

# THE RELATIONSHIP BETWEEN PERSONALITY AND THE ATTITUDE TO PSYCHIATRY OF MEDICAL STUDENTS

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## INTRODUCTION

In Singapore of the eighties there is still a stigma against mental illness in the general population, and few people are open about having been treated by psychiatrists. Among medical postgraduate students, there was not much interest in psychiatry in the past, but the trend is reversing. In 1970 there were only 9 psychiatrists. To date, there are 45 psychiatrists serving a population of 2.5 million. The medical curriculum has also changed and the teaching of psychiatry has increased, with the establishment of the Department of Psychological Medicine in 1979. In the sixties there were only a series of 10 lectures and a visit to the Mental Hospital compared to the present situation where students now have 30 lectures in the behavioural sciences and psychiatry, a posting of 3 weeks in adult and child psychiatry, in addition to clinical teaching in liaison psychiatry in the general hospital setting.

As medical students become more exposed to psychological aspects of illness, and to psychiatric problems, their attitudes to psychiatry are also felt to be changing. This study set out to ascertain what students thought about the subject at the end of their posting in Psychiatry. The personality characteristics of the students were also studied in order to determine whether personality had any effect on the attitude to psychiatry. Pollock et al (1982) (1) found that a group of students who did well in the psychiatric examinations were apprehensive and anxious but less neurotic than those who did not perform as well.

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## METHOD

At the end of their psychiatric posting, the final year class of 165 students were given the Eysenck Personality Questionnaire and the ATP 30 (Attitude to Psychiatry 30). This scale was developed by Burra et al (1982) (2) and is a 30-item Likert type scale which measured the attitudes of students to psychiatry.

## RESULTS AND DISCUSSION

TABLE 1

	No.	Mean	SD	t-value
Males	103	99.4	11.75	1.13*
Females	62	101.4	10.84	

\* N.S.

Females scored higher than males, but the results did not reach a level of significance.

Comparing the Singapore students to the Canadian group of second to fourth year medical students studied by Burra et al (2) the Singapore students showed slightly lower mean scores (99.4 for males, 101.4 for females) than the Canadians, who scored 103.76.

The responses to 5 items of the scales which were of special interest were specially looked at:

- Item 4: I would like to be a psychiatrist.
- Item 9: Psychiatric teaching increases our understanding of medical and surgical patients.
- Item 23: These days psychiatry is the most important part of the curriculum in medical schools.
- Item 28: The practice of psychiatry allows the deve-

lopment of really rewarding relationships with people.

- Item 29: Psychiatric patients are often more interesting to work with than other patients.

It was interesting to note that about 40% of the students answered positively to Item 4 'I would like to be a psychiatrist', and about two thirds (67%) thought that psychiatry was the most important part of the medical curriculum. Ghadirian (1982) (3) found that in McGill University only 3.3% of the students were interested in psychiatry as a future career, while Walton (1969) (4) ascertained that 4% of the students would definitely choose psychiatry and 36% would consider it. Nielson (1979) (5) found that in 1977 4% of medical graduates entered psychiatric training. This stated interest in psychiatry among Singapore students and the recognition of its importance among students could be due to 2 factors:

- (1) The general impression among the population that as Singapore becomes more urbanized and competitive, pressure will build up which could lead to an increased incidence of mental disorder in the population. This is in part supported by the suicide and attempted suicide rates which is one of the indices of stress in the country. Although the former has been constant for the past 2 decades, the attempted suicide rate has risen in the past decade from 50 to 70 per hundred thousand. (6) Moreover the figures for attendances at psychiatric clinics have also been showing an increase, eg. from 82% in 1982 to 89% in 1984. (7)
- (2) The transient phenomenon of an increase in interest in psychiatry after a period of posting, as found by Barra et al, 1982,(2) who obtained a positive attitude among third year medical students at Queen's University after a period of psychiatric training. However the mean scores dropped to the pre-posting period after a few months.

TABLE 2  
SELECTED ITEM RESPONSES

Items	Positive	Neutral	Negative
4 I would like to be a psychiatrist.	69(41.8%)	62(37.5%)	33(20%)
9 Psychiatric teaching increases our understanding of medical and surgical patients.	24(14.5%)	25(15.1%)	116(70%)
23 These days psychiatry is the most important part of the curriculum in medical schools.	112(67.8%)	33(20%)	19(11.5%)
28 The practice of psychiatry allows the development of really rewarding relationships with people	22(13.3%)	47(28.5%)	96(60%)
29 Psychiatric patients are often more interesting to work with than other patients.	71(43%)	48(29%)	44(26.6%)

TABLE 3  
EYSENCK PERSONALITY QUESTIONNAIRE — COMPARISON BETWEEN MALE AND FEMALE STUDENTS, AND BETWEEN FEMALE STUDENTS AND STAFF NURSES

	Students				t-value	Female Students N = 61		Staff Nurses N = 85		t-value
	Male N = 98	Female N = 61		Mean		SD	Mean	SD		
Extroversion	11.76	5.46	10.90	4.31	2.45	10.90	4.31	11.68	4.85	2.19
Neuroticism	8.88	4.94	11.65	5.17	4.61**	11.65	5.17	9.27	4.64	2.86*
Psychoticism	4.16	3.13	2.86	1.97	5.21**	2.86	1.97	3.60	1.43	2.69*
Lie score	7.26	3.98	7.29	3.34	0.10	7.29	3.34	12.53	3.55	9.12**

\* P < .01 (two-tailed)

\*\* P < .001 (two-tailed)

The scores on the Eysenck Personality Questionnaire showed a significant difference between the male and female students in that the females appeared to be more neurotic but less 'tough minded' as measured by the scores on the Psychoticism Scale. Comparing the female students with the norms of 81 staff nurses it was found that the students were significantly more neurotic, but also less 'tough minded' and had a lower Lie score.

Eysenck's norms (1975) of 2,312 males and 3,262 females, showed that the females also had higher scores on the Neuroticism and Lie scales and lower mean scores of extroversion and psychoticism. (8) The higher Lie scores obtained among the Singapore subjects as compared to the British norms could have a cultural basis, as some items of the Lie scores, when answered in the positive by the subjects would reflect the true situation, rather than attempts to 'fake good'.

**TABLE 4A**  
**MULTIPLE REGRESSION ANALYSIS OF**  
**EXTROVERSION, NEUROTICISM, PSYCHOTICISM**  
**AND LIE SCORES WITH ATP SCORES**

Dependent variable Independent variables	Total ATP Scores	
	R. <sup>2</sup>	F Value
Neuroticism	0.173	4.89*
Extroversion	0.212	3.67*
Lie Scores	0.232	2.96*
Psychoticism	0.248	2.53*

\* P < 0.05

**TABLE 4B**  
**MULTIPLE REGRESSION ANALYSIS OF**  
**EXTROVERSION, NOEUROTICISM, PSYCHOTICISM**  
**AND LIE SCORES WITH ITEM 9 SCORES**

Dependent variable Independent variables	Item 9	
	R. <sup>2</sup>	F Value
Extroversion	—	—
Lie Scores	0.196	6.33*
Psychoticism	0.225	4.16*
Neuroticism	0.231	2.92*

\* P < 0.05

**TABLE 4C**  
**MULTIPLE REGRESSION ANALYSIS OF**  
**EXTROVERSION, NEUROTICISM, PSYCHOTICISM**  
**AND LIE SCORES WITH ITEM 29 SCORES**

Dependent variable Independent variables	Item 29	
	R. <sup>2</sup>	F Value
Psychoticism	.178	5.17*
Extroversion	.242	4.98**
Neuroticism	.250	3.45*
Lie Scores	.254	2.66**

\* P < 0.05

\*\* P < 0.01

A multiple regression analysis was done and showed no significant relationship between the independent variables of Extroversion, Neuroticism, Psychoticism, and Lie scores of the Eysenck Personality Questionnaire and the dependent variables of scores

on Items 4, 23 and 28. However, there was a significant relationship between the independent variables and the dependent variables of the total ATP scores, item 9 scores and item 29 scores. From the table above (4A, B, C), it can be seen that the correlation of the Extroversion, Neuroticism, Psychoticism and Lie scores with the total ATP scores and the scores on item 9 and 29 selected items were generally low though statistical significance was reached. For the total ATP score, there is a significant correlation (P < 0.05) with Neuroticism, Extroversion, Lie and Psychoticism scores, and for item 9 (Psychiatric teaching increases or understanding of medical and surgical patients), there is a significant correlation with Neuroticism, Psychoticism and the Lie scores. For item 29 (Psychiatric patients are often more interesting to work with than other patients) there is a significant correlation with all 4 of the independent variables. However only 25% of the total variation in attitude was produced by the personality factors. Pollock 1982, (1) studied the relationship between the personality and psychiatric examination results (not attitudes) of medical students, and found a relationship between an anxious, neurotic and extroverted personality and success in oral examinations. Those who did well in multiple choice questions were found to be more apprehensive and introverted. Mowbray & Davies 1971 (9) found that students who chose psychiatry were more introverted, a finding which is contrary to this present study as students who were more extroverted and neurotic had a more positive attitude to psychiatry. Such students would be expected to be those who have a greater interest in people, and yet were also more prone to worrying about things and brooding over them. (8) The discrepancy in personality characteristics of the 2 studies could be explained by cultural differences and also by the fact that psychiatry is not a homogenous discipline, and different subspecialties would attract different types of personalities eg. those with a psychotherapeutic orientation would be different from those with a more behavioural orientation.

## SUMMARY

The attitudes to psychiatry of 165 medical students were studied. Females showed a slightly more positive attitude than males. About 41% of the students answered positively that they would like to be a psychiatrist, and 67.8% felt that psychiatry was the most important part of medicine. The female students were more neurotic but less tough minded than the male students, and also more neurotic than a group of staff nurses. A multiple regression analysis showed that while some of the correlation between Extroversion, Neuroticism, Psychoticism, Lie scores and the Attitude to psychiatry scores were significant, only 25% of the variations were produced by personality factors.

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