

# General Intelligence and Social Interest among Professional and Non-Professional Students

Amitkumar B. Parmar & Yogesh A. Jogsan\*

\*Associate Professor  
Department of Psychology  
Saurashtra University  
Rajkot-360005  
Gujarat (India)

Received Sept. 01, 2017

Accepted Oct. 5, 2017

## ABSTRACT

*The main purpose of this research was to find out the general intelligence and social interest among professional and non-professional students. The 100 students were taken as participate. The general intelligence test (K.S.Misra,S.K.Pal 2012) and social interest inventory (S.K.Bava,1986) in English language. Gujarati translated by Jogsan,Y.A & Parmar ,A.B (2016).Data was analyzed  $X^2$  (Chi-square) test and to check the relation between general intelligence and social interest Karl Pearson correlation method was used. Results revealed that significant difference in general intelligence and social interest among professional and non-professional students. The co-relation between general intelligence and social interest was 0.33.which was positive correlation.*

**Key words:** general intelligence and social interest

General intelligence also know 'g' factor, refers to the existence of a broad mental capacity that influences performance on cognitive ability measures (Kendra,C. 2016). Charles spearman first described the existence of general intelligence in 1904. According to spearman this 'g' factor was responsible for overall performance on mental ability tests. According to Wendy, J. et al. (2007) score of general intelligence males showed more variability than females. Edward Thorndike was one of the foremost advocates of both the validity mental testing and biologically based greater variability in general intelligence of males. Thorndike, 1906 believed that were at most small sex differences in mean levels of mental ability. In general ability of biological basis of sex differences in abilities such as Geddes and Thomson's (1890), Jensen (1973) concluded that males tended to show greater variability in general intelligence than females. The usefulness of general and practical intelligence in predicting job performance is well- documented (Schmidt and Hunter, 1981; Sternberg and Wanger, 1993). Social interest is said to represent a reflection of one's identification with humanity and feeling of belonging to society (Karcher and Lindwall, 2003). A central component in Adler's individual psychology, social interest is an innate characteristic, yet is also on that requires during growth (Adler, 1964). by having caring amiable and cooperative behavior shown for them young children can create a bond with their fellow humans and be able to work for the good of the society and not be absorbed by personal befits alone (Adler). Social interest is viewed as having a

connection to society and a desire to participate in solving problems of society (Adler, 1964). Rich, G. (2001) found higher social interest was significantly related to higher level of overall satisfaction as well as satisfaction with friends and family.

## Objectives

The main objectives of this study were under:

1. To measure the mean difference of general intelligence in professional and non-professional students.
2. To measure the mean difference of social interest in professional and non-professional students.
3. To check the correlation between general intelligence and social interest.

## Hypotheses

The main hypotheses of this study were under:

1. There will be no significant difference of general intelligence in professional and non-professional students.
2. There will no significant difference of social interest in professional and non-professional students.
3. There will be no correlation between general intelligence and social interest.

## METHOD

### Participants

In the study total 100 students were taken as sample.25 professional boy students, 25 professional girl students, 25 non-professional boy students and 25 non-professional girl students. The purposive sample selected from Rajkot (Gujarat).

**Instruments**

**(A) General intelligence test:** It is developed by Dr. K. S. Misra and S. K. Pal (2012) in English language which is translated in Gujarati by Dr. Jogsan, Y. A. and Parmar, A. B. (2016). 60 sentences are in this scale. This test split half reliability coefficient is 0.95 and test-retest reliability co-efficient 0.81 and validity of this scale on cattle's culture fair test of intelligence scale 3 form A the value of correlation was 0.68.

**(B) Social interest inventory:** It is developed by S. K. Bawa (1986) in English language which is translated in Gujarati by Dr. Jogsan, Y. A. and Parmar, A. B. (2016). 46 sentences are in this scale. Two point scale. Kuder-richards coefficient of reliability is 0.89. Validity of social interest inventory also contains context validity which has established by 100% agreement on each of the 46 items by a pool of three judges showing their affiliation to psychology as a profession with a

standing of more than ten years of experience in teaching.

**Procedure**

In this study purposive sampling used initial meeting with the participants was made at different Rajkot (Gujarat). The instructions were printed on the scales. The instruction was printed on the test. Standard instructions were ready by the investigator once and again the subjects were asked to read on their own. If there were any doubts then the investigator cleared them. Sufficient time was provided to the subject to complete their responses on the different tests. They were told about the confidentiality of the responses and were asked to give full cooperation by giving the correct answers. After completion of the tests participants returned the scale and they were thanked for their participation and co-operation.

**Research Design**

The aim of present research was to a study general intelligence and social interest among professional and non-professional students. For their total 100 students were taken as participate selection for purposive method was used. The distribution of the sample students on the basis of sex and profession has been presented in table: 1

**Table-1 descriptive 2 x 2 contingency Data Table**

| Variables    | Professional students | Non-professional students | Total      |
|--------------|-----------------------|---------------------------|------------|
| Boys         | 25                    | 25                        | 50         |
| Girls        | 25                    | 25                        | 50         |
| <b>Total</b> | <b>50</b>             | <b>50</b>                 | <b>100</b> |

**Result and Discussion**

The present study attempted to assess the general intelligence and social interest among professional and non-professional students. 25 boy professional students, 25 girl professional students, 25 boy non-professional students and 25 girl non-professional students. Purposive sample selected from Rajkot (Gujarat). The  $X^2$ - chi-square was applied for the purpose of statically interpretation to test the significance of difference between means. Results and discussion for the study are as follows.

**Result Table 2**

Showing the mean and  $x^2$  of general intelligence

| Variables        | Boys | Girls | N  | $x^2$ | Sig  |
|------------------|------|-------|----|-------|------|
| Professional     | 48   | 45    | 50 | 22.50 | 0.01 |
| Non-professional | 54   | 52    | 50 |       |      |

Sig. Level = 0.01 = 6.63  
0.05 = 3.86

In the table-2 general intelligence mean of professional boys received 48, professional girls received 45, non-professional boys received 54 and non-professional girls received 52. Here  $x^2$  (Chi-square) is 22.50 which is significant at 0.01 level. Here boys general intelligence greater than girls students. This study supported Wendy. J. et al (2008), Edward Thorndike (1904), Jensen (1973), Richard L. (1994) they all are said male's greater general intelligence than females also here significant seen so first hypothesis is reject.

**Result Table 3**

Showing the mean and  $x^2$  of social interest

| Variables        | Boys | Girls | N  | $x^2$ | Sig  |
|------------------|------|-------|----|-------|------|
| Professional     | 40   | 35    | 50 | 26.77 | 0.01 |
| Non-professional | 45   | 30    | 50 |       |      |

Sig. Level = 0.01 = 6.63  
0.05 = 3.86

In the table-3 social interest mean of professional boys received 40, professional girls received 35, non-professional boys received 45 and non-professional girls received 30. Here  $\chi^2$  (Chi-square) is 26.77 which is significant at 0.01 level. So here we can say second hypothesis reject. Here boys students social interest greater than girls students. So that non-professional students greater social interest than professional students.

**Result Table 4**

Showing correlation between general intelligence and social interest

| Variables            | Mean  | N   | r    | Sig. |
|----------------------|-------|-----|------|------|
| General intelligence | 49.75 | 100 | 0.33 | 0.01 |
| Social Interest      | 37.5  | 100 |      |      |

Sig. Level =0.01= 0.19

0.05=0.25

According to table-4 result of correlation analysis revealed is a positive correlation between general intelligence and social interest (0.33). Which is significant at 0.01 level. It means if general intelligence good so social interest good or social interest increase general intelligence.

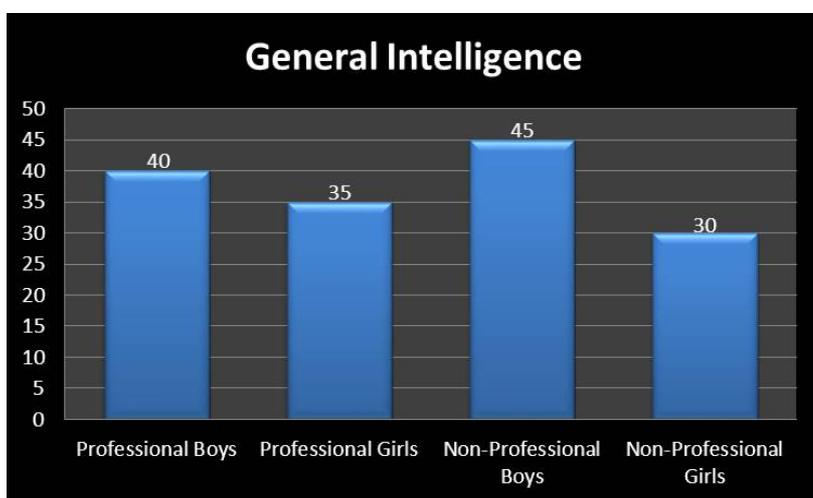


Figure 1 caption of General intelligence

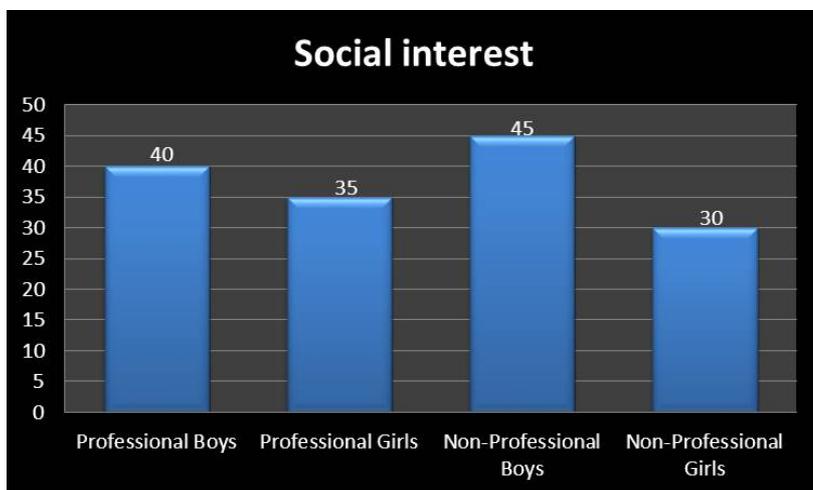


Figure 1 caption of Social Interest

**Conclusion**

We can conclude by date analysis as follows.

The present study was endeavored to study general intelligence and social interest among professional and non-professional students. It can be concluded that there is significant between professional boys and

professional girl students of general intelligence and non-professional boys and girls of general intelligence significant at 0.01 levels. Boy student's higher general intelligence greater than girl students. In social interest professional boys and girls student significant difference, Non-professional boys and girl's student are significance at 0.01 level. While social interest boy students greater than girl students And In correlation between general intelligence and social interest was 0.33 positive. Which was significance at 0.01 level it means general intelligence increase social interest.

### **Recommendation**

According to spearman general intelligence responsible for overall performance on mental ability and social interest conducted with society and participate with different social occasion. Review of literature indicates that boy's greater general intelligence than girls. Here a few are strategies that can be incorporated ones curriculum to duly benefit from all boys and girls. Develop the relation to their peoples, thinking different types, plays chess and game, practice a reasoning sum and many more. While for the social interest to help to other people, participate your age people, give a suggestion and take a suggestion, listening news, takes leadership.

### **Limitations of the study**

This study is not without its limitations, which should be noted. The present investigation was carried out under the following limitations.

- The study was confined to persons (aged 18-25 year) only so generalization of the result might be unwell here.
- One most limitation of this study is small sample size or 100 students.
- This study was conducted in Rajkot City (Gujarat).
- As the study was for 1-2 months (November-January) only, time was a limiting factor.
- The finding result made in the study may be biased by the incorrect information given by participants.
- In sample selection for this research purposive method was followed.

### **Main finding**

Here Significant difference in general intelligence and social interest among professional and Non-professional students. Boy student's greater general intelligence than girl and social interest boy greater than girl students. While the positive correlation between general intelligence and social interest.

### **Suggestion for future study**

- Endeavour can be executed to analyze more than 100 students of sample to attain better results.
- For the collection of information variegated methods except questionnaires can be adopted.
- Selection of participate can be determinate with the in take of different people from different state and district to ensure their general intelligence and social interest.
- To crown the fabric of the research work other method of selecting sample can be appropriated.

### **REFERENCE**

1. Adler, A. (1964). Social interest: A challenge to mankind. New york: Capricorn books.
2. Geddes, P. and Thomson, J. A. (1890). The evaluation of sex. New York: Scribner.
3. Jensen, A.R. (1973). Educational differences. London : Methuen.
4. Karcher, M. and Lindwall, J. (2003). Social interest, connectedness and challenging experience: What makes high school mentors persist? Journal of individual psychology, 59, 293-315.
5. Kendra, C. (2016). [www.psychology.about.com/old/gindex/g/gene ral intelligence.htm](http://www.psychology.about.com/old/gindex/g/gene ral intelligence.htm).
6. Rich, G. (2001). The relationship between life satisfaction, social interest and frequency of extracurricular activities among g adolescent students
7. Rechard, L, (1994). Sex differences in intelligence and brain size: A paradox resolved, Personality and individual differences. Vol, 17 (2), 257-271.
8. Sechmidt, F. L. and Hunter, J. E. (1981). Employment testing: old theories and new research findings. American psychologist 36: 1128-1137.
9. Spearman, C. E. (1904). General intelligence objectively determined and measured. American journal of psychology. vol, 15 .201-293.
10. Sternberg, R.J. and Wanger, R. K. (1993). The geocentric view of intelligence and job performance is wrong. Current directions in psychological science Vol 2,1-5.
11. Thorndike, E. L. (1906). Sex in education. Bookman, 23, 211-214
12. Wendly, J. B. and Thomas, J. (2007). Sex difference in mental abilities: G masks the dimensions on which they lie, intelligence. 35, 23-39.