and monthly income cross-effect

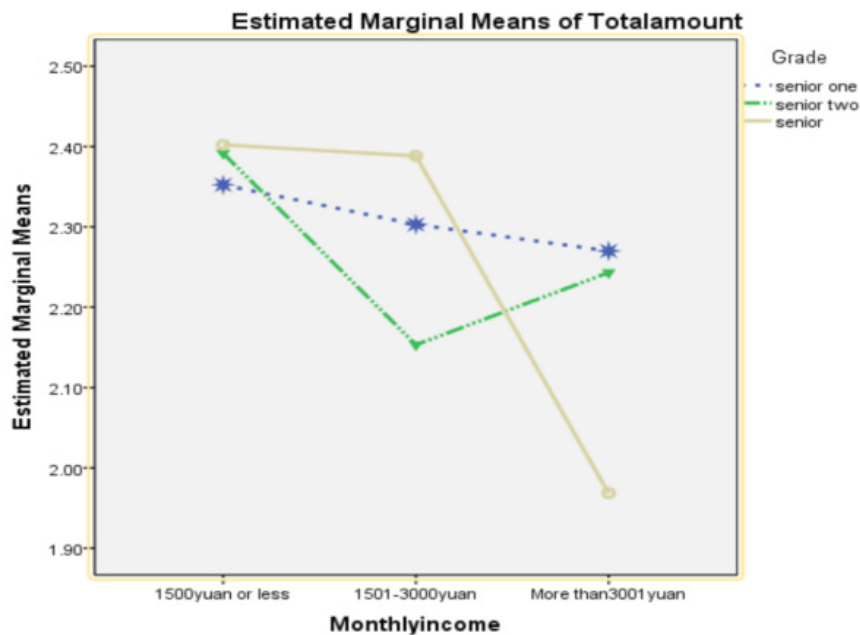


Figure 3: Grade and monthly income cross-effect

According to the simple effect analysis, the students' perception of keep distance whose family a monthly income of 1500 yuan or less in the third year of high school was significantly higher than that of students whose family monthly income above 3001 yuan ($p = .029 < .05$). Students' perception level of keep distance in the high school family with a monthly income of 1501–3000 yuan was significantly higher than that of the family with a monthly income of more than 3001 yuan ($p = .001 < .01$). The level of awareness blame of the monthly income of less 1500 yuan in the third year of high school was extremely higher than that of students with monthly income of more than 3001 yuan ($p = .000 < .001$), and the family monthly income of high school family is 1501–3000 yuan, the students' perception level of blame was significantly higher than students whose family monthly income above 3001 yuan ($p = .001 < .01$). High school students' perception level of non-supportive response with family monthly income of less than 1500 yuan are aware that the level of non-supportive response is significantly higher than that of students with monthly income of more than 3001 yuan ($p = .002 < .01$), and that of high school students with monthly income of 1501–3000 yuan is aware of non-supportiveness. The response level and its significantly higher than the students above 3001 yuan ($p = .002 < .01$) are shown in Table 9.

Table 9: Analysis of simple effects of non-supportive social responses

Grade monthly income (P)		Monthly income (Q)	P – Q
Keep distance senior	1500 yuan or less	1501–3000 yuan	-.118
		more than 3001 yuan	.363*
	1501–3000 yuan	more than 3001 yuan	.481**
Blame senior	1500 yuan or less	1501–3000 yuan	.131
		more than 3001 yuan	.677**
	1501–3000 yuan	more than 3001 yuan	.546**
Total amount senior	1500 yuan or less	1501–3000 yuan	.014
		more than 3001 yuan	.434**
	1501–3000 yuan	more than 3001 yuan	.420**

4 Discussion and analysis

4.1 Overall status of non-supportive social responses of high school students with hearing impairment in Southwest China

The non-supportive social responses perceived by high school students in the southwestern region are generally at a lower-middle level. Students with hearing impairment have certain difficulties in learning, language understanding, language

expression and social interaction [9], which limits their opportunities to communicate with hearing people. The scope of participation in social activities is relatively small, and the sources of social support are relatively less, combined with these hearing-impaired students are easy inferiority, there are also a large number of people who are discriminating against the disabled in real life, so they will also perceive some negative social reflections [10]. In the southwestern region, the overall level of perceived non-supportive social response of high school students with hearing impairment is at a lower-middle level, which has a greater relation with the country's long-term policy support. As the Outline of the National Medium- and Long-Term Education Reform and Development Plan (2010–2020) [11] proposed, every student deserves the care they deserve to get better development for each student. The National Special Education Promotion Plan for the second phase also pointed out that all sectors of society must work together to take care of and support the development of special education and create a good environment suitable for the development of special education. At the same time, it is necessary to help disabled students and their parents to fully realize that the development of special education has important practical significance for promoting the growth and development of disabled people and lifelong development. [12]

The hearing-impaired high school students, as the only disabled students who participated in the college entrance examination, received more attention and support, so they generally felt a low non-support level.

4.2 Influence of demographic variables on non-supportive social responses of high school students with hearing impairment

4.2.1 The influence of the nature of the household registration on the non-supportive social reflection of high school students with hearing impairment

The average scores of the hearing-impaired high school students in the rural hukou on the dimensions and the total scale of the non-supportive social response scale are higher than those of the hearing-impaired students in the urban hukou; the “ineffective” dimension and the total non-supportive social response on the scale, the non-supportive social responses perceived by the high school students with different hukou characteristics were significantly different and the difference reached a significant level. The reason may be the perception of non-supportive social reactions has a certain relationship with mental health. The mental health status of hearing-impaired students in urban areas was generally better than that of rural hearing-impaired students [13], so the rural hearing-impaired students are less likely to feel positive support. The urban economic conditions are better, the infrastructure and corresponding educational conditions are better than those in the rural areas.

The urban hearing-impaired high school students are better able to fully integrate resources and solve the negative life events according to the suggestions and opinions of others. The level of ineffectiveness perceived by urban hearing-impaired students was significantly lower than that of rural hearing impaired high school students. Secondly, compared with rural areas, the social concept of urban residents is more open, people's acceptance of hearing-impaired groups is higher, and the value of disabled people is more certain. The resistance of hearing-impaired students seeking support and corresponding compensation is much less. The hearing-impaired students from the city feel a higher level of support[14], so the non-supportive social response level perceived by them was low.

4.2.2 Influence of the provinces and cities on the non-supportive society of high school students with hearing impairment

Studies have shown that the scores of high school hearing-impaired students in different provinces and cities in the distance of perception, blame, ineffectiveness and non-supportive response are extremely significant. In addition to maintaining distance dimension, different provinces and cities students' scores in blame ineffective, and the total level of non-supportive responses are: Sichuan < Chongqing < Guizhou < Yunnan. Relevant data showed that there are 23 schools across the 2019 to recruit high school students. There are 9 undergraduate colleges to recruit undergraduate students, including Tianjin Polytechnic University, Changchun University, Beijing Union University, Chongqing Normal University, and Zhengzhou Normal University. Nanjing Normal University of Special Education, Jinling Institute of Technology, Suihua College, Xi'an Academy of Fine Arts. There are 3 colleges and universities for the national recruitment of Zhengzhou Engineering and Technology College, Zhejiang Special Education Vocational College and Changsha Vocational and Technical College. Undergraduate colleges with local enrollment include Leshan Normal University. There are 8 local colleges and universities to recruit hearing-impaired students, they are Guangzhou University, Municipal Technical College, Tianjin City Vocational College, Liaoning Special Education Vocational College, Shandong Special Education Vocational College, Guangdong Province British Vocational and Technical School, Fuzhou Vocational and Technical College, Xinjiang Disabled Vocational Secondary School. It can be seen from the universities' geographical distribution that hearing-impaired students in Yunnan and Guizhou do not have the opportunity to enter local colleges which are specialized for them, so they must participate single-study examinations in other provinces. The pressure for further study is relatively large, and it is easier to feel negative support for these students. While hearing-impaired students in Sichuan and Chongqing, they can enroll in colleges in local region, this can make them live close to their family members and can relieve their pressure so they can feel social support. The level of

non-supportive social reaction is relatively low. Students in Sichuan province have the least stress because they can enroll in Leshan Normal University, so their feeling of negative support level is the lowest.

4.2.3 Impact of family monthly income on non-supportive social responses of high school students with hearing impairment

Hearing-impaired high school students from different family monthly income scored significantly on blame and non-supportive social responses. Further analysis found that the blame and non-supportive social response perceived by hearing-impaired high school students with family monthly income below 1500 were higher than that of family monthly income was 1501–3000 yuan and more than 3001 yuan. Low-income family students may experience more stressors than middle-class family students. Studies have confirmed that [15], [16]. SES (family socioeconomic status) is closely related to the development of children, and youth who are from higher SES will get more academic attention and feel more family happiness, and all these will promote their personal development; while families with lower SES have more family conflicts, their happiness is lower than the middle class, which is harmful for the development of adolescents' personality. According to Maslow's hierarchy of needs, after the basic needs were met, they will turn to their growth needs, and take much care of their psychological and spiritual world. Therefore, hearing-impaired high school students with higher monthly household income will get more psychological attention, while hearing-impaired high school students with lower monthly household income will receive less psychological support. This can explain why the hearing-impaired high school students with high family monthly income feel less non-supportive social reactions, while the hearing-impaired high school students with low monthly household incomes perceive more non-supportive social reactions.

4.2.4 Influence of other demographic variables on non-supportive social responses of high school students with hearing impairment

The results of the study showed that the scores of male and female in the "keep distance", "blame" dimension and the non-supportive social response scale were different, and boys' scores were higher than girls' in these dimensions, but the difference did not reach the level of significance. High school for hearing impaired students are boarding systems, in these school, students' age difference is also small. And their education and general life experiences are similar. Therefore, the level of non-supportive social response perceived by high school boys and girls was not significant. Studies have shown that [17], hearing-impaired high school students generally have higher levels of mental health, and there is no significant difference between men and women, but boys are more likely to have psychological problems than girls in all aspects, and they perceived a relatively high level of non-supportive

social response. The research by Cao Juan [18] also shows that the overall social support status of girls is higher than that of boys, that is, the negative social interaction of boys is higher than that of girls. Therefore, the level of non-supportingness of boys' perception is generally higher than that of girls.

The results of the study showed that left-behind children with hearing-impaired high school students scored higher on the dimensions and total scale of the non-supportive social response scale than the non-left-behind children with hearing impairment, but did not reach the significant level. Some studies have used the Adolescent Quality of Life Self-Assessment Scale and the Social Support Rating Scale to test left-behind children and non-left-behind children. The results showed that non-left-behind children received higher subjective support and total social support than left-behind children [19]. Compared with non-left-behind children, the mental health problems of left-behind children are more serious, and they are higher than those of non-left-behind children [20]. Non-left-behind children are slightly higher than left-behind children in learning anxiety. It can be seen that because left-behind children are lack of effective communication with others and because their psychological characteristics are sensitive, they are often at a disadvantage state in social interactions, and thus feel more non-supportive social reactions than non-left-behind children, but this difference has not reached the level of significance.

4.3 Developmental characteristics of non-supportive social responses among high school students with hearing impairment

Studies have shown that scores of grades in the non-supportive social response scale and all dimensions are ranked from high to low: Senior One, Senior, and Senior Two, and there was a significant difference in keep distance between different grades. From the first grade of senior to the third grade of senior of high school, the grades gradually increase, and the students' age and physical development tend to be mature. Lin Chongde pointed out that one's physical development is closely related to his/her psychological development. As teenagers begin to look forward to integrating into the social life of adults, they explore a new social rule which is different from the past and learn to play a new social role, hoping to get a new social evaluation. At this stage, the personality of youth is gradually mature and tends to be stable, and the individual's self-awareness, social adaptability, values, and moral values are highly developed and mature [21]. Kohlberg's theory of moral reasoning also states that when individuals are at the customary level, they will abide by the rules to obtain the approval of the authoritative figures and avoid opposition. Individuals at the post-custom level begin to establish their own beliefs about right and wrong. Therefore, the high school students with hearing impairment in adolescence increased with the grade level, their sociality developed, their behaviors gradually conformed to social requirements

and behavioral norms, and they were more recognized and accepted by the society. On the other hand, with the dual development of physiology and psychology, the emotional management ability of high school students with hearing impairment is improved. In the study, Sai Liyang [22] confirmed that the emotional adjustment ability of adolescents was significantly higher than that of early adolescents, and the ability of emotional regulation increased with age. In summary, with the increase of grades, the socialization of high school students with hearing impairment gradually develops at a higher level, and the behavior gradually conforms to social norms. The ability of emotional adjustment increased with the grade (age). Therefore, there is a tendency for non-supportive social responses to decline with increasing grades.

4.4 The cross-impact of demographic variables in various dimensions of non-supportive social responses

Studies have shown that grade and monthly income have cross-effects on keep distance, blame, and non-supportive response factors, and reach a significant level. High school students with a family monthly income of less than 1,500 yuan perceived a significantly higher non-supportive social response than students with a family monthly income of more than 3001 yuan. Students with a high family monthly income of 1501–3000 yuan perceived a significantly higher non-supportive social response level than the high school students with hearing impairment above 3001 yuan. Coupled with economic pressure, a considerable number of students are unable to bear the burden of life and they need to seek help from others. Because they live and study with their peers and teachers at most when they explore their negative emotion, their peers are busy learning about their negative emotions so their peers' main response method of blaming or maintaining distance. Their teachers pay more attention to the results of the study, and they have difficulty to pay much attention to other things. Therefore, the level of keep distance, blame, and non-supportive social response perceived by students with poor economic conditions in the third year of high school feel is higher.

5 Research conclusions

The non-supportive social responses perceived by the respondents were generally at the middle and low level. It shows that the overall level of perceived negative support for high school students with hearing impairment in the Southwest is low. The factors are mainly the nature of accounts, province, monthly income and grade, and there are still cross influences between grade and monthly income.

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