



## Personality and Mental Health of Medical Professionals

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### Abstract

*The present study was aimed to study the personality and mental health of medical professionals. The sample size of 100 (Females=50, Males=50), from D.Y. Patil Medical College, Pimpri, Pune was selected. They responded to the tools of Revised Eysenck Personality Questionnaire (EPQ-R, 1975) and Mental Health Checklist (1999). The statistical analysis i.e., 't test' and Pearson's Product Moment Correlation among the three EPQ-R scales along with Mental Health Status was used. In the present study, the obtained finding shows that individuals scoring higher on neuroticism and psychoticism has poor mental health status and individuals with extraversion maintains good mental health status. However, no gender differences were obtained on extraversion, neuroticism and psychoticism. These findings are somehow in line with the previous finding; however, the studies related with the mental health are as expected.*

**Keyword:** Personality, Mental Health, Medical Professionals, Extraversion, Neuroticism, Psychoticism.

### Introduction

The growth of any nation depends upon the healthy citizens. Researchers, Doctors, Nurses and attendants work round the clock to maintain the better health of the society and ready to avoid any health related disaster. Although medical professionals belongs to varied background and have certain characteristics, traits, qualities, attitude, aptitude which makes them appropriate for this profession also which makes that person different from other people, perhaps even unique. This uniqueness makes one doctor more famous and successful in society than others. Therefore, the personality is the most important and most noticeable parts of an individual's psychological and professional life. Personality also covers the collection of psychological parts including motives, emotions, and thoughts, in short, their mental health. Allport as cited in Hall, Lindzey and Campbell has defined personality as: "Personality is the product of the dynamic organization with in individual of those psychophysical systems that determine individual's unique characteristics, behaviors, thoughts, and adjustment to the environment"<sup>1</sup>. Mental health is the state of health and wellbeing of our minds and about feeling good or feeling bad. According to World Health Organization as cited in Korchin mental health included that the subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential<sup>2</sup>. When the doctors have a healthy personality and mental health, they are able to do their work in best way and treat their patients properly. Therefore, this study was planned to access the personality and mental health in the medical professionals.

**Personality:** As per Kok in a study to find the relation between personality and the attitude to psychiatry of medical students found that females showed a slightly more positive attitude than

males<sup>3</sup>. As per Gosling in a study to find the Personality Impressions Based on Face book Profiles found that Face book-based personality impressions show some consensus for all Big Five dimensions, with particularly strong consensus for Extraversion; the impressions show some accuracy, with the exception of Emotional Stability; that observers are aware only of how they are seen in terms of Extraversion and some self-enhancement for the Big Five domains of Emotional Stability and Openness to Experience<sup>4</sup>. As per Heffernan, and Ling in a study to find the impact of Eysenck's Extraversion-Introversion personality dimension on prospective memory found that the extraverts reported significantly fewer errors on short- and long-term Prospective memory (PM) than introverts, and this difference could not be explained in terms of the number of strategies used to support prospective remembering<sup>5</sup>.

As per Mckelvie, Lemieux and Stout in a study on contact athletes, no contact athletes and non-athletes found that there was no difference found in extraversion on athletes and non-athletes or between contact and no contact athletes, but it was higher for athletes compared to American college norms. In neuroticism, athletes scored significantly lower than non-athletes, as neither extraversion nor neuroticism changed over time in four years of study<sup>6</sup>. As per Lynn to find national personality and tipping customs found that the number of tipped professions increased with national levels of extraversion and neuroticism and decreased with national levels of psychoticism<sup>7</sup>.

**Mental Health:** As per Truong studied the relationship between neighborhood characteristics and resident mental health. They found significant association between mental health and at least one measure of neighborhood characteristics, after adjusting for individual factors<sup>8</sup>. Christopher, Heath, Jeffrey, and Berman in a study to find the evolutionary lifestyle and mental health found

that relationships between these lifestyle elements and distress may not be critical for the range of exposure typically experienced in a normal, nonclinical population<sup>9</sup>. As per Mohamed, Rajan, Kumar and Mohammed stated that in comparison to females, males have better mental health, well being and gender ideology, whereas females have more stress than males<sup>10</sup>. As per Colling and Hicks in a study to find investigate the relationship between personal work characteristics and general mental health found the correlation of .69 and a significant effect size of .48. A strong relationships between personal work characteristics and mental health were identified in this study<sup>11</sup>. As per the Tyssen, Vaglum, Gronvold, and Ekeberg in a study of job stress and working conditions on mental health problems among junior house officers found that job stress is related to mental health problems among young doctors, even when the variables of previous mental health problems and personality traits are controlled. More support during internship is needed<sup>12</sup>.

**Personality and Mental Health:** As per Nordin, Alib, and Yaacob in a study to find the relationship among the personality, loneliness and mental health among undergraduates at Malaysian universities found a significant relationship between extraversion, agreeableness, conscientiousness, neuroticism, openness and loneliness on mental health. Loneliness was the most significant predictor in explaining mental health followed by neuroticism and extraversion personality<sup>13</sup>.

As per Suurmeijer, Sonderen, Krol, Doeglas, Heuvel, and Sanderman in the study to explore the relationship between personality, supportive transactions and support satisfaction as well as mental health of patients with early rheumatoid arthritis study found that people with a more neurotic personality showed more anxiety and depressed feelings. Whereas the people with extraversion personality had no direct effect on depression or anxiety. Apart from the worrying effect of a neurotic personality profile in relation to mental health, the results emphasized the importance of social companionship as a multifunctional activity for people's mental health<sup>14</sup>. As per Wang and Miao studied the relationship among mental health, personality traits and coping styles in the Chinese medical students, and found difference in mental health and their coping styles. They found extraversion related more with mature coping style where neuroticism and psychoticism related positively with immature coping style<sup>15</sup>. As per Srivastava in the study to find an assessment of personality and mental health among primary and secondary teachers found that personality types/traits influence the mental health of primary and secondary teachers and extrovert teachers enjoy better mental health as compared to introvert teachers in educational institutions<sup>16</sup>. As per Zhang, Yang, and Qiao in a study to find the correlation between mental health and personality among high school students after earthquake. The positive rate of total score was 56.15% with the positive rates of 50.3% for depression and 41.3% for anxiety there was a significant

correlation between the score of EPQ items (N, P, L) and the score of SCL-90. The personality test suggests that students with character of introversion and instable emotion are prone to show psychological problems<sup>17</sup>.

As per Lynn and Martin as cited in Singh and Lodhi explain that compared the scores of the three Eysenckian dimensions for 37 nations and studied the gender differences. The result reported that women scored higher than men in neuroticism in all countries and men scored higher than women on psychoticism in 34 countries and on extraversion in 30 countries. As per Forrest, Lewis and Shevlin as cited in Singh and Lodhi explain that males scored significantly higher on psychoticism and females scored higher on neuroticism and lie scales. No significant difference was found for extraversion. Phadke as cited in Singh and Lodhi reported that females scored higher on neuroticism and lower on psychoticism than males. There is no significant gender difference were found on extraversion and lie scales. Belhekar as cited in Singh and Lodhi reported the gender difference that male scored higher than females on psychoticism where as the female scored higher than males on neuroticism. Both Indian and Western studies reported similar gender differences. Therefore, it was hypothesized that males would score higher on psychoticism than females, whereas, females would score higher on extraversion and neuroticism than males. There would be a negative relationship among mental health and psychoticism as well as neuroticism than positive relationship with extraversion<sup>18</sup>. According to Martin and Kirkcaldy as cited in Sreevani explain that the females scored higher on neuroticism than males and males scored higher on psychoticism than females<sup>19</sup>.

**Hypotheses:** i. Males would score higher on psychoticism than females. ii. There is a negative relationship between mental health and psychoticism. iii. Females would score higher on extraversion than males. iv. There is a positive relationship between mental health and extraversion. v. Females would score higher on neuroticism than males. vi. There is a negative relationship between mental health and neuroticism.

## Methodology

**Sample:** All the samples were selected through incidental sampling method. 100 Medical Professionals. i.e.- 50 males and 50 females from Dr. D. Y. Patil Medical College Pimpri, Pune, with age range of 25 to 30 years. Group administration of the test was done randomly on selected medical professionals. Loud and clear instructions were given to them. All doubts were clarified. There was no time limit but samples were instructed to complete the test as soon as possible. First the test on EPQ-R was administrated and then mental health checklist.

**Tools used for Data collection:** In addition to the personal data sheet following two instruments were used to collect the data. EPQ-R (Eysenck Personality Questionnaire-Revised): The test used in the present study was given by Eysenck and Eysenck

(1975)<sup>20</sup>. EPQ-R was developed to measure normal and abnormal dimensions of personality. Eysenck identified three major dimensions of personality: Psychoticism (P), Extraversion (E) and Neuroticism (N). The EPQ-R consists of 100 statements which are to be answered in terms of either 'yes' or 'no' and is specially suited for persons aged 16 and older. It also incorporates a Lie (L) scale to assist the validity of testee's responses. Psychometric properties: The psychometric properties of the EPQ-R test are satisfactory. The one month test-retest reliabilities were .78(P), .89(E), .86(N) and .84(L). The internal consistency reliabilities were in the .70s for P and .80s for the remaining three scales. The construct validity of EPQ-R is also well-established in several studies using emotional, behavioral, attentional, learning and therapeutic criteria. The standardization data was taken on 2312 men and 3262 women.

Mental Health Checklist (MH): The checklist developed by Mathew and Ram (1999) measures the mental well-being of the respondent through 23 items. The respondent has to give the response in three ways given in the checklist, i.e., 'Almost', 'Sometimes', 'Never' and the scoring is in the direction of 3-1. The alpha coefficient of the checklist ranges from 0.76 to 0.78. In this, the higher score indicate lower mental health status<sup>21</sup>.

## Results and Discussion

The descriptive statistics of the obtained sample has been shown in table-1. The table 1 shows the obtained values of medical professionals on the gender difference among personality dimensions and mental health. On the Psychoticism, the obtained value of female professionals (M = 10.12, SD = 4.48) is higher (t = 0.07) than male professionals (M = 10.18, SD = 3.17). However, no significant difference on psychoticism on gender was found, it means that female medical professionals do not differ from male medical professionals on psychoticism. In this, the hypothesis 1 stating that the 'males would score higher on psychoticism than females' is rejected. On the Extraversion, the obtained value of female professionals (M = 15.72, SD = 4.79) is lesser (t = 0.74) than male professionals (M = 16.36, SD = 3.78). However, no significant difference on extraversion on gender was found, it means that female medical professionals do not differ from male medical professionals on extraversion. In this, the hypothesis 3 stating that the 'females would score higher on extraversion than males' is rejected. On the neuroticism, the obtained value of female professionals (M = 12.06, SD = 4.80) is higher (t = 0.88) than male professionals (M = 11.20, SD = 4.97). Again, no significant difference on neuroticism on gender was found, it means that female medical professionals do not differ from male medical professionals on neuroticism. In this, the hypothesis 5 stating that the 'females would score higher on neuroticism than males' is rejected. On the mental health, the obtained value of female professionals (M = 43.72, SD = 5.74) is higher (t = 1.69) than male professionals (M = 41.84, SD = 5.41). Here, no significant difference on mental health on gender was found, it means that female

medical professionals do not differ from male medical professionals on mental health.

**Table-1**  
**Shows the Gender difference among Personality dimensions and Mental health**

Dimension	Gender	Mean	SD	df	t' value	Sig.
P	FEMALE	10.12	4.48	98	0.08	NS
	MALE	10.18	3.17			
E	FEMALE	15.72	4.79	98	0.74	NS
	MALE	16.36	3.78			
N	FEMALE	12.06	4.80	98	0.88	NS
	MALE	11.20	4.97			
MH	FEMALE	43.72	5.74	98	1.69	NS
	MALE	41.84	5.41			

N= 50, NS= Not Significant

**Table-2**  
**Shows the Correlation among Personality dimensions and Mental health**

	P	E	N	MH
P	1.00			
E	-0.07	1.00		
N	0.31*	0.07	1.00	
MH	0.17	-0.04	0.53*	1.00

\* Correlation is significant at the 0.01 level (2-tailed).

The above table 2 shows the correlation among the three personality factors (E, N and P) along with the mental health status. In the all the intercorrelations among the three Eysenckian factor scales, are statistically insignificant. These correlations are in line with the claim by Eysenck that neuroticism, psychoticism and extraversion are orthogonal. However, the scoring for the mental health is negative in nature, which means higher the score on mental health leads to poor mental health. So, on the basis of it the above data can be interpreted as mental health status is negatively correlated with psychoticism (r = -0.17) and neuroticism (r = -0.53). Here, the hypothesis 2 stating 'There is a negative relationship between mental health and psychoticism' and the hypothesis 6 stating 'There is a negative relationship between mental health and neuroticism' is accepted. On extraversion then it would be interpreted as the positive correlation (0.04) with mental health status. So, the hypothesis 4 stating 'there is a positive relationship between mental health and extraversion' is accepted. The possible reason for the support of the above findings can be explained in the next section.

In the present study some of the findings are in line with the previous findings were as some could be considered as the findings in the present situation. Like, the findings which are contradictory to the previous findings are 'males would score higher on psychoticism than females' and 'females would score higher on neuroticism than males' is rejected. Whereas no gender difference on extraversion was found. Similar obtained

findings on extraversion were reported by Lynn and Martin in whom they found that men scored higher on extraversion in almost 30 countries. This is because the profession which they choose either male or female is the same and their working environment is also same. Thus, the finding rejected the hypothesis to which suggest that individual scored good i.e. either male or female. Similar finding were reported by Forrest, Lewis, and Shelvin as cited in Singh and Lodhi<sup>18</sup> found that there is no significant gender difference in extraversion. The similar finding were reported by Wang and Miao also found the positive relationship between neuroticism and psychoticism scales, with social maladjustment and poor mental health. This may be due to PG Medical residents packed schedule they most of the time engage with their work because of that they mostly don't have the time to carry out their personal needs that may frustrate them as they are working in a medical profession in that way they are serving the society so they can't reveal their anger, frustration or any other emotions towards their patients that may indirectly affect their mental health because in some or other way they are suppressing their emotions which leads to poor mental health and neuroticism. The inter-correlation among the mental health status and personality dimension are in line with the previous findings obtained by Eysenck in terms of personality dimensions. On the other hand Martin and Kirkcaldy as cited in Sreevani<sup>19</sup> which showed that females scored higher on neuroticism than males, whereas males scored higher on psychoticism than females reported the similar finding. So, considering the intercorrelation among the personality dimensions and mental health status findings, it could be said that the current changes occurred in the society, person's life style, academic training as well as persons interest in adopting other culture or new things in the environment. For this changes the persons environment may also play an important role. Because now a day's both males and females enjoy equal rights. They share the same professions, same pattern of education as well as same pattern of treatment in the society. And now a day's even the small child in the family has been treated equally inspite of gender. The data collected in the present study deals with both genders and both the genders engage in the same profession. So the variation in the present study is occurred may be due to this factor. It is said when there is a healthy mind in a healthy body, there will be healthy thinking which in turn will employ healthy functioning and it will ultimately lead to the development of the whole mankind. This study also focuses on the significance of extraversion in today's life, which leads to better mental health. The output of this study will be significant for the professionals from all types of professions to develop their mental health and personality. So that they can perform well professionally maintain better personality and better mental health of their own.

## Conclusion

In the present study, the obtained finding shows that individuals scoring higher on neuroticism and psychoticism has poor mental health status and individuals with extraversion maintains good

mental health status. However, no gender differences were obtained on extraversion, neuroticism and psychoticism. These findings are somehow in line with the previous findings, however the studies related with the mental health are as expected.

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