

Self-Esteem Among Prospective Teachers Belonging To Different Blood Groups: A Quantitative Study

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ABSTRACT

It is a well-known fact that every human being differ from one another on various basis, such as capability, potential, personality, intelligence, achievement, aptitude, attitude and other physical features etc. due to hereditary and environmental factors. It is assumed that blood groups have genetic properties and may influence various personality traits. The present study examines the association of self-esteem of prospective teachers with their blood groups. The study was conducted on 350 prospective teachers of NCR (National Capital Region) Delhi. The results of one way ANOVA and t-test shows that there is a statistically significant difference in the self-esteem of teachers belonging to Blood Group 'A' and 'O' and Blood Group 'B' and 'AB' which were significant at 0.05 level whereas Blood Group 'B' and 'O' were significant at 0.01 level of significance.

INTRODUCTION

Every creation of nature is unique and its chemistry is so complicated that it is very difficult to understand its functions and their driving factors. Among all the creations, human beings are at the highest position due to their intelligence. The study of human behaviour has always been assumed to be a challenging task. It is now a well-established fact that every individual differs from others in various aspects such as intelligence, personality, capacities, potentialities, achievement, attitude, interest and physical features etc. Some differences are hereditary, some are environmental and some are combination of both of them and many more known and unknown reasons. The difference in blood groups of human beings is a well-known fact to us, which is by birth, and is classified into four categories, viz A, B, AB and O.

One of the most idiosyncratic attribute on the basis of which humans can be classified is, blood group. Blood Group could not only assist in the classification based on blood types, but can also help in identification of several personality traits. Various blood types were first discovered in the year 1901 even though at that time the

mode of inheritance was not explained. It was only in the year 1920 that Human Genome Project presented more details about inheritance.

The idea of relating blood type to one's personality started in Japan during 1916 when a Japanese doctor, Kimata Hara, published a research paper claiming that blood groups are linked with one's temperament. Around the year 1925, military personnel began marking soldier's blood group with a belief that it can help them identify the soldier's strengths and weaknesses. However, the theory was opened to the public only when a psychologist, Takeji Furukawa in 1927, wrote his thesis titled "The Study of Temperament Through Blood Type" published his article in the scholarly Psychological Research Journal. Later, most studies were done in Japan in the mid-1980s regarding relationship between blood groups and personalities. Several such studies were conducted outside Japan also.

Literature based on studies available from ancient Greece to Carl Jung, Furukawa

specify idiosyncratic attributes to each blood group which are as follows:

Type A- self-sacrificing, mild-mannered, uncombative, reserved, indecisive, full of worry, deeply moved by things, and cautious.

Type B- light-hearted, cheerful, talkative, independent, caring, sensitive, sociable, and flamboyant.

Type AB- reserved, mild-mannered, full of worry, indecisive, cautious, deeply moved by things, uncombative and self-sacrificing on the outside, but reserved, mild-mannered, full of worry, indecisive, cautious, deeply moved by things, uncombative and self-sacrificing on the inside

Type O- patient, calm, strong-willed, in control of their emotions, unyielding and fully confident despite a quiet appearance.

Bu Dinar (2011) conducted research study to find out the differences in IQ among children of 6-14 years of age, according to the difference in their blood types. The study attempted to answer the questions as to whether there were significant differences between children aged 6-14 years in both verbal, practical, and total IQ, according to the different types of their blood types. According to the study children of blood groups AB have better IQ than other groups.

Atoom, M. (2014) carried out a study on 'Blood Group and their relation with intelligence among a sample of Jordanian university'. The study found that the blood group (AB) received the highest average in the Intelligence Quotient (IQ) test which is also the highest in the GPA and the blood type (B) was the lowest in the GPA and in test results. **Narges A, Hameed A, Fatema S (2013)** conducted a study on 'Personality psychological strategy in management of productivity'. The study showed that people with different blood groups have an effect on their group cooperation behaviour. Greater group participation was exhibited by people with

blood group A followed by blood group O, AB and B respectively.

Jassim WE (2012) conducted a research on 'Association of ABO Blood group in Iraqis with Hypercholesterolemia, Hypertension and Diabetes Mellitus'. The research concluded that there is a strong evidence to suggest that there is an association between ABO blood group and certain diseases. Analysis of the data showed that the levels of total glucose, systolic/diastolic blood pressure and cholesterol, were significantly higher in male and female patients with blood group O than other groups, with a decreasing trend from group A to B and then AB.

In 1983, **Toshitaka Nomi** and **Alexander Beshar** introduced the idea to western culture by publishing "You are Your Blood Type". According to the authors, Type O's are natural leaders who crave position of power because of their goal-oriented, competitive natures; they are also more concerned with public image than others.

TEACHERS' SELF-ESTEEM

The concept of "self-esteem" has originated from a Greek word, which translates to "reverence for self". The word "self" refers to the "values, beliefs and attitudes", which one holds about himself or herself, whereas the word "esteem" refers to the value and worth that one gives oneself. In simpler terms, teachers' self-esteem is one's feeling of "teachers' self-worth, teachers' self-confidence, and teachers' self-respect". Teachers' self-esteem translates into loving oneself as teacher and feeling good about oneself being a teacher unconditionally. In fact, anyone who wishes to be self-confident will have to begin with self-esteem. The presence of high self-esteem in an individual is critical in anyone's life.

As individual at any given point of time has various identities to play in the society based on gender, relationship, linguistic and cultural backgrounds etc. It is essential to understand and address issues generated

due to prejudices, belief and stereotypes resulting from these identities. The consideration and indulgence of these identities enable the prospective teachers to espouse methodology or acquire skills or develop thought process that not only help them in their personal and professional development but also helps expedite the growth of their students. As mentioned in curriculum framework for the NCTE two year B.Ed. programme (Course EPC 4: Understanding the Self), “The aim of understanding the self is to develop understanding of student-teachers about themselves- the development of the self as a person and as a teacher, through conscious ongoing reflection”.

Teachers have a great influence on the development and well-being of students. As students spend more & more time with teachers, they are considered as second only to the primary adult figure at home with regard to total time spent and this eventually also leads to influence the teacher and student relationship (**Scott et. al, 1996**). A number of studies have done on the student and teacher relationship as well as the impressions a teacher may have on a child. **Scott (1999)** in his study found that teachers who better mended behaviours and attitudes of students were generally the one's who ranked higher on the aspect of self-esteem.

It has been reportedly found that teacher's self-esteem correlated with high achievement of student, overall competence in teaching, and stronger relationships with students (**Christou, Phillipou, Menon, 2001; Scott et. al, 1996; Spilt, Koomen, Thijs, 2011**). Studies have also demonstrated that it is self-esteem which has proven to be an indispensable part of a student and teacher's journey, who interact in diverse dimensions every day. Teachers' self-esteem would also be associated to self-concept as how we perceive and evaluate ourselves would greatly impact of self-esteem (**Brookover, Thomas, & Paterson, 1964; Rosenberg, Schoenbach, & Rosenberg, 1995**). When as an educator we are familiar with ourself, then only we can have a self-concept. If teacher's self-

concept is not clear, it might incapacitate their teaching. Self-esteem is also linked with self-image, that is, how we truly think about ourselves (**Lawrence, 2006; Brookover, Thomas, & Paterson, 1964; Shavelson, Hubner, & Stanton, 1976; Bong & Skaalvik, 2003**). Since self-esteem relates to how we value ourselves, self-concept along with self-image bring the concept to the educational and teaching field of how we think about ourselves as educators and how we see ourselves as a person. Hence, it is imperative for all teacher preparation programs across the globe to boost teacher candidates' self-concept (**Yeung, Craven, & Kaur, 2014**). It is observed that teachers are not only teaching content in school subjects, but they are also consciously or unconsciously teaching the concept of self-esteem to students who are learning everything from them. Hence, enhancing self-concept for students as well as the teachers must be conspicuous and conscientious. Activities for enhancement of self-esteem of teachers and students should be integral part of the curriculum across Pre-Kindergarten to 12th grade schools as also in colleges, and universities.

The present study tries to see the self-esteem possessed by prospective teachers of different blood groups and how they reflect them in their teaching-learning process.

The understanding of oneself will endow pupil-teachers to develop a more comprehensive understanding of an individual's self-esteem and overall personality. Further, it will assist the student teacher to adopt an effective mechanism within oneself to better handle conflicts at different levels and to further enhance/accumulate strengths. “It is imperative for student and teachers to develop social & relational sensitivity and effective communication skills, including but not limited to the ability to listen and observe” (**Hall & Hall, 2003**).

OPERATIONAL DEFINITIONS OF THE TERM

Teachers' self-esteem: 'Self-esteem' refers to the extent to which a person believes with himself/herself in regards to capabilities, significance, success and worthiness.

The term teachers' self-esteem refers to the assessment of a teacher's self-worth and abilities by himself or herself related to his/her teaching profession.

It was assessed by Teachers' Self-Esteem rating scale consisting of 27 items covering six major dimensions of self-esteem viz Positivity, Openness, Teaching Competence, Humility, Self-Worth and Learning Orientation.

OBJECTIVES OF THE STUDY

1. To study the teachers' self-esteem among prospective teachers having different blood groups.
2. To compare the teachers' self-esteem of prospective teachers belonging to various blood groups.

SUBSIDIARY OBJECTIVES:

- 1.1 To study the teachers' self-esteem among prospective teachers having blood group A.
- 1.2 To study the teachers' self-esteem among prospective teachers having blood group B.
- 1.3 To study the teachers' self-esteem among prospective teachers having blood group AB.
- 1.4 To study the teachers' self-esteem among prospective teachers having blood group O.
- 2.1 To compare the teachers' self-esteem of prospective teachers belonging to A & B blood groups.
- 2.2 To compare the teachers' self-esteem of prospective teachers belonging to A & AB blood groups.
- 2.3 To compare the teachers' self-esteem of prospective teachers belonging to A & O blood groups.
- 2.4 To compare the teachers' self-esteem of prospective teachers belonging to B & AB blood groups.
- 2.5 To compare the teachers' self-esteem of prospective teachers belonging to B & O blood groups.

- 2.6 To compare the teachers' self-esteem of prospective teachers belonging to AB & O blood groups.

HYPOTHESES

Main Hypothesis

1. Prospective teachers belonging to A, B, AB & O blood groups do not differ significantly in terms of teachers' self-esteem

SUBSIDIARY HYPOTHESES:

- 1.1. Prospective teachers belonging to A & B blood groups do not differ significantly in terms of teachers' self-esteem.
- 1.2 Prospective teachers belonging to A & AB blood groups do not differ significantly in terms of teachers' self-esteem.
- 1.3 Prospective teachers belonging to A & O blood groups do not differ significantly in terms of teachers' self-esteem.
- 1.4 Prospective teachers belonging to B & AB blood groups do not differ significantly in terms of teachers' self-esteem.
- 1.5 Prospective teachers belonging to B & O blood groups do not differ significantly in terms of teachers' self-esteem.
- 1.6 Prospective teachers belonging to AB & O blood groups do not differ significantly in terms of teachers' self-esteem.

RESEARCH DESIGN

The study is descriptive survey which is exploratory in nature as it tends to study the self-esteem among prospective teachers belonging to different blood groups.

POPULATION

B.Ed. students of education colleges affiliated to four different universities in NCR Delhi constitute the population.

SAMPLE

A sample of 350 prospective teachers was taken under study. The sample was selected using simple random sampling technique.

TOOL

“Self-Esteem Scale” developed by Dr. Santosh Dhar & Dr. Upinder Dhar (2015) was adapted to Teachers’ Self-Esteem scale.

VALIDITY AND RELIABILITY OF TEACHERS’ SELF-ESTEEM

The adapted teachers’ self-esteem scale was initially given to the experts for their approval and suggestion. The statements were modified as per the experts’ advice and then administered on small sample for a pilot study. After scoring of the scale, reliability co-efficient was estimated by Cronbach’s Alpha.

Cronbach’s Alpha Formula

A better way to measure internal consistency is to compare individuals’ scores on all possible ways of splitting the test into two halves. This method compensates for any error introduced by a lack of equivalence in the two halves. **Cronbach (1951)** proposed a formula called co-efficient of Alpha, which calculates internal consistency for questions that have more than two possible responses. It was used to estimate internal consistency of a heterogeneous test, for

measuring internal consistency. The formula for coefficient alpha is

$$r_{\alpha} = \left(\frac{N}{N-1} \right) \left[1 - \frac{\sum \sigma_j^2}{\sigma^2} \right]$$

Cronbach’s Alpha co-efficient for Teachers’ self-esteem scale was found to be 0.944.

ANALYSIS OF DATA

Factorial design was used to see the affect of Blood Groups on teacher’s self-esteem. Data were analysed using SPSS version 18 and also descriptive statistics including frequency distribution tables, mean, standard deviation, one-way ANOVA, and t-test.

FINDING AND DISCUSSION

MAIN HYPOTHESIS-I

HO₁. ‘There is no significant difference between the means of Teachers’ Self-Esteem of Prospective Teachers context to Blood Group Variable’.

In order to test this hypothesis, scores obtained from teachers’ self-esteem scale were tabulated and analysed. One-way ANOVA is used to compare mean scores of blood group A, B, AB and O. Mean variance was computed to study the significant difference among the mean scores of blood group A, B, AB and O. The results so obtained have been entered in Table 1.1 (a) and (b).

Table - 1.1 (a) Data summary and 1.1 (b) ANOVA Summary
Comparison of Prospective Teachers’ Self-Esteem belonging to A, B, AB and O Blood Group

(a) Data Summary

	N	Mean	Std. Dev.	Std. Error
Blood Group A	72	95.51	16.65	1.94
Blood Group B	132	92.23	15.71	1.56
Blood Group AB	53	97.58	13.21	1.81
Blood Group O	93	100.09	13.14	1.37

(b) ANOVA Summary

Source	Degree of Freedom(DF)	Sum of Square (SS)	Mean Square (Variance)MS	F-Stat Value	Level of Significance
Between the Groups	3	3550.754	1183.585	5.312	0.01
Within the Groups	346	77099.601	222.831		
Total	349	80650.354			

Interpretation and Discussion: Table No.

1.1 displays analysed data regarding comparison of teachers' self-esteem in prospective teachers belonging to A, B, AB and O Blood Groups in terms of F-value. Obtained F-Value for df (3,346) was found 5.312. It is significant even at .01 level of significance, as minimum significant F-Value for df (3,346) according to standard F-Value should be 3.78 at .01 level of significance. On the basis of significance F-value it can be safely concluded that prospective teachers belonging to A, B, AB and O blood groups do differ significantly in terms of their teachers' self-esteem.

Thus, first main hypothesis namely; 'There is no significant difference between the means of Teachers' Self-Esteem of Prospective Teachers context to Blood Group Variable is not accepted.

For more precision, the data were analysed using t-test of significance shown in succeeding pages in six tables (Table 1.2 to 1.7).

SUBSIDIARY HYPOTHESES:

Hypothesis 1.1

'Prospective Teachers belonging to A& B blood groups do not differ significantly in terms of Teachers' Self-Esteem'

In order to test this hypothesis, scores obtained from Teachers' self-esteem scale were tabulated and analysed. t-test is used to compare mean scores of blood group A and blood group B. t-ratio was computed to study the significant difference between scores of teachers' self-esteem of prospective teachers. The results so obtained have been entered in Table 1.2.

Table –1.2 Comparison of Prospective Teachers' Self Esteem belonging to A and B Blood Groups

S.No	Name of Group	N	Mean Score	S.D.	t-value	Level of Significance
1.	Prospective Teachers with Blood Group A	72	95.51	16.650	1.401	0.05 (Not Significant)
2.	Prospective Teachers with Blood Group B	132	92.23	15.714		

Interpretation and Discussion: Table No.

1.2 displays analysed data regarding comparison of Teachers self-esteem of prospective teachers belonging to A and B blood groups in terms of critical ratio/t-value. Obtained t-value is 1.401 for df (202). It is not significant at 0.05 level of

significance as minimum significant 't' value according to standard t-table should be 1.98 at .05 level of significance for df (202).

Not significant t-value is a proof that the two groups of prospective teachers namely

prospective teachers with blood group A and B do not differ significantly in terms of their teachers' self-esteem. Mean difference of the two groups shows a little superiority of the prospective teacher belong to A blood group but t-value is not significant.

Thus, first subsidiary hypothesis namely; 'Prospective Teachers belonging to A& B blood groups do not differ significantly in terms of Teachers' Self-Esteem' is accepted.

Hypothesis 1.2

'Prospective Teachers belonging to A& AB blood groups do not differ significantly in terms of Teachers' Self-Esteem'

In order to test this hypothesis, scores obtained from teachers' self-esteem scale were tabulated and analysed. t-test is used to compare mean scores of blood group A and blood group AB. t-ratio was computed to study the significant difference between scores of teachers' self-esteem of prospective teachers. The results so obtained have been entered in Table 1.3.

Table –1.3 Comparison of Prospective Teachers' self-esteem belonging to A and AB Blood Groups

S.No.	Name of Group	N	Mean Score	S.D.	t-value	Level of Significance
1.	Prospective Teachers with Blood Group A	72	95.51	16.650	0.752	0.05 (Not significant)
2.	Prospective Teachers with Blood Group AB	53	97.58	13.211		

Interpretation and Discussion: Table No.

1.3 displays analysed data regarding comparison of teachers' self-esteem of prospective teachers belonging to A and AB blood groups in terms of critical ratio/t-value. Obtained t-value is 0.752 for df (123). It is not significant at .05 level of significance as minimum significant 't' value according to standard t-table should be 1.98 at .05 level of significance for df (123).

Not Significant t-value is a proof that the two groups of prospective teachers namely prospective teachers with blood group A and AB do not differ significantly in terms of their teachers' self-esteem. Mean difference of the two groups shows a little superiority of the prospective teacher belong to AB Blood Group but t-value is not significant.

Thus, second subsidiary hypothesis namely; 'Prospective Teachers belonging to A& AB blood groups do not differ significantly in terms of Teachers' Self-Esteem' is accepted.

Hypothesis 1.3

'Prospective Teachers belonging to A& O blood groups do not differ significantly in terms of Teachers' Self-Esteem'

In order to test this hypothesis, scores obtained from teachers' self-esteem scale were tabulated and analysed. t-test is used to compare mean scores of blood group A and blood group O. t-ratio was computed to study the significant difference between scores of teachers' self-esteem of prospective teachers. The results so obtained have been entered in Table 1.4.

Table –1.4 Comparison of Prospective Teachers' Self-Esteem belonging to A and O Blood Groups

S.No.	Name of Group	N	Mean Score	S.D.	t-value	Level of Significance
1.	Prospective Teachers with Blood Group A	72	95.51	16.650	1.975	0.05
2.	Prospective Teachers with Blood Group O	93	100.09	13.141		

Interpretation and Discussion: Table No. 1.4 displays analysed data regarding comparison of teachers' self-esteem of prospective teachers belonging to A and AB blood groups in terms of critical ratio/t-value. Obtained t-value is 1.975 for df (163). It is significant at .05 level of significance as minimum significant 't' value according to standard t-table should be 1.98 at .05 level of significance for df (163).

Significant t-value is a proof that the two groups of prospective teachers namely prospective teachers with blood group A and O differ significantly in terms of their teacher self-esteem

Since 't' value is significant at .05 level of significance and mean score of prospective teachers belong to O blood group is more than the mean score of students belong to A blood group, it means prospective teachers belong to O blood group show comparatively good performance in teachers' self-esteem scale with respect to

the prospective teachers belong to A blood group. It also can be said that if 100 samples are taken from the same population, in 95 cases the results will be similar to the present one.

Thus, third subsidiary hypothesis namely; 'Prospective Teachers belonging to A & O blood groups do not differ significantly in terms of Teachers' Self-Esteem' is not accepted.

Hypothesis 1.4

'Prospective Teachers belonging to B & AB blood groups do not differ significantly in terms of Teachers' Self-Esteem'

In order to test this hypothesis, scores obtained from teachers' self-esteem scale were tabulated and analysed. t-test is used to compare mean scores of blood group B and blood group AB. t-ratio was computed to study the significant difference between scores of teachers' self-esteem of prospective teachers. The results so obtained have been entered in Table 1.5.

Table –1.5 Comparison of Prospective Teachers' Self-Esteem belonging to B and AB Blood Groups

S.No.	Name of Group	N	Mean Score	S.D.	t-value	Level of Significance
1.	Prospective Teachers with Blood Group B	132	92.23	15.714	2.190	0.05
2.	Prospective Teachers with Blood Group AB	53	97.58	13.211		

Interpretation and Discussion: Table No. 1.5 displays analysed data regarding comparison of teachers' self-esteem of prospective teachers belonging to B and AB blood groups in terms of critical ratio/t-value. Obtained t-value is 2.190 for df

(183). It is significant at .05 level of significance as minimum significant 't' value according to standard t-table should be 1.98 at 0.05 level of significance for df (183).

Significant t-value is a proof that the two groups of prospective teachers namely prospective teachers with blood group B and AB differ significantly in terms of their teacher self-esteem.

Since 't' value is significant at .05 level of significance and mean score of prospective teachers belong to AB blood group is more than the mean score of prospective teachers belong to B blood group, it means prospective teachers belong to AB Blood Group show comparatively good performance in teachers' self-esteem scale with respect to the students belong to B blood group. It also can be said that if 100 samples are taken from the same population, in 95 cases the results will be similar to the present one.

Thus, fourth subsidiary hypothesis namely; 'Prospective Teachers belonging to B & AB blood groups do not differ significantly in terms of Teachers' Self-Esteem' is not accepted.

Hypothesis 1.5

'Prospective Teachers belonging to B & O blood groups do not differ significantly in terms of Teachers' Self-Esteem'

In order to test this hypothesis, scores obtained from teachers' self-esteem scale were tabulated and analysed. t-test is used to compare mean scores of blood group B and blood group O. t-ratio was computed to study the significant difference between scores of teachers' self-esteem of prospective teachers. The results so obtained have been entered in Table 1.6.

Table – 1.6 Comparison of Prospective Teachers' self-esteem belonging to B and O Blood Groups

S.No	Name of Group	N	Mean Score	S.D.	t-value	Level of Significance
1.	Prospective Teachers with Blood Group B	132	92.23	15.714	3.933	0.01
2.	Prospective Teachers with Blood Group O	93	100.09	13.141		

Interpretation and Discussion: Table No. 1.6 displays analysed data regarding comparison of teachers' self-esteem of prospective teachers belonging to B and O blood groups in terms of critical ratio/t-value. Obtained t-value is 3.933 for df (223). It is significant at .01 level of significance as minimum significant 't' value according to standard t-table should be 2.60 at .01 level of significance for df (223).

Significant t-value is a proof that the two groups of prospective teachers namely prospective teachers with blood group B and O differ significantly in terms of their teacher' self-esteem.

Since 't' value is significant at .01 level of significance and mean score of prospective teachers belong to O blood group is more than the mean score of students belong to B

blood group, it means prospective teachers belong to O blood group show comparatively good performance in teachers' self-esteem scale with respect to the students belong to B blood group. It also can be said that if 100 samples are taken from the same population, in 99 cases the results will be similar to the present one.

Thus, fifth subsidiary hypothesis namely; 'Prospective Teachers belonging to B & O blood groups do not differ significantly in terms of Teachers' Self-Esteem' is not accepted.

Hypothesis 1.6

'Prospective Teachers belonging to AB & O blood groups do not differ significantly in terms of Teachers' Self-Esteem'

In order to test this hypothesis, scores obtained from teachers' self-esteem scale

were tabulated and analysed. t-test is used to compare mean scores of blood group AB and blood group O. t-ratio was computed to study the significant difference between

scores of teachers' self-esteem of prospective teachers. The results so obtained have been entered in Table 1.7.

Table –1.7 Comparison of Prospective Teachers' self-esteem belonging to AB and O Blood Groups

S.No	Name of Group	N	Mean Score	S.D.	t-value	Level of Significance
1.	Prospective Teachers with Blood Group AB	53	97.58	13.212	1.102	0.05 (Not significant)
2.	Prospective Teachers with Blood Group O	93	100.09	13.141		

Interpretation and Discussion: Table No. 1.7 displays analysed data regarding comparison of teachers' self-esteem of prospective teachers belonging to AB and O blood groups in terms of critical ratio/t-value. Obtained t-value is 1.102 for df (144). It is not significant at .05 level of significance as minimum significant 't' value according to standard t-table should be 1.98 at .05 level of significance for df (144).

Not Significant t-value is a proof that the two groups of prospective teachers namely prospective teachers with blood group AB and O do not differ significantly in terms of their teachers' self-esteem. Mean difference of the two groups shows a little superiority of the prospective teacher belong to O blood group but t-value is not significant.

Thus, sixth subsidiary hypothesis namely; 'Prospective Teachers belonging to AB & O blood groups do not differ significantly in terms of Teachers' Self-Esteem' is not accepted.

As a whole, prospective teachers' with blood group 'O' is found to have more teachers' self-esteem than other blood groups. The possible reason for this may be that person with blood group 'O' more self-confident and optimistic than other blood group. The result is consistent with the study conducted by **Dr. Parag Arun Narkhede (2015)** he concluded in his research 'An empirical study on Blood Types and Personality' that blood group

have distinct characteristics. People belongs to 'O' blood type are the social butterflies. Often popular and self-confident, very creative personalities and always seem to be the centre of attention.

MAJOR FINDINGS

In present research, on the basis of significance F-value it can be safely concluded that prospective teachers belonging to A, B, AB and O blood groups do differ significantly in terms of their teachers' self-esteem. Prospective teachers with blood group 'A' and 'O', 'B' and 'AB', 'B and O' differ significantly in terms of their teachers' self-esteem. Among all the blood groups, prospective teachers with blood group 'O' is found to have higher level of teachers' self-esteem than other blood groups.

DELIMITATIONS OF THE STUDY

1. The present study was delimited to B.Ed. 2nd year pupil teachers (prospective teachers).
2. The present study was delimited to National Capital Region (NCR) Delhi.
3. Only ABO system of blood group was considered and not the Rh- factor.

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