

A Study on the Relationships between Adolescent Inferiority and Grit

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Abstract. To explore the relationships between adolescent inferiority and grit. 178 adolescents in Jiangxi Province were investigated by the inferiority scale and the grit questionnaire. The results showed that the dimensions of inferiority and the quality of inferiority are different in gender, place of origin, and whether there is a child, and there is a significant negative correlation between grit and inferiority. People with high grit level have lower inferiority level, and those with low grit level may have higher inferiority level. The results have the great effect in improving grit and reducing inferiority.

1. Introduction

Grit is a kind of positive Literacy and quality. It is a long-term goal, and persists in its own enthusiasm. Even after failures and setbacks, it can still work hard without giving up, which is reflected in the unremitting efforts and consistency of interest^[1]. Grit is an important personality trait and a new concept of positive psychology, which can promote the development of healthy psychology^[2]. A number of studies have shown that grit is positively related to positive states such as self-confidence, well-being, and life satisfaction. People with high quality and grit will regard difficulties and frustrations as challenges, and they will be more prone to positive emotions, while those with low grit will regard difficulties as harms and more likely to produce negative emotions^[3-5].

Studies have shown that inferiority is more prominent among adolescents^[6]. Inferiority is a kind of self-denial. People with inferiority can't see their own advantages and only see their own shortcomings. It is based on social comparison^[7]. People with inferiority are easy to be anxious, and become fearful when faced with difficulties. The ability to withstand pressure is reduced, and the level of grit determines the ability to withstand pressure^[8-10]. However, there is little research on the relationship between grit and inferiority, especially related empirical research^[11]. This study attempts to explore the relationship between grit and inferiority in order to provide a new direction for the cultivation of adolescents' grit quality and the improvement of inferiority, thereby improving the mental health of adolescents.

2. Subjects and methods

2.1 Subjects

Using random methods, adolescents aged 12 to 19 from all over Jiangxi Province (Gangzhou, Shangrao, Fengcheng, Jiujiang) were selected, 210 questionnaires were sent out, 187 questionnaires were returned, and 178 valid questionnaires were collected. The recovery efficiency was 85%. See Table 1 for details.

Table 1 Basic characteristics of the specimen

Independent variable	Level	Number	percentage
gender	female	103	58%
	male	75	42%
origin	urban	57	32%
	rural	121	68%
Only child or not	yes	66	37%
	no	112	63%

2.2 Research Tools

2.2.1 Inferiority Sense Scale (FIS)

We Adopt Inferiority scales compiled by Fleming and Courtney (1984) [12]. The scale has 36 questions and measures five dimensions: self-esteem, appearance, physical fitness, communication confidence, academic ability, and we adopt a seven-level scoring system. The reliability and validity of this scale in China's measurement scale is relatively high: the internal consistency reliability of the subscale and the total scale is 0.91 and 0.73-0.87, and the test-retest reliability of the subscale and the total scale is 0.86 and 0.74- 0.94.

2.2.2 Grit Scale

Using the firm scale compiled by Duckworth and other scholars [13], after the localization design of China, all the previous problems were retained. After testing, the internal consistency coefficient is 0.85. The questionnaire has two dimensions: the persistent dimension of diligence and the dimension of interest consistency. The questionnaire adopting a five-level scoring method has a total of 12 questions. The higher the total score, the higher the level of grit.

2.3 Statistical Analysis

The spss22 statistical software was used to conduct correlation analysis, descriptive statistics and other processing on the obtained data.

3. Results

3.1 Current situation and analysis of adolescents' inferiority

Table 2 Overall situation of adolescent inferiority

Dimension	n	x	s	Theoretical value of x
A-B	7	2.478	0.658	4
C-C	12	4.315	1.810	4
Appearance	5	3.271	1.297	4
Self-esteem	7	4.438	0.573	4
P-F	5	3.732	1.310	4
Total	36	4.131	1.972	4

Note: A-B =academic ability; C-C = communication confidence; P-F=Physical fitness, the same below

It can be seen from the table that the average value of the total score is slightly higher than the theoretical value, indicating that the inferiority complex of young people is still prominent; the average value of social confidence and self-esteem is higher than the theoretical value, which indicates that they are the main cause of inferiority among adolescents; the average value of academic ability is significantly lower than the average value of the total score, indicating that young people are not so inferior in their academic ability.

Table 3 Difference ratio of adolescent inferiority in different situations (M±SD)

		C-C	A-B	Self-esteem	Appearance	P-F	Total
gender	F	2.78±.70	2.89±.56	2.69±.72	2.74±.61	2.83±1.00	2.83±.57
	M	2.71±.55	2.91±.63	2.60±.67	2.73±.70	2.61±.83	2.74±.46
	t	2.271	-1.032	1.534	1.105	1.937*	2.038*
origin	U	2.76±.68	2.71±.71	2.68±.62	2.46±.56	2.69±.90	2.94±.61
	R	2.83±.70	2.70±.65	2.91±.63	2.65±.61	2.45±.87	2.97±.72
	t	-1.201	1.022	-2.133	-1.973	1.724*	-2.131*
only child	Y	2.71±.67	2.56±.65	2.67±.73	2.63±.71	2.67±.78	2.70±.81
	N	2.65±.70	2.70±.71	2.75±.80	2.74±.78	2.72±.76	2.73±.85
	t	1.312	-2.081	-1.987	-2.007	-1.923	-1.856

Note: *p<0.05; F=female; M=male; U=urban; R=rural;

In order to compare the gender, the place of origin, and whether the only child has a difference in inferiority, the data was processed by t test and variance analysis. It can be seen from the table that in terms of gender, the t value of the total score has a significant difference. Girls are inferior to boys, and only have less inferiority than boys in academic ability; while girls have more inferiority in their social confidence. In the place of birth, the t value of the total score also has significant differences. Rural adolescents are more inferior than urban adolescents. In addition to the academic ability and physical ability, the rural areas have lower scores than the urban areas, and the physical fitness has significant differences. In the case of the only child or not, the scores of non-only child are higher on the inferiority than the only child. Except for the social confidence, the scores of non-only child are lower than the only child, but there is no significant difference.

3.2 Current status and analysis of adolescent grit

Table 4 Current status of adolescents' grit

Dimension	x	s	Theoretical value of x
LRI	2.862	1.042	3
Grit	3.131	0.785	3
Total score	2.997	0.951	3

Note: LRI= Long-term retention of interest;

It can be seen from the table that the total mean value of adolescents is slightly lower than the theoretical value, indicating that the juvenile's grit quality is not so prominent; in both dimensions, the average value of grit is slightly higher than the mean value, indicating that the juvenile grit dimension is more prominent.

Table 5 Comparison in different situations of adolescent grit

		LRI	Perseverance	Total score
Gender	F	3.10±0.71	3.08±0.72	37.43±6.56
	M	3.01±0.68	3.18±0.76	38.65±6.30
	t	0.63	-3.38*	-3.34
Origin	urban	3.08±0.68	3.11±0.70	36.08±6.23
	rural	3.28±0.80	3.18±0.75	37.98±8.01
	t	-3.08	-2.51	-3.89*
Only child	Y	3.31±0.64	3.45±0.75	36.71±5.
	N	3.45±0.70	3.51±0.78	39.01±7.17
	t	-2.13	-3.14	-3.99

Variance analysis and t-test were also used to find differences in the adolescent grit in different contexts. It can be seen from the table that in terms of gender, boys are higher than the girls in the total score of grit. In both dimensions, boys' scores are higher than girls in persistent efforts, and there are significant differences, but in the scores of long-term retention of interest are kept below the score of girls. In the place of birth, young people in rural areas are higher than urban in the total

scores of grit, and there are significant differences. In both dimensions, the scores of rural youths are higher than those in urban. On the factor of whether it is an only child or not, the only child's grit quality scores are lower than that of the non-only child, but there is no significant difference, and in the two dimensions of grit, the only child's scores are lower than that of the non-only child.

3.3 Analysis of the relationship between adolescents' inferiority complex and grit

Table 6 Relationship between adolescent inferiority and grit

Dimension	Long-term retention of interest	Grit	Total score
A-B	-0.451*	-0.783*	-0.675*
C-C	-0.383	-0.654*	-0.561*
Appearance	-0.438*	-0.411*	-0.571*
Self-esteem	-0.521*	-0.694*	-0.521*
P-F	0.329	-0.390	-0.374
Total score	-0.463*	-0.560*	-0.491*

Using Pearson correlation analysis to analyze the relationship between grit and inferiority, the results of the scale data show that the dimensions of grit are negatively correlated with the inferiority scale. In addition to the correlation between physical and grit, there are significant differences. And the physical fitness in the inferiority scale has a slightly lower positive correlation with the long-term retention of interest in the grit scale. Among them, the correlation coefficient between academic ability and grit is the highest, and the total score of academic ability, the confidence of communication and the unremitting efforts, the self-esteem and the unremitting efforts are also more than 0.6.

4. Discussion

4.1 The current situation and differences of adolescents' inferiority

Through the analysis of inferiority data, it is found that the inferiority complex of teenagers in some areas of Jiangxi is more obvious in communication confidence and self-esteem. Moreover, there are significant differences in whether there are only children not, birth places, and gender. In terms of gender, girls are more likely to have inferiority than boys. It may be due to the cultural background of the society. Male adolescents have more social responsibilities and commitments than female adolescents, so their own ability to resist stress is stronger; in the place of birth, rural adolescents are more likely to have inferiority than those in urban adolescents. The reason may be that the environment is different. The resources and life of the urban are better than those of the rural areas. It is easier for the urban youth to be satisfied in all dimensions; In whether it is the only child or not, non-only children are inferior to the only child, although the difference is not significant, but according to the family situation, this situation may still occur, the only child gets more attention from the parents, non-only child, because of their brothers and sisters, is less likely to be concerned, and are more likely to have inferiority

4.2 The current situation and differences of adolescents' grit

The current situation of the grit of young people in various regions of Jiangxi has no obvious difference in the two dimensions of grit. Overall, the quality of grit is not too prominent. In terms of gender, the performance of boys in grit is more prominent than that of girls, but it is not statistically significant. In the place of birth, rural teenagers are more prominent in the quality of grit than in urban areas. The reason may be that there are not so many living environments in rural areas. Rural youths have to work harder on their efforts and concentration, and this result may occur. In the only child or not, the grit of non-only child is more prominent than that of the only child, but it is not statistically significant.

4.3 The relationship between adolescents' inferiority and grit

In the related research on grit and inferiority, the data showed that they have a significant negative correlation. People with high inferiority have low grit qualities, and those with low inferiority may

have high grit.

5. Conclusion

(1) Inferiority complex is more pronounced in female adolescents, rural adolescents, and non-only children;

(2) Grit is more pronounced in male adolescents, However, it is significant but not statistically significant in rural and non-only children

(3) In the study of the relationship between the grit and inferiority, there is a significant negative correlation between grit and inferiority. People with high inferiority sense have a low grit level, and people with low inferiority sense have high grit level, so they can make more good solutions to reduce inferiority and cultivate grit.

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