Chapter III
PROBLEM AND HYPOTHESES
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In recent years, the more emphasis is given on cognitive psychology and information processing. The main element of information processing is inspection time, reaction time and auditory evoked potentials. Inspection time is, to date the only single & information processing index that accounts for approximately 20% intelligence test variance. IT, because of its much replicated correlation with IQ and its potential for our understanding of individual differences in cognitive ability than other indexes of human information on processing. However, there are many other factors, which may influence this process, but individual differences in general and personality traits in particular are the crucial determinants of information processing. Howe (1990) also raised a possibility that the speed of information processing measured correlated with IQ because of personality temperament dimensions. Zneider (1994) has also reviewed the relationship exists between a wide variety of personality and intelligence test performance. In another study Stough and others (1996) after studying the inspection time and performance IQ with personality or temperament found that IQ or inspection time significantly related but independent of personality or temperament.

The investigator, however, have reviewed different kind of studies in chapter II. After surveying research work, it was found that the research studies related with intelligence, personality and information processing particularly in inspection time and in attention processes is very limited. There is hardly any Indian reference in this context. Therefore, keeping in mind the practical importance of the area, the investigator performed the present research study. The
study would be a significant contribution in the area of placement services and will also help in the understanding of the combine role of intelligence and personality in relation to inspection time and attention processes.

The problem for present investigation was formulated in following manner:

To assess the degree of relationship between intelligence, personality and a number of specific information processing tasks such as inspection time and attention tasks.

Keeping in view the multiphasic nature of the problem, the investigator identified the following objectives for the present study:

1. To study the gender differences in level of intelligence, personality dimensions and performance on various selected information processing tasks.

2. To study the effect of intelligence level on performance of the selected information processing tasks.

3. To study the effect of extraversion trait on performance of the selected information processing tasks.

4. To study the effect of neuroticism trait on performance of the selected information processing tasks.

5. To find out the degree of relationship amongst variables of the study:

(i) To find out the degree of relationship by applying Pearson’s correlation between scores on intelligence and selected information processing tasks.
(ii) To find out the degree of relationship by applying Pearson’s correlation between scores on extraversion and selected information processing tasks.

(iii) To find out the degree of relationship by applying Pearson’s correlation between scores on neuroticism and selected information processing tasks.

6. To identify the predictors of selected information processing tasks by applying stepwise multiple regressions on criterion variables.

Hypotheses:

To fulfill the objectives of the study the following hypotheses were formulated:

1. There would be no gender differences in level of intelligence, personality dimensions and performance on the selected information processing tasks.

2. There would be no effect of intelligence level on performance of the selected information processing tasks.

3. There would be no effect of extraversion trait on performance of the selected information processing tasks.

4. There would be no effect of neuroticism trait on performance of the selected information processing tasks.

5. There would be no significant correlation between/amongst variables of the study.
6. Criterion variables would not be in position to predict the performance level of the selected information processing tasks.

We may now pass on the next chapter dealing with design and methodology of the study.