

## To Study the Relationship of Intelligence of Adolescents with Different Dimension of Personality

Meena Devi<sup>a</sup>, Archana Loona<sup>b</sup>

<sup>a</sup>Professor of Education, Guru Angand Dev Nagar – 8, Muktsar – 152026, Punjab, India

<sup>b</sup>Teacher, Govt.Sen.Sec.School, Rupana, Punjab, India

### Abstract

The aim of the study is to study the relationship of intelligence of adolescents with three important personality dimensions: Psychoticism, Neuroticism, and Extroversion. **General Mental Ability Test by Jalota (1982 and Eysenck's Personality Questionnaire by Eysenck' (1975)** were administered on a sample of 120 adolescents. The sample of the present study was drawn from senior secondary government managed Punjabi medium schools of Punjab by selecting 3 schools each from Sri Muktsar Sahib district. Further a sample of 20-25 adolescents was taken up randomly from each school. Due representation was given to cover rural and urban areas in the selection of schools from each districts. The co-efficient of correlation of intelligence of adolescents with psychoticism and neuroticism dimension of personality came out to be insignificant ( $r=0.011$ ;  $p>0.05$ ).

**KEYWORDS:** Intelligence, Personality dimension, Adolescents.

### Introduction

Adolescent children experience a number of physiological and psychological changes in this transitional period. For the mental health it is necessary that all our dispositions, native and acquired should like the organs of body, work not completely and fully but harmoniously together. The first aim of education is to help the individual to grow mentally healthy. The child's mental health and balance are of utmost important in relation to his general health. The complexity and stresses of modern living make necessary considerations of his mental health if he is to meet them successfully. During adolescence if the individual continues desirable health and habits which began in childhood he will be able to better meet his emotions. If adolescents are mentally healthy then they are self controlled and self disciplined. "Rational impulsion, not blind compulsion is the goal". For attaining this mental health the students should be provided with while task which will discipline them. Simonton (2003) has defined intelligence is certain set of cognitive capacities that enable an individual to adapt and thrive in any given environment they find themselves in, and those cognitive capacities include things like memory and retrieval, and problem solving and so forth, there's a cluster of cognitive abilities that lead to successful adaptation to a wide range of environments. Aderson (2006) Intelligence is "that facet of mind underlying our capacity to think, to solve novel problems, to reason and to have knowledge of the world. Legg and Hunter (2006) viewed intelligence as an ability to achieve goals in a wide range of environments. Moynihan and Peterson (2001) are of the view that personality traits are the key antecedent of an individual's cognitions and affective states that may influence his or her

task and interpersonal or socio-emotional role behaviour. According to Rychman (2004) personality is dynamic and organized set of characteristics possessed by a person that uniquely influences his or her cognition, motivation and behaviours in the various situations.

## REVIEW OF LITERATURE

Ambler and Strydom (2013) studied The relationship between happiness and intelligent quotient the results indicated that those with lower IQ are less happy than those with higher IQ. Interventions that target modifiable variables such as income (e.g. through enhancing education and employment opportunities) and neurotic symptoms (e.g. through better detection of mental health problems) may improve levels of happiness in the lower IQ groups.

Bukaiei (2011) study the emotional intelligence, burnout levels, and personality styles prevailing among teachers of first three grades. Results indicated high level of emotional intelligence, low level of burnout, and prevalence of extrovert personality style among participants. In addition, there were statistically significant positive relationship between emotional intelligence and extrovert personality style; whereas no statistically significant relationship was found between emotional intelligence and burnout.

Dinesh (2013) studied the intelligence of extrovert and introvert secondary students of District Rewari (Haryana). A sample of 200 secondary Boys and girls students with the age range 15 to 18 years. The finding revealed that extrovert adolescent students are more intelligent as compared to introvert adolescent students.

Gupta (1999) This study examined the relationship between fluid intelligence, personality dimensions (Extroversion, Neurosis and psychosis) and emotional intelligence with academic success. Results showed that fluid intelligence, extroversion, emotional intelligence, intrapersonal intelligence and adaptability were positively correlated with academic success. Psychosis was negatively associated with academic success.

Lynn and Gordon (2011) investigators have reported studies of personality factors in educational attainment in terms of Eysenck's dimensional theory of personality. These findings show that there was no significant correlation between either neuroticism or introversion and intelligence.

Ley and Spelman (2011) investigation that the regression of intelligence test scores on anxiety and neuroticism is curvilinear, and in the form of an 'inverted U,' and that extra version is negatively correlated with intelligence.

Nunn, Bergmann, and Britton (2003) analysis the relation of low intelligence quotient (IQ) with neurosis in old people who are living in the community. The findings suggest that below-average intelligence is one of the factors that independently contribute to the development or persistence of neurotic illnesses in older people.

Wells and Kelly (2001) diagnosis of 102 psychotic cases examined by the Stanford

intelligence scale. The result indicated that there is no relationship between psychotic and intelligence.

## **OBJECTIVES**

1. To study the relationship of intelligence of adolescents with psychoticism dimensions of personality.
2. To study the relationship of intelligence of adolescents with neurotism dimensions of personality.
3. To study the relationship of intelligence of adolescents with extroversion dimensions of personality.

## **HYPOTHESES**

- 1 There will be significant relationship of intelligence of adolescents with psychoticism dimensions of personality.
- 2 There will be significant relationship of intelligence of adolescents with neurotism dimensions of personality.
- 3 There will be significant relationship of intelligence of adolescents with extroversion dimensions of personality.

## **OPERATIONAL DEFINITIONS OF THE VARIABLES**

The key terms used in the study were operationally defined as under:

1. **Intelligence:** Intelligence is the ability to deal with numbers, analogies, opposites and synonyms to make categories and to draw inferences. Its measurement (verbal) is the total scores on Group Test of General Mental Ability (Jalota, 1982).
2. **Personality:** Personality is defined as dynamic organization within the individual, which enables him to make adjustment in the environment.

## **METHODOLOGY**

Descriptive method of research was used in the conduct of present study. The sample of the present study was drawn from senior secondary government managed Punjabi medium schools of Punjab by selecting 3 schools each from Sri Muktsar Sahib district. Further a sample of 20-25 adolescents was taken up randomly from each school. Due representation was given to cover rural and urban areas in the selection of schools from each districts. A sample of 120 adolescents was selected.

## **RESEARCH TOOLS**

The selection of suitable tools is of vital importance for successful research. The success of any research endeavour is largely dependent upon the tools which are used for data collection. The following tools were used to collect data:-

**General Mental Ability Test by Jalota (1982)-** Intelligence in terms of vocabulary,

similar and opposites, number series, classification, best answer inferences and analogies. It consists of 100 questions. The students had to put a tick mark on the correct option. The test was scored with the help of hand scoring key provided for this purpose. A weightage of one point is given if the response is correct and no or zero weightage is given if the response is wrong. Total scores are found by adding all the correct responses.

**Eysenck’s Personality Questionnaire by Eysenck’ (1975)** -The Questionnaire measure of three important personality dimensions: Psychoticism, Neuroticism, and Extroversion. Each of these three dimensions is measured by means of 90 questions; a scoring key was used to check the answer. It was checked that each question had only one answer. The key was placed on the booklet so that the (\*) mark on the booklet was visible through that circle of key. Scores of psychoticism, neuroticism, extroversion and lie score were obtained. On each page a table of all four scores was given. All these scores were entered and the scores of each variable were added at the end of the page.

**RESULT AND DISSCUSION**

**Intelligence of Adolescents with Different Dimensions of Personality**

The coefficients of correlation of mental health of adolescents with intelligence and different dimensions of personality are given in table

**Table-1: Correlation Matrix of Intelligence of Adolescents with Different Dimensions of Personality of Total Sample (N=120)**

Variables	Intelligence	Psychoticism	Neuroticism	Extroversion
<b>Intelligence</b>	1	0.011	-0.028	0.087**
<b>Psychoticism</b>		1	0.072*	0.049
<b>Neuroticism</b>			1	0.043
<b>Extroversion</b>				1

\*\* p<0.01; \*p<0.05

The co-efficient of correlation of intelligence of adolescents with psychoticism dimension of personality came out to be insignificant (r=-0.011; p>0.05). The co-efficient of correlation of intelligence of adolescents with neuroticism dimension of personality turned out to be negative and insignificant (r=-0.028; p>0.05). The co-efficient of correlation of intelligence of adolescents with extroversion dimension of personality came out to be positive and significant (r=0.087; p<0.01).

Hence the hypothesis, ” There will be significant relationship of intelligence of adolescents with extroversion dimensions of personality” is accepted. Dinesh (2013), Bukaiei (2011) supported the result. But psychoticism and neuroticism dimension of personality came out to be insignificant. Hence the hypothesis, ”There will be significant relationship of intelligence of adolescents with psychoticism dimensions of personality.

Wells and Kelly (2001) supported the result. There will be significant relationship of intelligence of adolescents with neurotism dimensions of personality” is rejected. Bukaiei (2011), Lynn and Gordon (2011) supported the result.

## **BIBLIOGRAPHY**

Aderson, M. (2006) Intelligence. MS Encarta online Encyclopedia.

Ambler,G, and Strydom, A. (2013) The relationship between happiness and intelligent quotient: the contribution of socio-economic and clinical factors. Journal of Psychological Medicine. 43(6).

Bukaiei.N. (2011)Emotional Intelligence and Relationship with Personality Styles and Burnout among Teachers of the First Three Grades. An-Najah University Journal for Research - Humanities . 25(1), 49-82.

Dinesh,K.(2013) A Study of Intelligence of Extrovert and Introvert Students. International Indexed & Refereed Research Journal, 5,55-56.

Eysenck, H.J. (1975) Manual of the Eysenck Personality Questionnaire. London: Hodder and Stoughton.

Gupta.C(1999) Correlation Between Fluid Intelligence, Dimensions Of Personality (Extroversion, Neurosis And Psychosis) And Emotional Intelligence With Academic Success In High School Students. Journal Of Applied Psychology.2010,44 -57.

Jalota, S. (1982) Manual of General Mental Ability. New Delhi: The Psychocentre.

Ley and Spelman ,M.S.( 2011) *The Relationships Between Intelligence, Anxiety, Neuroticism And Extraversion*. British Journal Of Educational Psychology. 36(2), 185–191.

Lynn,R. and Gordon,I.E.(2011) *The Relation Of Neuroticism And Extraversion To Intelligence And Educational Attainment*. British Journal of Educational Psychology.31, 194–203.

Moynihan, L.M. and Peterson, R.S. (2001) A Contingent Configuration Approach To Understanding The Role of Personality in Organizational Groups. Research in Organizational Research, 23, 327-78.

Nunn, C. Bergmann, K. Britton,P.G.(2003) Intelligence and Neurosis in Old Age. British Journal of Psychiatry. 124,446.

Simonton, D. K. An interview with Dr. Simonton (2003) In J. A. Plucker, Editor, Human Intelligence, Historical influences, Current Controversies, Teaching Resources.

Rychman, R. (2004) Theories of Personality. Belmont, California: Thomson/Wadsworth.

Wells,F.L. and Kelly,C.M.(2001)Intelligence and Psychosis. American Journal of Psychiatry.77(1).17-45.