

The Relationship between Gratitude and Belief in A Just World of Hearing-impaired Middle School Students: The Mediating Role of Perceived Social Support

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Abstract

In order to explore present conditions of hearing-impaired middle school students' gratitude and its relationship with perceived social support and belief in a just world, this study adopted gratitude questionnaire, perceived social support scale, belief in a just world scale to conduct questionnaire for 132 hearing-impaired middle school students in Sichuan. The results show that girls' gratitude level is better than that of boys, urban hearing-impaired students' gratitude level is higher than that of rural hearing-impaired students', and mother's educational level has an impact on hearing-impaired middle school students' gratitude level, there is a positive correlation among hearing-impaired middle school students' gratitude level, belief in a just world and perceived social support, hearing-impaired middle school students' perceived social support play a part mediating role in belief in a just world and gratitude.

Keywords

Hearing-impaired middle school students, gratitude, belief in a just world, perceived social support.

1. Problem Posing

The gratitude is that individual can experience help given by others and the favors they get, and have positive emotional response with gratefulness [1]. As a moral feeling, gratitude level has a significant impact on the individual life satisfaction, and then affects the development of personal mental health conditions.

Some studies have concluded that the experience caused by gratitude make the individual can be more feel support of the external world, understand others' behaviors as supporting behaviors, and attribute the good results to the support of others [2], and then stimulates the individual gratitude feeling, so gratitude has a close relationship with social support. The perceived social support as an individual subjective experience of support of the external world, the stronger the support people feel, the easier they treat and explain others' behaviors from a positive angle, thus producing positive emotional experience, so it is different from actual social support and is considered to be more meaningful [3]. Studies have shown that perceived social support has a significant positive correlation with gratitude, the more perceived social support is obtained, the stronger the gratitude experience [4].

People believe that the world they live in is fair and they can be treated fairly, which is belief in a just world. This deserving belief establishes inherent sense of order for people in a disordered world, which can give people a better sense of psychological safety and a sense of control over the world, it has a positive role for individuals adapt to the social environment [5], maintain mental health [6], and keep a sense of life happiness [7]. Some studies have found that there is

a significant positive correlation between belief in a just world and gratitude, it was pointed out that belief in a just world has a promotion role for gratitude in a survey of freshmen [8], and consistent conclusions have been reached in the study for teenager [9], the belief of a just world has a positive predictive role for gratitude [10]. It can be seen that the belief in a just world and the understanding of social support have a significant impact on gratitude, but the relationship among between the three needs to be further explored.

According to previous studies, the groups which people focus on are mainly concentrated on ordinary students, and less attention is paid to special groups. The hearing-impaired middle school students have more special psychological characteristics than ordinary students due to obstacles in hearing and speech, and the hearing-impaired middle school students are in the period when develop self-awareness and need strong social interaction, their world outlook, values and outlook on life also have begun new developments. Moral education in this period is of great significance to the future development of hearing-impaired students, therefore, paying attention to hearing-impaired students' gratitude level can help them better adapt to society and promote individual physical and mental health and future positive development. Therefore, this study intends to explore the current situation of hearing-impaired middle school students' gratitude and its relationship with belief in a just world and perceived social support, and explores new ways to promote the mental health of hearing-impaired students.

2. Research Methods

2.1. Research Objects

Convenience sampling was adopted and hearing-impaired middle school students in special education schools in Chengdu, Leshan, and Guang'an in Sichuan Province as research objects. 140 questionnaires were distributed, and invalid questionnaires were retrieved and eliminated, the final number was 132, including 72 boys and 60 girls; 24 students are in the first year in junior middle school, 27 students are in the second year in junior middle school, 29 students are in the third year in junior middle school, and 52 students are in the first year in senior middle school.

2.2. Research Tools

2.2.1. Gratitude Questionnaire

The questionnaire of junior middle school students drawn up by Zhao Guoxiang and others was adopted [11], which has totally 18 items and three dimensions, they are figure, thing and moral orientation. The figure orientation includes the gratitude of parents, teachers, and classmates; the thing orientation includes recognition of happy life events and so on; the moral orientation includes knowing how to reciprocate gratitude, etc. The questionnaire adopted five-level score, from 1 (strongly disagree) to 5 (completely agree), the higher the total score, the higher the gratitude level. α coefficient of this scale is 0.80 in this research.

2.2.2. Perceived Social Support Scale

The perceived social support scale drawn up by Jiang Qianjin was adopted [12], which reflects the overall situation of social support felt by individual. The scale includes family support, friend support and other support (teachers, classmates, relatives) three dimensions, there are a total of 12 items. The scale adopted 7-level score, from 1 (strongly disagree) to 7 (strongly agree), the higher the score, the higher the degree of social support felt by the individual. α coefficient is 0.82 in this research.

2.2.3. Belief in A Just World Scale

The belief in a just world scale of junior middle school students drawn up by Mao Jinfeng was adopted [10], which has a total of 27 items. The scale adopted 5-level score, from 1 (completely

disagree) to 5 (completely agree), the higher the score, the higher the individual belief in a just world. α coefficient is 0.84 in this research.

2.3. Survey and Statistics

The survey adopted the way of class group survey, and is tested by the trained people, read the unified instruction to the subjects through sign language; the questionnaires were collected on the spot after the subjects completed the questionnaires. The collected questionnaires adopted SPSS22.0 for data analysis.

3. Research Results

3.1. Present Situation of Hearing-Impaired Middle School Students

3.1.1. Gender and Residence Test of Hearing-Impaired Middle School Students

The independent sample t-test was used to test the gender difference of hearing-impaired middle school students' gratitude level; the results showed that girls' gratitude level was significantly higher than that of boys. As shown in Table.1.

3.1.2. Difference Test of Educational Level of Hearing-Impaired Middle School Students' Parents

The F-test was used to test the difference of parents' educational level, it was found that there was a significant difference in the mother's educational level ($F=5.87$, $P<0.01$), as shown in Table.1. Test afterwards (LSD) showed that the gratitude score of hearing-impaired students, whose mothers' educational level is primary school, is significantly lower than that of hearing-impaired students whose mothers' educational level is high school, university and postgraduate. However, the father's educational level had no significant effect on the gratitude level of hearing-impaired middle school students ($F=0.425$, $p>0.05$).

Table 1. Difference test of gender, residence and mother's educational level of hearing-impaired middle school students

	category	M \pm SD	difference test
gender	male	58.43 \pm 6.86	t=-0.40**
	female	63.26 \pm 7.04	
residence	city	63.15 \pm 8.63	t=4.01 **
	countryside	59.55 \pm 9.56	
mother's educational level	primary school	57.87 \pm 5.91	F=5.87**
	junior middle school	60.65 \pm 6.03	
	senior middle school	63.53 \pm 7.92	
	university	66.18 \pm 6.68	
	postgraduate	63.31 \pm 10.13	

Note: * $p<0.05$, ** $p<0.01$, *** $p<0.001$, similarly hereinafter.

3.2. Correlation Analysis of Hearing-Impaired Middle School Students' Gratitude, Perceived Social Support and Belief in A Just World

The correlation analysis of the three is shown in Table.2, There is a significant positive correlation among gratitude, perceived social support and belief in a just world, it shows that

the higher the hearing-impaired students' gratitude tendency, the more social support they receive, the higher the level of belief in a just world.

Table 2. Correlation analysis of gratitude, perceived social support and belief in a just world

	1	2	3
1 gratitude	1		
2 perceived social support	0.472**	1	
3 belief in a just world	0.474**	0.282**	1

3.3. Analysis of the Mediating Role of Hearing-Impaired Middle School Students' Perceived Social Support in Gratitude and Belief in A Just World

The mediating role of perceived social support in gratitude and belief in a just world was explored in accordance with the procedure of mediating role test. First, belief in a just world as a predictive variable, and the gratitude is used as dependent variable for regression analysis; the second step is to add perceived social support for stepwise regression analysis.

It can be seen from Table 3 that the path coefficient of perceived social support for gratitude is significant in the M1 model (β value is 0.35, $p < 0.001$), while in the M2 model that add perceived social support, the significance of belief in a just world for gratitude is reduced (β value is 0.27 and 0.30, $p < 0.01$). It shows that perceived social support plays part mediating role in belief in a just world and gratitude, the explanatory power has been increased from 21.9% to 35.9%, the relationship among the three is shown in Fig.1.

Table 3. Analysis of the mediating effect of perceived social support in gratitude and belief in a just world

	M1		M2		R2	F
	β	t	β	t		
gratitude the first level belief in a just world	0.35	6.07***	0.27	4.92**	0.22	36.90**
gratitude the second level perceived social support			0.30	5.34**	0.36	36.81**

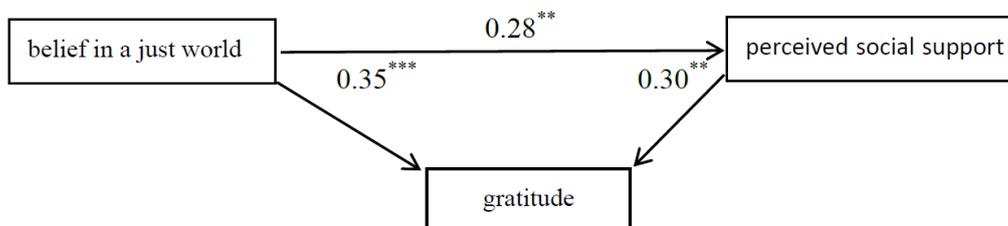


Fig 1. The path relationship among belief in a just world, perceived social support and gratitude

4. Discussion

4.1. Difference Analysis of Gender and Residence of Hearing-Impaired Middle School Students' Gratitude

The research on hearing-impaired middle school students found that girls' gratitude level is higher than that of boys, which is consistent with the research results of ordinary middle school students [13]. The gratitude is feeling generated in interpersonal interaction, and girls usually seek social support more actively than boys, and pay more attention to the support given by the external world, it is easier for them to perceive the support and help of others, it can be seen from this research that hearing-impaired middle school students also show consistent characteristics, so hearing-impaired girl students who have received and felt more social support have stronger gratitude experience than that of boys. In addition, the stimulus of gratitude need to empathize with others, it can have empathy with the benefactor, girls have richer and more delicate feeling in interpersonal interactions due to the gender role given by the socialization, and are more easily moved, their empathy level is also higher [14], so hearing-impaired girl students will have more empathy with others, and produce gratitude feeling.

It was found that influence of residence on hearing-impaired middle school students' gratitude condition; the hearing-impaired students' gratitude tendency in city is significantly higher than countryside. This may be related to cities with more social resources, hearing-impaired students in urban areas have diverse and rich educational resources, so that they can get more gratitude cognition from various channels, this kind of cognitive stimulation will guide more gratitude experience. In addition, due to the geographical convenience, they are also more likely to obtain professional support and social assistance than students in rural areas, such as rehabilitation exercise, living materials and so on, which makes them often in beneficiary situations and are more likely to have gratitude experience.

4.2. Difference Analysis of Parents' Educational Level in Hearing-Impaired Middle School Students' Gratitude Level

In this research, it was found that the higher the mother's educational level, the more hearing-impaired middle school students' gratitude level, but the father's educational level has no significant effect for hearing-impaired students' gratitude level. As far as hearing-impaired students are concerned, hearing loss will cause them to have communication barriers in their interactions with people, studies conclude that hearing-impaired students generally have the need to communicate with people, especially with normal people, but moreover, they have concerns and inferiority in interact with people due to hearing loss, and it reduces the "external causes" of hearing-impaired students' gratitude. China is a country where mother education has deep influence, mothers usually interact more with children, and they can more pay attention to children's emotions and understand children's emotional problems, therefore, it is more likely to affect the feeling of hearing-impaired students [15]. The mother's own quality will affect her educational concept, the higher the mother's educational level, the less the social negative behavior of child [16], therefore, if hearing-impaired mothers view the limitations brought by child's hearing loss with a more positive attitude, this kind of family atmosphere can guide them to pay more attention to social positive support and obtain positive emotional experience, therefore, it is also more likely to produce gratitude.

4.3. Analysis of the Relationship Among Gratitude, Perceived Social Support and Belief in A Just World

Correlation analysis found that there was a significant positive correlation among gratitude, belief in a just world and perceived social support and, which is consistent with existing research results. The belief in a just world provides individual with an explanatory framework

for rebuilding fairness to overcome difficulties and reduce negative emotions [17]. Hearing-impaired students are prone to encounter unfair treatment in their lives; such unfair treatment will reconstruct their cognitive framework, stimulate their stronger demand for world fairness, and then strengthen belief in a just world [18]. Individuals with high belief in a just world have a better sense of psychological safety and can trigger a good internal cognitive mechanism in interpersonal interactions, and produce grateful experience. Therefore, hearing-impaired middle school students with high belief in a just world also have a higher gratitude level. Similarly, hearing-impaired students who have a high level of perceived social support will tend to explain their behaviors as supporting behaviors, the more they perceive the support of others, the easier they attribute personal achievements to the help of others and are grateful, therefore, the higher the level of perceived social support, the stronger the gratitude experience. After the significant predictive role of belief in a just world for gratitude was verified, this study introduced the mediating variable of perceived social support, and further discussed the relationship among the three. Through analysis, it was found that hearing-impaired middle school students' perceived social support produced part mediating role on the impact of belief in a just world on gratitude. On the one hand, belief in a just world, as an internal cause, directly affects the generation of gratitude feelings of affection. According to the cognitive emotion theory of gratitude, belief in a just world, as a psychological mechanism for individuals to judge the cause of events justly, is one of the internal mechanisms that cause hearing-impaired middle school students to produce gratitude. On the other hand, belief in a just world can affect the gratitude feeling of hearing-impaired middle school students through perceived social support. Some studies have pointed out that belief in a just world of hearing-impaired middle school students is generally at the upper middle level [18], good belief in a just world can establish a more stable internal system for hearing-impaired students, it make them to make more appropriate attribution and explanation for the events they encounter, furthermore, they can actively understand and transform the interpersonal interaction into support for themselves in social activities, which can promote the establishment of more just world belief, and then trigger the external causes of gratitude, and finally trigger hearing-impaired middle school students' gratitude feeling. It can be seen that training hearing-impaired students' good belief in a just world, giving more social support, guiding and stimulating the positive perception of individual social support, it is conducive to hearing-impaired middle school students' gratitude level and promote active development of their mental health.

5. Conclusion

- (1) The gratitude level of hearing-impaired middle school girl students is significantly higher than that of boys, the gratitude level of urban hearing-impaired students is significantly higher than that of rural hearing-impaired students, and the educational level of mothers has a significant impact on hearing-impaired middle school students' gratitude level.
- (2) There is a significant positive correlation among hearing-impaired middle school students' gratitude level, belief in a just world and perceived social support.
- (3) The perceived social support of hearing-impaired middle school girl students plays part mediating role in belief in a just world and gratitude.

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