

Coping style and mental health on high school students

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ABSTRACT

Objective: To explore the coping style of high school students and its relationship to mental health. **Methods:** Make a survey upon 320 students through coping style questionnaire and MSMH. **Results:** High school students often resort to problem solving and appeal to coping factors. No distinct gender difference is found in coping style. There are different degrees of correlation between coping style and mental health. Remarkable grade difference is shown in the factor of appealing in coping style and the three factors of compulsion, anxiety and mental imbalance in mental health. **Conclusion:** Relatively mature coping style has come into existence among high school students, but more guidance and assistance are in need in cultivating the coping style and improving the mental health.

Keywords: High School Students; Coping Style; Mental Health

1. INTRODUCTION

Coping style is the process of cognitive and behavioral efforts made by individuals under pressure to alleviate its negative effects. It is mentally healthy to form a proper cognition and evaluation towards events and adopt a positive coping style in front of pressure. Compas defines coping style from the developmental angle, and thinks that coping style is one side of stress reaction. When individual faces stressful events and environments, individual has conscious efforts to regulate emotion, cognition and behavior [1]. High school is a critical period of life and students are often confronted with pressure of further studies and employment as well as mental perplex in puberty. Thus, it is of great significance to explore the relationship between coping style and mental health of high school students. There are preliminary

studies made by Huang Xiting, etc. towards the coping style of middle school students, which show that the main coping style of middle school students in China are problem solving, appealing for help, avoidance, abreacting, fantasy and endurance and that girls prefer coping style of endurance and abreacting while boys prefer that of fantasy when comparing girls with boys [2]. No distinct change of coping style is noticed in the age of middle school students. Liang Junlin's study shows that negative coping style has negative correlation with mental health [3]. Jiang Qianjin's study shows that coping style has positive correlation with SCL-90, SDS, SAS and scores of N scale in EPQ [4]. The study finds that coping style is highly associated with mental health [5]. The paper delves into the characteristics of high school student coping style and its relationship towards mental health on the basis of previous studies, in order to provide reference to high school student mental health education and improve their mental health.

2. PARTICIPANTS AND METHOD

2.1. Participants

320 high school students were recruited to take part in the study. They were from Grades One, Two and Three of Dengfeng High School, Dengfeng city, Henan province. 284 effective questionnaires were retrieved from 155 male students and 129 female students, with 72 from Grade One, 72 from Grade Two, 67 from Grade Three, and 73 from Grade Three of previous year. The study was approved by the local review board for human participant research and each participant provided informed consent prior to participate in the experiment.

2.2. Methods

2.2.1. Coping Style Questionnaire

The questionnaire is a revised version by Xiao Jihua and Xu Xiufeng which is based on Folkman and Bond's coping and defense. There are 62 items, including 6 factors-problem solving, self-accusation, appealing for help, fantasy, avoidance and rationalization. The factor loaded

value of what constructs the items of coping style questionnaire stays above 0.35 and the re-measured related coefficient of the six coping factors above 0.62, which make the questionnaire a good credibility and validity [6].

2.2.2. MSMH

It consists of 10 subscales formulated by Wang Jisheng, namely compulsion, stubbornness, hostility, tense and sensitive interpersonal relationship, depression, anxiety, study pressure, maladjustment and emotional imbalance, amounting to a total of 60 items. It adopts a 5-level grading with each item containing a declarative sentence. The table is proven to have a good degree of distinction, credibility and validity [7].

3. RESULTS

3.1. Scoring Statistics of Different Coping Styles

As is indicated in **Table 1**, coping styles employed by high school students is in such an order as: problem solving, asking for help, fantasy, rationalization, retreat and self-blame (from more to less). It shows that high school students tend to adopt positive and mature coping styles such as problem solving, asking for help. Those negative and immature coping styles such as retreat and self-blame are less adopted.

3.2. Analysis on Gender Differences of Coping Style

As is indicated in **Table 2**, boys' means for coping styles' factors such as "problem solving", "fantasy" is higher than the girls', while the girls' is higher than boys' in the "asking for help" factor. All coping styles' factors means do not show significant gender differences.

3.3. The Relevance between Senior High School Students' Coping Styles and Their Mental Health Conditions

Table 3 indicates that senior high school students'

coping style—"problem solving", is significantly negative related with each factors of mental health scale; except hostility factor, total means in mental health scale, "asking for help" factor is negatively related with factors such as paranoia, interpersonal sensitivity and tension, maladjustment and psychological imbalance factors extremely significantly or significantly. While self-blame, fantasy factors are positively related with each factors of middle school students' mental health extremely significantly.

3.4. Scoring Comparison of Different Grades of Senior High School Students' Coping Styles and Each Factor of Mental Health Conditions

Table 4 indicates that: among coping styles, "asking for help" factor show very significant grade differences, but other factors do not; Among mental health conditions, three factors—obsession, anxiety, psychological imbalance show extremely significant grade differences.

In order to further study concrete grade differences, LSD is applied to several factors (asking for help, obsession, anxiety, and psychological imbalance) which has significant grade differences for mean multiple comparison analysis. **Table 5** indicates that: regarding factor of "asking for help", the senior one and the senior two show extremely significant or significant grade differences with the review of senior three respectively; regarding the factor of obsession, the senior one and senior two show significant grade differences with each other, and both show extremely significant ones.

Table 1. Scoring statistics of different coping styles.

Styles	Mean	Std. deviation	Sum
Problem-solving	0.6799	0.1946	193.08
Self-blame	0.3018	0.2117	85.70
Asking for help	0.4680	0.2398	132.90
Fantasy	0.4553	0.2095	129.30
Retreat	0.4081	0.1842	115.90
Rationalization	0.4130	0.1692	117.30

Table 2. Analysis on gender differences of coping style (X ± SD).

Coping styles	Girls (n = 129)	Boys (n = 155)	Total	t
Problem-solving	0.67 ± 0.19	0.70 ± 0.20	0.68 ± 0.19	-1.712
Self-blame	0.29 ± 0.23	0.31 ± 0.19	0.30 ± 0.21	-0.577
Asking for help	0.49 ± 0.23	0.45 ± 0.23	0.47 ± 0.24	1.662
Fantasy	0.44 ± 0.21	0.47 ± 0.21	0.46 ± 0.21	-1.156
Retreat	0.40 ± 0.17	0.41 ± 0.19	0.41 ± 0.18	-0.421
Rationalization	0.41 ± 0.17	0.42 ± 0.17	0.41 ± 0.17	0.268

Table 3. The relevance between senior high school students' coping styles and their mental health conditions (r).

	Problem-solving	Self-blame	Asking for help	Fantasy	Retreat	Rationalization
Obsession	-0.233**	0.427**	-0.117*	0.400**	0.151**	0.087
Paranoia	-0.261**	0.420**	-0.212**	0.315**	0.190**	0.227**
Hostility	-0.315**	0.380**	-0.044	0.357**	0.093	0.120*
Interpersonal sensitivity tension	-0.307**	0.495**	-0.184**	0.390**	0.227**	0.237**
Depression	-0.430**	0.609**	-0.120*	0.355**	0.334**	0.157**
Anxiety	-0.396**	0.532**	-0.152*	0.434**	0.293**	0.084
Study stress	-0.379**	0.455**	-0.124*	0.379**	0.355**	0.220**
Maladjustment	-0.309**	0.309**	-0.189**	0.275**	0.258**	0.184**
Emotion imbalance	-0.340**	0.435**	-0.147*	0.352*	0.229**	0.139**
Psychological imbalance	-0.200**	0.379**	-0.210**	0.316**	0.175**	0.093
Total average marks	-0.331**	0.515*	-0.114	0.440**	0.287**	0.23**

Note: *P < 0.05; **P < 0.01.

Table 4. Scoring comparison of different grades of senior high school students' coping styles and each factor of mental health conditions (M ± SD).

	Senior one (n = 72)	Senior two (n = 72)	Senior three (n = 67)	Review of senior three (n = 73)	F
Problem-solving	0.67 ± 0.17	0.66 ± 0.21	0.67 ± 0.23	0.72 ± 0.17	1.357
Self-blame	0.25 ± 0.17	0.32 ± 0.23	0.31 ± 0.24	0.33 ± 0.20	2.415
Asking for help	0.49 ± 0.26	0.52 ± 0.24	0.45 ± 0.	0.41 ± 0.21	2.899**
Fantasy	0.43 ± 0.19	0.48 ± 0.21	0.46 ± 0.22	0.46 ± 0.21	0.805
Retreat	0.38 ± 0.17	0.42 ± 0.19	0.44 ± 0.18	0.40 ± 0.20	1.556
Rationalization	0.45 ± 0.17	0.43 ± 0.18	0.39 ± 0.16	0.38 ± 0.16	2.504
Obsession	1.99 ± 0.48	2.20 ± 0.15	2.10 ± 0.57	2.34 ± 0.65	4.747**
Paranoia	2.00 ± 0.48	2.05 ± 0.62	2.04 ± 0.58	2.23 ± 0.65	2.221
Hostility	1.98 ± 0.63	2.01 ± 0.73	1.90 ± 0.73	1.98 ± 0.65	0.327
Interpersonal tension & sensitivity	2.14 ± 0.61	2.30 ± 0.72	2.30 ± 0.78	2.46 ± 0.73	2.470
Depression	1.20 ± 0.63	2.14 ± 0.71	2.14 ± 0.71	2.16 ± 0.65	0.895
Anxiety	2.11 ± 0.67	2.36 ± 0.82	2.47 ± 0.80	2.55 ± 0.83	4.167**
Study stress	2.35 ± 0.78	2.44 ± 0.78	2.34 ± 0.81	2.25 ± 0.69	0.720
Maladjustment	2.28 ± 0.57	2.22 ± 0.67	2.24 ± 0.61	2.25 ± 0.62	0.482
Emotion imbalance	2.40 ± 0.59	2.46 ± 0.74	2.41 ± 0.67	2.52 ± 0.62	0.482
Psychological imbalance	1.98 ± 0.49	2.14 ± 0.67	2.23 ± 0.64	2.31 ± 0.57	4.162**

Note: *P < 0.05, **P < 0.01.

with the review of senior three.; regarding the factor of anxiety, the senior one shows significant grade differences with the senior three and the review of senior three; regarding the factor of Psychological unbalance, there exists significant grade differences between the senior one and senior three, and extremely significant ones between the senior one and the review of senior three.

4. DISCUSSION

It is found in the research that senior high students tend to take positive methods (solution and consultation)

rather than negative ones (escape and self-accusation) to deal with daily issues. And it indicates that senior high students are able to analyze and solve problems in a reasonable way and turn for other's help with increase of age, horizon and cognition, which is in accordance with the research of Lan Yuping, whose findings show that the usual coping style taken by middle school students to deal with daily issues are solving the problem, consultation, fancy, escape, rationalization and self-accusation successively [8].

And it is found in the research that there is no obvious

Table 5. Multiple comparison of several factors with significant differences among students of different grades.

		Asking for help		Obsession		Anxiety		Psychological	
		F	P	F	P	F	P	F	P
Senior one	Senior two	-0.031	0.441	-0.211*	0.034	-0.248	0.059	-0.160	0.109
	Senior three	0.043	0.292	-0.116	0.250	-0.357**	0.008	-0.255*	0.013
	The review	0.078*	0.049	-0.359**	0.000	-0.432**	0.001	-0.334**	0.001
Senior two	Senior one	0.031	0.441	0.211*	0.034	0.248	0.059	0.160	0.109
	Senior three	0.073	0.071	0.095	0.346	-0.109	0.413	-0.095	0.349
	The review	0.109**	0.006	-0.148	0.133	-0.185	0.157	-0.174	0.080
Senior three	Senior one	-0.043	0.292	0.116	0.250	0.356**	0.008	0.255*	0.013
	Senior two	-0.073	0.071	-0.095	0.346	0.109	0.413	0.095	0.349
	The review	0.035	0.379	-0.243*	0.016	-0.076	0.569	-0.079	0.435
The review	Senior one	-0.078*	0.049	0.359**	0.000	0.432**	0.001	0.334**	0.001
	Senior two	-0.109**	0.006	0.148	0.133	0.185	0.157	0.174	0.080
	Senior three	-0.035	0.379	0.243*	0.016	0.076	0.569	0.079	0.435

Note: *P < 0.05, **P < 0.01.

difference between different genders in coping style and mental health, which is in accordance with findings of research carried out by Wang Guipin [9]. However, it can be seen from **Table 2** that boys tend to solve problems individually instead of asking for someone's help compared with girls. And it is also found that coping style is closely related with mental health. Students with positive coping style often possess higher mental health, which, as a result, indicates that the education of mental health should concentrate on students' coping style so as to improve their mental health.

Besides, senior high students from different grades differ with each other in consultation, anxiety, obsession and mental unbalance. And further multiple analyses indicates that with the increase of age and the failure of college entrance examination, students from higher grade who possess more self-respect and stronger mental adapting ability, tend to solve problems individually or escape the situation instead of asking for someone's help. However, when they face the college entrance examination again, this so-called life-turning point pushes them into more anxiety and burden compared other middle school students. Because of the existence of the uncontrollable factor namely the college entrance examination, their efforts do not pay back as they expect, which, as a result, strengthen their mental unbalance and unsteadiness. Thus it is of great necessity to offer special education of mental health to this group of students.

5. CONCLUSIONS

The results of the study indicate that: 1) Senior high students tend to take positive attitudes rather than negative ones to deal with daily issues; 2) There is no obvious difference between male and female students on the

coping methods; 3) The coping style of senior high students is opposite to each factor of mental measure of middle school students. And the factors of self-blame and fantasy, however, are obviously related to each factor of their mental health; 4) There is obvious difference on the factor of consultation in coping style among students from different grades, which can be easily seen in other factors. The difference is also obvious on the obsession, anxiety and mental unbalance among students from different grades in terms of mental health. Moreover, those who once failed in the college entrance examination differ a lot in the consultation, obsession, anxiety and mental unbalance with other middle school students.

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