# Personality Inventory and Its Association with Tattoo

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#### How to cite this article:

Vijayanath V, Anitha MR. Personality Inventory and Its Association with Tattoo. Indian Journal of Legal Medicine. 2020;1(1): 17-22.

# Abstract

Introduction: even though it is more roughly understood that getting a tattoo is for fashion. We wanted to understand the personality of these individuals; hence this study is taken up for the research activity.

Aim: To assess the personality of the tattooed individuals.

Materials and Methods: Individuals who were willing to be part of the study and those given consents were included in this study; from all the age group and gender. Eysenck Personality Inventory is used to categorize these subjects into different personality groups.

Results: The study has shown number of extroverts in the individuals having these tattoos, which is being depicted in the tables. Hindus, unmarried and urban population was more. Tattoo on the hands which is permanent in nature was more of neurotic.

Discussion: The study is comparable with most of the earlier research as well as contrasted. This type of categorization was not available in the literature search done by us. Hence it is pertaining to this part of the world.

Conclusion: More neurotic individuals have been found to have these tattoos. But it was not clear if the individual had the tattoos because of his personality trait.

Keywords: Tattoo; Personality; Neurotic.

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#### Introduction

In earlier days tattoos were used as the symbol of royalty and social status. More than one tattoo without any religious background or any reason on the exposed area insists any individual think about the possible psychopathology. Even some authors have mentioned this is the possibility of having a personality disorder. Majority of these tattoos were used as a sign of non-verbal communication and lens for the outside world. Individualization or identity formation was considered as the major factor in teenagers to consider this tattoo being done on their body. As quoted in Atkinson's study<sup>2</sup> majority of the females use these tattoos to enhance their feminine image. This is appearing true as in earlier days the tattoo used to be in the smaller size and hidden areas, whereas now the size of the tattoo is increasing especially over the exposed parts with different colours. In a study by Brooks<sup>3</sup> conducted on adolescents indicated a relation between tattoos and risk-taking behaviour and impulsivity. Lander<sup>4</sup> found in his study that the prevalence of tattoos is more in the psychiatric population than in the general population. Similarly, studies done by Ferguson<sup>5</sup> and Gittleson<sup>1</sup> have indicated a high prevalence of personality disorder in tattooed individuals.

# Aims

To assess the personality in the tattooed individuals.

## Materials and Methods

Here we have used the Eysenck Personality

Inventory (EPI) which measures two pervasive, independent dimensions of personality, Extraversion-Introversion, Neuroticismand Stability. And these are the one which accounts for most of the variance in the personality domain. This contains 57 "Yes-No" items with no repetition of items. The inclusion of a falsification scale provides for the detection of response distortion. The traits measured are Extraversion-Introversion and Neuroticism. When you fill out Eysenck's Personality Inventory (EPI) you get three scores.

The 'lie score' is out of 9. It measures how socially desirable you are trying to be in your answers. Those who score 5 or more on this scale are probably trying to make themselves look good and are not being totally honest in their responses.

The 'E score' is out of 24 and measures how much of an extrovert you are.

The 'N score' is out of 24 and measures how neurotic you are.

#### Results

Table 1: Religion compared with personality

	Religion * personality Cross tabulation								
			Personality						
		0	1	2	3	4	-		
Religion	Hindu	20	5	18	9	3	55		
	Muslim	0	0	1	1	0	2		
	Christian	1	0	0	0	0	1		
	Jain	2	0	0	0	0	2		
	Not answered	1	0	1	0	0	2		
Total		24	5	20	10	3	62		

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 2: Residence compared with personality

Residence * personality Cross tabulation							
		Personality					Total
		0	1	2	3	4	-
Residence	Urban	17	4	15	5	3	44
	Rural	6	1	5	4	0	16
	Not answered	1	0	0	1	0	2
Total		24	5	20	10	3	62

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 3: Marital status compared with personality

Marital status * personality Cross tabulation									
			Personality						
		0	1	2	3	4			
Marital status	Unmarried	22	5	18	9	3	57		
	Married	2	0	2	1	0	5		
Total		24	5	20	10	3	62		

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 4: Education compared with personality

E	ducation * persona	lity C	ross	tabu	latio	Education * personality Cross tabulation								
			Total											
		0	1	2	3	4								
Education	Illiterate	1	0	1	0	0	2							
	literate	1	0	0	0	1	2							
	Primary/	1	0	0	1	1	3							
	secondary/SSLC													
	PUC	9	3	8	3	0	23							
	Graduate	10	2	10	2	1	25							
	PG/PhD	2	0	1	2	0	5							
	Not answered	0	0	0	2	0	2							
Total		24	5	20	10	3	62							

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 5: Occupation compared with personality

Occupation * personality Cross tabulation								
				Total				
		0	1	2	3	4		
Occupation	Semi-skilled	0	0	1	1	0	2	
	Labour	1	0	0	0	0	1	
	Professional	0	0	1	0	0	1	
	Student	22	5	18	8	3	56	
	Not answered	1	0	0	1	0	2	
Total		24	5	20	10	3	62	

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 6: Tattoo no compared with personality

Tattoo no *	Tattoo no * personality Cross tabulation								
			Personality						
		0	1	2	3	4			
Tattoo no	1	15	4	12	6	1	38		
	2	6	1	3	1	1	12		
	3	2	0	3	3	0	8		
	4	0	0	1	0	0	1		
	5	0	0	0	0	1	1		
	8	1	0	0	0	0	1		
	61	0	0	1	0	0	1		
Total		24	5	20	10	3	62		

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 7: Nature compared with personality

	Nature * person								
			Personality						
		0	1	2	3	4	_		
Nature	Temporary	1	0	1	1	0	3		
	Permanent	23	5	19	9	3	59		
Total		24 5 20 10 3							

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 8: Tattooing method compared with personality

Tattooing method * personality Cross tabulation								
			Total					
		0	1	2	3	4	-	
Tattooing	Needling	21	5	19	9	3	57	
method	Sticker	3	0	1	1	0	5	
Total		24	5	20	10	3	62	

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

**Table 9:** Duration of Tattoo compared with personality

Dura	Duration of Tattoo * personality Cross tabulation								
		Personality Tot							
		0	1	2	3	4	-		
Duration	1 to 6 month	7	0	5	2	0	14		
of Tattoo	7 month to 1 year	2	2	1	0	1	6		
	1.1 year to 3 year	4	0	6	2	1	13		
	3.1 year to 5 year	1	1	1	0	0	3		
	Above 5 year	3	1	4	1	1	10		
	Not answered	7	1	3	5	0	16		
Total		24	5	20	10	3	62		
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The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 10: Tattoo cost compared with personality

Tattoo cost * personality Cross tabulation								
			Total					
		0	1	2	3	4	-	
Tattoo cost	Rs 1-1000	4	0	7	2	0	13	
	Rs 1001-2000	9	1	5	4	0	19	
	Rs 2001-3000	4	1	4	1	0	10	
	Rs 3001-5000	3	0	2	2	1	8	
	>Rs 5000	3	0	1	1	1	6	
	Not answered	1	3	1	0	1	6	
Total		24	5	20	10	3	62	

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 11: The site compared with personality

	Site * personality Cross tabulation									
			Personality							
		0	1	2	3	4	-			
Site	Face	0	0	2	2	0	4			
	Neck	2	0	2	0	0	4			
	Shoulder	2	0	2	1	1	6			
	Hands	19	4	13	7	2	45			
	Legs	0	1	0	0	0	1			
	Other parts	1	0	1	0	0	2			
Total		24	5	20	10	3	62			

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 12: Colour compared with personality

Colour * personality Cross tabulation										
				Total						
		0	1	2	3	4	_			
Colour	Single	21	4	14	10	1	50			
	Multicolour	3	1	6	0	2	12			
Total		24	5	20	10	3	62			

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 13: Tattoo size compared with personality

Tattoo size * personality Cross tabulation								
			Personality					
		0	1	2	3	4	-	
Tattoo size (in sq mm)	< 5	1	0	1	1	0	3	
	6-10	1	0	0	0	0	1	
	21-30	1	0	3	0	0	4	
	31-50	4	2	3	1	0	10	
	51-100	5	1	4	3	1	14	
	>101	7	2	7	3	2	21	
	NA	5	0	2	2	0	9	
Total		24	5	20	10	3	62	

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 14: Tattoo reason compared with personality

	Tattoo reason * p	erson	ality	Cross	tabula	tion	
			Pe	rsonal	ity		Total
		0	1	2	3	4	_
Tattoo	Individuality	2	0	0	1	0	3
reason	Fashion	6	1	9	1	1	18
	Memory	8	0	3	3	0	14
	No meaning	2	1	2	1	0	6
	Identification	0	0	1	0	0	1
	Religion	0	0	2	1	0	3
	Passion	5	3	1	1	2	12
	Expressing self	1	0	2	1	0	4
	NA	0	0	0	1	0	1
Total		24	5	20	10	3	62

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

**Table 15:** Tattoo done at compared with personality

Tattoo has done at * personality Cross tabulation							
		Personality					Total
	_	0	1	2	3	4	-
Tattoo done at	Professional centre	21	5	14	7	3	50
	Amateur artists	3	0	5	3	0	11
	Self	0	0	1	0	0	1
Total		24	5	20	10	3	62

The personality score is as follows 0= normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 16: Complaints post tattooing compared with personality

Complaints post tattooing *	perso	nal	ity Cı	oss t	abul	ation
Complaints post tattooing			Total			
	0	1	2	3	4	_
Not answered	6	2	5	3	1	17
Big	1	0	0	0	0	1
No	14	1	10	6	1	32
Pain	1	0	0	0	0	1
Redness, burning sensation, itching	0	0	1	0	0	1
Redness for a week	0	0	1	0	0	1
Shaded	0	0	1	0	0	1
Swelling on the hand	1	0	0	0	0	1
Uncontrollable pain	0	1	0	0	0	1
Yes	0	0	1	0	0	1
Good	0	0	0	0	1	1
No	0	1	1	0	0	2
Small swelling	1	0	0	0	0	1
	24	5	20	10	3	62

The personality score is as follows 0= normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

**Table 17:** Living with tattoo compared with personality

Living with tattoo * personality Cross tabulation								
Living with tattoo	Personality Tota							
	0	1	2	3	4			
Not answered	10	3	5	4	2	24		
Feels good	2	2	2	1	1	8		
Mixed emotions	1	0	0	0	0	1		
Normal to have	1	0	4	0	1	6		
Very much upset	1	0	0	0	0	1		
Upset	9	0	7	4	0	20		
Irritated with memory	0	0	2	0	0	2		
Total	24	5	20	10	3	62		

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

**Table 18:** Thought of getting away with Tattoo compared with personality

Thought of getting away with Tattoo * personality Cross tabulation							
Thought of getting away	Personality						
with Tattoo	0 1 2 3 4						
Not answered	6	2	5	3	0	16	
No	14	1	11	6	2	34	
Not now	1	0	0	0	0	1	
Yes	3	1	2	1	0	7	
Not sure	0	1	2	0	1	4	
Total	24	5	20	10	3	62	

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 19: Method of removal compared with personality

Method of removal * personality Cross tabulation								
				Total				
		0	1	2	3	4	_	
Method of	Yes	9	3	8	4	1	25	
removal	NA	0	1	0	0	0	1	
	Laser	2	0	1	1	0	4	
	No	13	1	11	5	2	32	
Total		24	5	20	10	3	62	

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

Table 20: Regret after tattooing compared with personality

Regret after tattooing * personality Cross tabulation								
			Personality					
		0	1	2	3	4	_	
Regret after	NA	6	2	7	2	0	17	
tattooing	No	15	2	12	8	1	38	
	Yes	2	0	1	0	1	4	
	No	1	1	0	0	1	3	
Total		24	5	20	10	3	62	

The personality score is as follows 0 = normal; 1 = extrovert; 2 = neurotic; 3 = lie; 4 = both extrovert and neurotic

## Discussion

The study included 62 subjects of which 24 were normal over Eysenck Personality Inventory, 5 were having extrovert, 20 were neurotic 10 were measured lie over the scale and 3 individuals were having both extrovert and introvert. Among the 20 neurotic 18 were from the Hindu religion. With respect to the area in which these individuals were living 15 neurotics were from Urban and 5 were from rural residing individuals. Similarly, 5 were measured lie in EPI scale from the urban population, whereas 4 were from the rural area. And 4 extrovert subjects from the urban area. Unmarried individuals were the majority in number (18) who were scoring the neurotic score in the category of the marital status of these individuals. And almost half (9) the unmarried individuals were scored lie on the EPI Scoring.

Graduates were almost equal in number compared to those who have passed pre-university college (PUC) who were having tattoos. And 10 subjects were neurotic from graduates group and 8 were from the PUC group. Since the students were consenting to participate in the study, the group of students is more here indicating 18 were neurotic and 8 were lying on the scorecard. Here 12 subjects having one tattoo turned to be neurotic and 6 were lying. With respect to the nature of tattoo 19 were categorized to have neurotic and 9 were lying. And tattooing was done in 19 subjects by using needling procedure and in this category 9 were scored lie on the EPI scale.

Coming to the category of the duration of tattoo 6 were having the tattoo for 3 years scoring in the neurotic category. And same neurotic subjects 7 have spent about 1000 rupees to get this tattoo done and 5 have spent about 2000 and 4 have spent up to 3000 rupees. 13 subjects had a tattoo on the hands in the neurotic subjects and 7 were lying. 14 individuals have used single coloured tattoo and 6 were using multicolour belonging to neurotic's category. Looking at the tattoo's size measuring more than 100 sq mm were 7 in number belonging to neurotics. And 9 individuals have answered that they got these tattoo done from the neurotic category. 14 individuals in the neurotic subjects have got these tattoos done at a professional center. Regarding complaints after the tattoo, 10 individuals from neurotics did not have any complaints were as 6 were scoring lie on the scale. 7 neurotic individuals were upset by having these tattoos done and 4 were lying. After having these tattoos being done 11 neurotic individuals

did not get any thoughts to getting away these tattoos and 6 were scored lie on the scale. And 12 neurotic subjects did not have any regrets in getting these tattoos done and 8 were lying on the EPI scoring scale.

Swami<sup>6</sup> used the battery of inventories for assessing various personality traits and found that those with tattoos only scored higher on measures of extraversion, experience-seeking, and need for identity. And also effect sizes were small to moderate, these results highlight that, if personality differences do exist among those with tattoos compared to the general population, they may not necessarily be dysfunctional or pathological. He concluded this keeping in mind that with recent findings from the United States inwhich the Community Body Modification Checklist wasgiven adult subjects with and without tattoos or non-ear body piercings.7 Giles-Gorniak7 found that theonly significant difference in mental health history and behavioral choices between the two groups was that those with body modifications were more likely toengage in social and healthy behaviors. Similarly, Australian reported that employed the Loyola Generativity Scaleto assess "concern for and commitment to the next generation" among adult women and found that those with and without tattoos had equivalent levels of psychosocial health according to this measure.8

In contrast to the above-mentioned studies involving adults across the lifespan, much of the work to date on personality differences between tattooed and non-tattooed individuals has been performed in samples of college students, with limited generalizability. In order to avoid the methodological limitations of earlier studies, Tate and Shelton measured personality traits with validated scales that assessed for the Big Five Factors of personality (neuroticism, extraversion, openness toexperience, agreeableness, conscientiousness), the need for uniqueness, and the desire to be perceived favorablyby others.9 Tattooed individuals, as compared to their non-tattooed counterparts, scored significantly loweron agreeableness and conscientiousness and higher on need for uniqueness. However, while these differences were statistically significant, effect sizes were small and personality scores found among tattooed individuals were, with a single exception among women, within published norms. The authors, therefore, concluded that"it is untenable to refer to tattoos, per se, as signs of social deviance or personality and character flaws".9

## Conclusion

This study is intended to identify if tattooed individuals are having any personality factors. Since this study was consisting more of student and graduate populations, the result is oriented more to this group only. Majority of the individuals were neurotic in EPI scale scoring. Hindus were more with the urban population in the category of neurotics. Unmarried and graduate individuals having single coloured tattoo were neurotics. Majority of the individuals were having more than one tattoo having on the hands. Few individuals also reported being upset for having these tattoo done. And these tattoos were basically got done for the purpose of fashioning done at the professional center by needling procedure and they are permanent in nature with multicolor. Some were regretting having these tattoos and wanted to get rid of these.

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