

Study on the Present Situation of Learning Burnout and Its Influencing Factors on High-school Students with Hearing Impairment

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Abstract: To understand the learning burnout and its influencing factors on high-school students with hearing impairment, 240 students were randomly selected in Sichuan, Guizhou and Chongqing province. The survey found that: (1)The learning burnout of High-school students with hearing impairment is generally at lower-middle level; (2)There are significant differences in the scores of personal isolation and learning burnout among high-school students with hearing impairment in different gender; (3)There are very significant differences in the scores of personal isolation among high-school students with hearing impairment of different household types; (4)There are significant differences in the scores of personal isolation and learning burnout between left-behind high-school students and non- left-behind ones; (5) There are very significant differences in the scores of physical and mental exhaustion, learning burnout among high-school students with hearing impairment in different provinces and cities. There are extremely significant differences in the scores of personal isolation; (6) There are significant differences in the scores of personal isolation among high-school students with hearing impairment of different family monthly income. The personal isolation of high school students with hearing impairment whose household income is less than 1,500 Yuan per month is remarkably higher compared with the high school students with hearing impairment whose household income is more than 3001 Yuan per month; (7)There is no significant difference in learning burnout and its each aspect among high school students with hearing impairment in different grades; (8)In the aspect of low achievement, there is a significant cross-impact between genders and whether or not left-behind children; provinces and family monthly income; in the aspects of personal isolation, there is a significant cross-impact between whether or not only-child and whether or not left-behind children; in the aspect of learning burnout, there is a significant cross-impact between grades and family monthly income.

Keywords: High-school students with hearing impairment; learning burnout; present situation; influencing factors

1. Introduction

Based on the data of the Second National Sample Survey of Disabled Persons in 2006, there are 2.4 million hearing impairment population in our country, accounting 24.16% of the total number of disabled people, among them 110,000 people (4.47%) suffer from hearing impairment. According to the data, there are at least 30,000 newly emerged deaf-mute children in our country every year. According to that speed, the hearing impairment population in our country has accumulated into huge data so far. High-school students with hearing impairment are in the key stage of their adolescence. In this stage, they have to face the challenge of physical and mental health, apart from that, they also have to bear multiple pressure from school, family, friend and society, especially the pressure of entering a higher stage of education^[1]. The multiple pressure can easily lead to physical exhaustion, mental fatigue and decrease in the overall level of well-being. They also can be tired of study, which may lead to poor academic performance, academic procrastination, declining self-confidence, alienation from teachers and friends, puppy love, Internet addiction and even depression, and eventually they might drop out of school etc. These are all related to Learning Burnout^[2-5]. The reason for learning burnout is because of the academic pressure, course load or other personal psychological factors when they are studying, which can lead to emotional and physical exhaustion, personal isolation, depersonalization, low sense of achievement and personal efficacy^[6]. Nowadays, high-school students, especially high-school students with hearing impairment, are facing high academic pressure caused by concerns of entering a

higher stage of education, which makes it necessary for us to face the problem of learning burnout of hearing-impaired high-school students.^[7] It is essential for us to understand the learning burnout of high-school students with hearing impairment and its influencing factors. The research aimed at understanding learning burnout of senior high-school students and its influencing factors through questionnaire, in the hope of providing some references for improving learning efficiency.

2. Research Design

2.1 Research Subject

The research have adopted random cluster sampling method, selecting 240 high-school students with hearing impairment from Chongqing, Sichuan and Guizhou province as the objects of the questionnaire. A total of 240 questionnaires were give out and 230 questionnaires were collected, among them, there were 215 valid questionnaires, and the validity rate was 93.47%. The basic information of the respondents is shown in Table 1.

Table 1: Respondents

variable	classification	N	%	variable	classification	N	%	
Gender	Male	108	50.2	whether or not left-behind children	YES	35	15.8	
	Female	107	49.8		NO	180	83.7	
Household	Rural	148	68.8	Grade	Senior one	91	42.3	
	Urban	67	30.7		Senior two	75	34.9	
Province	Sichuan	76	35.3		Senior three	49	22.8	
	Chongqing	67	31.2	family monthly income	Under 1500 Yuan	70	32.6	
	Guizhou	72	33.5		1501-3000 Yuan	95	44.2	
						More than 3001 Yuan	50	23.3

2.2 Research Tool

The research have adopted *Learning Burnout Scale for Senior high-school Students*^[8] compiled by Chen Wei, Zhao Shouying, Zhu Dan and Zhang Jinfu. The scale includes three aspects: low sense of achievement: sense of meaninglessness, self-doubting, decreased learning motivation and sense of self-value. (2)Physical and mental exhaustion: feeling tired, lack of energy; academic burden, loss of interest in study. (3)Personal isolation: student are afraid of and have bias for teachers; isolation and lack of good friends. For each aspect four questions have been prepared, so in total there are 12 questions. The scale was scored by five points, in the order of "never, rarely, sometimes, often, always", which were 1, 2, 3, 4 and 5 respectively, and the "low achievement" was scored in reverse. The higher the score is, the more serious the learning burnout is. By carrying out reliability test for hearing impaired students, we found that the internal consistency reliability of the aggregate table is 0.769, the internal consistency reliability of low sense of achievement, physical and mental exhaustion and personal isolation were 0.786, 0.812 and 0.724 respectively, and their composite reliability were 0.790, 0.8134 and 0.739, respectively. To further validate the scientific nature of the questionnaire, we using confirmatory factor analysis (CFA), CFI=0.94, IFI=0.94, TLI=0.92, NFI=0.86, AGFI=0.87, RMSEA=0.06, $\chi^2/df=1.6$ all indicators are acceptable. The result shows that the learning burnout scale for high school students has excellent psychometric performance.

2.3 Construction survey methods

In the survey, the class was administered as a unit. The teacher issued the questionnaire and guided the respondent to answer the questions carefully. The time was about 5 minutes. After the test, the questionnaire was collected by the teacher immediately.

2.4 Statistical Method

The study adopted SPSS17.0 statistical software to carry out statistical analysis and processing the data.

3. Research Result

3.1 Overall Situation of Learning Burnout of Hearing-impaired high-school Students

By using descriptive statistics to analyses learning burnout and its each aspect, it is found that high-school students with hearing impairment scores among 2.44-2.88, the score of learning burnout is 2.71, which is in the area of “rarely” and “sometimes”, generally tend to “sometimes”. Taking 3 as the median, it belongs to the lower-middle level. Referring to the existing research, the mild average score is 1-2; the symptoms are obviously 2-3, which should be the focus of prevention; the high level of burnout, which is between 3 and 5, needs to be focused on prevention and treatment^[9]. High-school students with hearing impairment are key prevention objects for learning burnout, see Table 2 for details.

Table 2: The overall situation of learning burnout of high-school students with hearing impairment (M/SD)

	Low sense of achievement	Physical and mental exhaustion	Personal isolation	Learning Burnout
Mean value	2.815	2.876	2.443	2.711
Standard Deviation	0.856	0.913	0.843	0.536

3.2 Differences in demographic variables in learning burnout among hearing impaired high-school students

3.2.1 Independent Sample T Test on Learning Burnout of Different Genders

Table 3 shows that: referring to the mean value, the scores of male students are higher than female students in the aspect of low sense of achievement, physical and mental exhaustion, personal isolation and learning burnout; Sores are very significantly different in terms of personal isolation($p = 0.006 < 0.01$) and learning burnout($p = 0.004 < 0.01$) of high-school students with hearing impairment of different genders; Low achievement and physical and mental exhaustion did not reach significant level.

Table 3: Difference analysis of genders in learning burnout ($M \pm SD$)

Project	Gender		<i>t</i>	<i>p</i>
	Male (N=108)	Female (N=107)		
Low sense of achievements	2.877 \pm 0.846	2.752 \pm 0.866	1.071	0.286
Physical and mental exhaustion	2.972 \pm 0.905	2.778 \pm 0.914	1.565	0.119
Personal isolation	2.599 \pm 0.827	2.285 \pm 0.833	2.777	0.006
Learning burnout	2.816 \pm 0.490	2.605 \pm 0.562	2.936	0.004

3.2.2 Independent sample T test of different household types in Learning Burnout

Table 4 shows that: high-school students with hearing impairment in urban areas scored higher on low achievement than those in rural areas from the average score. In the aspect of physical and mental exhaustion, personal isolation and learning burnout, the scores of rural areas are higher than urban areas. There are very significant differences of different household types among high-school students with hearing impairment in terms of personal isolation ($P=0.008<0.01$), none of the others shows significant difference.

Table 4: Difference Analysis of Learning Burnout in the Nature of Household Types ($M \pm SD$)

item	Household Type		<i>t</i>	<i>p</i>
	Rural areas (N=148)	Urban areas (N=67)		
Low sense of achievement	2.758 \pm 0.859	2.936 \pm 0.847	-1.399	0.163
Physical and mental exhaustion	2.883 \pm 0.908	2.864 \pm 0.937	0.146	0.884
Personal isolation	2.534 \pm 0.827	2.208 \pm 0.808	2.701	0.008
Learning burnout	2.725 \pm 0.508	2.669 \pm 0.596	0.706	0.481

3.2.3 Independent Sample T Test on Learning Burnout of whether or not Left-behind Senior high-school Students

Table 5 shows that: The average scores of left-behind children on low sense of achievement, physical and mental exhaustion, personal isolation and learning burnout were higher than those of non-left-behind children. There was a significant difference in whether or not left-behind students had personal isolation ($p=0.037<0.05$) and learning burnout ($p=0.030<0.05$).

Table 5: Difference Analysis of Learning Burnout of whether or not Left-behind Children ($M\pm SD$)

Project	whether Left-behind Children		<i>t</i>	<i>p</i>
	Yes (N=35)	No (N=180)		
Low sense of achievement	2.893±0.959	2.800±0.837	0.586	0.558
Physical and mental exhaustion	3.064±0.888	2.839±0.916	1.339	0.182
Personal isolation	2.714±0.945	2.390±0.814	2.097	0.037
Learning burnout	2.891±0.449	2.676±0.546	2.179	0.030

3.2.4 One-way analysis of variance of Learning Burnout in Different Provinces

Table 6: Difference Analysis of learning burnout in provinces ($M\pm SD$)

Item		Description		F	<i>p</i>	LSD post-test
		N	($M\pm SD$)			
Low sense of achievement	Sichuan (A)	60	2.904±0.921	2.344	0.098	
	Chongqing (B)	67	2.933±0.797			
	Guizhou (C)	88	2.665±0.841			
Physical and mental exhaustion	Sichuan (A)	60	2.721±0.789	4.881	0.008	A<C B<C
	Chongqing (B)	67	2.713±0.993			
	Guizhou (C)	88	3.105±0.889			
Personal isolation	Sichuan (A)	60	2.471±0.777	13.43	0.000	B<C<A
	Chongqing (B)	67	2.052±0.776			
	Guizhou (C)	88	2.722±0.828			
Learning burnout	Sichuan (A)	60	2.699±0.496	4.815	0.009	B<C
	Chongqing (B)	67	2.566±0.614			
	Guizhou (C)	88	2.831±0.473			

Table 6 shows that: there are very significant differences in the scores of physical and mental exhaustion, learning burnout among high-school students with hearing impairment in different provinces and cities. There are extremely significant differences in the scores of personal isolation. Post-event LSD test have shown that the physical and mental exhaustion of high-school students with hearing impairment in Sichuan Province is significantly lower than that of students in Guizhou Province ($p=0.03<0.05$). That of Chongqing province was also significantly lower than Guizhou province ($p=0.02<0.05$); the personal isolation of high-school students with hearing impairment in Chongqing province is extremely significantly lower than that of students in Guizhou province ($p=0.000<0.001$) and meanwhile significantly lower than Sichuan. The total average score of learning burnout in Chongqing is very significantly lower than that in Guizhou ($p=0.002<0.01$).

3.2.5 One-way analysis of variance of Different Monthly Household Income on Learning Burnout

Table 7 shows that: according to the average score, the scores of physical and mental exhaustion, personal isolation and learning burnout of high-school students with hearing impairment with different household monthly incomes were ranked from high to low as follows: under 1500 Yuan, 1501-3000 Yuan and more than 3000 Yuan, which means learning burnout of high-school students with hearing impairment decreases with the increase of family monthly income, one-way ANOVA have showed that there are significant differences in personal isolation among high-school students with hearing impairment in terms of different family monthly incomes. After the multiple comparisons of LSD post-test shows that: personal isolation of high-school students with hearing impairment whose family monthly income under 1500 Yuan is very significant higher than that more than 3001 Yuan ($P=0.008<0.01$).

Table 7: Analysis of the Difference of Learning Burnout in Family Monthly Income

Item	Description	Description		F	p	LSD post-test
		N	(M±SD)			
low sense of achievement	≤1500 Yuan (D)	70	2.693±0.868	1.094	0.337	
	1501-3000 Yuan (E)	95	2.861±0.803			
	>3000 Yuan (F)	50	2.900±0.933			
physical and mental exhaustion	≤1500 Yuan (D)	70	3.043±1.012	2.432	0.090	
	1501-3000 Yuan (E)	95	2.858±0.860			
	>3000 Yuan (F)	50	2.675±0.835			
personal isolation	≤1500 Yuan (D)	70	2.675±0.909	4.887	0.008	D>F
	1501-3000 Yuan (E)	95	2.395±0.814			
	>3000 Yuan (F)	50	2.210±0.729			
learning burnout	≤1500 Yuan (D)	70	2.804±0.547	2.244	0.109	
	1501-3000 Yuan (E)	95	2.704±0.524			
	>3000 Yuan (F)	50	2.595±0.532			

3.2.6 One-way analysis of variance of Grade on Learning Burnout

Table 8: Analysis of variance of learning burnout in grade

Item		descriptive statistics		F	p
		N	(M±SD)		
low sense of achievements	Senior 1	91	2.904±0.948	2.547	0.081
	Senior 2	75	2.863±0.852		
	Senior 3	49	2.577±0.623		
physical and mental exhaustion	Senior 1	91	2.857±0.994	1.848	0.160
	Senior 2	75	2.763±0.802		
	Senior 3	49	3.082±0.899		
personal isolation	Senior 1	91	2.456±0.910	0.875	0.418
	Senior 2	75	2.353±0.783		
	Senior 3	49	2.556±0.804		
learning burnout	Senior 1	91	2.739±0.581	0.523	0.593
	Senior 2	75	2.660±0.486		
	Senior 3	49	2.738±0.536		

The data from table 8 show that: there is no significant difference in learning burnout and its dimensions among senior high- school students with hearing impairment. In terms of low sense of achievement, the average score of three different grades from high to low: senior 1, senior 2, senior 3; in terms of physical and mental exhaustion, personal isolation and learning burnout, the average score of three grades from high to low is senior 3, senior 2, senior 1 respectively.

3.3 Cross-impact and Simple-effect Analysis of Different Demographic Variables on Learning Burnout

Combined with Table 9, Figure 1, Figure 2 and Figure 3, it shows that in terms of low sense of achievement, there is a significant cross-impact with gender and whether or not left-behind children ($p=0.030<0.05$), and also a significant cross-impact in terms of different provinces and cities and family monthly income ($p=0.039<0.05$); in terms of learning burnout, there is a significant cross-impact with grades and monthly income ($p=0.021<0.05$). The other variables have no significant cross-impact on learning burnout.

Table 9: Cross-impact of demographic variables on Learning Burnout

Item		F	P
Low sense of achievements	gender*whether or not left-behind children	4.793	0.030
	province*family monthly income	2.573	0.039
learning burnout	grade*monthly income	2.957	0.021

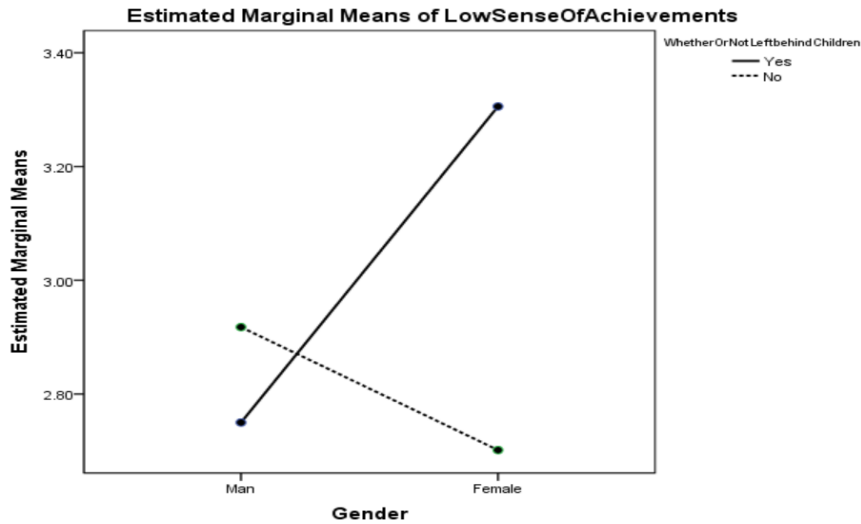


Figure 1: Cross-impact of genders and whether or not left-behind children

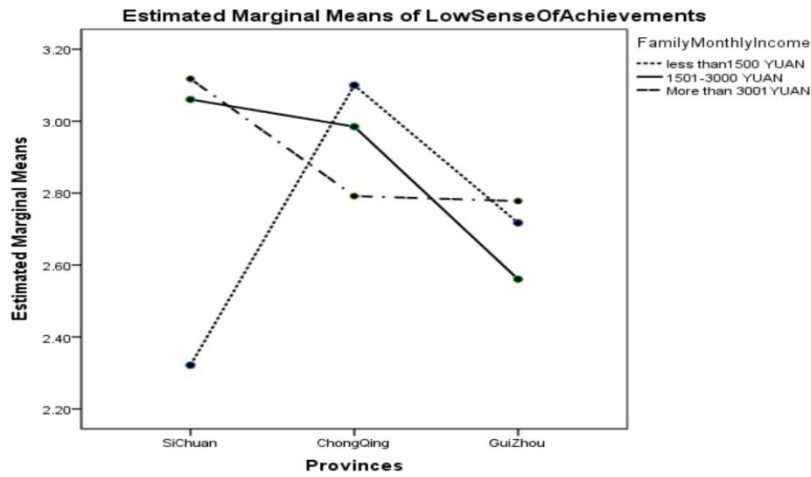


Figure 2: Cross-impact of income and related provinces and cities

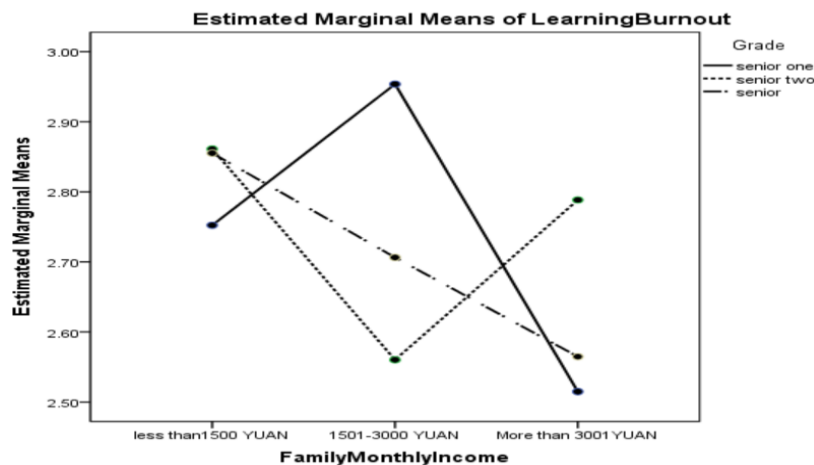


Figure 3: Cross-impact of monthly income and grades

Through simple effect analysis it can be found that the low sense of achievement of left-behind male high-school students is lower than that of non-left-behind male high-school students, but it did not reach the significant level ($p=0.382>0.05$); the low sense of achievement of left-behind female high-school students is significantly lower than that of non-left-behind female high-school students ($p=0.043<0.05$); the low sense of achievement of high-school students with hearing impairment whose family monthly income is under 1500 in Sichuan province is significant lower than whose family monthly income is more than 3001 Yuan ($p=0.028<0.05$). The different low achievement levels of

family monthly income in other areas did not reach significant level; the learning burnout level of senior 1 high-school students with hearing impairment whose family monthly income among 1501-3000 is significant higher than whose family monthly income is more than 3001 ($p=0.007<0.01$), others were not significant.

4. Discussion and Analysis

4.1 Overall Characteristics of Learning Burnout of High-school students with hearing impairment

The result shows that learning burnout of high-school students with hearing impairment is generally at lower-middle level, which belongs to the key preventive objects. Students in senior high are experiencing huge physical and mental adjustment. High-school students with hearing impairment generally have lower level of abstract thinking which makes learning more difficult because of hearing impairment. These all lead to loss of interesting in study, decrease in academic performance, gradual loss of self-confidence, more sense of frustration and failure, lower self-evaluation^[10]. The interpersonal relationship of high-school students with hearing impairment is not tense, probably due to the implementation of new curriculum reform, which is based on the student-oriented education idea. Teachers are changing their method of teaching, focusing more on student and interaction with colleges. The enthusiasm of students has been improved and the relationship between students and teachers has become closer^[11]. On the whole, the level of learning burnout is at lower -middle level.

4.2 Effect of Different Demographic Variables on Learning Burnout of High-school Students with Hearing Impairment

4.2.1 Effect of Gender on Learning Burnout of High-school Students with Hearing Impairment

The study shows that the score of learning burnout of male students is higher than female students in all aspects; and there are significant differences in personal isolation and learning burnout among high school students with hearing impairment in different genders. This is consistent with the research conclusions of Shen Shuxing and other researchers^[12]. When confronted with learning pressure, male students are prone to bear it themselves and are not good at getting support from others, they seldom feeling the expect, help and support from their teachers. In addition, male students are more demanding of themselves, hoping to achieve their ambitions and aspirations, so the satisfaction from study is much lower than female^[13]. Female students commonly mature earlier than male and they can adjust themselves to better face the problems in studies and life. Coupled with their strong self-discipline, they can arrange their study and relax time reasonably to make sure the quality of study. Therefore, male students' scores of learning burnout are extremely significantly higher than female's and reach a very remarkable level.

4.2.2 Effects of Household Types on Learning Burnout of High-school Students with Hearing Impairment

The study shows that in terms of physical and mental exhaustion, personal isolation and learning burnout, the average scores of rural areas are higher than urban areas. There are very significant differences in terms of personal isolation of different household types among high-school students with hearing impairment. According to the *The Second National Sample Survey of Disabled People Bulletin* issued on 28 May 2007, as at 1 April 2006, the total number of disabled people in China was 82.96 million, and 110,000 people with hearing disabilities. Except Shanghai, Beijing, Tianjin and Tibet, which are directly under the Central Government, there are no special schools in 74 districts of 326 prefecture-level cities, and 405 counties in the central and western regions, accounting for 82% of the total number of counties with over 300,000 people without special schools^[14]. It is clear that special schools are all built in over the county level, and there is still a big gap, a considerable number of cities only have high and middle schools in urban areas. Thus high-school students with hearing impairment have to leave their hometown to urban areas to accept high school education, they not only have to face strange living environment, but also deal the relationship with friends and teachers. Their loneliness and non-supportive social response are relatively high^[15]. They are afraid of and have bias to teachers; Students also have their own circles, so they are likely to be isolated and lack good relations with schoolmates. Children in cities and towns graduate from junior high directly to senior high and the study environment doesn't change. Relatives and friends can keep them company and they have good relationship with teachers and classmates, also have pals. So the personal isolation of high school students with hearing impairment in rural areas is significantly higher than that in urban areas.

4.2.3 Effect of Different Provinces on Learning Burnout of High-school Students with Hearing Impairment

There are very significant differences in terms of physical and mental exhaustion, personal isolation and learning burnout among high-school students with hearing impairment in different cities and provinces. The level of learning burnout from high to low respectively is Guizhou, Sichuan and Chongqing. The learning burnout of hearing-impaired high school students in Guizhou is significantly higher than that in Chongqing. Relevant data show that up to 2019, 23 schools have enrolled disabled high school students in China, and 9 universities have enrolled undergraduate students across the whole country. They are Tianjin University of Technology, Changchun University, Beijing Union University, Chongqing Normal University, Zhengzhou Normal University, Nanjing Normal University Of Special Education, Jinling Institute of Technology, Suihua University and Xi'an Academy of Fine Arts. There are 3 colleges enroll junior college students: Zhengzhou Institute of Technology, Zhejiang Vocational College of Special Education and Changsha Vocational & Technical college. Leshan normal university is one university in Leshan which enrolls undergraduate students on a local scale. Technical colleges which enroll on a local scale includes Guang Zhou University College Municipal Works & Construction, Tianjin City Vocational College, Liaoning Vocational College of Special Education, Shandong Vocational College of Special Education, Guangdong Peiying Vocational and Technical School, Fuzhou Polytechnic and Xinjiang Vocational Secondary School for the Disable. From the geographical distribution, it is clear that Guizhou don't have colleges and universities which enrolls disabled high school students independently. Students have to take part in exclusive recruit examination in other areas, so the pressure of entrance college is relatively higher. They tend to feel powerless, a lot of exhaustion and are more likely to feel the learning burnout. High-school students with hearing impairment in Sichuan and Chongqing can enroll in nearby schools which are close to home and the pressure of College Entrance Examination is relatively low and the level of feeling learning burnout is relatively small. The population of Chongqing is relatively smaller so the pressure of competition and study is the lowest, so the level of learning burnout is the lowest.

4.2.4 Influence of family monthly income on Learning Burnout of High-school Students with Hearing Impairment

The study found that there are significant differences on personal isolation of high-school students with hearing impairment who have different family monthly income. The level of learning burnout decreases while family monthly income increase. The level of low sense of achievement increase while family monthly income increase. It shows that the higher the family monthly income is, the lighter learning burnout of high-school students with hearing impairment is, and the lower the family monthly income is, the more the high-school students with hearing impairment feel learning burnout. There is a close relationship between family socio-economic status and student's development. The higher socio-economic status they have, the higher academic support they receive^[16]. The personal isolation is lower, they can get a higher degree of family happiness^[17], and their learning burnout is relative low. In contrast, high school students with lower family economic status, their life will suffer more conflicts in their families' lives, interpersonal relationship are more intense, the family well-being they receive is lower and it is not conducive to the individual development of high school students. Children like this will suffer more physical problems and their learning burnout level is relatively higher^[18]. This can explain why learning burnout of high-school students with hearing impairment with high family monthly income is relatively lower than that with low family monthly income.

4.2.5 Influence of other demographic variables on learning burnout of high-school students with hearing impairment

The study found that learning burnout was more serious in the first grade of the hearing-impaired high school, followed by grade three and finally grade two, but they did not reach significant differences. Because Senior-One students have just passed the High School Entrance Examination, and were divided into a new class, they need an adaptation process to integrate into a new environment^[19]. Related studies have found that the academic adaptation of hearing-impaired students entering the new environment is the worst^[20], and the most prominent problem in their class adaptation. Senior-Two students have adopted to new schoolmates and new teachers, the pressure of college entrance examination is not very great, so students in this stage can pay more attention to the study and the things they are interested in. Their academic pressure is relatively low and they have higher physical and mental liberation^[21], so the phenomenon of learning burnout is lower than that of Senior One and Senior Three. When entering Senior Three, to go to their ideal university, they are burdened with a lot more homework with extra weekend classes which can make them exhausted. During this stage, the individual emotion can turn abnormal easily, which will result into a variety of mental problems and

lead to the change of individual learning method and meanwhile they will become negative in studying. As a result, the learning burnout level of Senior-Three students is relatively higher. However, due to every grade has its own way of coping with pressure and relaxing themselves, so the learning burnout of high school students of all grades has not reached a significant difference.

The study have found that the average score of learning burnout and its each spectrum among left-behind children is higher than non- left-behind children and there are significant differences in total average score of personal isolation and learning burnout. This is consistent with conclusion of relevant researches [22,23].

4.3 The Cross-impact of Demographic Variables on Every Aspect of Learning Burnout

The research have found that there a very significant cross-impact on learning burnout of grade and monthly income. The learning burnout of Senior One students whose family monthly income is among 1501-3000 Yuan is significant highly than that of students with hearing impairment whose family income is above 3001 Yuan per month, while other aspect did not reach significant level. In areas where the economy thrives, the development of local economy is positively related to the development of education. Better economic conditions can promote education. However, the depressed economy will affect the development of education. Different family economic income can influence student's development significantly. Different family incomes will significantly affect the development of students. Households with high family incomes will have more academic investment in their children while those with lower family incomes will have to ignore the academic education conditions for students.^[24] Students with lower family incomes will face greater pressure and learning burnout levels will be relatively high. On the low sense of achievement, the left-behind female high school students were significantly higher than the non-left-behind female high school students, and the males did not reach significant differences. This can result from sensitive emotion that females have inherently. Left-behind female high-school students don't have parents to keep them company, so can feel lonely most of the time. They lack emotion dependence and can't concentrate on study, therefore easier to experience failure. So the sense of achievement is significantly lower than non-left-behind high-school students. The personal isolation level of left-behind high school students who are not the only-child is significantly higher than that of non-left-behind high school students who are not only children. The personal isolation of left-behind high-school students who are the only-child is significantly lower than that of non-left-behind high school students who are the only-child. Relevant study showed that family that have only one child devote more on education, because they have better material conditions while left-behind only children lack company of parents and seldom communicate with their parents and also don't have siblings of the same age to keep them company, so they will be lonelier and gradually they will become indifferent^[25]. Non-left-behind high school students who are not the only-child are more likely to have more support because they have more siblings at home, and they are more willing to make friends with others. Therefore the level of personal isolation is lower.

5. Conclusion

Learning burnout of high-school students with hearing impairment is at lower-middle level on the whole; gender, whether or not left-behind high-school students, different provinces and province are have significant influence on high-school students with hearing impairment. At the same time, grade and monthly income have significant cross-impact on learning burnout; the significant influencing factors on personal isolation of high-school students with hearing impairment are: gender, household type, whether or not left-behind high-school students, different provinces and cities and family monthly income; the significant influencing factor on physical and mental exhaustion of high-school students with hearing impairment are the provinces and cities; grade does not have a significant impact on learning burnout and its various aspects of high-school students with hearing impairment; in terms of low sense of achievement, a cross-impact exists between gender and whether left-behind children; and also between different provinces/cites with and family monthly income; in the aspect of personal isolation, there is a significant cross-impact between whether or not the only-child and whether or not left-behind children.

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