

**BLOOD ANTIGENICITY & PERSONALITY****DR JAYANT J MAKWANA***Professor, Physiology, Parul Institute of Medical Sciences and Research (PIMSR) Baroda***ABSTRACT**

Effect of blood group antigen on personality was studied in 400 participants aged 18-60 years in Department of Physiology of R D Gardi Medical College. The personality assessment was done with the help of standard personality inventory. Blood group was determined with slide agglutination method. It was observed that blood group 'O' individuals were 48.75 % efficient, 49.09% social, 52.15 % emotional, 51.94 % challenge acceptor, 48.63% workaholic. Blood group 'A' individuals were 45.6 % efficient, 52 % social, 52.9 % emotional, 48 % challenge acceptor, 50.3 % workaholic. Blood group 'B' individuals were 47.82 % efficient, 50.53% social, 51.3 % emotional, 51.7 % challenge acceptor, 48.94 % workaholic. Blood group 'AB' individuals were 51.43 % efficient, 50 % social, 53.06 % emotional, 46.94 % challenge acceptor, 44.5 % workaholic. So according to our study Individuals with blood group A are more efficient, those with blood group O are more social, blood group B individuals are more emotional & those with blood group AB are more workaholic and accepts the challenge. The results were statistically significant.

KEY WORDS: *Blood group, personality, inventory, slide agglutination.*



*Corresponding author



DR JAYANT J MAKWANA
Professor, Physiology, Parul Institute of Medical
Sciences and Research (PIMSR) Baroda

INTRODUCTION

The tentative pattern of thoughts, feelings and behavior that distinguishes one individual from other are called the 'personality traits'¹. According to McCrae, Costa & Ostendorf² by 30 years of age personality attains its mature form and thereafter there can only be a modest change³. McCrae & Costa Jr in 1999⁴ observed that personality traits were insulated from the direct effects of environment and are exclusively biological in origin. Both blood group and personality thus have a biological background. Many correlations have been observed between blood group and health disorders like Gastric carcinoma⁵, Coronary artery disease⁶ are more prevalent in blood group A individuals, while peptic ulcer⁵ and type 1 anxiety disorders⁷ are common in individuals with O blood group. T.Meian, He et al in their two prospective cohort study found that those with the blood groups A, B, or AB were more likely to develop CHD⁸. Furukawa 1927⁹ has showed positive correlation between blood group type and personality trait while K.Wu et al 2005¹⁰ did not find any appreciable or significant correlation between it.

MATERIALS AND METHODS

Study was conducted in 400 healthy participants in the age group of 18-60 years. The participants included belonged to varied educational, economical and social background. Necessary institutional ethical clearance was obtained.

Participants were explained the aim of the study and their consent was obtained. Participants were given the inventory and were asked to read and clarify any doubt if existed.

Inclusion Criteria

Age group 18-60 years, no history of medication.

Exclusion criteria

- 1 Unwillingness
- 2 Psychiatric illness
- 3 Medication of any type

Personality was assessed by standard available personality inventory (having 50 questions). Volunteer had to choose the most appropriate answer as per their choice. The options/answers were assigned the scale from 1 to 5. Total of all the answers were added. The positive aspect of personality was assigned lower score on rating and negative aspect was given higher markings on rating scale. Inventory assessed five different types of personalities viz., efficiency/competency, social behavior, challenge acceptance, emotion and approach towards work (workaholic). The score obtained was converted to percentage form. Blood group was determined by using standard agglutination method.

Statistical Analysis

Results obtained were statistically analyzed using One Way ANOVA with the help of SPSS statistical package. The results were statistically significant¹⁰.

RESULTS

Results of our present study are shown in table 1. We can notice that

- blood group 'O' individuals were 48.75 % efficient, 49.09% social, 52.15 % emotional, 51.94 % challenge acceptor, 48.63% workaholic.
- Blood group 'A' individuals were 45.6 % efficient, 52 % social, 52.9 % emotional, 48 % challenge acceptor, 50.3 % workaholic.
- Blood group 'B' individuals were 47.82 % efficient, 50.53% social, 51.3 % emotional, 51.7 % challenge acceptor, 48.94 % workaholic.
- Blood group 'AB' individuals were 51.43 % efficient, 50% social, 53.06 % emotional, 46.94 % challenge acceptor, 44.5 % workaholic.

Table 1
Correlation between blood group and personality traits




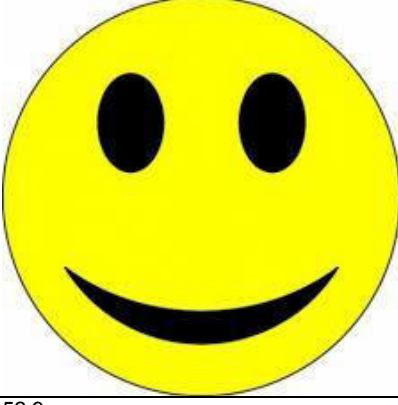

Blood group	Mean age (Years)	Personality traits				
		Efficiency % 	Social % 	CA% 	Emotion% 	Workaholic % 
A	37	45.6	52	48	52.9	50.3
B	41	47.82	50.53	51.7	51.7	48.94
O	44	48.75	49.09	51.94	52.15	48.63
AB	39	51.43	50	46.94	53.06	44.5

Table 2
Personality trait of different blood groups ⁷

Blood group A	
Best traits	Earnest , creative, sensible, self sacrificing, patient
Worst traits	Fastidious, stubborn, indecisive
Blood group B	
Best traits	Wild, doer, cheerful, goal oriented, flexible, independent
Worst traits	Selfish, irresponsible, impulsive, erratic
Blood group O	
Best traits	Social butterflies, decisive, goal oriented, orderly, calm, optimist
Worst traits	Self centered, cold, doubtful, careless
Blood group AB	
Best traits	Cool, controlled, rational, social,
Worst traits	Critical, forgetful

We conclude from our study that

- Individuals with blood group A are more efficient
- Individuals with blood group O are more social
- Individuals with blood group B are more emotional
- Individuals with blood group AB are more workaholic and accepts the challenge more readily

} than other blood group

DISCUSSION

The effect of blood group on various personality trait give us the idea about the way an individual would react to different situations, surroundings, occasions, challenges and about his approach to handle the stress, work load and crowd. According to Furukawa 1927⁹ different blood groups inherit different personality traits. Some¹¹ researchers found blood group O to be more social and blood group A to be high on agreeable scale. While some¹² noticed that O blood group were

phlegmatic, A individuals were melancholic and B blood group individuals to be sanguine. Blood group O have varied emotions because of lower platelet MAO activity which also can be the basis for higher incidence of type 1 affective disorder in the O blood group individuals⁷.

CONCLUSION

Result obtained in our study found partial correlation between blood type and personality traits.

REFERENCES

1. Singh A.K., Singh. A.P. Personality development amongst executives. *As J Arts and Sc*, 1(1):96-108,(2010).
2. McCrae R.R., Costa P.T., Ostendorf F. Nature over nurture; temperament, personality and life span development. *J Pers and Soc Psy*, 78(1):173-186,(2000).
3. Costa P.T. Jr, McCrae R R. Age Changes in Personality and Their Origins: Comment on Roberts, Walton, and Viechtbauer,. *Psychol Bull*, 132(1):26-28,(2006).
4. McCrae, Costa Jr. Pervin L.,& JohnO. (Eds.).*Handbook of personality*. Gullford press, NY, 139-135,(1999).
5. Dempsey T. Brunicardi F., Anderson D., Billiar T.(Eds). *Schwartz manual of surgery*, 8th edition, Mc Graw Hill Medical publishing pvt Ltd: 670,(2006).
6. Hafeezulla W., Rao A.A., Joachlm W.H. *Pak J Phy*, 1:1-2,(2005).
7. Zonda T., Lester D. Blood type and bipolar disorder. *Percept motor skills*, 95(3 pt 1):988, (2002).
8. Meian H., Brian W., Kathy R., Joann E., Manson, Eric R. ABO Blood Group and Risk of Coronary Heart Disease in Two Prospective Cohort Studies. *Art Throm Vas Biol.*, 32:2314-2320,(2012).
9. Furukuwa T. A. Study of temperament by means of human blood groups. *Jap J Psy*, 2:612-634,(1927).
10. Wu K., Krishtian D., Lindsted B. Blood type and the five factor of personality in Asia. *Pers and Ind Diff*, 38(4):797-808,(2005).
11. Mary R., Alan G. Blood type and personality. *Pers and Ind Diff*, 34 (7):1099-1112, (2003).
12. Furukawa T. A study of temperament and blood-groups. *The J Soc Psychol*, 1: 494-509, (1930).