

THE STUDY OF RELATIONSHIP AMONG STUDY HABITS AND ATTITUDE, INTELLIGENCE, COGNITIVE STYLE AND ACHIEVEMENT IN ENGLISH

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ABSTRACT

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In this study the researcher find that the relation between study habits and attitude, intelligence, cognitive style in relation to English subject through their academic achievement. The present study provides the information about the performance of secondary school students. it lights on their study styles or habits and attitudes as well their cognitive styles. There is a useful differences in performance of secondary school students in relation to their study habits and attitudes and cognitive styles. The study confined to secondary school students, there is a ample of differences in study techniques and attitudes towards learning. There is the ample of differences in the cognitive styles among secondary school students.

KEY WORDS: *Study Habits & Attitude, Intelligence, Cognitive Style, Achievement.*

INTRODUCTION

“ Styles depend upon cerebral dominance of an individual in retaining and processing different modes of information in his own style of learning. Venkataraman(1990), styles are propensities rather than abilities. Styles are not fixed, but changeable. The efforts to understand learning and thinking styles and to learn to use them flexibly require the identification of individuals preferred style.

It is important for the teachers to know about the students preferred styles of study habits and attitude, cognitive styles of grasping the study material and intelligence, so that they can capitalize the opportunities for learning. Students acquire knowledge and know about think, persons, traits if personality, habits and values.

STUDY HABITS & ATTITUDE

Students academic performance occupies a very important place in education as well as in the learning process. It is considered as the key to judge one total potentialities and capacities which are frequently measured by the examination results. Study habit is the pattern of behaviour adopted by students that serves as the vehicle of learning.

Study habit is the degree to which the student engages in regular acts of studying routines. Study habits and attitudes

means a willingness to learn, openness and receptivity. It means usual or regular learns way of learning. The poor factors of habits and attitudes will have an adverse influence on the academic achievement of even the naturally bright students.

Learners learning character is characterized by his study habits. These serve as the vehicle of learning. It may be seen both means and ends of learning. Every student have his own study habits. These provide them the medium for learning.

DEFINITIONS OF STUDY HABITS

Azikiwe(1998) describes the study habits as “ the adopted way and manner a students plans his private readings, after classroom learning. So as to attain mastery of the subject.”

Hussain(2006), defines as “ study habits refer to predispositions which students have developed towards private readings through a period of time.”

Crede (2008) defined study habits as external factors that assist the study process such as sound study routines that include how often a student engage in studying sessions, review the material, self-evaluate, rehearse, explaining the material and studying in a conducive environment.”

Crede and Kuncel(2008) defines “ study habits as study routines, including but not restricted to, frequency of studying sessions, review of material, self-testing, rehearsal of learned material, and studying in a conducive environment.”

ATTITUDE

Attitude is something that is learned by an individual as he learns many other things in life. Attitude is an orientation or a sort of readiness to react in a certain way. It is evident that attitude is a specific mental state of the individual towards something according to which his behaviour towards it is moulded. It is obvious that people with positive attitude towards a Psychological objects are likely to respond in a favourable manner and benefit much more from their associations with that object than those people whose attitudes are negative and unfavourable.

The term attitude is defined differently by different authors. An attitude is defined as a mental state of readiness to respond to and also which indicates the degree of favourableness or unfavourableness towards a Psychological object internal evaluation system in this case.

DEFINITIONS OF ATTITUDE

Allport, has defined attitude as a “ mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individuals response to all objects with which it is related.”

Sorenson(1977), defined attitude is a particular feeling about something. It, therefore involves a tendency to behave in a certain way in situations which involves that something, whether person, idea or object. It is partially rational and partially emotional and is acquired, not inherent in an individual”.

CONCEPT OF INTELLIGENCE

Man is considered to be endowed with certain cognitive abilities which make him a rational being in contrast to animals. He can reason, discriminate, understand, judge, adjust and face a new situation from various perspective. We can see the wide range of differences among people. Some are having high performance in learning process, as well some are slow. But no doubt, interest, attitude, skills and desired knowledge and so on are count towards this achievement. But still there is something that contributes significantly towards these varying differences. In Psychology, we may termed it as ‘intelligence’. In Sanskrit, our rishis named it as ‘Viveka’.

Woodworth and Marquis, “intelligence means intellect put to use. It is the use of intellectual abilities for handling a situations or accomplishing any task.”(1948).

Stern(1914), “ intelligence is a general capacity of an individual consciously to adjust his thinking to new requirements. It is general mental adaptability to new problems and conditions of life.”

Terman, ”intelligence is a capacity for abstract thinking.”

Ebbinghaus, “intelligence is the capability to complete the parts into a whole.”

Thorndike, “ intelligence is the power of good response from the point of view of truth or fact.”

Spearman, “ intelligence includes the similar qualities of man.”

THEORIES OF INTELLIGENCE

The theories of intelligence propagated by Psychologists, grouped under two categories namely, factor theories and cognitive theories. These are;

A. FACTOR THEORIES

1. UNITARY OR MONARCHIC THEORY

This theory holds that intelligence consists of one factor: simply a fund of intellectual competency, which is universal for all the activities of the individual. A man who vigour can move so much to East as to the West in a similar way if one

has a fund of intelligence he can utilize it to any area of his life and can be as successful in one area as in the other depending upon his fund of intelligence. But in routine one may wise in core subject, but dull in languages. Therefore, the unitary theory rejected.

2. ANARCHIC THEORY OR MULTI-FACTOR THEORY

According to Thorndike intelligence is composed of highly particularised, and independent faculties. As the name suggest this theory considers: intelligence a combination of numerous separate elements of factors, each one being a minute elements of an ability. There is no significant relation between them.

3. SPEARMAN'S TWO FACTOR THEORY

According to him intelligence consists of two factors one is G factor and the other is S factor. The G factor stands for general ability and the S factors the specific ability. According to him every different intellectual activity involves a general factor ‘g’ which is shared with all intellectual activities and a specific ‘s’ which it shares with none.

4. GROUP FACTOR THEORY

Thurstone, while working on a test of primary mental abilities he came to the conclusion that certain mental operations have in common a primary factor which gives them Psychological and functional unity and which differentiates them from other mental operations. These mental operations constitutes a group factor. So, there are a number of groups of mental abilities each of which has its own primary factor. Thurstone and his associates have differentiated nine such factors. They are,-

1. Verbal factor
2. Spatial factor
3. Numerical factor
4. Memory factor
5. Word fluency factor
6. Inductive reasoning factor
7. Deductive reasoning factor
8. Perceptual factor
9. Problem solving ability factor.

5. SAMPLING THEORY

This theory assumes that the mind is made of many independent bonds or elements. Any specific tests or school activity sample some of these bonds. It is possible that two or more tests sample and utilize the same bonds., then a general common factor can be said to exist among them. It is also possible that some other tests sample different bonds, then the tests have nothing in common and each is specific.

6. VERNON'S HIERARCHICAL THEORY

Intellectual abilities or factors of intelligence lie in hierarchical order. On top we have G, a general type of major factor representing on overall intelligence of the individual. Under G, their lie two prominent group factors. These two major factors may be divided with minor group factors and in turn these minor factors may be further sub-divided into various specific factors related with minute specific mental ability.

7. GUILFORD'S THEORY OF INVOLVING A MODEL OF INTELLECT

A model of intellect on the basis of the factor analysis of several tests employed for testing intelligence of the human beings. They concluded that any mental process or intellectual activity of the human being can be described in terms of three basic dimensions or parameters known as operation; contents; and products. These parameters may be further subdivided into specific factors or elements. Operations may be subdivided into 5, contents into 5, and products into 6.

B. COGNITIVE THEORIES

1. CATELL AND HORN'S THEORIES OF INTELLIGENCE

The Catell(1965) and Horn (1978)theory of fluid and crystallized intelligence suggest that intelligence is composed of different abilities that interact and work together to produce overall individual intelligence.

2. JENSONS THOERIES OF MENTAL FUNCTIONING

Jenson(1969) accepts Spearman's idea of a general factor in human intelligence, and his own theory divides intelligence into two distinct sets of abilities: Level I abilities account for memory functions and simple associative learning, and Level II abilities comprise abstract reasoning and conceptual thought.

3. COMPIONS AND BROWNS THOERY OF INTELLIGENCE

Brown and Compion (1986) theory of intelligence according to which ones intelligence is which one's intelligence is composed of two-part system. The first part is a biologically based architectural system and the second, an environmentally influenced executive system. While the former works as a base for one's intellectual functioning incorporating such factors as memory capacity, information processing etc. The later is responsible for the higher order mental functioning.

4. STERNBERGS INFORMATION PROCESSING THEORY OF INTELLIGENCE

This theory of intelligence is a theory of love developed by Sternberg, during his time as a professor, he emphasized his research in the fields of intelligence, creativity, wisdom, leadership, thinking styles, ethical reasoning, love and hate.

COGNITIVE STYLE

The notion of cognitive style is fairly new. The concept of cognitive style is one that crosses many disciplines. Cognitive style refers to the way people process information and use strategies to respond to task: people are said to differ in the ways they typically and characteristically process information. The general processing strategies that characterize different people are known as perceptual cognitive styles.

Cognitive style theorists start from the accepted fact that we are bombarded by so much data from the environment every moment of our lives that we cannot possibly attend to them all without enormous cognitive strain. The way in which we assign things to categorise will be partly by innate factors, including how we actually perceive things.

Cognition is a problem solving activity. Cognitive processes refer to the things which we do in our head- these are mental activities and thinking. These process include selecting information from the environmental modifying that information and using it to meet the demands of the task at hand.

'Cognition' is a word that dates back to the 15th century when it meant "thinking and awareness". The term "cognitive style" is meant to imply certain personality and motivational factors that influence the way in which a person approaches a cognitive task(Kogan-1983).

Cognition is a process by which a sensory inputs where us transformed, reduced, elaborated, stored, recovered, and used. Cognition is the mental processing that includes the attention of working, memory, comprehending and producing language, calculating, reasoning, problem solving and decision making.

Cognition is the faculty for the processing of information applying knowledge, and changing preferences. The concept of cognition is to abstract concepts such as mind, intelligence etc.

'Cognitive style' or 'thinking style' is a term used in cognitive Psychology to describe the way individual think, perceive and remember information, cognition style differs from cognitive ability. The cognitive style describe person's typical mode of thinking, remembering or problem solving, cognitive style denotes a tendency to behave in certain manner.

Witkin(1977), defined cognitive style as "a unique way of dealing with information in terms of receiving, coding, maintenance and using."

Guilford (1997), defined cognitive style as "a control process of human behaviour embodied with a number of cognitive ability or cognitive controls."

ACHIEVEMENT

Achievement performance according to the Cambridge University Reports (2003) is frequently defined in terms of examination performance. It refer to the student have learned what skills the students have learned and usually measured through assessments like standardized tests, performance assessments and portfolio assessments(Santrock-2006).

Hayle (1986) argued that schools are established with the aim of imparting knowledge and skills to those who go through them and behind all this is the idea of enhancing good academic performance.

According to Malvika Ganguly, achievement is the accomplishment of acquired efficiency in the performance of an individual in a given skill of body of knowledge. It means the knowledge attained or skills developed in the college subjects usually designated by test scores or by marks assigned by the teacher/ university or by both. Since academic achievement is the criterion for selection, promotion or recognition in various walks of life, the attention of educators is being increased on academic achievement.

OBJECTIVES OF THE STUDY

Following are the objectives of the study.

1. To identify the effect of intelligence on academic achievement of secondary school students.
2. To identify the effect of study habits and attitude on academic achievement of secondary school students.
3. To identify the effect of cognitive style on academic achievement of secondary school students.
4. To identify the relationship of study habits and attitude and academic achievement of secondary school students.
5. To identify the relationship of intelligence and academic achievement of secondary school students.

HYPOTHESES OF THE STUDY

(H1): A significant association between types of management (government and private) with levels of academic performance in English, levels of study habits & attitude, levels of intelligence and levels of educational problems of high school students

(H2): A significant association between location (rural and urban) with levels of academic performance in English, levels of study habits & attitude, levels of intelligence and levels of educational problems of high school students

(H3): A significant association between gender (male and female) with levels of academic performance in English, levels of study habits & attitude, levels of intelligence and levels of

educational problems of high school students

(H4): A significant association between mediums of study (Kannada and English) with levels of academic performance in English, levels of study habits & attitude, levels of intelligence and levels of educational problems of high school students

(H5): A significant association between levels of academic performance in English and levels of study habits & attitude of educational problems of high school students

SAMPLE OF THE STUDY

For the present study stratified random sampling technique will be adopted. Sample size of the study 1000.

METHOD OF THE STUDY

For the present study an investigator will be adopted the descriptive survey method.

TOOLS USED FOR THE STUDY

For the present study following standardized tools will be used.

- Scale of Study Habits & Attitude
- Scale of Intelligence
- Scale of Cognitive Style

STATISTICAL TECHNIQUES USED IN THE STUDY

- a) T-test
- b) Coefficient of correlation
- c) Factorial design by Tukeys multiple posthoc procedures
- d) Multiple linear regression technique

Summery of Karl Pearson’s correlation coefficient method between study habits & attitude, intelligence and cognitive style scores with academic performance in English of high school students in entire samples.

Variables	Correlation coefficient between academic performance in English of high school students in entire samples with				
	r-value	r ²	Degrees of freedom	t-value	p-value
Study habits & attitude	0.8562	0.7331	998	52.3518	<0.001,S
Intelligence	0.7942	0.6307	998	41.2865	<0.001,S
Cognitive style	0.7701	0.5931	998	38.1375	<0.001,S

Table: Summery of two sample independent t test between government and private high school students with their study habits & attitude, intelligence and cognitive style scores

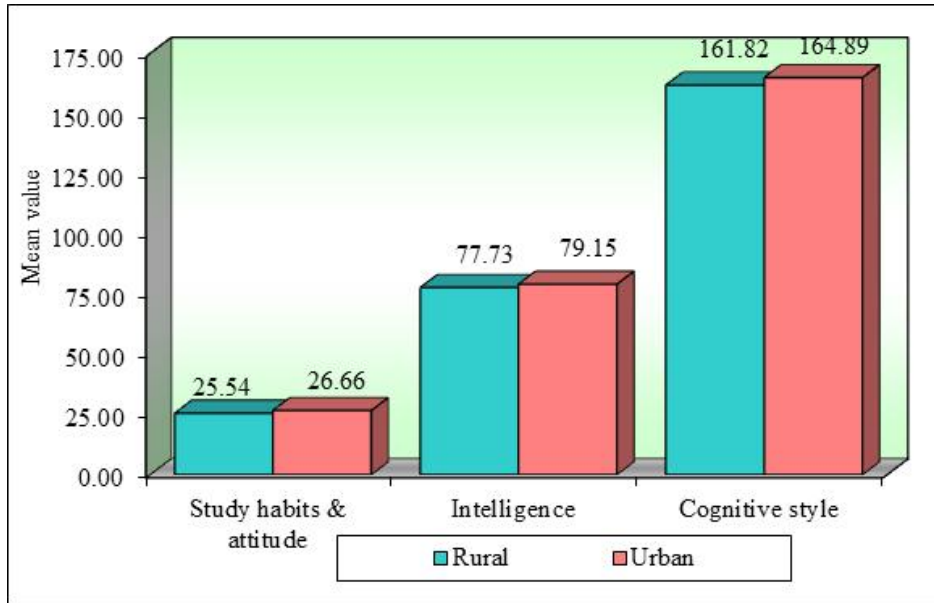
Variables	Managem ents	N	Mean	SD	Degrees of freedom	t-value	P-value
Study habits & attitude	Government	500	25.26	4.05	998	6.5077	<0.001,S
	Private	500	26.93	4.09			
Intelligence	Government	500	77.70	4.71	998	5.8630	<0.001,S
	Private	500	79.18	3.13			
Cognitive style	Government	500	160.36	16.19	998	6.2647	<0.001,S
	Private	500	166.36	14.02			

- The calculated value of t test is 6.2647 and the critical value of t with 998 degrees of freedom at 5% level is 1.9600. It indicates that, the calculated value i.e. 6.2647 is greater than 1.9600. It means that, a significant difference was observed between government and private high school students with cognitive style scores.

Therefore, the null hypothesis is rejected and alternative hypothesis is accepted. It concludes that, the students of private high schools have significant and higher cognitive style scores as compared to students of government high schools.

Summery of two sample independent t test between rural and urban high school students with their academic performance in English

Location	N	Mean	SD	Degrees of freedom	t-value	P-value
Rural	500	76.32	15.17	998	5.6444	<0.001,S
Urban	500	81.25	12.28			



The result of the above table clearly shows that, the calculated value of t test is 5.6444 and the critical value of t with 998 degrees of freedom at 5% level is 1.9600. It indicates that, the calculated value i.e. 5.6444 is greater than 1.9600. It means that, a significant difference was observed between rural and urban high school students with their academic

performance in English. Therefore, the null hypothesis is rejected and alternative hypothesis is accepted. It concludes that, the students of urban high schools have significant and higher academic performance in English scores as compared to students of rural high schools. The summery of average and standard deviation are presented in the figure given below.

Summery of two sample independent t test between male and female high school students with their academic performance in English

Gender	N	Mean	SD	Degrees of freedom	t-value	P-value
Male	500	73.65	15.34	998	12.4509	<0.001,S
Female	500	83.92	10.25			

The result of the above table clearly shows that, the calculated value of t test is 12.4509 and the critical value of t with 998 degrees of freedom at 5% level is 1.9600. It indicates that, the calculated value i.e. 12.4509 is greater than 1.9600. It means that, a significant difference was observed between male and female students of high schools with their academic

performance in English. Therefore, the null hypothesis is rejected and alternative hypothesis is accepted. It concludes that, the female students of high schools have significant and higher academic performance in English scores as compared to male students of high schools. The summery of average and standard deviation are presented in the figure given below.

Summery of two sample independent t test between Kannada and English medium high school students with their academic performance in English

Mediums	n	Mean	SD	Degrees of freedom	t-value	P-value
Kannada	500	79.85	13.74	998	2.4011	0.0165, S
English	500	77.72	14.22			

The result of the above table clearly shows that, the calculated value of t test is 2.4011 and the critical value of t with 998 degrees of freedom at 5% level is 1.9600. It indicates that, the calculated value i.e. 2.4011 is greater than 1.9600. It means that, a significant difference was observed between Kannada and English medium high school students with their academic performance in English. Therefore, the null hypothesis is rejected and alternative hypothesis is accepted. It concludes that, the Kannada medium high school students have significant and higher academic performance in English scores as compared to English medium high school students. The summery of average and standard deviation are presented in the figure given below.

FINDINGS

1. The students of urban high schools have significant and higher academic performance in English scores as compared to students of rural high schools.
2. The students of private high schools have significant and higher cognitive style scores as compared to students of government high schools.
3. The female students of high schools have significant and higher academic performance in English scores as compared to male students of high schools.
4. The Kannada medium high school students have significant and higher academic performance in English scores as compared to English medium high school students.

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