

Pressure of National College Entrance Exam on Senior High School Students and Status of Their Personality

——Evidence from Jiangsu Province

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1. Introduction

(1) The national college entrance exam is very competitive.

In Jiangsu province, recently the yearly admitted rate is around 20% (excluded the private college students). The science subject admitted rate is higher than arts subject and the number of admitted male students is larger than the number of admitted female students.

(2) Society, schools, teachers and parents have high expectation on the students.

The performance of teachers will be evaluated by the admission rate of their students. (3) Students are trying their best to be admitted in the university to realize their self worth.

How much pressure do the students burden? What's their personality status? What's the difference between the students in province key schools, in ordinary schools, in city and in county school? Any difference between the arts classes and science classes? Gender differences?

In this study, I used pressure scale and YG-WR Personality Scale to measure and analyze the pressure and personality status of the senior high school students.

2.Measurement of Pressure

2.1 Objective

Understand the pressures on the senior high school students due to the competitive national college entrance exam.

2.2 Method

Instrument: Using self-designed pressure scale (Reliability=0.8521, re-test reliability=0.8102, P=0.000)

Participant: Randomly selected senior high school students (Arts & Sciences classes) in province key schools, ordinary schools in Nan Jing City, province key schools in Chang Zhou City (located in county), total 337 valid scale forms.

Statistics Tools: SPSS10.0

Table 1 Pressure Score of Different Classes

	Schools	Classes	Partic	cipants (n)	Avg. Score	Class Avg. Score	
	Province key	Anta Class	50	Male 22	37.95	29.52	
	school	Arts Class	50	Female 28	38.96	38.52	
	Province key	Science Class	50	Male 27	37.81	38.14	
City	school	Science Class	30	Female 23	38.52	30.14	
	Ordinary school	Arts Class	47	Male 25	37.92	37.40	
	Orumary school	Arts Class	4/	Female 22	36.82	37.40	
	Ordinary school	Science Class	41	Male 34	38.59	39.12	
				Female 7	41.71	39.12	
	Province key school	Arts Class	51	Male24	37.88	39.22	
				Female27	40.41	39.44	
	Province key	Science Class	53	Male25	42.00	41.15	
County	school	Science Class	33	Female28	40.39	41.13	
	Ordinary school	Arts Class	30	Male16	39.44	39.80	
	Ordinary school	Aits Class	30	Female14	40.21	37.00	
	Ordinary school	Science Class	55	Male40	41.48	41.24	
	Orumary school	Science Class	33	Female15	40.60	71.27	
Total			377			39.36	

Table 2 Comparison of Pressures Scores, Mean and SD

Туре	Participants	Total score	M	SD	t
City school County school	188 189	7195 7643	30. 27 40. 44	4. 93 5. 67	3.96 **
Province key school Ordinary school	204 173	8013 6824	39. 28 39. 45	5. 54 5. 28	0.29
Arts classes Science classes	178 199	6878 7960	38. 64 40. 00	5. 34 5. 42	2.45 *
Male Female	213 164	8365 6473	39. 27 39. 47	5. 44 5. 41	0.35

Note: *P (0.05, **P (0.01)

2.3 Result

- (1) Total average pressure score of senior three students is 39.36
- (2) The average score of county students is higher than the average score of city students, P=0.000 < 0.001, the difference is obvious.
- (3) The average score of science class students is higher than the average score of arts class students , P=0.015 < 0.05, the difference is obvious.
- (4) The pressure of Ordinary school students is higher than the pressure of province key school students. And the average score of female students is higher than the average score of male students, but both not statistically significant

2.4 Conclusion

- (1) Overall senior three students feel pressures for the national college entrance exam.
- (2) County students have higher pressure than city students, Science Class students have higher pressure than Arts Class students.

Under such high level of pressure, what's the personality status of the students?

3. Measurement of Students Personality Status

3.1 Objective

Measure and analyze the personality status of senior three student under the pressure of national college entrance exam.

3.2 Method

Instrument: Using YG-WR students personality scale including 12 personality traits, which belong to three classes "General emotionalism", "social adaptability" and "Extroversion/Introversion". Refer to table 3

Table 3 Correlation Analysis of Pressure Score and Personality Status

Gen	eral otional Z1	lism		Sociada Z2	ial ptab	ility	Extra Intro		sion/ sion			General e			
Depression	Cyclic tendency	Inferiority	Nervousness	Objectivity	Cooperativeness	Aggressiveness Agreeableness	General activity	Rhythmic	I hinking extroversion	Ascendance	Social extroversion	emotionalism Z1	laptability 2	Extroversion/Introversion 3	
0.33	0.31	0.34	0.36	0.31	0.27	0.03	-0.33 **	0.02	0.01	-0.23 **	-0.13 *	0.43	0. 29 **	-0.23 **	

Note: *P (0.05, **P (0.001.)

Participants: Randomly selected one senior three art class and one senior three science class each from province key schools and Ordinary schools in Nan Jing City and in the county of Changzhou city, total 8 classes and 401 participants. Selected two classes from Nan Jing Xiaozhuang normal school and Nan Jing Electric technical school, total 212 participants.

Statistics Tool: SPSS10.00

Time: Participants completed the questionnaire independently in 25 minutes.

3.3 Result and Discussion

Valid form is 377 of senior three students, and 201 valid forms from normal school and technical school. I standardized the original test scores. Please refer to the table 4, table 5 and table 6 for the statistics analysis of the personality status and correlation with the pressure level.

(1) Correlation analysis of pressure level and personality status

The pressure level is not significantly correlated with Rhythmic, Agreeableness/Aggressiveness, Thinking extroversion, but shows significant correlation with other type and shows positive correlation with General emotionalism with correlation coefficient reached 0.43.

(2) Personality status of senior three students

Each type has two personality descriptions to represent the "low score" and "high score". The higher the score the more obvious the high score type traits manifested and the lower the score the more obvious the low score type traits.

Table 4 Comparison of personality standard score of Technical/Normal school students and senior three student

Personality Type		Technical/I school stud (n1=201)	ents	senior three (n2 =377)	t	
		M	SD	M	SD	
Depression Cyclic tendency Inferiority Nervousness	Z1	2. 92 2. 73 2. 72 2. 95	0. 92 1. 01 0. 90 0. 84	3. 31 3. 11 2. 90 3. 41	1. 02 1. 10 1. 04 0. 99	2. 40 * 2. 14 * 1. 11 3. 13 *
Objectivity Cooperativeness Aggressiveness General activity Rhythmic Thinking extro Ascendance Social extro	Z 3	2. 95 2. 97 3. 00 3. 02 2. 78 3. 14 3. 30 3. 27	0. 78 1. 01 0. 78 1. 08 1. 09 0. 98 1. 07 1. 12	3. 04 3. 11 2. 77 2. 93 2. 94 2. 97 3. 23 3. 31	0. 94 0. 93 0. 97 1. 08 1. 05 0. 96 0. 93 1. 05	0. 70 0. 77 0. 77 -0. 40 0. 82 -0. 96 -0. 39 0. 18
General emotionalism Zocial adaptability Extroversion/Introvesion Z3 Note: *P<0.05	Z2 er-	11. 32 8. 92 15. 48	2. 75 1. 89 3. 54	12. 73 8. 90 15. 37	3. 26 2. 02 3. 18	2. 91 * -0. 01 -0. 19

Table 5 Analysis of mean, SD of standard score of senior three student personality status(1)

Personality	Total n=377		City student n1=188		County student n2=189		F	Province key school student n1=204		Ordinary school student n2=173		F
	M	SD	M	SD	M	SD		M	SD	M	SD	
Depression	3. 31	1.02	3. 13	0. 99	3. 48	1. 01	12.01 **	3. 28	0. 98	3. 33	1. 06	0. 16
Cyclic tendency	3. 11	1.10	2. 93	1. 11	3. 29	1. 07	12.28 **	3. 12	1. 16	3. 10	1. 04	1. 09
Inferiority	2. 90	1.04	2. 71	1. 03	3. 10	1. 01	10.96 **	2. 85	1. 06	2. 97	1. 00	0. 06
Nervousness	3. 41	0.99	3. 26	0. 95	3. 56	1. 01	9.43 **	3. 40	1. 00	3. 43	0. 98	0. 63
Objectivity	3. 04	0.94	2. 99	0. 92	3. 09	0. 96	1.11	3. 05	0. 93	3. 03	0. 95	0. 17
Cooperative- ness	3. 11	0.93	3. 07	0. 93	3. 14	0. 93	0.73	2. 98	0. 96	3. 25	0. 87	8. 05 **
Agreeableness/ aggressiveness	2. 77	0.97	2. 81	0. 92	2. 72	1. 03	0.58	2. 70	0. 99	2. 85	0. 95	1. 96

Personality		Total n=377		City student n1=188		County student n2=189		Province key school student n1=204		Ordinary school student n2=173		F
	M	SD	M	SD	M	SD		M	SD	M	SD	
General activity	2. 93	1.08	3. 19	1. 00	2. 67	1. 10	22.06 **	2. 88	1. 11	2. 98	1. 05	0. 64
Rhythmic	2. 94	1.05	2. 98	1. 03	2. 89	1. 07	0. 89	2. 92	1. 07	2. 96	1. 04	0. 23
Thinking extroversion	2. 97	0.96	2. 84	0. 96	3. 11	0. 95	7. 32 **	3. 04	0. 96	2. 89	0. 96	1. 71
Ascendance	3. 23	0.93	3. 38	0. 95	3. 07	0. 87	9. 02	3. 25	0. 91	3. 20	0. 95	0. 09
Social extroversion	3. 31	1.05	3. 45	1. 07	3. 16	1. 02	7. 45 **	3. 30	1. 07	3. 31	1. 04	0. 04
General emotionalism Z1	12. 7	3.26	12. 0	3. 24	13. 4	3. 14	18. 7 7 **	12. 6 5	3. 32	12. 8	3. 20	0. 34
Social adaptability Z2	8. 90	2.02	8. 87	2. 00	8. 96	2. 04	0. 26	8. 73	2. 04	9. 13	1. 99	3. 11
Extroversion Introversion Z3	15.37	3.18	15.84	3. 21	14. 9 0	3. 09	8. 05	15.39	3. 16	15. 3	3. 21	0. 00

*P <0.05, ** P <0.001.

Table 6 Analysis of mean, SD of standard score of senior three student personality status (2)

Personality	Arts C		Science Class n =199		F	Male n	=213	Female n =164		F
	M	SD	M	SD		M	SD	M	SD	
Depression	3. 29	0. 99	3. 32	1. 04	0. 03	3. 33	1. 06	3. 27	0. 96	0. 28
Cyclic tendency	3. 21	1. 09	3. 02	1. 11	0. 83	3. 02	1. 07	3. 22	1. 14	0. 01
Inferiority	2. 83	1. 10	2. 97	0. 97	3. 06	2. 92	1. 02	2. 88	1. 06	2. 06
Nervousness	3. 43	0. 99	3. 40	1. 00	2. 37	3. 47	0. 98	3. 33	1. 00	1. 22
Objectivity	3. 07	0. 93	3. 02	0. 95	0. 52	3. 08	0. 86	2. 99	1. 03	1. 34
Cooperativeness	3. 11	0. 94	3. 10	0. 92	0. 73	3. 13	0. 96	3. 08	0. 89	0. 98
Agreeableness/ag gressiveness	2. 78	1. 05	2. 76	0. 90	0. 07	2. 83	0. 92	2. 71	1. 03	0. 45

Personality	Arts on =		Science Class n =199		F	Male n	=213	Fema	F	
	M	SD	M	SD		M	SD	M	SD	
General activity	2. 96	1. 12	2. 90	1. 04	0. 0	2. 95	1. 07	2. 89	1. 10	0. 12
Rhythmic	2. 88	1. 10	2. 99	1. 01	1. 4 4	2. 90	1. 00	2. 99	1. 12	1. 29
Thinking extroversion	2. 94	0. 92	3. 00	1. 00	0. 3	2. 92	0. 96	3. 05	0. 96	1. 21
Ascendance	3. 36	0. 93	3. 11	0. 91	5. 2 8 *	3. 19	0. 89	3. 27	0. 97	0. 19
Social extroversion	3. 31	1. 10	3. 30	1. 02	0. 0	3. 28	1. 03	3. 34	1. 09	0. 47
General emotionalism Z1	12. 7 6	3. 25	12. 70	3. 28	0. 3 5	12. 75	3. 18	12. 71	3. 38	0. 03
Social adaptability Z2	8. 96	2. 01	8. 88	2. 03	0. 3 8	9. 02	1. 89	8. 78	2. 18	0. 77
Extroversion Introversion Z3	15. 46	3. 41	15. 29	2. 96	0. 0	15. 23	3. 04	15. 54	3. 35	0. 90

^{*} Note P <0.05.

Senior three students show positive traits in Inferiority, Agreeableness/Aggressiveness, Objectivity, Objectivity, Cyclic tendency, Thinking extroversion, Ascendance, Rhythmic, Social extroversion; but show worse in General emotionalism class than technical school students.

The personality status of senior three student is:

Depressed, emotional cyclic tendency, confident, brave, strong learning ability, being nervous, anxieties, sensitive, realism, working independently, self-effacing, kind, lively, conversable, energetic, hard working, good at thinking, active in team working, having management ability, decision maker, and ascendant.

When facing national college entrance exam, they showed:

- 1 Poor in general emotionalism(Depression, Cyclic tendency, Nervousness)
- 2 Confident, positive attitude, hard working, thinking independently and with good social adaptability. Besides, they also showed cooperative ability and interested in social interaction. All these proved that they are courageous and have the right attitude to the future.

Comparison of the personality status of senior three students from county schools and city schools, province key schools and ordinary schools, and students from art classes and science class, and between male and female students:

(1) City students has better general emotionalism (Depression, Cyclic tendency, Inferiority Nervousness) than county students. City students have strong general activity and ascendance than county students, while county students perform better in thinking extroversion which means they are more frank with their inner feeling.

- 2 Province key school students have better cooperativeness than ordinary school students.
- ③Arts Class students have significantly strong ascendance than science Class students.
- 4 There are difference between male and female students in all 12 personality types but not so obviously.

3. 4 Conclusion

(1) The pressure has correlation with most of the personality types and has significant positive correlation with general emotionalism.

- (2) Under the pressure of national college entrance exam, senior three students are positive in Objectivity, Cooperativeness; Agreeableness/Aggressiveness, General activity, Rhythmic, Thinking extroversion, Ascendance, Social extroversion, but negative in Depression, Cyclic tendency, Inferiority
- (3) There are difference in the personality status of the senior three students compared to the students in county school and in city school, in province key school, and in ordinary school, the students in art classes and science class, and male students and female students.

4. Conclusion

- (1) All senior three students are under pressures. The difference between the pressure scores of county student and city students and art/science class students are all significant. County students have higher pressure than city students. Science class student have high pressure than arts class students.
- (2) The pressure has correlation with most of the personality types and has significant positive correlation with general emotionalism.

(3) Under the pressure of national college entrance exam, senior three students are positive in Objectivity, Cooperativeness; Agreeableness /Aggressiveness, General activity, Rhythmic, Thinking extroversion, Ascendance, Social extroversion, but negative in Depression, Cyclic tendency, Inferiority. There are difference in the personality status of the senior three students compared the students in county school and in city school, in province key school, and in ordinary school, the students in art classes and science class, and male students and female students.

