

**PERSONALITY STRUCTURE, CREATIVE POTENTIAL AND STUDY
HABITS OF ACADEMICALLY GIFTED STUDENTS WITH SPECIAL
REFERENCE TO 10+2 LEVEL STUDENTS**

**DISSERTATION SUBMITTED TO UNIVERSITY OF KASHMIR IN PARTIAL
FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF THE DEGREE OF**

MASTER OF PHILOSOPHY (M. Phil)

IN

EDUCATION

BY

TARIQ AHMAD WANI

Under the Supervision of

Prof.(Dr.) NIGHAT BASU



**FACULTY OF EDUCATION
UNIVERSITY OF KASHMIR**

(NAAC Accredited Grade-A)

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2012



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CERTIFICATE

Certified that the dissertation “**Personality Structure, Creative Potential and Study Habits of Academically Gifted Students with Special Reference to 10+2 Level Students**”, Which is being submitted by **Tariq Ahmad Wani**, for the award of **M.Phil. Degree** in Education of the University of Kashmir, is a record of his own work carried out under my supervision and guidance. All the content in this **M.Phil** Dissertation has not been submitted for the award of any other degree of this university or any other university.

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Supervisor

FACULTY OF EDUCATION

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DECLARATION

This dissertation is the result of an independent investigation. Whenever the work is indebted to the work of others it has been acknowledged and cited.

I declare that this dissertation has not been accepted in substance for any other degree or diploma nor is it concurrently being submitted in candidature or achievement of any other degree at any other university.

Tariq Ahmad Wani

Investigator

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ABSTRACT

Achievement is the end- product of all educational endeavours. The main concern of all educational efforts is to see that the learner achieves. After exploring the concept of achievement in the cognitive, effective and psychomotor aspects of human behaviour researchers have probed further and have attempted to understand the black box of achievement. The studies have brought to light the correlates of achievement and paved the way for control and manipulation of variables for quality management of achievement.

The world is becoming more and more competitive. Quality of performance has become the key factor for personal progress. Parents desire that their children should climb the ladder of performance to as high a level as possible. This desire for a high level of achievement puts a lot of pressure on students, teachers, schools and in general the educational system itself. Thus a lot of time and effort of the schools are used for helping students to achieve better in their scholastic endeavours and it should be so because high achievers are asset to the society. Academic achievement is of paramount importance, particularly in the present socio-economic and cultural contexts. The effectiveness of any educational system is gauged to the extent the pupils involved in the system achieve. Generally, achievement refers to the scholastic or academic achievement of the student at the end of an educational program.

Personality is the total picture of man`s organized behavior especially characterized by his fellowmen in the characteristics pattern of behavior, cognition, emotions which may be experienced by the individual manifested to others. Individual through his continuous reactions attempts to adjust himself to his

environment. Individual's moment which he adopt himself to the environment is his personality. Personality is the product of its own functioning in that particular environment.

Personality has physical as well as biological implications but social factor cannot be ignored. The outer dimension of personality include his physique, talents, abilities, temperament, disposition etc. inner dimensions include an individual's drive, emotional tendencies, aspiration level, attitudes and self concept. Outer dimensions can be observed by others and inner dimensions are difficult to judge from outside but better known to the person himself.

A habit is just a behavior that is repeated until it is automatic. A habit is something that is done on a scheduled, regular and planned basis that is not relegated to a second place or optional place in one's life. It is simply done, no reservations, no excuses, no exceptions. Study habits are the ways that we study. The habits that we have formed during our schools years. Study habits can be 'good' which means they work and help us to make good grades – or "bad" which just means they don't work and don't help us make good grades. Good study habits include being organized, keeping good notes and reading textbook, listening in class, and working every day. Bad study habits include skipping class, not doing work, watching too much TV or playing video games instead of studying, and losing work. Without good study habits, a students cannot succeed. To succeed, students must be able to appropriately assimilate course content, digest it, reflect on it, and be able to articulate that information in written and/or oral form.

According to J. P. Guildford (1965) creativity is a form of divergent thinking. Divergent thinking is a kind of mental operation in which we think in different directions. Sometimes searching and sometimes seeking Variety. Divergent thinking leads to novel responses to a given stimuli. The unique feature of the divergent thinking is that a variety of responses are produced, to discover and define complex abilities that together make up creative thinking. The various

variables of creativity are as: Sensitivity, Fluency, Flexibility, Originality, Redefinition and Elaboration.

Sinha (1970) in his study revealed the operation of some psychological variables behind academic performance of the students, study habits play a vital role in the psycholostic achievements of successful and unsuccessful students.

Mehid's Study (1971) revealed that the combination of factors required for success in three courses- science, commerce and arts did show appreciable difference both in kind and in degree.

Rai (1974) revealed that anxiety as a personality trait had a remarkable role in scholastic achievement.

Sharma (1978), Sinha (1979) and Dhar (1988) have found that high creative are less adjusted in compare to low creative.

Sharma (1984) observed that highly significant positive relationship exists between the three variables of family, climate and academic achievement.

Madeline, (1985) in their studies reported a positive correlation between attitude towards subject and achievement.

Byrk and Thum (1989) have found that socioeconomic status is a powerful predictor of school achievement.

Koteswara (1991) in his study observed that the personality attributes influence the academic achievement.

Sen (1992) has attempted investigation into the personality make up, intelligence and study habits of high and low achievers.

Mills (1993) reports on a study that compared academically talented students to a group of same age peers of mixed ability and found that they differed on four important dimensions of cognitive style (preferences for introversion – extraversion, sensing – intuition, thinking – feeling and judging – perceiving).

Patil R.P (1996) in his study revealed that the achievement scores of pupils having high and low study habits were significantly different.

Bokhari, (1996) in his study revealed that successful learners adopt positive study attitudes.

Maree (1997) describes that study attitude is a driving force behind study habits and poor attitudes was a reason for pupils underachievement in the authors study of learning in mathematics.

D. Wivedi K. (1998) in his study revealed that different values were significantly associated with prominent personality characteristics.

Firdous and Hussian A. (1998) in his study revealed that male subjects perceived 29 similar personality traits between self and other as a potential mate.

Rani, N. (1999) in her study indicates that interaction effect of Q_1 and locus of control was significant in influencing task performance. There was a significant interaction effect of Q_1 and fluency component of creativity.

Crow and Crow (1999) commented that learning experience shapes study attitude.

Lin et al., (2001) recommended that future researchers are encouraged to find out the interactions between students performance and attitude.

Tomas, C.P. and Adrian F. (2003) in his study suggested that conscientiousness may lead to higher academic achievement. The present results provide evidence supporting the inclusion well established personality measures in academic excellence.

Ma and Xu (2004), also exploring mathematics achievement, concluded that secondary level students must have a positive attitude towards math in order to succeed.

Therefore, keeping in view the above studies the investigator feels privileged to undertake the analytic study of personality structure, creative potential and study habits of academically gifted (10+2) students with respect to male & female students presently perusing their studies in different colleges and departments of university of Kashmir.

NEED AND IMPORTANCE

Education is a purposefully designed process aiming at fostering the harmonious and healthy development of individuals as productive, successful and well adjusted persons in society. Student's performance in school is a topic of great concern to teachers, parents, schools and the educational system in general. Academic achievement outcomes have been regarded as a function of two characteristics ' skill' and ' will' and these must be considered separately because possessing the will alone may not ensure success if the skill is lacking (**M.C. Combs and Marzano, 1990**). This is a reminder to the teaching profession that skills in study habits might need to be 'taught' just as a subject matter is taught.

Very few studies have been undertaken to look into the learning habits and attitudes to learning of students at any level of the education system in India especially with respect to over achievers. The study shall be an attempt to fill that gap. Because of the dearth of the previous study, much of the literature informing the research is based on other (Mainly western) work. Whilst much of this might well be applicable internationally, care needs to be taken in assuming that all of it is directly applicable to the Indian context. Hopefully studies such as this one shall begin the process of developing a contextually appropriate literature.

Good students learn facts and skills by which they organize and express their thoughts and talents. It is true that we are all born with the ability to learn. We do it every day in our lives often without being aware of it. However, studying is special form of learning; it is achieved with some specific purpose in mind. All of us need to learn how to use good study habits, personality structure and creative approach. Poor study method clearly disrupts the academic progress of students. The students in secondary schools do not devote sufficient time to their studies and seldom have poor study habits. Students study habits seem to show differences in how they learn and how serious they are about learning. This study shall seek to explore the question of whether there is any impact of study habits, creative potential and

personality structure on the academic achievement of academically gifted 10+2 students.

In the 5th survey of educational research on page (89) “Only a few researches have been conducted to asses and compare different combinations of personality traits in different groups of students at different levels. However the findings of these studies cannot be expected and are not usually claimed to be generalisable for large populations or extensive areas”.

In the light of the above research gap the investigator justifies the need to conduct a study stated as under:

“Personality Structure, Creative Potential and Study habits of Academically Gifted Students with Special Reference to (10+2) Level Students”.

OBJECTIVES OF THE STUDY

The following objectives were formulated for the present study:

1. To identify the academically gifted 10+2 students.
2. To measure the personality dispositions of the academically gifted 10+2 students.
3. To measure the creative potential of the academically gifted 10+2 students.
4. To make an assessment of the study habits of academically gifted 10+2 students.
5. To compare male and female academically gifted students on personality structure, creative potential and study habits.

HYPOTHESES

The following hypotheses were formulated for the present investigation:

1. Academically gifted male and female 10+2 students do not differ significantly in their personality structure.
2. Academically gifted male and female 10+2 students do not differ significantly in their creative potential.

3. Academically gifted male and female 10+2 students do not differ significantly in their study habits.

TERMS AND VARIABLES

1. Personality structure

For the purpose of present investigation personality structure is operationally defined as the scores obtained by the subjects on **Cattel's 14 HSPQ**.

2. Creative potential

Creative potential is operationally defined as the scores obtained by the subject on **Baqur Mehdi's tests of creativity (verbal and non verbal)**.

3. Study habits

For the purpose of present study, Study habits is operationally defined as the scores obtained by the subject on **Palsane and Sharma Study Habits Inventory (PSSHI)**.

4. Academically Gifted Students.

For the purpose of present investigation the academically gifted students are those students who are toppers in higher secondary part – II examination with cut point of 75% marks and above in aggregate.

SAMPLE

The total population of academically gifted students as per the result gazette of higher secondary part-II examination (10+2) regular students of session 2009-10 is given as under:

Stream	Boys	Girls	Total
Arts	233	238	471
Commerce	784	424	1208
Science	1560	1169	2729
		Total	4408

The sample for the present study consists of 5% of total toppers in higher secondary part-II examinations (10+2) for the session 2009-2010. Thus the sample

comprised of 200 academically gifted 10+2 students presently perusing their studies in different colleges and departments of university of Kashmir.

The breakup of the sample of academically gifted male and female students is as under:

S.No	Name of the University/College	Class	Male	Female	Total
1.	University of Kashmir, Srinagar	1 st , 2 nd Year, BBA & LLB (integrated)	20	20	40
2.	SKUAST, (K) Srinagar	1 st , 2 nd year Bv.Sc	20	20	40
3.	Islamic University of Science & Technology, Pulwama	1 st , 2 nd year B.Tech`	20	20	40
4.	NIT, Srinagar	1 st , 2 nd year B.E Students	20	20	40
5.	Government Medical College, Srinagar	1 st , 2 nd year MBBS & BDS	20	20	40
Total			100	100	200

TOOLS

The following tools were employed for the purpose of collecting relevant data from the selected sample subjects:

1. The Junior High School personality questionnaire (14 HSPQ form A) by Cattell was administered to measure personality characteristics of the sample subjects.
2. Baqer Mehdi`s testes of creativity (Verbal and non-verbal) were used to measure the creative potential of the sample subjects.
3. Palsane and Sharma`s Study Habits Inventory (PSSHI) was administered on the sample subjects to measure their study habits.

STATISTICAL TREATMENTS

Various statistical methods including Mean, S.D, Percentage statistics and t-test, were used to analyze the data and draw inferences.

FINDINGS

On the basis of analysis, interpretation and discussion of the results, certain meaningful findings have been drawn and are reported as under:

1. It was found that 71% of the academically gifted students fall in range of 85-90% of marks on Academic performance standard, 14.5% fall in the range of 80-84% marks and 14.5% academically gifted students fall in the range of 75-79% marks at 10+2 level.
2. It was found that 73.5% academically gifted students had excellent study habits, 15% having very good study habits, 5.5% were having average, 3.5% were having unsatisfactory study habits and a very small proportion of students (2.5%) were having very unsatisfactory study habits
3. The study has revealed that 75% of academically gifted male students have excellent study habits, 12% have very good study habits, 6% have average, 4% have unsatisfactory and 3% have very unsatisfactory in their study habits, whereas 72% of academically gifted female students have excellent study habits, 18% have very good, 5% have average, 3% have satisfactory and 2% have very unsatisfactory in their study habits.
4. It has been found that 77% of the academically gifted students were found high creative on verbal creativity test and 23% students were found low creative on the same test. It was further found that 82% of the students were found high creative on non-verbal test of creativity and small proportion of students (18%) were found low creative on the same test.
5. The study further revealed that on performance standards of academically gifted students 68% male and 74% female fall on 85-90% of marks at 10+2 level, 15% male and 14% female fall on 80-84% marks and 17% male and 12% female fall on 75-79% of marks at 10+2 level respectively.
6. It was found that academically gifted female students in comparison to male students differ significantly on personality factors A, B, H, I and Q₄ which

implies that female students are more warmhearted, intelligent, adventurous, tender minded and more tense.

7. Academically gifted male and female students were found somewhat similar on personality factors of 'C' (Emotionally unstable - Emotionally stable), 'D' (Undemonstrative – Excitable), 'E' (Obedient – Assertive), 'F' (Sober – Enthusiastic), 'H' (Expedient – Persistent), 'J' (Vigorous – Unwilling to act), 'Q₁' (Confident – Apprehensive), 'Q₂' (Sociably group dependent – Self Sufficient) and 'Q₃' (Uncontrolled – Controlled).
8. It was found that there is no significant difference between academically gifted male and female students on the fluency dimension of creativity (verbal).
9. There is significant difference between academically gifted male and female students on the flexibility dimension of creativity (verbal).
10. It has been found that there is no significant difference between academically gifted male and female students on originality dimension of creativity (verbal), however there is significant difference between the academically gifted male and female students on originality dimension of creativity as measured by non-verbal test of creativity.
11. It was found that the two groups under study i.e, academically gifted male and female students differ significantly on overall dimension of creativity (verbal), moreover, the two groups under study i.e, academically gifted male and female students also differ significantly on overall dimension of creativity (non-verbal).
12. The study revealed that there is no significant difference between the academically gifted male and female students on elaboration dimension of creativity (non-verbal).
13. It has been found that there exists no significant difference in the study habits of academically gifted male and female students. Though the mean difference slightly favoured female gifted students but the difference failed to arrive as any level of confidence.

CHAPTER - 1

INTRODUCTION

Achievement is the end- product of all educational endeavors. The main concern of all educational efforts is to see that the learner achieves. After exploring the concept of achievement in the cognitive, effective and psychomotor aspects of human behavior, researchers have probed further and have attempted to understand the black box of achievement. The studies have brought to light the correlates of achievement and paved the way for control and manipulation of variables for quality management of achievement.

Current research suggests that there may be higher incidents of children in this high range than previously thought. Due to their unique characteristics the children are particularly vulnerable. Academically gifted children need a specialized advocacy because very little has been done to develop appropriate curriculum.

The academically gifted students also differ from the general population of the students on three personality scales (achievement, endurance and affiliation). Although as a group the academically gifted 10+2 students differ from other students on these dimensions, not all gifted students looked the same. There were also differences within the academically gifted and talented group. In fact, a wide range of scores on the personality traits, creative potential and different cognitive styles were represented in the academically gifted group.

Academically gifted students also show a strong reference for variety, novelty and change. For all the commonalities found among the academically

gifted students in both age groups, there were also differences between the two age groups, leading the researchers to hypothesize about developmental changes.

Personality is the total picture of man's organized behavior especially characterized by his fellowmen in the characteristics pattern of behavior, cognition, emotions which may be experienced by the individual manifested to others. Individual though has continuous reactions attempts to adjust himself to his environment. Cattell (1956) equates personality with the individual aspects of behavior. He defines personality as "that which permits a prediction of what a person will do in a given situation".

Academically gifted students differ from the general population of the students on the three personality skills i.e achievement, endurance and affiliation. Although as a group the academically gifted students differ from other students on these dimensions, not all gifted students looked the same. There were also differences within the academically gifted and talented group. The creative abilities, learning characteristics, study habits and personality structure often set them apart from their age mates. These students are fluent thinkers and able to generate possibilities, consequences or related ideas. They are flexible and able to use many different alternatives and approaches to problem solving. Academically gifted students also show a strong reference for variety, novelty and change.

The importance of the knowledge of student personality for the educator can hardly be exaggerated. In fact it is now held a part of his duty to assess the personality of each of the pupils and it is still more important for him to know, as precisely as possible, the exact nature of the relationship between personality and value system of adolescents. Such knowledge will enable the educator to locate more easily the specific factors that go into the formation of various traits and to map out the situations through which to reform particular traits. Recent research

induces us to believe that personality characteristics have a way of interacting differently between themselves and reacting different with different social situations. This would hearten us to go about creating a better society by paying more attention to exploring the hitherto greatly neglected areas of personality.

The knowledge of the nature of personality can help us to identify the strengths and weakness of the young people and establish diagnostic descriptions of more successful personality in cause effect terms and chalk out behavioral changes needed for better adjustment and development. The report of the Secondary Education Commission (1952-53) admits the importance of personality in relation to individual development and has made several recommendations to introduce new methods of personality assessment.

A habit is just a behavior that is repeated until it is automatic. A habit is something that is done on a scheduled, regular and planned basis that is not relegated to a second place or optional place in one's life. It is simply done, no reservations, no excuses, no exceptions. Study habits are the ways that we study. The habits that we have formed during our schools years. Study habits can be 'good' which means they work and help us to make good grades – or "bad" which just means they don't work and don't help us make good grades. Good study habits include being organized, keeping good notes and reading textbook, listening in class, and working every day. Bad study habits include skipping class, not doing work, watching too much TV or playing video games instead of studying, and losing work. Without good study habits, a students cannot succeed. To succeed, students must be able to appropriately assimilate course content, digest it, reflect on it, and be able to articulate that information in written and/or oral form.

To study is to buy out the time and dedicate self to the application and the task of study is to become engrossed in a process of learning, practice,

enlightenment education of one's self. Therefore the study habits can be derived from the above as buying out a dedicated scheduled and uninterrupted time to apply one's self to the task of learning. Without it, one does not grow and becomes self-limiting in life. We only go as far in life as our study habits (learning/education) will take us how far do we want to go, how much do we want to earn, how manual is the labour we choose we decide by our study habits throughout life.

Good students learn facts and skills by which they organize and express their thoughts and talents. It is true that we are all born with the ability to learn. We do it every day of lives, often being aware of it. However, studying is a special form of learning. It is achieved with some specific purpose with mind. All of us need to learn how to study (Lalitha, 2000, Landsberger, 2005, Rowntree, 1988, Sarwar, 1991). If we are to do best we can, as a student, we need to understand what would we want out of studying and what learning means to us.

There are a number of study methods identified as being helpful in the literature. Landsberger (2005) gave a list of keys to academic success: they are taking responsibility, putting things in proper order, discovering one's key productivity periods and places, prioritizing productivity periods and places for the most difficult study challenges, considering oneself in a win-win situation, consulting with the teacher, and continuously challenge oneself.

Race (1986) advises students to do a bit of studying whenever they can. He believes that a number of short bursts of activity tend to work better than a few long ones. It is better for students to study in the morning while there concentration is at peak and students should study their toughest subjects when they feel at their ease. It should be remembered however that each learner is different so he should develop his own methods and preferences.

Creativity has been a matter of concern to all. Advanced interested in the study and development of creativity: as are third world countries, whose survival depends upon creative vision and creative striving of the masses (Raina, 1980). Emphasizing the role of creative process H. Guardian (1982) wrote, "The greatest psychologies from William James to Sigmund Freud, from B. F. Skinner to Jean Piaget have all recognized the importance of the appeal of study of creative process.

Creative talents of handful persons have enabled mankind to see the bright sunshine of civilization. It is, therefore imperative for every nation to chalk out adequate programmes for the identification of creative students and make arrangements for their education and training in a stress free environment and thus make opportunities for them to develop their creative potential.

Creativity has been approached differently by different thinkers. Philosophically, creative thinking is not a peculiar type of thinking that has different non-publicity observable features from other types of thinking, for a philosopher a creative thinker is one whose thinking leads to a result which conforms to criteria of value in one domain or another while discussing creativity. Plato makes a distinction between artificial art and true art. He said, artists deal only with appearances and not with reality itself. True artists, for him are those who bring into birth come new reality. They are creative as they enlarge human consciousness. Scientifically creativeness involves an imaginative leap to a new perspective. The scientist searches for a hypotheses which is likely to fit-the facts he is concerned with for care has expressed creativity as the capacity to be surprised, as many scientific discoveries are made just in this way. The scientist observes a phenomenon which many others before him have been without getting puzzled. A scientist has the capacity to be surprised, anything obvious for others

becomes a problem for mind starts working on it and it becomes the beginning of his discovery. What makes him creative scientist is only partially his ability to solve the problem and the ability to getting puzzled is largely responsible for making him different from the average scientist. Social scientists approaches creativity with respect to interpersonal relationships. For them creativity is a social invention whose product is not an object but persons creativity in human relationships. Such a person is regarded creative who is intelligent and possesses sharp perceptions, subtle sensitivities, and respect for the individual person, boldness to explain one's point of view and to stand for one's convictions.

What Guilford showed to be intellectually wrong in conceiving of intelligence in narrow terms, Getzels and Jackson (1962) showed it to be also educationally wrong. Benefitting from Guilford's break-through and devising tests for creativity, they attempted to seek the relationship between intelligence and creativity and revealed that it was not possible to trace the able students if alone traditional measures of intelligence would have been used, and again, the cream of the students would have also been missed. They concluded that it is not only the intelligence tests that are biased against the highly creative children, but also the teachers. Guilford, Getzels and Jackson had undoubtedly opened the new era but it remained to Torrance to unravel unfailingly the positive domain in educational practice.

Taylor (1962) points out that many lay persons have a quite different notion from that held by psychologists when they think of creativity in the arts. They believe that most people have zero potential to be creative, where as a few persons have creative talent in varying degrees. The psychologists, on the other hand, are of the opinion that all persons have some degree of potential to be creative in one or more ways. It is now recognized that creativity is not limited

essentially to certain fields of the arts and sciences rather it should be generally in human activities.

Torrance (1965) developed tests of creativity that are extensively used by teachers for several levels of education in classroom settings to cultivate creativity in children through their daily teaching practices. He also developed programmes for teacher training. In regard to intelligence and creativity he has demonstrated that we miss about seventy per cent creative children when we depend solely on traditional tests of intelligence to measure ability. He too finds some correlation between creativity and intelligence upto 120 IQ and beyond that both are independent in their future direction.

According to Kothari Commission (1964-66) "Destiny of India is shaped in her classrooms". Teacher Education is put to develop the cluster of characteristics, values, adherence and should help in promoting creativity.

According to J P Guilford (1965) creativity is a form of divergent thinking. Divergent thinking is a kind of mental operation in which we think in different directions. Sometimes searching and sometimes seeking Variety. Divergent thinking leads to novel responses to a given stimuli. The unique feature of the divergent thinking is that a variety of responses are produced, to discover and define complex abilities that together make up creative thinking. The various variables of creativity are as: Sensitivity, Fluency, Flexibility, Originality, Redefinition and Elaboration.

Creativity is natural to a child. He grows and as he grows he displays this faculty through his behaviour which is qualified by his parents and teachers as naughtiness or mischievousness. It is in his plays Independent in their future direction

Most psychological researchers generally agree that all persons have some creative potential, though there are wide individual differences in degree. Lowenfeld (1959) distinguished between actual creativity and potential creativity, the former being that potential which is already developed and functioning, the later including the total creative potential (both developed and undeveloped within an individual).

Researchers also agree that creativity occurs at all ages, in some aspects of all cultures and to some degree in all fields of human work and endeavour though there are marked differences in the frequency, level, and type of creativity across these categories. Again, despite the notion that some fields of endeavour require more creativity, they may not necessarily do so at all times; creative bursts on the other hand may occur in fields not often thought of as creative.

People now begin to realize that creativity is in each one of us which could no longer be left to the chance occurrences, of the genius, neither it could be left in the realm of the wholly mysterious and be untouchable. Men had to be able to do something about it, creativity had to be a property in many men; it had to be something identifiable, it had to be subject to the effects. Of efforts to gain more of it (Razik 1967). Two things can be said with confidence. First, psychologists are convinced that all people are, to some degree, potentially creative despite their age levels, cultures and fields of human endeavour. Second, individuals, vary in their degree, of creative potential for various fields of activity and in the modes of expression of their creativeness.

Various factors have been identified that go with creative performance. Among them certain personal and situational attributes have been found to be more promising predictor of creative performance than others. For instance, certain intellectual characteristics such as, originality, redefinition, flexibility,

fluency, elaboration, and evaluation have come out as valid measures of creative performance. In broader terms a few components of memory, cognition and evaluation, convergent production and divergent production are involved in creative work. Divergent production seems to be the most important for the production of ideas in both quantity as well as in quality as it involves originality, flexibility, sensitivity, and ability to redefine. The fact that these intellectual aspects of creativity are relatively distinct components indicates the probability of multiple types of creative talent. There is probability also that some of these intellectual components underlie some of the motivational forces in the creative person such as drive, dedication to work, resourcefulness, striving for general principles, desire to bring order out of disorder, and desire for discovery.

The intellectual and motivational factors are linked significantly to certain personality characteristics. Several personality traits have been found to be valid indicators of creative potential, among them self-sufficiency, independence, openness, stability, tolerance to ambiguity, femininity interests, and self-confidence rate first. Creative people in different fields may have different personal characteristics. The personal characteristics possessed by artists may not be the same as scientists do have. However, researchers generally agree that the creative individual tends to produce adaptive responses that are original in nature. About their adjustment it is said that, whereas the typical person focuses on adjusting to his environment the creative individual tries to adjust the environment to him, to improve it in ways that he feels are urgently needed.

Environmental influences also affect the creative potential. These can either enhance or hinder development of those attributes which seem to be predictors of creative performance. These influences include factors involved in educational settings, working conditions climate and training programmes. Home

environments also may be regarded as external influences modifying creative attributes either in positive or negative directions.

Researchers are generally agreed that education can do a great deal in promoting creative performance through environmental manipulation. For Lasswell (1950), the environment serves as facilitator and as restrictor both in the innovation process and in the process of discovery and recognition of the innovation. Anderson (1961) has used the concepts of "Open" and "Closed systems" in discussing the facilitators and inhibitors of creative development in education. The open system permits originality, experimentation, initiative and invention. The closed system, on contrary, is concerned mainly with the acquisition of knowledge, memorization of facts, and findings already known answers to problem.

Sinnott (1959) discussed genetic variation and also creativity as response to environment. For him the changes of the mind are not dependent on genetic change rather are they the result of the enormously varied responses of a given genetic constitution to environmental differences and much of the variety of all organic life is due to environmental variety.

According to research by (Torrance 1966) it become clear that creative thinking is important for mental health, educational achievement, vocational success performance in various sectors of life and other important areas on predictive lines.

NEED AND IMPORTANCE

Education is a purposefully designed process aiming at fostering the harmonious and healthy development of individuals as productive, successful and well adjusted persons in society. No aspect or components thereof can left

untouched by Psychology. Student's performance in school is a topic of great concern to teachers, parents, schools and the educational system in general. Academic achievement outcomes have been regarded as a function of two characteristics ' skill' and ' will' and these must be considered separately because possessing the will alone may not ensure success if the skill is lacking (**MC. Combs and Marzano, 1990**). This is a reminder to the teaching profession that skills in study habits might need to be 'taught' just as a subject matter is taught.

Very little effort has been made to look into the learning habits and attitudes to learning of students at any level of the education system in India especially with respect to over achievers. The study shall be an attempt to fill that gap. Because of the dearth of the previous study, much of the literature informing the research is based on other (mainly western) work. Whilst much of this might well be applicable internationally, care needs to be taken in assuming that all of it is directly applicable to the Indian context. Hopefully studies such as this one shall begin the process of developing a contextually appropriate literature.

Good students learn facts and skills by which they organize and express their thoughts and talents. It is true that we are all born with the ability to learn. We do it every day in our lives often without being aware of it. However, studying is special form of learning; it is achieved with some specific purpose in mind. All of us need to learn how to use good study habits, personality structure and creative approach. Poor study method clearly disrupt the progress of students. The students in secondary schools in India usually do not devote sufficient time to their studies and seldom have poor study habits. Students study habits seem to show differences in how they learn and how serious they are about learning. This study shall seek to explore the question of whether there is any impact of study habits,

creative potential and personality structure on the academic achievement of academically gifted 10+2 students.

Sinha (1970) studies a fairly large sample of success full and unsuccessful students of the University of Allahabad. His investigation brought out certain interesting differences between successful and unsuccessful students and revealed the operation of some Psychological variables behind academic performance of the students, study habits and interests play a vital role in the achievement of scholastic achievements.

Medhi's study (1971) revealed that the combination of factors required for success in three courses – science, commerce, and arts did show appreciable difference both in kind and in degree.

Personality traits like anxiety and hostility have been studied in relation to scholastic achievement while studying thousand students of science (Biology) group of 12 higher secondary schools of Agra.

Rai (1974) revealed that anxiety as a personality trait had a remarkable role in scholastic achievement. Low level of anxiety was detrimental to achievement and level of aspiration was not found to be a significant correlate of achievement. However, students fixed up high goals commensurate with their ability and tried to achieve it.

The objectives of the study conducted by **Patil R.P (1996)** was to examine the qualitative aspect of study habits of the pupils and its impact on the school academic achievements. The results indicated that the achievement scores of pupil's having high and low study habits were significantly different. The pupils who had good study habits did get significantly more academic achievement scores than those who had poor study habits.

D. Wivedi K. (1998) in his study of personality characteristics and value system on 50 undergraduate and postgraduate female students. The results revealed that different values were significantly associated with prominent personality characteristics.

Firdous and Hussian A. (1998) attempted to investigate the perception of similarity of personality traits between self and potential mates. The results indicated that male subjects perceived 29 similar personality traits between 'self' and 'other' as a potential mate. They perceived 47 personality traits as desirable for themselves and 50 traits as desirable in others as a potential mate.

Study habits, personality structure, learning styles and cognitive style profiles of academically gifted students by **Mills (1993)** reports on a study that compared academically talented students to a group of same age peers of mixed ability and found that they differed on four important dimensions of cognitive style (preferences for introversion – extraversion, sensing– intuition, thinking –feeling and judging – perceiving).

Rani, N. (1999) investigated the interaction effects of personality factor Q_1 , locus of control and creativity on task performance of 160 female adolescent of class 9th and 12th (age 15-17). The results indicate that interaction effect of Q_1 and locus of control was significant in influencing task performance. There was a significant interaction effect of Q_1 and fluency component of creativity.

Tomas, C.P. and Adrian F. (2003) were interested to know to what extent and which personality traits predict academic performance. This was investigated in two longitudinal studies of two British University Samples. The results suggested that conscientiousness may lead to higher academic achievement. The

present results provide evidence supporting the inclusion well established personality measures in academic excellence.

The attitude towards study is one of the main factors which affect academic performance of learners. Numerous studies have reported a positive correlation between attitude towards subject and achievement (Ma and Xu, 2004 Madeline, 1985, Maree, 1997). This has implications for teachers, who need to find ways of engaging the interests of students in their particular subjects.

Study attitude serves as an index of how we think and feel about study. Crow and Crow (1999) commented that learning experience shapes study attitude. Successful learners adopt positive study attitudes (Bokhari, 1996). Maree (1997) describes that study attitude is a driving force behind study habits and poor attitudes was a reason for pupils underachievement in the authors study of learning in mathematics. Ma and Xu (2004), also exploring mathematics achievement, concluded that secondary level students must have a positive attitude towards math in order to succeed. Lin *et al.*, (2001) recommended that future researchers are encouraged to find out the interactions between students performance and attitude.

Therefore, keeping in view the above studies the investigator feels privileged to undertake the analytic study of personality structure, creative potential and study habits of academically gifted (10+2) students with respect to male & female students presently perusing their studies in different colleges and departments of university of Kashmir valley.

In the 5th survey of educational research on page (89) "Only a few researches have been conducted to asses and compare different combinations of personality traits in different groups of students at different levels. However, the

findings of these studies cannot be expected and are not usually claimed to be generalisable for large populations or extensive areas”.

In the light of the above research gap the investigator justifies the need to conduct a study stated as under:

“Personality Structure, Creative Potential and Study habits of Academically Gifted Students with Special Reference to (10+2) Level Students”.

OBJECTIVES OF THE STUDY

The following objectives were formulated for the present study:

6. To identify the academically gifted 10+2 students.
7. To measure the personality dispositions of the academically gifted 10+2 students.
8. To measure the creative potential of the academically gifted 10+2 students.
9. To make an assessment of the study habits of academically gifted 10+2 students.
10. To compare male and female academically gifted students on personality structure, creative potential and study habits.

HYPOTHESES

The following hypotheses were formulated for the present investigation:-

5. Academically gifted male and female 10+2 students do not differ significantly in their personality structure.
6. Academically gifted male and female 10+2 students do not differ significantly in their creative potential.

7. Academically gifted male and female 10+2 students do not differ significantly in their study habits.

TERMS AND VARIABLES

2. Personality structure

For the purpose of present investigation personality structure is operationally defined as the scores obtained by the subjects on **Cattel's 14 HSPQ**.

2. Creative potential

Creative potential is operationally defined as the scores obtained by the subject on **Baqur Mehdi's tests of creativity (verbal and non verbal)**.

3. Study habits

For the purpose of present study, study habits is operationally defined as the scores obtained by the subject on **Palsane and Sharma Study Habits Inventory (PSSHI)**.

8. Academically Gifted Students.

For the purpose of present investigation the academically gifted students are those students who are toppers in higher secondary part – II examination with cut point of 75% marks and above in aggregate.

DELIMITATION OF THE STUDY

The present study was delimited to the academically gifted male and female students at 10+2 level of Kashmir division who are presently perusing their studies in different universities and professional colleges.

CHAPTER – 2
REVIEW OF LITERATURE

The survey of the related literature is an important step in conducting educational research. It enables the investigator to locate the gaps and find the trends in research in a particular field. The information about the designs, samples and research tools employed by other investigators help the future investigators to formulate their design with more accuracy. Investigators must be aware of the new researches conducted in the past and only then he/she will be in a position to contribute something in original. Good (1972) has rightly remarked, “without a critical study of the related literature, the investigator will be groping in the dark and perhaps uselessly, repeat the work already done. Therefore to save time, energy and resources it is necessary to undertake a detailed and penetrating study of all available literature.

A worthwhile study in any field of knowledge demands an adequate familiarity with the work which has been conducted in that field. It is only through the accumulation of the recorded knowledge of the past that a researcher utilizes a previous finding in order to enunciate a sound research design. He locates comparative data that is useful in interpretation of hypotheses, explains ideas in a lucid manner, enriches his personal scholarship and prevents repetition of research.

The surveys of related studies avoid the risk of duplication; provide theories, ideas, explanations of hypotheses valuable and in formulation the

problem and contribution to the general scholarship of the investigators. The literature is in the form of books, monogram, govt. publication on education, encyclopedia of education, education indexes, education abstracts and journals etc, “practically all knowledge can be found in books and libraries. Unlike other animals that must start with new generation, man build upon the accumulated and the recorded knowledge of the past. His constant heading to the vast storage of knowledge makes possible progress in all areas of human endeavour” (Best 1983).

The review of the literature serves as a guide to judge the quantum of the work done and perceive the gaps existing in the concerned field of research. A critical review of the literature enables the researcher to go into the greater details and wider applicability of the problem in hand so as to provide new ideas, explanation of hypotheses. The review promotes a greater understanding of the problem and its allied aspects and ensures that unnecessary and useless duplication is avoided. According to Tuckman (1972) “the purpose of the literature review is to expand upon the context and background of the study to help further, to define the problem and to provide an empirical bases for the subsequently development of hypotheses.

Review of the related literature, besides to allow the researcher to acquaint the current knowledge in the field or area in which one is going to conduct his research serves the following specific purposes:

1. The review of the related literature enables the researcher to define the limits of the field. It helps the researcher to delimit and define the problem.
2. The knowledge of the related literature brings the researcher up-to-date on the work which other have done and thus to state his objectives clearly and concisely.

3. By reviewing the related literature, the researcher can avoid unfruitful and useless problem areas. He can select those areas in which positive findings are varying likely to result and his endeavours would be likely to add to the knowledge in a meaningful way.
4. Through the review of the related literature, the researcher can avoid unintentional duplication of well established findings. It is no use to replicate a study when the stability and validity of its results have been clearly established.
5. The review of the related literature gives the researcher an understanding of the research methodology which refers to the way of the study is to be conducted. It helps the researcher to know about the tools and instruments which proves to be useful and promising in the previous studies. The advantage of the related literature is also to provide insight into statistical methods through which validity of the results is to be established.

This chapter is devoted to review of available literature relevant to the present study and effort has been made to cover almost all the important dimensions that may have a direct or indirect bearing on the study. The studies under review have been classified and are presented as under:

1. Studies on Gifted Students.
2. Studies on Personality, Creativity and Study habits.

1. STUDIES ON GIFTED STUDENTS

Moshe Zeidner; Inbal Shani-Zinovich (2011) Do academically gifted and non-gifted students differ on the Big-Five and adaptive status? Some recent data and conclusions

This study examined a representative sample of academically gifted (N = 374) and non-gifted (N = 428) Israeli high-school students in order to compare these different student populations on the Big-Five and adaptive outcomes. Consistent with prior research, gifted students scored higher than non-gifted peers on Openness to Experience but scored lower on Neuroticism. In addition, gifted students scored lower on state anxiety facets and were not reliably different from their non-gifted counterparts on mental distress or subjective well being. Overall, the empirical data are consistent with recent research suggesting that when gifted students are compared with non-gifted students on various socio-emotional and personality characteristics, the results are not unfavorable to gifted students.

Laurence Vaiver – Douret (2011) Developmental and Cognitive Characteristics of "High-Level Potentialities" (Highly Gifted) Children

This study covers the interesting field of the development in gifted children which is often neglected in pediatrics because psychomotor development data are still rare, since "gifted" children are generally noticed towards the end of their primary schooling by IQ measurement. Developmental studies have shown the evidence from several fields that children identified as

"high-level potentialities" or "intellectually gifted" develop sensory, locomotor, neuropsychological, and language skills earlier than typically expected. The hypotheses is offered that the earlier development originates from biological processes affecting the physical development of the brain and in turn even intellectual abilities are developed earlier, potentially allowing for advanced development. Further it is discussed how these developmental advances interact with the social environment and in certain circumstances may entail increased risk for developing socio emotional difficulties and learning disabilities that often go unaddressed due to the masking by the advance intellectual abilities.

Hoi Yan Cheung, Sammy (2011) Competencies and characteristics for teaching gifted students: a comparative study of Beijing and Hong Kong teachers

This study examines the competencies and characteristics of in-service teachers who teach gifted students. A total of 511 in-service teachers participated in the study, 334 of whom were from Beijing and 177 were from Hong Kong. The scale developed by D. W. Chan was used as the instrument to examine the competencies and characteristics of the teachers. The Beijing in-service teachers gave significantly higher self-ratings for their characteristics and competencies than the Hong Kong in-service teachers. Beijing in-service teachers who taught in schools for the gifted (supernormal schools) gave the highest ratings for all the variables. This study analyzed the reasons behind why teachers in each city would have such ratings on competencies and characteristics for themselves, and why Beijing teachers (especially those who taught in supernormal schools) would have significantly higher ratings than their Hong Kong counterparts.

**Deviney, David Mills, (2011) Impact of behavioral factors on GPA
Lavelle H. et al., for gifted and talented students**

This research article explores various behavioral factors and their relationship to success for academically talented students at an upper-level residential school located in the south-central US. Students in their junior and senior years were given the DISC (Dominance, Influence, Steadiness, Conscientiousness) behavioral instrument and tracked over a two year period to identify behavioral factors leading to higher grade point averages. Data were collected from 211 students, including academic and personal demographic information along with DISC scores.

Success in this study was measured as the outgoing grade point average (GPA) of the student. Students were partitioned into three groups according to their GPA ranking (independent variable). Eight areas of behavior (dependent variables) were compared across the three GPA groupings. ANOVA was used to assess for differences in the mean values of the dependent variables. Results indicate that three behavioral factors-Analysis of Data, Organized Workplace and Frequent Change-had significantly different mean scores between the three GPA groupings. The other five behavioral factors did not have significantly different mean scores. The findings can also be used to help improve retention at the institution and better predict those who may be at most risk of attrition.

**Michelle Schapiro, Barry (2009) Competitive Goal Orientations,
H. Schneider Bruce M. Quality, and Stability in Gifted and
Shore *et al.*, Other Adolescents Friendships A Test
of Sullivan's Theory About the**

Harm Caused by Rivalry

The study reveals that the competitive goal orientations were rated by self, peers, and teachers for 38 gifted- and 38 regular-program, same-sex, friendship dyads (19 female and 19 male) from grades 7 and 8 (N = 152). Gifted dyads were reassessed on friendship quality and stability at the end of the school year and after the summer. Gifted students were more task-oriented and comparison students more other-referenced. Task-orientation was related to fewer friendship conflicts, more friendly competition, and, for gifted students, greater friendship stability. Being other-referenced was related to negative friendship qualities and unstable friendships regardless of sex, grade, or program, and instability in gifted female students friendships. Friends reporting positive friendship qualities at the end of the school year more likely remained friends over the summer. Comparison group friendships had more numerous positive qualities (companionship, help, security, closeness) than those of gifted adolescents. Competitive goal orientation rather than competition itself affects friendship success.

Nancy M. Robinson, (2008) Parenting the Very Young Gifted Child

This report provides research-based answers to questions facing families of young, gifted children, questions often asked of preschool teachers, physicians, psychologists, and other professionals who deal with young children. Unfortunately, the database about these children is sparse and often inconclusive. The most consistent findings point to the strong influence of the home and to the extra investment parents of gifted children make, not so much in securing outside classes, but in reading to and playing with their children, enriching their experience, and helping them focus on potential opportunities for learning. Psychological testing is advised only in special circumstances; parents can, in fact,

describe their children's development rather accurately. Their descriptions provide the best basis for responsive parenting, which includes securing and creating an *optimal match* for children among their readiness, their pace of development, and their environments.

**Anne N. Rinn, (2007) Sports Participation among Academically
Stevan R. Gifted Adolescents: Relationship to the
Winner Multidimensional Self-Concept**

This study compares academically gifted students who engage in sports to academically gifted students who do not engage in sports on measures of the multidimensional self-concept. Participants include 264 gifted adolescents who had completed the 6th through 10th grade during the previous academic year. Sports participation was measured by asking participants whether or not they participated in organized sports. Multiple facets of self-concept were measured using the Self Description Questionnaire II (Marsh, 1990). Results indicate gifted adolescents who engage in sports have higher physical abilities self-concepts than those who do not engage in sports. No grade level or gender interactions were found.

**Carol L. Tieso (2007) Patterns of Over excitabilities in Identified Gifted
Students and Their Parents A Hierarchical Model**

The purpose of this study is to examine the underlying construct of over excitabilities (OEs) and to identify individual and family-level factors that may explain gifted students' patterns of OEs. Data are collected from a convenience sample of identified gifted students (W= 143) and their parents (A= 161) using a

Liker-type questionnaire, the Over excitabilities Questionnaire II, developed to measure levels of the five intensities of the OEs. Multivariate and univariate analyses of variance and hierarchical linear modeling are used to differentiate between gender and age groups and to explain between and within-group variance on the five subscales of the OEs: Psychomotor, Intellectual, Imaginational, Sensual, and Emotional, Results suggest that there were significant differences between gender and age groups and that most of the variance among students on the OEs was explained by family membership. This study represents an important step in our understanding of affective characteristics of giftedness and creativity.

Tracy L. Cross, Kristie L. Speirs Neumeister, Jerrell C. Cassady (2007) Psychological Types of Academically Gifted Adolescents

This study provides descriptive information about the psychological types of a sample of 931 gifted adolescents who attended a public residential academy. Psychological types are assessed with the Myers-Briggs Type Indicator (MBTI). The MBTI reports on four pairs of personality types:

Extraversion/Introversion (E/I), Sensing/Intuition (S/N), Thinking/Feeling (T/F), and Judging/Perceiving (J/P). Overall, the most common types reported by this sample were INTJ, INTP, INFP, ENFP, and ENTP. Comparisons between gifted and normal samples are reported. Gender differences for the gifted sample were found on E/I, with males orienting toward I and females orienting toward E. Gender-specific comparisons between gifted and norming samples reveal that gifted females had a greater tendency toward I and T, and gifted males had a greater tendency for I. Overall, both genders in the gifted sample tended to be NP types.

**Muhyieddeen Sh. Touq, (2006) Social and Personality Characteristics of
Nawal H. Kamal & Alia T. Gifted Students.**

Fada

This study aimed at investigating the relationship between intellectual, social, personal and personality variables of academically gifted secondary school students. A total of 297 tenth grade boys and girls were identified on the basis of three main criteria: 1. Academic achievement with special emphasis on Arabic language, science and math scores, 2. Behavioural traits, 3. General mental ability and general adjustment. Data related to socioeconomic status and personal characteristics were also collected. Results of the analysis of variance showed that there were significant differences between gifted male and female students in general mental ability, achievement, general adjustment, behavioural traits, personal and social variables, in favour of the former.

**Joyce I. Fields (2006) Measuring Giftedness in Young Children: A
Comparative Study in Malaysia**

Almost all measures used to identify intellectually gifted children are developed in the USA and the UK, therefore, there is a need for them to be translated into other non-English languages, such as Malay. Thus, the stability and to some extent the validity of the Malay version of these measures are presented in this paper. Since the criterion of intellectual giftedness is a high IQ an individual intelligence test was administered. This limited the number and the representativeness of the sample. However, having found that the conventional procedure was not effective, multiple regression and discriminate function analyses were conducted to ascertain the predictors of giftedness.

Tracy L. Cross; Jerrrel C. (2006) Suicide Ideation and Personality

This study describes psychological characteristics of gifted adolescents. It also identifies the relationships between psychological personality types and suicide ideation. Participants in the study were 152 juniors enrolled in a public residential high school for academically gifted students. The Suicide Ideation Questionnaire, a 30-item self-report measure, was used to assess adolescent levels of suicide ideation. The Myers-Briggs Type Indicator (MBTI; Myers, 1962), a widely used measure of psychological type that contrasts four dimensions of personality—extraversion (E) introversion (I), sensing (S)/intuition (N), thinking (T)/feeling (F), and judging (J) perceiving (P)—was used to determine personality types of the students.

The results indicated that gifted adolescents did not exhibit heightened rates of suicide ideation as compared to their non-gifted peers. However, female students held higher levels of suicide ideation than male students. Female students exhibiting introversion-perceiving (IP) types held higher levels of suicide ideation than those with other types. There was a significant between-groups effect for the judging-perceiving analysis. Students identified as perceiving personality types held higher levels of suicide ideation than those with the judging personality type. Gender, judging/perceiving, and extraversion/introversion combined to reliably predict approximately 18% of the variance in suicide ideation in this sample.

**Heiner Rindermann, (2005) The Benefit of Gifted Classes and
Kurt A. Helier Talent Schools for Developing
Students Competences and Enhancing
Academic Self-Concept**

In a vast amount of educational research, it has been documented that a negative causal relationship exists between class or school ability level and ability self-concept. However, the aim of educational institutions is not to improve self-concept, but rather to support cognitive ability development (acquisition of new knowledge, school performance, etc.). A recent 11-year-long study of six grammar schools in Baden-Württemberg (Germany) involving 22 classes and 544 pupils demonstrated over a 2-year interval that mean class ability lowers individual ability self-concept. Yet it also revealed that this negative effect was compensated for by a positive school effect on self-concept. In particular, it showed that the sum of the effects of class and school level on individual ability development was positive (teachers adapted teaching to the class ability level, and students were stimulated by classmates). Selective schools have a positive effect.

**Robert Cohen, Melissa (2005) Classroom Peer Relations of
Duncan & Sheila L. Cohen Children Participating in a Pull-Out
Enrichment Program**

The study compared the classroom peer relations of fourth, fifth, and sixth graders participating in a pull-out enrichment program (Creative Learning in a Unique Environment (CLUE) with all other classmates. Data included peer sociometric assessments, evaluations of friendship relationships, and peer nominations as aggressors and as victims of aggression. Relative to other classmates, CLUE children (a) were evaluated by peers as having greater social acceptability and social competence, (b) demonstrated greater awareness of reciprocity in friendship relationships, and (c) were perceived less often as an

aggressor or as a victim of aggression. These children did not have more friends or best friends than their peers, but they had more valued positions within the peer network. These findings suggest that a pull-out enrichment program can be associated with enhanced peer relations in the classroom, an effect not evident in the current research literature.

Leah B. Bucknavage, Frank (2005) C. Worrell **A Study of Academically Talented Students Participation in Extracurricular Activities**

In this study, we surveyed the participation rates of academically talented students across 9 areas: dance, solo instrument, choral music, band, athletics, student government, academic clubs, ethnic/cultural clubs, and an "other activities" category. Participants consisted of 2 independent cohorts (Cohort 1, N= 842; Cohort 2, N= 290) attending a summer program. Results indicated that athletics was the activity in which males and females reported greatest participation across cohorts. Significant differences in rates were found for participation in athletics, choral music, and dance in the direction of gender-stereotypical expectations. Differences were also found among ethnic groups and across grade levels in certain activities. We concluded that the results contradict the nonathletic stereotype sometimes associated with students who are academically talented.

Mary K. Tallent – (2004) Runnels; Arturo Olivarez Jr. et al., **Strategies of Gifted and Average-Ability Junior High Students**

The study was carried out to investigate that not enough is known about whether the learning and study strategies of gifted students are adequate or how they compare to average-ability learners. Therefore, two studies were conducted to determine if gifted and average-ability junior high students differed in learning and study strategies. Results of Study One revealed several differences between gifted (n = 80) and average-ability (n = 61) seventh, eighth, and ninth graders on the Learning and Study Strategies Inventory. Anxiety emerged as the variable that discriminated most between the groups with the average-ability students having more anxiety. Study Two replicated study one with ninth graders (99 gifted, 98 average-ability) taking the newer Learning and Study Strategies Inventory-High School Version and all students drawn from school settings. There were fewer differences between the two groups but significant differences did result on some of the same subtests as in Study One with anxiety again emerging as the most powerful discriminator. There were also gender differences in the second study with girls scoring higher than boys in motivation, study aids, and self-testing. Even with the differences between the ability groups, gifted students did not score above the mean on many subtests and it is recommended that both groups need explicit instruction in learning and study strategies.

Ugur Sak (2004) Synthesis of Research on Psychological Types of Gifted Adolescents

In this study, the author synthesizes results of studies about personality types of gifted adolescents. Fourteen studies were coded with 19 independent samples. The total number of identified participants in original studies was 5,723. The most common personality types among gifted adolescents were “intuitive”

and “perceiving.” They were higher on the Introversion, Intuition, Thinking, and Perceiving dimensions of the personality scales of the Myers-Briggs Type Indicator (MBTI) when compared to general high school students. Also, gifted adolescents differed within the group by gender and by ability. Based on the findings, the author discusses teaching practices for gifted students according to their personality preferences.

Norma J. Ewing, (2004) A comparative study of the learning style preferences among gifted African-American, Mexican-American, and American-born Chinese middle grade students

The purpose of this study was to determine whether significant group, gender, and grade differences existed in the preferred learning styles of gifted minority students. The Learning Style Inventory (Dunn, Dunn, & Price, 1987) was administered to 54 African-American (20 males, 34 females), 61 third-generation Mexican-American (26 males, 35 females), and 40 third-generation American-born Chinese (25 males, 15 females) students. A three way analysis of variance on the LSI raw scores of gifted African-American, Mexican-American, and American-born Chinese students indicated significant group differences in preferences for noise, light, visual modality, studying in the afternoon, and persistence. Significant gender differences were found in preferences for the tactile modality and intake. Finally, significant grade differences were found in preferences for temperature (warm/cool environment) and mobility. Findings support and extend past research regarding the learning styles of gifted students.

Mark A. Runco (2004) Current research on the social and emotional development of gifted and talented students: Good news and future possibilities

The present study was carried out a recent summary of research produced by a task force of psychologists and educational researchers associated with the National Association for Gifted Children and the National Research Center on the Gifted and Talented indicated that high-ability students are generally at least as well adjusted as any other group of youngsters. This research also found, however, that gifted and talented students can face a number of situations that may constitute sources of risk to their social and emotional development. Some of these issues emerge because of a mismatch with educational environments that are not responsive to the pace and level of gifted students' learning and thinking. Others occur because of unsupportive social, school, or home environments. In this article, current research about the social and emotional development of gifted and talented students is summarized and suggestions are made about strategies to enhance these students' school experiences. Suggestions are provided for assessment and educational programming based on students strengths and interests that may result in helping talented students realize their potential.

Ugur Sak Citation (2004) A Synthesis of Research on Psychological Types of Gifted Adolescents

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Thinking, and Perceiving dimensions of the personality scales of the Myers-Briggs Type Indicator (MBTI) when compared to general high school students. Also, gifted adolescents differed within the group by gender and by ability. Based on the findings, the author discusses teaching practices for gifted students according to their personality preferences.

The personality characteristics of highly able youth have been investigated extensively (Chiang, 1991; Cordrey, 1986; Gallagher, 1987; Geiger, 1992; Hawkins, 1997; Jackson, 1989; McCarthy, 1975; McGinn, 1976; Mills, 1984, Mills & Parker, 1998). In these studies, gifted adolescents were found to be different from the general adolescent population, as well as different among themselves in personality types as measured by the Myers-Briggs Type Indicator (MBTI). Personality dimensions have also been shown to be associated with academic achievement and intelligence. For instance, Myers (1980) asserted that the possibility of one's being intuitive- introverted increases as academic giftedness increases. One might anticipate, then, that a high introvert or intuitive type may be related to high intellectual capacity and high academic achievement in one or more areas.

**Megan Biddick (2003) Cluster Grouping for the Gifted and
Talented: It Works.**

In this study, Cluster grouping, as an organizational strategy for gifted and talented education, has been discussed, implemented and researched in the United States for several decades. Outcomes have been positive, yet the potential benefits of this model for the New Zealand context remain largely unrecognized. Cluster grouping involves the placement of a group of gifted and talented learners in one or more classrooms in their respective year group, with the remainder of

students heterogeneously grouped. Used in conjunction with differentiation, pull-out programmes, and effective professional development for teachers, it can deliver a full-time, cost-effective programme for gifted and talented students. This article discusses the benefits of the strategy to school communities as a whole, and considers both affective and achievement outcomes for students. Implementation is presented in theory and in respect of a case study – a New Zealand school that has successfully adapted the concept in accordance with its individual needs

Rostan, Pariser and (2002) Conducted a cross-cultural study of Gruber the development of artistic talent, creativity and giftedness.

In this study, examining the relationships among age, culture, training in the fine arts, the technical and aesthetic properties of drawings, and realized artistic giftedness, the researchers intermixed the juvenile drawings executed by critically acclaimed artists with artworks executed by contemporary North American and Chinese North American children. When judges from the North American culture and from the Chinese North American culture, blind to this mix, assessed the drawings, assessments made by the representatives of both cultures were more alike than they were different. Only the North American judges assessments, however, suggest that the art students life drawings were more technically and aesthetically successful, and more creative, on the average, than the non-art students drawings. These judges also gave the juvenilia the highest scores in technical skill and the lowest scores in creativity independent of technical skill and aesthetic success. The implications of the study stress on the role of technical skill in the development of creativity.

**Gilbert A. Clark, (2001) Issues and Practices Related to Identification of
Enid Zimmerman Gifted and Talented Students in the Visual Arts**

Important issues and practices relative to identification of gifted and talented students in the visual arts are introduced in this paper. As many of the issues and practices discussed are complex and often misunderstood or misapplied, they are examined critically in terms of their research implications and applications. Problems of definition, identification, and recommended practices are addressed based on past and current research about education of artistically gifted and talented students.

Issues are discussed relative to the apparent lack of agreement upon definition of talent in the arts and the role of culture, student characteristics, creativity, skills, cognitive abilities, affective abilities, interest and motivation, potential and processes contrasted with performance and products, art specializations, and distribution of arts talents in the general school population. Each issue is examined in light of complexities that have confounded definitions of talent in the arts and practices used in identification programs.

**Felicia A. Dixon; Tracy L. Cross; Cheryl M. Adams (2001) Psychological characteristics of
academically gifted students in a
residential setting: A cluster
analysis**

The main objective of the study was that students in one entering class at a Midwestern residential school for gifted and talented adolescents ($N = 156$) took three instruments: the Self-Description Questionnaire III (SDQIII; Marsh, 1988), the

Minnesota Multiphasic Personality Inventory for Adolescents (MMPI-A, Butcher, Williams, Graham, Archer, Tellegen, Ben-Porath, & Kaemmer, 1992), and the Self-Perception Profile for Adolescents (SPPA, Harter, 1988) in order to determine the psychological makeup of academically gifted students who are admitted to and leave home to attend a residential school. Scores from the SDQIII were cluster analyzed using Ward's hierarchical method. Clusters were validated using data from the MMPI-A and the SPPA. Results indicated six different cluster groups that were described as follows: a mathematics focus (21%), a social focus (18%), a nonathletic group (21%), a low overall self-concept group (16%), a verbal group (9%), and a nonspiritual/religious group (14%). Characteristics of the clusters and implications for residential schools are discussed.

Lesley Sword (2001) Psycho-social Needs: Understanding the Emotional, Intellectual and Social Uniqueness of Growing Up Gifted

The study reveals that the gifted children not only think differently to other children, they also feel differently. Their intellectual complexity combines with their emotional intensity to give them a qualitatively different way of experiencing the world. This unique perspective of life has a profound impact on their social relationships with age peers. In addition, personality characteristics such as idealism, expanded moral awareness and introversion set them further apart. For gifted children's social and emotional wellbeing, it is imperative that these differences are understood as "normal for gifted" by teachers and parents and that they be helped to find true intellectual peers. In this way they will be able to express their unique selves in the world.

**Pfeiffer, Steven I. (2000) Vulnerabilities of Academically Gifted
Stocking, Vicki B. Students**

The study was carried out to investigate that the gifted students and youth possess a set of personality characteristics that make them uniquely vulnerable. School personnel and parents need to be aware of these risk factors so that they can provide coordinated educational and social opportunities to foster resilience. They must also be ready to offer preventive and therapeutic mental health interventions if actual psychological problems develop.

**Jan B. Hansen, (1999) Comparison of Trained and Untrained
John F. Feldhusen Teachers of Gifted Students**

Leaders in the field of gifted education have presented models for both instructional programs for gifted students and correlated teacher training, but research on or evaluation of the effects of these training models is meager. This study showed that teachers trained in gifted education demonstrated greater teaching skills and developed more positive class climates than did teachers who had no training in gifted education. Students of GT trained teachers reported greater emphasis on higher level thinking skills and on discussion, and less emphasis on lecture and grades than did students of untrained teachers.

**D. E. Mc Intosh, M. (1995) Neuropsychological characteristics of
D. Dunham, R. S. learning disabled/gifted children.
Dean, D K Kundert**

In this study, neuropsychological characteristics of 68 learning-disabled/gifted children (LD/Gifted) were studied using the Halstead-Reitan Neuropsychological Test Battery for Children (HRNB-C). The proportion of LD/Gifted children identified as impaired was low compared to previous research

that has examined the proportion of school-identified learning-disabled students who scored within the impaired range on the HRNB-C. Consistent with previous research, the results of this study indicated that LD/Gifted children were also more likely to demonstrate impairment on the Tactual Performance Test-Memory, Tactual Performance Test-Localization, and Trails B-Errors components of the HRNB-C.

H. Benony, D. Van Der Elst, K. Chahraoui, C. Bénony, J.P. Marnier (1994) Link between depression and academic self-esteem in gifted children

In this study, the comparison of 23 gifted children (GC) and 23 controls matched on age, sex and school grade revealed that the scores for academic self-esteem, total self-esteem and lie-scale were significantly lower than those observed in the control group ($p < 0.006$, $p = 0.03$, $p < 0.0001$ respectively) and that the depression scores were significantly higher in the gifted children ($p = 0.021$). Significant correlations are only observed in the group of gifted children. The correlation analyses reveal that the lower the general self-esteem, academic self-esteem and total self-esteem values had fallen, the higher the depression ($r = - 0.59$, $r = - 0.67$ and $r = - 0.76$ respectively), hyperactivity ($r = - 0.47$, $r = - 0.82$ et $r = - 0.59$) and total psychopathology ($r = - 0.56$, $r = - 0.67$ et $r = - 0.75$) scores were. Similarly, the lower the general and total self-esteem scores, the higher the aggression scores ($r = - 0.56$ and $r = - 0.68$ respectively). Academic self-esteem was the only value to be negatively correlated with communication disorders ($r = - 0.79$) and somatization symptoms ($r = - 0.49$). Finally, social self-esteem, family self-esteem and the lie scale were not correlated with any CBCL variable. The

regression analyses indicate that academic self-esteem is the variable that explains the depression scores.

Afshan (1991) "Academically Gifted rural and urban girls; their vocational interest and creativity."

The study reveals that the rural and urban gifted girls did not show any characteristic difference in parental education or occupation. Rural gifted girls in comparison to urban gifted girls were found to be higher on creativity but difference between the mean scores could not reach any level of significance. No significant-difference was found between these two groups on the components of creativity viz. fluency, flexibility and originality. The vocational interests of gifted rural and urban girls were more or less similar when compared on one to one basis (AGM 1859).

Olszewski- Kubilius, P. (1990) Personality dimensions of gifted adolescents
Kulieke, M.J.

This article by Paula Olszewski-Kubilius and Marilyn Kulieke examines the literature on the personality dimensions of gifted adolescents. It also presents a study they conducted with participants from the Midwest Talent Search summer program. The purposes of the research were to provide a detailed, comprehensive, gender-specific profile of gifted adolescents, to address the issue of psychological maturity with a sample of gifted students by comparing them to older students, and to determine to what extent gifted female and male adolescents differ from one another.

Within the literature on gifted individuals there are many studies that examine personality dimensions. These studies cover a variety of age groups and employ many different personality instruments, yet they can be categorized around several key issues. One broad area of research has to do with discerning personality differences between gifted and non-gifted individuals. Within this area comparisons

can be made between gifted students and non-gifted same age peers and between gifted students and non-gifted chronologically older students. Studies of the first type address the issue of whether gifted individuals have unique patterns of personality characteristics compared to non-gifted age mates, while the second addresses the issue of early psychological maturity for the gifted.

Another broad area of research has to do with differences on personality dimensions within gifted populations. Comparisons between gifted females and males predominate and no significant difference was found between the male and female gifted students on different dimensions of personality. The literature within each of these three areas will be reviewed briefly as a prelude to a study that also addresses these issues.

Susan L. Dauber, Camilla Persson Benbow (1990) Aspects of personality and Peer Relations of Extremely Talented Adolescents

The study was reveals that the exceptionally gifted students may be at risk for problems in social and emotional development. To discover if peer relations are affected by type and/or amount of giftedness, extremely mathematically or verbally talented 13 year-olds (top 1 in 10,000) were compared to modestly gifted students (top 1 in 20) of similar age on measures of popularity and peer acceptance, participation in group activities, and personality traits. The verbally or mathematically talented students were also contrasted on the same measures. Virtually no differences in group activities or personality traits were found. In their ratings of peer perceptions, the modestly gifted group exceeded the extremely gifted, especially the verbally gifted, in being considered athletic and popular, and in social standing. The modestly gifted also rated themselves as more extroverted, socially adept, and uninhibited. Perceptions of peer ratings of importance and acceptance were higher for the mathematically than the verbally gifted. Thus,

extremely precocious adolescents, especially the verbally precocious, may be at greater risk for developing problems in peer relations than modestly gifted youth.

B. E. Kurtz, F E (1989) Weinert **Metamemory, memory performance, and causal attributions in gifted and average children.**

Fifth and seventh graders who had been teacher-selected as high- or average-achieving were tested on the Kognitiver Fähigkeits Test, a standardized test of intellectual abilities for German children. Children who met pre established criteria as gifted or average were then tested on measures of metacognitive knowledge, attribution beliefs, and performance on a sort recall task. Results indicated ability-related differences in metamemory and sort recall performances. Responses to the attribution questionnaires also varied systematically according to ability: gifted children were more likely to attribute their academic successes to high ability than were average children, who showed a stronger belief in the importance of effort in determining task outcomes. Causal modeling analyses illustrated the strength of metacognitive knowledge as a performance predictor on the memory task, especially for average children. Results are discussed in terms of the value of metacognitive theory in understanding individual performance differences.

2. STUDIES ON PERSONALITY, CREATIVITY AND STUDY HABITS

**Rosa Aurora Chávez-Eakle (2012) The Multiple Relations Between
Jonathan Eakle *et al.* Creativity and Personality**

The aims of this article are to review the multiple relations between creativity and personality, exploring the measurement instruments that have been used to identify them. Specific personality characteristics and traits found in highly creative individuals and the interaction of these traits with the creative process are described. In addition, results of research projects conducted at the National Institute of Psychiatry Ramon de la Fuente in Mexico City are presented. These projects evaluated personality traits and behaviors present in productive and successful highly creative individuals. The association of these traits and behaviors with differential brain activation and molecular genetic variations in neurotransmitters systems were also explored, which suggested some neurobiological foundations for the creative personality. Finally, it is shown how certain developmental events are critical for personality formation and creativity maturation, pointing out the need for specific strategies in designing and producing programs and policies to provide quality education for all children.

**Lajwanti Chaturvedi (2011) Effect of Internet Surfing on the Study
Habits of Higher Secondary Students**

The purpose of the study was to find out the use of internet among adolescents in India has led to a vast change in their life styles and study habits. In this paper, the effect of internet users and non-user, sex (male and female) and stream (science and arts) of education on study habits of higher secondary students has been studied on the group of 120 students. The results of the study

will help a lot to specialists, counselors, policy makers, parents and teachers in framing school programmes and curriculum in relation to the internet usage as open access or controlled access.

**Loo, Sze Wei and Tuan (2011) Motivation and study habits of
Fatma Tuan Sulaiman, and working adults: a case study of
Wardah Mohamad Masters Students in Open
University Malaysia.**

The objective of this study was to explore what motivates working adults to continue with their studies and what are their study habits. A group of OUM masters students from the Faculty of Business and Management were studied using the case study approach. The main implication from the case findings is that working adults are highly motivated in pursuing their studies and that there are many sources of motivation for them. A new job, increased career prospects, gaining knowledge, a pay increase and filling their time are some of the factors that motivate these students to further their studies. Their study habits also differ widely from a short time span to full concentration, from early in the morning to late at night and from formal sessions to minutes of stolen time. The research looked at how the students studied and how motivated they are. The findings from the study are useful to students, academicians and university administrators alike. Students and seek to learn from their friends experiences, academicians can tailor the learning process to cater to students' needs and behavior, whilst university administrators can find ways to market their programmes and retain their students. As the research has initiated some new questions in the behavior of working adults, it can serve as the basis for further research in the area.

**Mohd. Ghani Awang, (2011) The Development of Study Skill Tools in
Suriya Kumar Evaluating Student's Study Orientation
Sinnaduria Skills and Its Relationship towards
Academic Performance**

The purpose of this study is to measure the study orientation skills and to provide remedial devices in correcting respondents study orientation skills mistakes. The study reveals the relationship between study orientation skills and the grade point average. In addition, the classification of group achiever based on study orientation skills is identified into higher group achiever, normal group achiever and under-achiever. The remedial devices used comprise of the web-based adapted version of Study Habits and Attitudes (SSHA) questionnaires on other remedial devices used are study orientation skills module, kit, Ghani's format of note-taking, DVD's and study orientation skills classes. 59 respondents were selected as the sample of study by group sampling from the Faculty of Computer System & Software Engineering and 59 respondents from the Faculty of Civil Engineering & Natural Resources. The research applies Quasi-experimental pre-test and post-test separated group design. The respondent's study orientation skills are analyzed and sorted into three groups of achievement; the higher achiever, normal achiever and under achiever. The significant difference test on study orientation skills was conducted based on pre-test and post-test mean score and the significant differences test on the academic performance was done based on grade point average scores in semester 1 and 2 of first year students. The significant difference test used paired t-test based on statistical package of social science computer program, r Pearson product-moment correlation of coefficient results will show the relationship between study orientation skills and grade point average for each group and between the groups. The internal consistency reliability of the remedial devices is measured by Cronbach's alpha score. Results

obtained shows that there is a significant difference between pre-test and post test for study orientation skills for Civil Engineering & Natural Resources respondents ($t = 8.47$, $p = 0.000$) and Computer System & Software Engineering ($t = 2.74$, $p = 0.008$). Significant difference results are also shown by grade point average for both tested groups ($t = 3.054$, $p = 0.003$) and ($t = 3.187$, $p = 0.002$). A significant correlation was found on the relationship between study orientation skills and grade point average for each tested group, based on r value was 0.24 ($p = 0.05$) for Civil Engineering & Natural Resources and r was 0.33 ($p = 0.05$) for Computer System and Software engineering. The correlation between both groups tested for study orientation skills and grade point average are $r = 0.16$ ($p = 0.05$), ($r = 0.15$), ($p = 0.05$), $r = 0.13$ (0.05) and ($r = 0.31$), ($p = 0.01$).

**Rebecca L. Pierce, (2011) The Effects of Clustering and
Curriculum on the Development of
Jerrell C. Cassady Gifted Learners Math Achievement**

There is a paucity of empirical studies dealing with benefits of gifted programming in mathematics for elementary students. The current study reports on the impact of using cluster grouping and specific curriculum to support gifted learners' math achievement in urban elementary schools. Although the results of Year 3 provide the most compelling evidence of success, Year 1 results are included to explain the route taken to achieve those results. The results demonstrated that teachers in a large urban school district can promote academic gains over time for gifted and comparison students provided the curriculum is designed to support learning at varied ability levels, that teachers have sufficient experience with the content to deliver the planned materials appropriately, and

that the context of the classroom setting supports collaborative learning and embraces challenge for all learners.

**Aluja-Fabregat, (2010) Socialized Personality, Scholastic
Anton; Blanch, Angel Aptitudes, Study Habits, and Academic
Achievement**

This study analyzed the relationships among Cattellian personality factors scholastic aptitudes, study habits, and academic achievement. A total of 887 volunteer students from primary education (453 males and 434 females), enrolled in 29 public schools, participated in this research. It was found that the scholastic aptitudes were the most predictive variables of achievement, while the personality traits had a low direct contribution to academic achievement, although the students with higher scores on socialized personality traits showed better study habits than those students with lower scores on personality socialization traits. The relationship between personality and academic achievement seems to be mediated by study habits. Moreover, females obtained higher academic achievement scores than males. These differences could be explained by the fact that females showed a more socialized personality pattern and better study habits.

**Bolanle A. Ola, Olufemi (2010) Study habits among Nigerian
Morakinyo secondary school students with brain
fag syndrome**

Brain Fag Syndrome (BFS) is a psychiatric disorder associated with study affecting two to four out of every ten African students. One of the consequences of this illness is early foreclosure of education in affected students. Etiological factors such as nervous predisposition, motivation for achievement, and psycho-

stimulant use have been found associated with it. However, the contributions of study habits to the pathogenesis of this study-related illness deserve more attention than has been given. We carried out this cross-sectional study to ascertain the types of study habits associated with BFS among a sample of senior secondary school students in Ile-Ife, Nigeria. Five hundred students from six schools in Ile-Ife were selected using a stratified random sampling technique. The selected students completed the Socio-demographic Data Schedule, the Brain Fog Syndrome Scale, and Bakare's Study Habit Inventory. The prevalence of BFS was 40.2% (201). There were no significant socio-demographic variables identifying BFS students apart from those without BFS. The significant measures of study habits that predicted BFS were homework and assignments, examinations, and written work. Those with BFS had 3.58 times the odds to perform poorly on homework and assignments, 3.27 times the odds to perform poorly on examinations, and 1.01 times the odds to perform poorly on written work compared to those without BFS. We concluded that the results of this study suggest that homework and assignments, examinations, and written work were significant study habit variables associated with BFS.

Lands Berger (2010) A study of personality type and thinking skill.

This study investigates the personality types as measured by the Myers-Briggs Type Indicator [MBTI] and the thinking skills of the students. This study seeks to ascertain if there is any significant difference in the domination of different critical and creative thinking skills among ES [Extravert-Sensing], EN [Extravert-Intuitive], IS [Introvert-Sensing] and IN [Introvert-Intuitive] students. Quantitative approach was utilized to collect the data. Forty-five samples with age

ranging from seventeen to eighteen years old were purposefully selected from one of the schools in Sarawak state. MBTI and a test were given to these students to answer. The statistical analyses involved the calculations of mean scores and analysis of variance. The findings showed that there was significant difference among ES, EN, IS and IN students on the domination of certain critical and creative thinking skills. For translating skill, EN scored significantly higher than IS; IN scored significantly higher than IS. For determining parts-whole relationships, ES scored significantly higher than EN and IS; IN scored significantly higher than EN and IS. For identifying relationships skill, EN scored significantly higher than ES, IS and IN; IN scored significantly higher than ES. For interpreting skill, IN scored significantly higher than ES; IN scored significantly higher than IS. For drawing figures skill, IS scored significantly higher than ES; IN scored significantly higher than ES and EN. No significant difference was found among ES, IS, EN and IN students on the other thinking skills. This finding implies the importance of knowing the different personality types and domination of thinking skills of the students as it enables the Ministry of Education, educators and other researchers to design effective teaching environment for the students. This study concludes with some recommendations for future researches.

Andrew Davis (2009) Regional attractiveness: It's all about creativity and Innovation

The study examined that all the more recent growth theories are placing innovations at the heart of what drives creativity and growth in countries and regions. However the available data shows that regional growth is very much a self reinforcing phenomenon, leading to a huge amount of inertia, a fact that flies in the face of a lot of regional agenda, "when you are stuck at the bottom you are

going to stay there for quite an amount of time, it gets quicker when you are already in the middle".

The aim of the global project is to take stock of the different approaches to supporting innovations at the regional level. On the basis of the review of current policies and implementation mechanisms, the project will lead to identification of best practices and the recommendations for improving policies in this field. The project is being organized around the broad modules that cover key themes that have been identified as of particular interest for regional policy-makers. These modules will use a mixture of quantitative analysis, cross national comparative research and case studies illustrating good practices. The modules are:

The role of public investment: measuring policy impact and performance at regional level. Collaborative mechanism at regional level. Multi level governance and funding.

Taylor, Ronald G. (2009) Personality traits and discrepant achievement: A review

This review is concerned with the relationship of the following personality traits to discrepant achievement: academic anxiety, self-values, authority relations, interpersonal relations, independence-dependence conflict, activity patterns, and goal orientation. The review covers the period from 1933 to 1963 although most of the investigations appeared after 1950. In general, the following factors have been found positively related to level of achievement: (a) the degree to which a student is able to handle his anxiety, (b) the value a student places upon his own worth, (c) the ability to conform to authority demands, (d) student acceptance by peers, (e)

less conflict over independence-dependence, (f) activities centered around academic interests, and (g) the realism of his goals.

**Muhammad Sarwar, (2009) Study Orientation of high and low
Muhammad Bashir *et al.* academic achievers at secondary level
al. in Pakistan.**

The study orientation of low and high academic achievers was compared, measured through a self developed study orientation scale (SOS) primarily based on 47 items comparing study habits and attitude. Students marks obtained in the tenth grade examination determined the measure of academic performance. The analysis revealed that the high achievers had better study orientation, study habits and attitude than low achievers. There was no significant difference between the study orientations of male and female students but the rural students differed significantly from urban students on study orientation.

**Fayez Mina (2009) Promoting Creativity for all students in
Mathematics Education (Ph.D University of
Egypt).**

The purpose of this paper is to express the writer's views concerning promoting creativity for all students in mathematics education. The paper defines creativity and mathematics creativity. Two theories of creativity exist; creativity for the elites and "mass creativity". The writer supports the second one. The paper includes some means to promote creativity in mathematics and requirements to achieve mathematics creativity.

Marcus Credel & Nathan R. Kuncel (2008) Study Habits, Skills, and Attitudes: The Third Pillar Supporting Collegiate Academic Performance.

The study was designed to examine the study habits, skills, and attitude inventories and constructs were found to rival standardized tests and previous grades as predictors of academic performance, yielding substantial incremental validity in predicting academic performance. This meta-analysis (N = 72,431, k= 344) examines the construct validity and predictive validity of 10 study skill constructs for college students. We found that study skill inventories and constructs are largely independent of both high school grades and scores on standardized admissions tests but moderately related to various personality constructs; these results are inconsistent with previous theories. Study motivation and study skills exhibit the strongest relationships with both grade point average and grades in individual classes. Academic specific anxiety was found to be an important negative predictor of performance. In addition, significant variation in the validity of specific inventories is shown. Scores on traditional study habit and attitude inventories are the most predictive of performance, whereas scores on inventories based on the popular depth-of-processing perspective are shown to be least predictive of the examined criteria. Overall, study habit and skill measures improve prediction of academic performance more than any other non cognitive individual difference variable examined to date and should be regarded as the third pillar of academic success.

**Marrinir (2007) Above average ability, creativity and self-
Nigel R. efficacy as predictors of success for honors students.**

The purpose of the study was to analyze the components of Renzulli's enrichment Triad, which is comprised of above-average ability, creativity and for this study, self-efficacy, to gauge its possible use as a predictor of academic success for honors students. A sample of 230 honors students at public research university in the Northeast were asked to complete a information sheet as well as two survey instruments. The analysis of the data illustrated that high school G.P.A & the self-efficacy.

John Baer, James C. K., (2007) Gender Differences in Creativity

Research on gender differences in creativity, including creativity test scores, creative achievements, and self-reported creativity is reviewed, as are theories that have been offered to explain such differences and available evidence that supports or refutes such theories. This is a difficult arena in which to conduct research, but there is a consistent lack of gender differences both in creativity test scores and in the creative accomplishments of boys and girls (which if anything tend to favor girls). As a result, it is difficult to show how innate gender differences in creativity could possibly explain later differences in creative accomplishment. At the same time, the large difference in the creative achievement of men and women in many fields make blanket environmental explanations inadequate, and the explanations that have been proposed thus far are at best incomplete. A new theoretical framework (the APT model of creativity) is proposed to allow better understanding of what is known about gender differences in creativity.

Ackerley, (2006) Edward **An investigation of the relationship of creativity and leadership in university business students.**

The study was exploratory using correlation analysis of data collected in a self- assessment by university under- graduates. The sample consisted of upper- division under-graduate students (n= 122. 53 male and 69 female) who were enrolled in a business/ management program at a major south western university in the United states in the spring semester of 2004. The findings of this study indicated a significant relationship between creativity and leadership. Significant difference was found between male and female students on creativity. The female students were found to be more creative than the male students.

Mills, C.J & Parker (2006) **Performance of college students impact of study time and study habits.**

In this paper, we report the results of a survey of the study habits of CS1 students. In this survey, students were asked how much time they spent on course-related activities such as reading the textbook, working on problems outside class, using online learning tools, and consulting with their instructor. We identified factors that influenced student study habits and how those factors affected students' final course score. The findings show that students engaged in a wide range of study behaviours in terms of time spent and use of resources. Previous programming experience and lecture attendance were positive factors to final course score, and a tendency to work with others was negative factors. We found no difference in final course score based on gender; however, females tended to read the textbook more than males and they tended to work with others more than males.

Al-Dhobaiban, (2005) **Exploring the relationship between self-regulation & Creativity.**
Nawal

The purpose of this study was to explore the relationship, currently missing in the literature, between self-regulation and creativity among college students and the association of self-regulation, creativity and GPA with demographic characteristics. This study uses the bio-functional theory to explore the relationship between two very important areas of academic and life success. The tools used were the Learning and (LASSI), the Whole theme Learning Inventory (WLI) and Test Your Creativity Level (TYCL). The sample comprised of 219 university students. The results of the study showed a significant relationship between self-regulation and creativity only when the Whole theme education perspective. This finding remained the same for two different creativity measures- TYCL and KTCPI. Whole theme education recognizes the roles of creativity and dynamic (or brain – mediated) self – regulation in learning beyond any contribution from strategic (or mind-mediated) or external (or stimulus- mediated) self-regulation. Whole theme self-regulation correlated positively with student GPA, suggesting that the use of three sources of self-regulation also effects students academic achievements.

Vcharyton, (2005) **Creativity (scientific, artistic, general) and risk tolerance among engineering and music students.**
Christine

The purpose of the study was to examine similarities and differences in general, artistic and scientific creativity among engineering and music College students. 100 music and 105 engineering college students from a large,

Northwestern university completed a demographic questionnaire, two general creativity instruments, a cognitive tolerance instruments, a musical creativity instrument, and an engineering creativity instrument. ANOVAs were performed for the general creativity measures and major whole ANOVAs were performed for scientific and artistic creativity measures and Biajor. The results of this study indicated that musicians scored higher in general & artistic creativity while there were no significant differences in scientific creativity for musicians and engineers. Participants scored higher than the normative data in general, artistic and scientific creativity. Overall, specialization with each major significantly tended to favor general, Artistic pr scientific creativity. There were no significant differences in general, scientific or artistic creativity between genders. However, gender distributions varied among major Caucasians who scored significantly higher in general and scientific creativity in both engineering and music groups. However, there were less minority participants in both engineering and music groups. Age stratification found no significant differences in general, artistic and scientific creativity in relation to age groups.

Shrader Aija (2004) Creativity and leadership: The higher education music administrator.

The study was designed to examine the higher education music administrators through the lens of creativity theory as defined by Csikszentmihalyi (1996). The study reveals notable consistencies from six music deans with quite different personalities, personal histories, & university environments. When these consistent creative elements are gathered together a description of a creative person, who is also a leader of people, appears. The conclusion can be made that

elements of creativity are part of the leadership of people of six deans of music. Creative leadership is categorized into the following sections, leadership and the creative personality, leadership & the work of creativity, leadership and the flow of creativity, and leadership and creative.

R. Keith Sawyer, Vera (2004) Creativity and Development

John- Steteiner, et al.,

The purpose of the study was to find out what is creativity, and where does it come from? Creativity and Development explores the fascinating connections and tensions between creativity research and developmental psychology, two fields that have largely progressed independently of each other-until now. In this book, scholars influential in both fields explore the emergence of new ideas, and the development of the people and situations that bring them to fruition. The uniquely collaborative nature of Oxford's Counterpoints series allows them to engage in a dialogue, addressing the key issues and potential benefits of exploring the connections between creativity and development. Creativity and Development is based on the observation that both creativity and development are processes that occur in complex systems, in which stages or changes emerge from the prior state of the system. In the 1970s and 1980s, creativity researchers shifted their focus from personality traits to cognitive and social processes, and the co-authors of this volume are some of the most influential figures in this shift. The central focus on system processes results in three related volume themes: how the outcomes of creativity and development emerge from dynamical processes, the interrelation between individual processes and social processes, and the role of mediating artifacts and domains in developmental and creative processes. The chapters touch on a wide range of important topics, with the authors drawing on

their decades of research into creativity and development. Readers will learn about the creativity of children's play, the creative aspects of children's thinking, the creative processes of scientists, the role of education and teaching in creative development, and the role of multiple intelligences in both creativity and development. The final chapter is an important dialogue between the authors, who engage in a roundtable discussion and explore key questions facing contemporary researchers, such as: Does society suppress children's creativity? Are creativity and development specific to intelligence or a domain? What role do social and cultural contexts play in creativity and development? Creativity and Development presents a powerful argument that both creativity scholars and developmental psychologists will benefit by becoming more familiar with each other's work.

M.I. Mattoo (2004) A study on secondary school students in relation to creative thinking ability and adjustment

The study aimed at exploring the adjustment patterns of high and low creative students. A sample of 200 students was randomly drawn from 15 higher secondary schools of Anantnag District (J & K). The subjects were studying in the 10th class and were in the age group of 16+. Data were collected with the help of adjustment inventory by J. Qadir (Urdu translated). High and low creative students were identified by administering Baquer Mehdi's verbal test on creative thinking ability. The students who were above the 75th percentile and below the 25th percentile were labeled as high and low creative's respectively. The study yielded significant differences on some areas of adjustment between the two extreme groups.

M.I. Mattoo (2003) Creative Thinking Ability and Vocational Interests – A Study

An attempt has been made to assess and compare the vocational interests (fine arts and literary) of high and low creative students. A sample of one thousand students (700 boys and 300 girls) was randomly drawn from 26 secondary schools of Anantnag district (J&K). The data were collected by administering Verbal Test of Creative Thinking Ability and Chatterji 's Non-language Preference Record. Identification of high and low creative categories was made on the basis of 75th and 25th percentiles respectively. Two way analysis of variance was used to find out the significant differences between high and low creative categories. The results revealed that the two groups differ significantly in their vocational interests. Further, sex as a variable could not make any significant difference in the interest patterns of high and low creatives.

Carol Ann Tomlinson, (2003) Differentiation Instruction in Response to Student Readiness. Interest, and Learning Profile in Academically Diverse Classrooms: A Review of Literature.
Catherine Brighton,
Holly Hertberg

The study reveals that both the current school reform and standards movements call for enhanced quality of instruction for all learners. Recent emphases on heterogeneity, special education inclusion, and reduction in out-of-class services for gifted learners, combined with escalations in cultural diversity in classrooms, make the challenge of serving academically diverse learners in regular classrooms seems an inevitable part of a teacher's role. Nonetheless, indications are that most teachers make few proactive modifications based on learner

variance. This review of literature examines a need for “differentiated” or academically responsive instruction. It provides support in theory and research for differentiating instruction based on a model of addressing student readiness, interest, and learning profile for a broad range of learners in mixed-ability classroom settings.

Srivastava, K. S. (2002) Effects of self concept on the learning styles preferences of high school male pupils.

The purpose of the study was an attempt to explore the effects of self concept on the learning styles preferences of high school male pupils and to find whether one’s self-concept and learning- styles preference may have any inter affect. The study was conducted on a sample of 329 adolescent boys (207 urban and 122 rural) of age group 14-15 years., studying in class X in Tehri- Garhwal district and was selected through stratified random sampling technique. Normative survey research method was adopted to collect data. The subject’s self concept was treated as independent variable and the learning- style preferences was treated as dependent variable. The pupils age, sex, class-level and locality were treated as controlled variables. Swatva Bodh Parikshan of Dr (Mrs) Sherry, Verma and Goswami (1988) and learning- styles Inventory developed by Dr S.C Aggarwal (1983) were used for data collection. Mean, standard deviations and averages were used for data analysis. The results indicated that as the self-concept level of the urban boys increased they showed increasing preferences to flexible, not-individualistic, visual, feel-independent long attention space, motivation-centered and environment-free learning styles. With the increasing self-concept, the rural boys showed their increasing preferences towards flexible, not-

individualistic, visual, field- dependent, long attention span, motivation-centered and environment-free learning styles.

Patel, R.K. (2002) A study of scientific creativity of under- Graduate science students of Allahabad University of affiliated degree colleges.

This study tried to find out whether the boys of university teaching departments differ from affiliated degree colleges with respective scientific creativity. Survey method was used for the study. 200 students of B.Sc. part I (CBZ group) of Allahabad University and one affiliated degree college constituted the sample. The test of scientific creativity constructed by K.S. Misra was used for measuring the scientific creativity. The findings of the study showed no significant difference among students of university teaching departments and affiliated degree colleges with respect to their overall scientific creativity and different aspects of scientific creativity, i.e. fluency, flexibility, originality and inquisitiveness. There was no significant difference in overall scientific creativity as well as fluency, flexibility, originality and inquisitiveness aspect of scientific creativity among boys and girls of degree colleges, respectively. Girls excelled boys in fluency and flexibility aspect of scientific creativity.

Koteshwar, M.N & (2001) Impact of personality characteristics on the Reddy, B.R., reading achievement of high schools students.

The study was designed to explore the impact of personality characteristics on the reading achievement of high schools students. The sample consisted of 1,293 students of classes VII , IX and X. The high school reading achievement test in

Telugu developed by the investigator as well as Cattell's High school personality questionnaire (HSPQ) were administered. The results indicated that all the 14 factors of HSPQ had a significant impact on the reading achievement of the sample subjects.

**James C. Kaufman (2000) Finding Creative Potential on Intelligence
Tests via Divergent Production**

The study was designed to assess the creative potential using a comprehensive battery of standardized tests requires a focus *on how and why an individual responds* in addition to *how well* they respond. Using the "intelligent testing" philosophy of focusing on the person being tested rather than the measure itself helps psychologists form a more complete picture of an examinee, which may include information about his or her creative potential. Although most aspects of creativity are not present in current individually based IQ and achievement tests, one exception is divergent production. Although still poorly represented, some subtests show great potential for tapping into divergent production, and hence provide some insight into creativity. The research on the relationship between measures of intelligence and creativity is discussed in this article. The authors also propose a way to use individually administered cognitive and achievement batteries to extract information about an individual's divergent production and general creative potential.

Agarwal, A.R. (2000) Television Viewing Pattern among higher secondary level students in terms of duration, type of programmes parental control and lining for companionship.

The purpose of the study was to find out television viewing pattern among higher secondary level students in terms of duration, type of programmes, parental control and lining for companionship; a purpose sample comprising of 95 higher secondary level students stratified across gender (boys and girls) and educational stream (Arts, Science and Commerce) were selected from Moradabad district. Television viewing Pattern Inventory (TVPI) by investigator and Study Habits Inventory (SHI) by Palsane and Sharma were used for the collection of data. The collected data was analyzed using F-test and t-test. The Findings have revealed that sixty eight percent of students felt that their parents impose restriction on them regarding the content and duration of televiewing. There were no gender and stream differences in this reference. Nearly 87 percent of the higher secondary level students watched television for less than four hours per day. Duration of televiewing was found to affect significantly the study habits of students watching television for more than four hours.

Arora, R.K. (2000) International effect of creativity and intelligence on emotional stability, personality adjustment and academic achievement

The present study deals with the relationship between creativity and intelligence and their interactional effect on emotional stability, personality adjustment and academic achievement. The sample of the study consists of 70

students studying in standard XII from two boys and two girls' intermediate colleges in Aligarh, by the random sampling technique. The findings of the study revealed that high creative/ high intelligence group was significantly highest in emotional stability than the remaining three creative/intelligence groups. Those possessing both high convergent and divergent abilities were by far the most accommodative persons among different creative-intelligence groups. All the high intelligence groups performed better than the low ones.

Rani,. N. (1999) Interaction effects of personality factor Q₁, Locus of control, and creativity on task performance

The study was designed to investigate the interaction effects of personality factor Q₁, Locus of control, and creativity on task performance of 160, female adolescents of class XI, and XII (age 15-17). The hindi adaptation of 16 PF (Kapoor), Rotter's Locus of control Scale, Scrambled Word Task Test (Goel & Shrivastava, 1998) and verbal Test of creative thinking (Mehdi, 1981) were administered. The results indicated that the interaction effect of Q₁ and locus of control was significant in influencing task performance. There was a significant interaction effect of Q₁ and fluency component of creativity. The interaction effect if all the three factors was found to be non- significant. These factors were independent of each other in affecting the performance of female adolescents.

Nair, V.P., (1999) Personality variables of pre-degree students in the regular stream and the correspondence stream.

The study designed to compare certain personality variables of pre-degree students in the regular stream and the correspondence stream and to see whether

or not certain personality variables like social adjustment, personal adjustment, achievement motivation, examination anxiety, general anxiety, introversion, extroversion, masculinity, femininity can discriminate significantly between the two different groups under study. The data for the study was derived from a representative sample of 186 pre-degree students from regular colleges and 344 students undergoing correspondence education. Mean, SD and critical ratio were used to treat the Data. The findings revealed that the personality variables used in the present study discriminated between regular and correspondence pre-degree students. High score in each variable was associated with regular college students except 'general anxiety' and 'examination anxiety' where high scores were associated with correspondence course students.

Busato, V.V. et. al., (1998) Learning styles - a meaning directed, a reproduction directed, an application directed and an undirected style

The study was conducted on four different learning styles- a meaning directed, a reproduction directed, an application directed and an undirected style. In a cross-sectional and longitudinal design the development of these learning styles during student's stay at the university was studied, as well as the relation of these styles with academic success. A systematic relation between year of study and learning style is expected, namely that the application and meaning directed learning style scores would be higher in the later years and the undirected and reproduction learning style scores would be the higher in the early years. In the cross-sectional study it was not found that the application and meaning directed learning style scores were higher in the later years, nor that the undirected and reproduction learning style scores were the highest in the early years. In the

longitudinal study the means of the meaning directed and application directed learning style scores indeed increased over the years, while the means of the reproduction and undirected learning style scores decreased. For the score on the meaning directed learning style, this change was significant, though a marginal effect size was found. It might not be concluded there is a systematic relation between year of study and learning style. No evidence is found for the implicit hierarchy that the meaning directed learning are better than the reproduction learning style. The undirected learning style however, correlated negatively with academic success.

Kember, D. & (1998) Leung, D.Y.P. The discrepancy between the dimensionality inherent in the design of instruments measuring approaches to learning and that indicated by subsequent factor analyses.

In their study attempted to examine the discrepancy between the dimensionality inherent in the design of instruments measuring approaches to learning and that indicated by subsequent factor analyses. Confirmatory factor analysis was used to examine the dimensionality of approaches to learning process questionnaires. The sample used for SPQ analysis was 4843 university students from Hong Kong universities. The LPQ data was drawn from a representative selection of 20 secondary schools in Hong Kong. The total number of useable questionnaire for the LPQ was 3254. The results indicated that for both sets of questionnaire data, the best fit was achieved by a model with two factors. The results suggest that approaches to learning are described better by a two-factor model than the three-or four- factors. The results suggest that approaches to

learning are described better by a two-factor model than the three-or four-factor ones on which the inventories are based.

Farooq Ah. Kuchay (1995) "Impact of type of school and rural urban background on creativity of the students".

The results revealed that pupils differ significantly in the levels of creativity and intelligence while as when the two groups were compared at 120 IQ and above. No significant difference was detected which means creativity and intelligence go a part when they reach a given threshold. Private school pupils have been found more creative as compared to government combined as well as sex wise. Pupils either belonging to rural or urban background do not differ significantly in their levels of creativity, however, boys hailing from rural government schools did reveal more creative talent as compared to urban government boys while pupils belonging to private institutions either in urban or rural areas do not exhibit any significant difference between the different levels of creativity.

Brown. William F, (1995) A study attitudes questionnaire for Holtzman, Wayne predicting academic success H.

The study describes the development of a self-rating questionnaire to measure students study habits and attitudes. Cross validation on freshmen showed correlations of 50 and 52 with grades at the end of the semester. A final revision of questionnaire has since been administered to several thousand students with equality satisfactory results and is now available for general use. The authors

interpret the predictive validity of their “Survey of Study Habits and Attitudes” as “evidence of its relevance for counseling purposes, diagnostic testing, investigations of the education process, and as a teaching aid in remedial or how-to-study classes.”

Joshi, Asha (1992) A Study of the Creative Potential of Urban, Rural and tribal Adolescents of Western Orissa.

The result of the study reveals between the urban and rural adolescents, urban adolescents in general are more creative than their rural counterparts. Between rural and urban adolescent, tribal adolescents in general are creative than their rural counterparts. Between urban and tribal adolescents both the groups perform same standard. This is to say tribal adolescents in general are as creative as their urban counterparts.

Emerick, L. J. (1992) Academic underachievement among the gifted: Students perceptions of factors that reverse the pattern

The main purpose of the study was to examine the achievement among the gifted has been a focus of research, for over 35 years. With few exceptions, studies of interventions for gifted underachievers have demonstrated only limited success. This study investigated factors which had influenced the reversal of the underachievement pattern in 10 gifted students, ages 14 to 20, who moved from chronic underachievement to academic success. Results indicated six factors were influential in reversing poor school performance. There was evidence that some gifted underachievers may respond well to interventions incorporating educational modifications which focus on individual strengths and interests.

**Margaret A. (1985) Giftedness and Reading: A Cross-
Anderson, Nona A. Sectional View of Differences in
Tollefson, Edwyna C. Reading Attitudes and Behaviors
Gilbert**

The study investigated the attitude toward reading and the self-reported reading behaviours of 276 gifted students in grades 1 through 12. Females had more positive attitudes toward reading and reported that reading was a hobby more frequently than males. Primary students had more positive attitudes toward reading than did senior high students. Primary students reported reading more books per month than intermediate level, junior high school, and senior high school students. Senior high school students reported reading the least number of books per month.

**Getzels, Jacob W.; (1962) Creativity and Intelligence: Explorations
Jackson, Philip W. with gifted students.
Oxford**

A study of psychological differences between children high in intelligence but not concomitantly high in creativity and children high in creativity but not concomitantly high in intelligence. S_s attended a private school in the Chicago area, ranged from 6th grade through the senior year of high school, and had a mean IQ of 132 with SD of 15. Ss were selected on the basis of school intelligence-test records and 5 measures of creativity. Groups were compared with reference to measures of morality, adjustment, and scholastic achievement. Groups were also compared with reference to less structured sources of information such as autobiographical accounts, a test of imagination, teacher ratings, and parental interview.

OVERVIEW

The review carried out in this area is represented as under:

1. Studies on Gifted Students
2. Studies on Personality, Creativity and Study Habits.

1. STUDIES ON GIFTED STUDENTS

Some researches have been carried out on Gifted Students. Moshe Zeidner; Inbal (2011), Laurence Vaiver – Douret (2011), Hoi Yan Cheung (2011), Deviney, David Mills, Lavelle H. et al.,(2011), Michelle Schapiro, Barry H. Schneider Bruce M. Shore et al., (2009), Nancy M. Robinson(2008), Anne N. Rinn (2007), Carol L. Tieso (2007), Tracy L. Cross, Kristie L. Speirs Neumeister, Jerrell C. Cassady (2007), Muhyieddeen Sh. Touq, Nawal H. Kamal & Alia T. Fada (2006), Joyce I. Fields (2006), Tracy L. Cross; Jerrel C. Cassady (2006), Heiner Rindermann, Kurt A. Helier (2005), Robert Cohen, Melissa Duncan & Sheila L. Cohen (2005), Leah B. Bucknavage, Frank C. Worrell (2005), Mary K. Tallent – Runnels; Arturo Olivarez Jr. et al., (2004), Ugur Sak (2004), Norma J. Ewing, Fung Lan Yong (2004), Mark A. Runco (2004), Ugur Sak Citation (2004), Megan Biddick (2003), Rostan, Pariser and Gruber (2002), Gilbert A. Clark, Enid Zimmerman (2001), Felicia A. Dixon; Tracy L. Cross; Cheryl M. Adams (2001), Lesley Sword (2001), Pfeiffer, Steven I., Stocking, Vicki B. (2000), Jan B. Hansen, John F. Feldhusen (1999), D. E. McIntosh, M. D. Dunham, R. S. Dean, D. K. Kundert (1995), H. Benony, D. Van Der Elst, K. Chahraoui, C. Bénony, J.P. Marnier (1994), Afshan (1991), Olszewski- Kubilius, P. Kulieke, M.J. (1990), Susan L. Dauber, Camilla Persson Benbow (1990), B. E. Kurtz, F. E. Weinert (1989).

Moshe Zeidner; Inbal (2011), found that gifted students scored lower on state anxiety facets and were not reliably different from their non-gifted counterparts on

mental distress or subjective well being. Laurence Vaiver – Douret (2011), concluded that children identified as "high-level potentialities" or "intellectually gifted" develop sensory, locomotor, neuropsychological, and language skills earlier than typically expected. Hoi Yan Cheung (2011), has analyzed the reasons behind why teachers in each city would have such ratings on competencies and characteristics for themselves, and why Beijing teachers (especially those who taught in supernormal schools) would have significantly higher ratings than their Hong Kong counterparts. Deviney (2011), found that three behavioral factors-- Analysis of Data, Organized Workplace and Frequent Change--had significantly different mean scores between the three GPA groupings. Michelle Schapiro (2009), found that Comparison group friendships had more numerous positive qualities (companionship, help, security, closeness) than those of gifted adolescents. Nancy M. (2008), concluded that the strong influence of the home and to the extra investment parents of gifted children make, not so much in securing outside classes, but in reading to and playing with their children, enriching their experience, and helping them focus on potential opportunities for learning. Anne N. Rinn (2007), has concluded that gifted adolescents who engage in sports have higher physical abilities self-concepts than those who do not engage in sports. No grade level or gender interactions were found. Carol L. Tieso (2007), found that there were significant differences between gender and age groups and that most of the variance among students on the OEs was explained by family membership. Tracy L. (2007), found that gifted females had a greater tendency toward I and T, and gifted males had a greater tendency for I. Overall, both genders in the gifted sample tended to be NP types. Joyce I. Fields (2006), found that the conventional procedure was not effective, multiple regression and discriminant function analyses were conducted to ascertain the predictors of giftedness. Muhyieddeen Sh. Touq (2006), had found that there were significant differences between gifted male and female students in general mental ability, achievement, general adjustment, behavioural traits, personal and social variables, in favour of the former. Tracy L. Cross (2006), concluded that

the results indicated that gifted adolescents did not exhibit heightened rates of suicide ideation as compared to their non-gifted peers. However, female students held higher levels of suicide ideation than male students. Female students exhibiting introversion-perceiving (IP) types held higher levels of suicide ideation than those with other types. Heiner Rindermann, (2005), had showed that the sum of the effects of class and school level on individual ability development was positive (teachers adapted teaching to the class ability level, and students were stimulated by classmates). Robert Cohen (2005), suggested that a pull-out enrichment program can be associated with enhanced peer relations in the classroom, an effect not evident in the current research literature. Leah B. Bucknave, (2005), concluded that significant differences in rates were found for participation in athletics, choral music, and dance in the direction of gender-stereotypical expectations. Mary K. Tallent – Runnels (2004), found that there were also gender differences in the second study with girls scoring higher than boys in motivation, study aids, and self-testing. Ugur Sak (2004), concluded that gifted adolescents differed within the group by gender and by ability. Norma J. Ewing, Fung Lan Yong (2004), found that significant gender differences were found in preferences for the tactile modality and intake. Mark A. Runco (2004), found that gifted and talented students can face a number of situations that may constitute sources of risk to their social and emotional development. Ugur Sak Citation (2004), concluded that gifted adolescents were found to be different from the general adolescent population, as well as different among themselves in personality types as measured by the Myers-Briggs Type Indicator (MBTI). Personality dimensions have also been shown to be associated with academic achievement and intelligence. Megan Biddick (2003), discussed the benefits of the strategy to school communities as a whole, and considers both affective and achievement outcomes for students. Rostan, Pariser and Gruber (2002), concluded that the implications of the study stress on the role of technical skill in the development of creativity. Felicia A. Dixon; Tracy L. Cross; Cheryll M. Adams (2001), concluded that six different cluster groups that were

described as follows: a mathematics focus (21%); a social focus (18%); a nonathletic group (21%); a low overall self-concept group (16%); a verbal group (9%); and a no spiritual/religious group (14%). Lesley Sword (2001), found that the gifted children not only think differently to other children, they also feel differently. Their intellectual complexity combines with their emotional intensity to give them a qualitatively different way of experiencing the world. Jan B. Hansen, John F. Feldhusen (1999), found that teachers trained in gifted education demonstrated greater teaching skills and developed more positive class climates than did teachers who had no training in gifted education. D. E. McIntosh, M D Dunham, R. S. Dean, D K Kundert (1995), found that LD/Gifted children were also more likely to demonstrate impairment on the Tactual Performance Test-Memory, Tactual Performance Test-Localization, and Trails B-Errors components of the HRNB-C. H. Benony, D. Van Der Elst, K. Chahraoui, C. Bénony, J.P. Marnier (1994), found that social self-esteem, family self-esteem and the lie scale were not correlated with any CBCL variable. The regression analyses indicate that academic self-esteem is the variable that explains the depression scores. Afshan (1991), found that Rural gifted girls in comparison to urban gifted girls were found to be higher on creativity. Olszewski- Kubilius, P. Kulieke, M.J. (1990), had found that comparisons between gifted females and males predominate and no significant difference was found between the male and female gifted students on different dimensions of personality. Susan L. Dauber, Camilla Persson Benbow (1990), had concluded that Virtually no differences in group activities or personality traits were found. In their ratings of peer perceptions, the modestly gifted group exceeded the extremely gifted, especially the verbally gifted, in being considered athletic and popular, and in social standing. B E Kurtz, F E Weinert (1989), had concluded that attribution questionnaires varied systematically according to ability: gifted children were more likely to attribute their academic successes to high ability than were average children, who showed a stronger belief in the importance of effort in determining task outcomes.

3. STUDIES ON PERSONALITY, CREATIVITY AND STUDY HABITS

Some researches have been carried out on Personality, Creativity and Study Habits. Rosa Aurora Chávez-Eagle Jonathan Eagle et al. (2012), Lajwanti Chaturvedi (2011), Loo, Sze Wei and Tuan Fatma Tuan Sulaiman, (2011), Mohd. Ghani Awang, Suriya Kumar Sinnaduria (2011), Rebecca L. Pierce, Jerrell C. Cassady (2011), Aluja-Fabregat, Anton; Blanch, Angel (2010), Bolanle A. Ola, Olufemi Morakinyo (2010), Lands Berger (2010), Andrew Davis (2009), Taylor, Ronald G. (2009), Muhammad Sarwar, Muhammad Bashir et al. (2009), Fayez Mina (2009), Marcus Credel & Nathan R. Kuncel (2008), Marrinir Nigel R. (2007), John Baer, James C. K., (2007), Ackerley, Edward (2006), Mills, C.J & Parker (2006), Al-Dhobaiban, Nawal (2005), Vcharyton, Christine (2005), Shrader Aija (2004), R. Keith Sawyer, Vera John- Steteiner, et al., (2004), M.I. Mattoo (2004), M.I. Mattoo (2003), Carol Ann Tomilinson, Catherine Brighton, Holly Hertberg (2003), Srivastava, K. S. (2002), Patel, R.K. (2002), Koteswar, M.N & Reddy, B.R., (2001), James C. Kaufman (2000), Agarwal, A.R. (2000), Arora, R.K. (2000), Rani (1999), Nair, V.P., (1999), Busato, V.V. et. al., (1998), Kember, D. & Leung, D.Y.P. (1998), Farooq Ah. Kuchay (1995), Brown. William F, Holtzman, Wayne H. (1995), Joshi, Asha (1992), Emerick, L. J. (1992), Margaret A. Anderson (1985), Getzels, Jacob W. (1962).

Rosa Aurora Chávez-Eagle Jonathan Eagle et al. (2012), concluded that certain developmental events are critical for personality formation and creativity maturation. Lajwanti Chaturvedi (2011), found that the use of internet among adolescents in India has led to a vast change in their life styles and study habits. Loo, Sze Wei and Tuan Fatma Tuan Sulaiman, (2011), concluded that the main implication from the case findings is that working adults are highly motivated in pursuing their studies and that there are many sources of motivation for them. Mohd. Ghani Awang, Suriya Kumar Sinnaduria (2011), found that there is a

significant difference between pre-test and post test for study orientation skills for Civil Engineering & Natural Resources respondents, Rebecca L. Pierce, Jerrell C. Cassady (2011), found that teachers in large urban school district can promote academic gains over time for gifted. Aluja-Fabregat, Anton; Blanch, Angel (2010), concluded that the relationship between personality and academic achievement seems to be mediated by study habits. Bolanle A. Ola, Olufemi Morakinyo (2010), found that the significant measures of study habits that predicted BFS were homework and assignments, examinations, and written work. Lands Berger (2010), found that importance of knowing the different personality types and domination of thinking skills of the students, Muhammad Sarwar, Muhammad Bashir et al. (2009), concluded that the high achievers had better study orientation, study habits and attitude than low achievers, Marcus Credel & Nathan R. Kuncel (2008), found that study motivation and study skills exhibit the strongest relationships with both grade point average and grades in individual classes, Marrinir Nigel R. (2007), illustrated that high school G.P.A & the self-efficacy, Ackerley, Edward (2006), found significant difference between male and female students on creativity. The female students were found to be more creative than the male students. Mills, C.J & Parker (2006), found that students engaged in a wide range of study behaviours in terms of time spent and use of resources. Previous programming experience and lecture attendance were positive factors to final course score, and a tendency to work with others was negative factors. Al-Dhobaiban, Nawal (2005), found the significant relationship between self-regulation and creativity only when the Whole theme education perspective. Vcharyton, Christine (2005), found that musicians scored higher in general & artistic creativity while there were no significant differences in scientific creativity for musicians and engineers. Shrader Aija (2004), concluded that notable consistencies from six music deans with quite different personalities, personal

histories, & university environments. R. Keith Sawyer, Vera John- Steteiner, et al., (2004), concluded that the Creativity and Development presents a powerful argument that both creativity scholars 2nd developmental psychologists will benefit by becoming more familiar with each other's work. M.I. Mattoo (2004), found that students who were above the 75th percentile and below the 25th percentile were labeled as high and low creative's respectively. The study yielded significant differences on some areas of adjustment between the two extreme groups. M.I. Mattoo (2003), concluded that the two groups differ significantly in their vocational interests. Further, sex as a variable could not make any significant difference in the interest patterns of high and low creative's. Patel, R.K. (2002), found no significant difference in overall scientific creativity as well as fluency, flexibility, originality and inquisitiveness aspect of scientific creativity among boys and girls of degree colleges, respectively. Girls excelled boys in fluency and flexibility aspect of scientific creativity.

Agarwal, A.R. (2000), found that sixty eight percent of students felt that their parents impose restriction on them regarding the content and duration of televiewing. There were no gender and stream differences in this reference. Arora, R.K. (2000), concluded revealed that high creative/ high intelligence group was significantly highest in emotional stability than the remaining three creative/ intelligence groups. Rani (1999), found the interaction effect of Q1 and locus of control was significant in influencing task performance. Nair, V.P., (1999), concluded the personality variables used in the present study discriminated between regular and correspondence pre-degree students. Busato, V.V. et. al., (1998), found no evidence for the implicit hierarchy that the meaning directed learning are better than the reproduction learning style. Kember, D. & Leung, D.Y.P. (1998), concluded that approaches to learning are described better by a two-factor model than the three-or four- factors. Farooq Ah. Kuchay (1995),

concluded that pupils differ significantly in the levels of creativity and intelligence while as when the two groups were compared at 120 I .Q and above, Joshi, Asha (1992), concluded that between rural and urban adolescent, tribal adolescents in general are creative than their rural counterparts. Emerick, L. J. (1992), results indicated six factors were influential in reversing poor school performance. Margaret A. Anderson (1985), found that females had more positive attitudes toward reading and reported that reading was a hobby more frequently than males. Getzels, Jacob W. (1962), found that groups were compared with reference to measures of morality, adjustment, and scholastic achievement.

Chapter – 3

Methodology and Procedure

Research methodology is a way to systematically investigate the research problem. It gives various steps in conducting the research in a systematic and a logical way. It is essential to define the problem, state objectives and hypotheses clearly. The research design provides the details regarding what, where, when, how much and by what means enquiry is initiated. Every piece of research must be planned and designed carefully so that the researcher precedes a head without getting confused at the subsequent steps of research. The researcher must have an objective understanding of what is to be done, what data is needed, what data collecting tools are to be employed and how the data is to be statistically analyzed and interpreted. There are a number of approaches to the design of studies and research projects all of which may be equally valid.

A researcher before formulating a research design should contemplate on it thoroughly keeping in view the demands of the selected problem. A objectively and suitable designed technique for the completion of various research steps is the basic requirement for a research problem. Thus research plan is specifically conceived and executed to bring empirical evidence. The design of the research is the actual blue print of ensuring research. A well conceived design adequately planned and executed helps greatly in permitting to rely both on observations and inferences.

Research designs have been defined by different social scientists in different ways. All these definitions emphasis systematic methodology in collecting accurate

information for interpretation. Selltize *et al.* (1959) indicates that, “research designs are closely linked to investigators objectives, accordingly they specify that research designs are expletory descriptive and/or experimental in nature”. According to Ackoff Russel (1961) research design is, “planning various phases and procedures relating to the formulation of research effort”.

Similarly Van Delan (1973) has drawn the attention of researchers towards the appropriate frame work to be adopted in a research design. He has remarked, “Research is often confused, as floundering process rather than logical, orderly one. An investigator does not tackle one step at a time; complete the process and then move on to the next step. He may tackle the steps out of the order, shuffle back and forth between steps or work on two steps more or less simultaneously”. Martin Bulmer (1974) has said that, “research design is the specification of the problem, conceptual definitions, derivation of hypotheses to test and defining a population to be studied”. According to Henry Manheim (1977), “Research design not only anticipates and specifies the seemingly countless decisions connected with carrying out data collection, processing and analysis, but it presents a logical basis for these decisions”.

Kerlinger (1983) has rightly remarked; “Research designs set up the frame work for adequate tests of the relations among variables. Design tells us in a sense, what observation to make, how to make them and how to analyze the quantitative representation of the observations. A design tells us what type of statistical analysis to use. Finally, an adequate design outlines possible conclusions to be drawn from the statistical analysis”. William Zikmund (1988) has described research design as, “master plan specifying the methods and procedures for collecting and analyzing the needed information”. Miller (1989) has defined

research design, “as the planned sequence of the entire process involved in conducting a research study”.

The present study has been completed through the descriptive method of research. This method has been the most popular and widely used method of research in social science and education. The descriptive method is designed to obtain pertinent and precise information concerning the current status of phenomena and also draw valid conclusions from the facts discovered. They are restricted not only to fact finding but may often result in the formulation of important principles of knowledge and solution significant problems concerning local, state, national and international issues. Descriptive studies investigate phenomena in their natural setting. Their purpose is both immediate and long range. Descriptive research helps to explain educational phenomena in terms of the condition and relationships that exist, opinions that are held by the students, teachers, parents and experts processes that are going on.

SAMPLE

The total population of academically gifted students with the cut point of 75% of marks and above in aggregate served as the criteria for identification of academically gifted students for the present study. The sample for the present study consists of 5% of total toppers in higher secondary part-II examinations (10+2) for the session 2009-2010. The sample comprised of 200 academically gifted 10+2 students presently perusing their studies in different colleges and departments of university of Kashmir.

The total population of academically gifted students as per the result gazette of higher secondary part-II examination (10+2) regular students of session 2009-10 is given as under:

Stream	Boys	Girls	Total
Arts	233	238	471
Commerce	784	424	1208
Science	1560	1169	2729
Total			4408

The breakup of the sample of academically gifted male and female students is as under:

S.No	Name of the University/College	Class	Male	Female	Total
1.	University of Kashmir, Srinagar	1 st , 2 nd Year, BBA & LLB (integrated)	20	20	40
2.	SKUAST, (K) Srinagar	1 st , 2 nd year Bv.Sc	20	20	40
3.	Islamic University of Science & Technology, Pulwama	1 st , 2 nd year B.Tech`	20	20	40
4.	NIT, Srinagar	1 st , 2 nd year B.E Students	20	20	40
5.	Government Medical College, Srinagar	1 st , 2 nd year MBBS & BDS	20	20	40
Total			100	100	200

SELECTION AND DESCRIPTION OF TOOLS

The tools for the present study were selected in a manner to achieve an optimum level of confidence by the investigator for the objectives of the study. Since the study principally contained three variables namely personality structure, creative potential and study habits, therefore such tools were decided to be choosing as could validity and reliably measure these variables. The investigator after screening a number of available tests finally selected the following tools to collect the data:

4. The Junior High School personality questionnaire (14 HSPQ form A) by Cattell was administered to measure personality characteristics of the sample subjects.
5. Baqer Mehdi`s testes of creativity (Verbal and non-verbal) was used to measure the creative potential of the sample subjects.
6. Palsane and Sharma`s study habits inventory (PSSHI) was administered on the sample subjects to measure their study habits.

DESCRIPTION OF TOOLS

The Jr. Sr. High School personality Questionnaire (14 HSPQ)

The Jr. Sr. High School Personality Questionnaire ("HSPQ") constructed by Cattell, is a new aid for teachers, guidance specialists, and for general clinical and research use. Recent advances based on extensive psychological research have made possible an instrument that gives an objective analysis of the individual personality to supplement the teacher's personal evaluation. The HSPQ is a standardized test that can be given within a class period, to single individuals or in groups, to yield a general assessment of personality development. The HSPQ

measures fourteen distinct dimensions or traits of personality which have been found by psychologists to come near to covering the total personality. By working with these fourteen scores, the psychologist can obtain predictions of school achievement, of vocational fitness, of danger of delinquency, of likelihood of leadership qualities, of need for clinical help in avoiding neurotic conditions, etc. The reading level of the test is adapted to ages 11 or 12 through 18 years, and the scoring can be done rapidly by a stencil key.

a. Brief Description of the Fourteen HSPQ Personality Factors

Low Sten Score Description (1-3) A boy or girl with low scores is	Alphabetic Designation of factor	High Sten Score Description (8-10) A boy or girl with high scores is:
Reserved Detached critical Aloof, Stiff	A	Warm Hearted, Outgoing, Easy-going, participating
Less Intelligent, Concrete thinking of Lower scholastic Mental capacity	B	More Intelligent, Abstract Thinking, Bright, of Higher Scholastic mental capacity
Affected By Feelings, Emotionally less stable, easily upset changeable, of lower ego strength	C	Emotionally Stable, Mature, Faces reality, Calm, of Higher Ego Strength (not the same as "egotistical")
Undemonstrative, Deliberate, Inactive, Stodgy, Phlegmatic	D	Excitable, Impatient, Demanding Over active, Unrestrained
Obedient, Mild Easily Led, Accommodating, Submissive	E	Assertive, Competitive, Aggressive, Stubborn. Dominant
Sober, Taciturn, Serious	F	Enthusiastic, Heedless, Happy-Go-Lucky.
Disregards Rules, Expedient, Has Weaker Super Go Strength	G	Conscientious, Persistent, Moralistic, Staid, Has Stronger

		Superego Strength
Shy , Timid Threat Sensitive	H	Adventurous , "Thick-Skinned" Socially Bold
Tough-Minded , Rejects Illusions	I	Tender-Minded , Sensitive, Clinging, Over Protected.
Zestful , Likes Group Action	J	Circumspect Individualism, Reflective, Internally Restrained
Self-Assured , Placid, Secure, Complacent, Untroubled	Q ₁	Apprehensive , Self- Reproaching, Insecure, Internally Restrained.
Sociable Group-Dependent , A "Joiner" And Sound Follower	Q ₂	Self-Sufficient , Prefers Own Decisions, Resourceful.
Uncontrolled , Lax, follows Own Urges, careless of Social rules has Low Integration	Q ₃	Controlled , Socially-Precise, Self-Disciplined, Compulsive, Has high self concept control.
Relaxed , Tranquil, Torpid, Unfrustrated, Composed	Q ₄	Tense , Driven, Overwrought, Frustrated, Fearful

a. Administration of the Test

The test is administered without a time limit but can be completed by all but the slowest readers in about 40-50 minutes per form. In addition to Form A, which requires this time, there are also three other forms B, C, and D, equivalent in every way and intended for more extended testing or for retesting when there is only a short interval. The authors strongly advise using at least the A and B forms, and, whenever time permits, all four forms for maximally reliable evidence on any single personality dimension and the entire personality as expressed in all fourteen dimensions of the test. For such comprehensive coverage, 160-200 minutes of testing time are surely well invested. In all ordinary cases, one passes out the test booklets and answer sheets and proceeds verbatim as follows: "This is called the booklet and contains the questions you are to answer. The separate sheet is called the answer sheet. All your answers are to be placed only on the answer sheet, in a way I shall explain.

"Put your answer sheet beside the booklet, like this, and write your name and whatever other particulars the examiner may want on it. Do it now (Pause until done) now, follow the 'What to Do' section, on the cover of the booklet, while I read it aloud." The Examiner reads this aloud, pausing to remind the examinees to answer the examples. After the instructions are read and the examples are completed, he says: "Do not open the booklet until I tell you. First tell me: you have any questions about the instructions? Raise your hand if you do. The examiner deals fully with any questions, for this is not an ability test but requires that even the least intelligent shall understand clearly how responses are to be made. Then the examiner says: "Now, have you marked the answers for the examples that were on the cover? Are there any more questions? (If not). Fine, we are ready, Open the booklet and start on number. Be sure you mark your answer for question 1 in one of the boxes beside the 1 on the answer sheet. Continue with one question after another, marking your answer to each question on the answer sheet. Be sure the number of the box on the answer sheet always matches the number of the question you are answering in the booklet. (illustrate this by pointing to two instances). Give one answer to every question, don't skip any questions".

During the test, the meaning of words may be explained to an examiner, upon request, EXCEPT for the intelligence scale items (numbers 23, 24, 43, 44, 63, 64, 83, 84, 104, and 124). In general, however, this will not be necessary since the vocabulary has been adjusted to eleven-year-old comprehension. In any case, it is important, just after the testing is started, to move rapidly around the class to make sure that the instructions have been understood. In particular, see that no one is omitting questions and that the idea of marking in the box or space by the corresponding number on the answer sheet has been understood. For this purpose, wait until most students reach the end page of the booklet, and then

point out to them that they can check if they are keeping on the right numbers because the answer sheet always says where the end of each of the booklet pages comes; convenience, each page of the booklet corresponds to a column on the answer sheet. (This last sentence does not hold true for answer sheet).

“Reminders” as to where one should be by a given time can be made at several points, because this also helps to keep stragglers from proceeding too slowly. The average time needed by high school pupils to finish the test will generally fall within a class period of 50 to 60 minutes. (Except in certain school situations where it is inappropriate, those who finish early may reasonably be released, or at least allowed to hand in their papers). Definitely better performance can be insured in the slower examinees by a calling out, at 10, 20, and 30 minutes from the start, as follows: At 10 minutes say, “You should by now have reached at least question 35 if you are not as far as 35, it means that you should be going faster. Do not take quite so long with each question, but give the answer that comes to you when you first read it. However, do not leave out any of the questions.” Interrupt similarly, naming questions 70 and 105, at 20 and 30 minutes respectively. The main point to make toward the end of the test is,

“Look back over your answer sheet and make quite sure before you turn it in that you have answered every question.” Discourage the tendency to change answers on the answer sheet; prevent it when possible by collecting the papers from individuals as they finish. However, if anyone asks, the examiner should make it clear that it is not forbidden to change an answer if, on reflection, the person feels he wants to do so. The completed answer sheet is the usual record for obtaining the score. In special cases e.g., an unusually young student, who has been allowed to answer directly on the questionnaire booklet, it will save total scoring time to transfer the responses to an answer sheet before scoring.

b. Scoring of the Answer Sheets

The answer sheet is scored by a streamlined hand stencil key. An experienced clerk can obtain the fourteen scores on an answer sheet in little more than a minute. Conveniently, the same key is applicable to all four forms. The scoring instructions are as follows:

Check to see that each question has been given one, and only one, answer. At the same time, note whether there are gross oddities of response which could upset the key- Principally, watch for the occasional child who marks all positions, or who proceeds mechanically to mark all right- hand responses, etc. reject such answer sheets.

Place cardboard stencil key number 1 on the left-hand side of the answer sheet, adjusting it as described right on the key. All necessary instructions for applying the hand stencil key to get "raw scores" for seven of the factors are also printed on the key itself. Do the same with cardboard stencil key number 2 to get the other seven raw scores.

PALSANE AND SHARMA'S STUDY HABITS INVENTORY

A. Description of the Inventory

The study habits of the individual cover mainly the reading habits, learning techniques, memory, time-schedule, physical conditions, examination, evaluation, etc.

The items of the inventory belong to the following eight areas:

i. Budgeting Time: It is very important to plan the budget of study time. Time schedule helps to adjust the study periods and other activities according to the

needs of the individual. The best way to budgeting the time is to keep the record of all activities throughout the day for one week. The analysis of this diary will help in budgeting the time. By budgeting time, students can optimize their success in study as well as their extra -curricular activities.

ii. Physical Conditions for Study: Physical conditions play an important part in study habits. The place for study should be calm and quiet. It should be clean and there should be proper illumination and ventilation. Furniture should be comfortable. There should be sufficient light. One should use diffused light. Study table should be clean and contain only and all the necessary things e. g. papers, pen, books, pencil, etc.

iii. Reading Ability: Reading is the basic skill in any kind of study. Reading ability includes various factors as good vocabulary, speed of reading, comprehension; independent selection of appropriate material for reading and locating information. One should be able to read at least 300 words per minute in his mother tongue, 75 to 100 words in any foreign language. One must try to build up a good vocabulary by remembering the precise meaning of the words. Speed of reading is also an important factor. Silent reading is always faster than loud reading. It's necessary to adjust the speed of reading according to the importance of matter. Technical material requires more time than usual one. An individual should try to understand what he is reading. He should try to remember the ideas he has grasped while reading and should be able to summarize the main ideas.

iv. Note Taking: Taking notes in the classroom is an important learning activity. Taking notes from book also helps a great deal in study. There are different ways of taking notes. One may copy everything from text book. One may take down only important paragraphs or one may take down the headings and sub headings and important key paras to make an outline. Paraphrasing in one's own words and summarizing is supposed to be the best way of making one's notes. It is a good

practice to combine class notes and notes from books to make a final note. With the help of regular practice note taking can become a habit.

v. Factors in Learning Motivation: Apart from ability to learn, desire to learn an important consideration. If one is genuinely interested in learning he may learn quickly and retain it for a long time. There are individual differences in capacity to learn. Everybody can improve with extra efforts. Spirit of competition and co-operation helps in learning one learns better in a group.

vi. Memory: Improving memory means learning better. Distributing learning periods is preferable to continuous or massed learning. The better we learn the longer we retain. Over-learning helps in remembering for a longer period.

vii. Taking Examinations: Most of our examinations are of essay type where a few questions are given and students are required to write long answers. It is good to prepare an outline and arrange the ideas properly, following a logical pattern of presentation use of simple language is advisable. Separate ideas should be discussed in paragraphs. Headings and sub-headings should be properly placed. Important words and phrases may be underlined.

a. Preparation for examination: One should devote more time and attention to his weak points. A time schedule for study should be prepared. If one is regular in his study habits he is already prepared for the examination. Calm, cool and relaxed attitude towards the examination is necessary and can be achieved only after a good preparation.

b. Use of Examination Results: From the results one can find out his strong and weak points. Knowledge of results can motivate an individual and direct his efforts.

viii. Health: Regular and healthy habits of eating, exercise, recreation and sleep help in maintaining good health and sound mental state which is necessary to achieve success in the examination.

The following table shows the items belonging to various areas:

S.No	Areas	No. of Items
1	Budgeting time	1, 2, 3, 4, 32
2	Physical condition	5, 6, 7, 8, 9, 43
3	Note taking	10, 13, 14, 15, 16, 17, 22, 28
4	Learning motivation	20, 21, 23, 24, 25, 40
5	Memory	12, 26, 27, 37
6	Taking examinations	29, 30, 31, 33, 34, 35, 36, 38, 39,42
7	Health	41,44,45

B. Administration of the Inventory

The inventory can be administered to individuals as well as in groups of 25 to 50. Still larger numbers can be handled with the help of assistant supervisors and the public address system (Loud speakers). The subjects should be seated comfortably and as far as possible should not have a chance to talk to other students or glance at their answers. There should be good ventilation and light in the room. By explaining the purpose of the test the supervisor should try to get full cooperation from the students. The inventory is self-administering. All the instructions are printed on the front page of the Inventory. The supervisor should read these out to the students and explain to them whatever is necessary. The following points should be emphasized:

- (i) The results are useful only if the subjects give honest answers,
- (ii) The needed bio-data be filled on the first page of Inventory. The test administrator should see this personally,

- (iii) Although there is no time-limit, the subjects should complete the entire inventory within 20 to 25 minutes,
- (iv) The answers of the individuals will be kept confidential,
- (v) If the subjects have any difficulty in understanding the meaning of the words or statements the test administrator may be consulted.

C). Scoring:

The procedure of scoring is quite simple. For always or mostly response, score of 2 is awarded, whereas 1 and 0 scores are to be given for 'Sometimes' or 'Never' response respectively. In case of statement Nos. 6, 9, 13, 15, 24, 26, 34, 36, 37, 41 & 42 the weightage of scoring is reversed and it is as 0, 1 and 2 for 'always', sometimes and 'never' responses respectively. The maximum obtainable score is 90. Higher score indicates good study habits.

D). Reliability

The reliability of the inventory is determined by two methods:

- (i) The reliability coefficient was found to be .88 by test retest method (with an interval of 4 weeks) on a sample of 200 male students of undergraduate classes.
- (ii) The reliability coefficient was found to be .67 with an interval of 3 months on a sample of 60 girls studying in intermediate classes.
- (iii) Using split half technique on 150 boys of intermediate and undergraduate classes, the coefficient of correlation was found to be .56 between odd and even items.

E). Validity

The inventory, besides having a high face validity, has the other validity Coefficients which are given below:

I) With External Criterion (Similar type of Study habit inventories)

S.No	Name of other tests	N	Validity Coefficient
1	Study Habit inventory - Mukhopadhyaya and Sansanwal	80	.69
2	Test of Study Habits and Attitudes C. P. Mathur	80	.67
3	Study Habit Inventory B.V. Patel	80	.74
4	Study Involvement Inventory Asha Bhatnagar	80	.83

II) With other variable Measures

1.	Verbal Achievement Motivation Test V.P. Bhargava	50	.46
2.	Scholastic Achievement (total marks in annual examinations)	50	.42
3.	Level of Aspiration – Shah and Bhargava	50	.58
4.	Projective Test of Achievement Motivation P. Deo	50	.53
5.	Reading Comprehension Test – Ahuja & Ahuja	50	.76

The above validity coefficients indicate that the inventory has sufficiently high validity with other similar inventories and allied measures by other authors and have significant relationship with other variables which influences the study habits and academic performances. For research purposes, the inventory can be safely recommended for use with the sample for which it has been prepared.

III) Academic Achievement

Further the academic achievement of the students was collected by giving them self-constructed information blank in which they had to give the aggregate marks of 10+2 level. This was then also confirmed from the college records of the respective colleges. The investigator faced a lot of difficulties in obtaining the achievement scores of the subjects under investigation. But after proper persuasion the investigator was able to collect the academic achievement record of the sample from the concerned heads of the institutions.

A. Baqer Mehdi's Verbal Tool of Creativity

The verbal test of creative thinking includes the following four sub-tests:

1. Consequences test
2. Unusual uses test
3. New relationships test
4. Product improvement test

1. Consequences Test: In this sub-test there are three hypothetical situations:

1. What would happen if man could fly like birds?
2. What would happen if our school is put on wheels?
3. What would happen if man does not have any need for food?

This hypothetical nature of situation provide the subject with an unlimited opportunity to make responses with his own imagination and originality. The time allowed for this activity is fifteen minutes.

2. Unusual Tests: This test presents the subject with the names of three common objects:

1. A piece of stone
2. A wooden stick

3. Water

The subject is required to think and write as many novel, interesting and unusual uses of these objects as he may think of. The time allowed for the three tasks is four minutes each.

3. New Relationship Test: This test presents the subject with three pairs of words apparently different:

1. Tree and house
2. Chair and ladder
3. Air and water

The subject is required to think and write as many novel relationships as possible between the two objects of each pair. This activity also provides an opportunity for the free play of imagination and originality. Time allowed for this activity is fifteen minutes.

4. Product Improvement Test: In this test, the subject is asked to think of a simple wooden toy of a horse, and suggest and write addition of new things to it in order to make it more interesting for the children to play. The time allowed for this activity is six minutes.

B. Baqer Mehdi's Non-Verbal Tool of Creativity

This test is intended to measure the individual's ability to deal with figural contents in a creative manner in the preparation of non-verbal creative thinking tasks pertaining to originality and elaboration have been used. Three types of activities have been framed for this purpose:

1. Picture construction activity
2. In-complete figure activity
3. Triangles and ellipses activity

1. Picture Construction Activity: This activity presents the subject with two simple geometrical figures, a semi circle and a rhomb. The subject is required to construct and elaborate picture by using each figure as an integral part.

a). Semi circle, and b). A Rhomb

Emphasis is put on originality and elaboration. Originality is judged by the novelty of the picture and elaboration by adding pertinent details in the picture so that it tells a complete and an interesting story. The subject is also required to give an interesting and unusual title to each picture. Ten minutes are allowed for this activity.

2. Incomplete figure activity: This activity consists of 10 line drawings which could be made into meaningful pictures of different objects. The subject is required to construct different pictures and give suitable title to each picture. Each item is scored for originality and elaboration. Time allowed for this activity is fifteen minutes.

3. Triangles and ellipses activity: This activity presents the subject with seven triangles and seven ellipses and requires him to construct different meaningful pictures based on the two given stimuli. He is also asked to give suitable title to each picture. Here, also the items are scored for originality and elaboration. Ten minutes are allowed for this activity.

Statistical Treatment

The data obtained will be put to suitable statistical techniques for analysis and interpretation. T-test will be used to study the significance of difference, if any, between the groups.

Administration of the Test

The administration of the test was completed in the following patterns:

Instructions

Some additional instructions besides these mentioned in the test booklets were given to the subjects to make them understand clearly what they were required to do. These are as follows:

- i. Before starting the test, I would like you first to fill certain details required on the title pages of the test, (Time was allowed for the subjects to fill in the details as it was made sure that they had done so).
- ii. The investigator tells the subjects that you should not copy it from your colleague.
- iii. Be quick as possible so that you can write more responses.

This test was completed in the five sittings of 48 minutes (verbal test). The total time required for completion of non-verbal test is 35 minutes. Three types of activities have been framed for this purpose.

Scoring Procedure

a. Scoring Procedure (Verbal)

The verbal test of creative thinking has been scored for fluency, Flexibility and originality. In scoring for Fluency, the irrelevant and the repeated responses were struck off and then the remaining relevant and meaningful responses were given a weightage of one score each and in this way the total score for fluency was obtained.

In scoring for flexibility different categories of responses were made that is response belonging to one and the same category were pooled together and then a weightage of one score to each category was given and in this way the total score for flexibility was obtained.

In scoring for originality a greater care was taken and the following procedure, as explained in the manuals was adopted.

1. A responses given by 0.1% to 0.99% of the testees was given a weightage of 5 scores.
2. A responses given by 1% to 1.99% of the testees was given a weightage of 4 scores.
3. A responses given by 2% to 2.99% of the testees was given a weightage of 3 scores.
4. A responses given by 3% to 3.99% of the responses was given a weightage of 2 scores.
5. A responses given by 4% to 4.99% of the testees was given a weightage of 1 score.
6. A responses given by 5% to more of the testees was given a weightage of zero score.

The total creativity score has been obtained after converting the raw fluency, flexibility and originality scores into total creativity score (Mehdi 1978).

b. Scoring Procedure (Non-Verbal)

The non-verbal test for creative thinking has been scores for elaboration and originality. In scoring for elaboration, it is important for the scorer to see that the primary and minimum response is meaningful and relevant to the stimulus

before it is scored, if the figure is not relevant and meaningful, it should be ignored. The total elaboration score will consist of a score of one for the primary and minimum response plus one score each for all the additional new ideas. An idea once scored in a picture should not be scored again in the same picture.

Scoring for the Title

As in the case of scoring for elaboration, the originality scores for titles will be considered as verbal rather than nonverbal. The titles are to be evaluated for originality on the basis of the following scheme:

1. A zero score will be given to a title, if it just names the object such as cat, dog, hen, etc. These are obvious "thing" titles.
2. A score for one will be given to a title, if it attempts to describe the object in somewhat elaborate terms, such as "A Fat man", "A Hungry Child", "A Beautiful Bird", etc.
3. A score of two will be given to a title which is imaginative and goes beyond a mere physical description of the object for example, "A king from Mar's" and "A cat that never mewed"?

c. Statistical Treatment

The data collected was subjected to the following statistical treatment:

- i. Percentage statistics.
- ii. Mean and S.D.
- iii. t-test.

Chapter – 4

Analysis Interpretation and Discussion of the Results

The analysis and interpretation of data is of great significance. The data as such has no meaning, if it is not analyzed and interpreted properly. It may be fair to say that research consists in general of two large steps, the collection of data and the analysis of that data. Interpretation calls for a critical examination of the results of analysis in the light of all the limitations of that gathered data. However valid, reliable and adequate data may be, it does not serve any worthwhile purpose unless it is carefully edited systematically classified, tabulated scientifically, analyzed intelligently and rationally concluded.

For every researcher, it is crucially important to know that not only precision in the collection of data or selection of tools can guarantee the accomplishment of objectives, but adequate knowledge in the application of statistical analysis is equally important. Data analysis is the act of transforming data with the aim of extracting useful information and facilitating conclusion. Data analysis is the process of systematically applying statistical and/or logical techniques to describe and illustrate, condenses, recap and evaluate data. According to Shammo and Resnik (2003) various analytical procedures provide a way of drawing inductive inferences from data and distinguishing the signal (the phenomena of interest) from the noise (statistical fluctuations) present in the data.

The organization, analysis and interpretation of data and formulation of conclusions and generalization are necessary steps to get a meaningful picture out of raw information collected. The analysis and interpretation of data involves the objective material in the possession of the researcher and subjective reactions and

desires to derive from the data the inherent meanings in their relation to the problem.

In the present endeavor, the investigator has made an attempt to study the personality characteristics, creative potentials and study habits of academically gifted male and female students by using different tools and techniques. The information collected from the students perusing their studies in different universities and colleges in Kashmir was put to suitable statistical analysis in order to arrive at definite conclusions in the light of proposed objectives.

The data has been analyzed and tabulated in the following manner:

- A: Description of the sample subjects with respect to their Academic Performance, Study Habits, Creativity and Personality.
- B: Comparison of male and female academically gifted students on Academic Performance, Personality Structure, Creative Potential and Study Habits.

A. Description of the Sample Subjects with Respect to their Academic Performance, Study Habits Creativity and Personality (n=200)

Table 4.1: Showing academic performance standard of academically gifted male and female students at 10+2 level (N=200).

Performance Standards	Total	Percentage
75-79	29	14.5
80-84	29	14.5
85-90	142	71

A perusal of the above table reveals that 14.5% academically gifted students have got 75-79% of marks at 10+2 level, 14.5 students have got 80-84% of marks and 71% students have got 85-90% of marks respectively. The above academic performance standard of students clearly shows that majority of academically gifted students fall on 85-90% of marks at 10+2 examination.

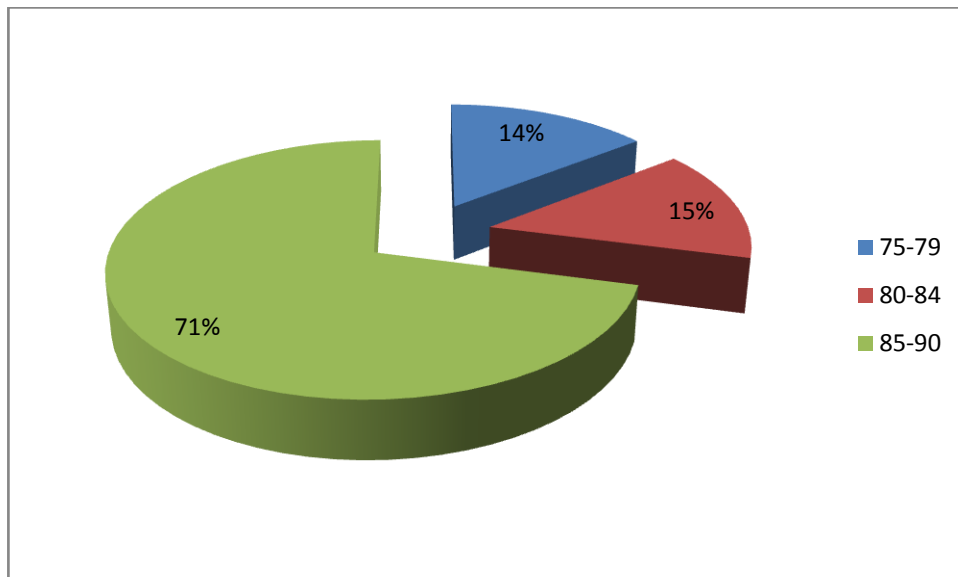


Fig 4.1: Showing comparison on performance standard of academically gifted male and female students at 10+2 level.

Table: 4.2: Showing the percentage of respondents falling on each level of study habits (N=200).

Levels	No. of Respondents	Percentage
Excellent	147	73.5
Very Good	30	15
Average	11	5.5
Unsatisfactory	7	3.5
Very unsatisfactory	5	2.5
Total	200	100

A quick look of the above table shows that out of 200 Academically gifted male and female students 73.5% have excellent study habits, 15% have very good study habits, 5.5% have average study habits, 3.5% have unsatisfactory study habits and 2.5% have very unsatisfactory in their study habits. This clearly shows that majority of academically gifted male and female students possess excellent study habits.

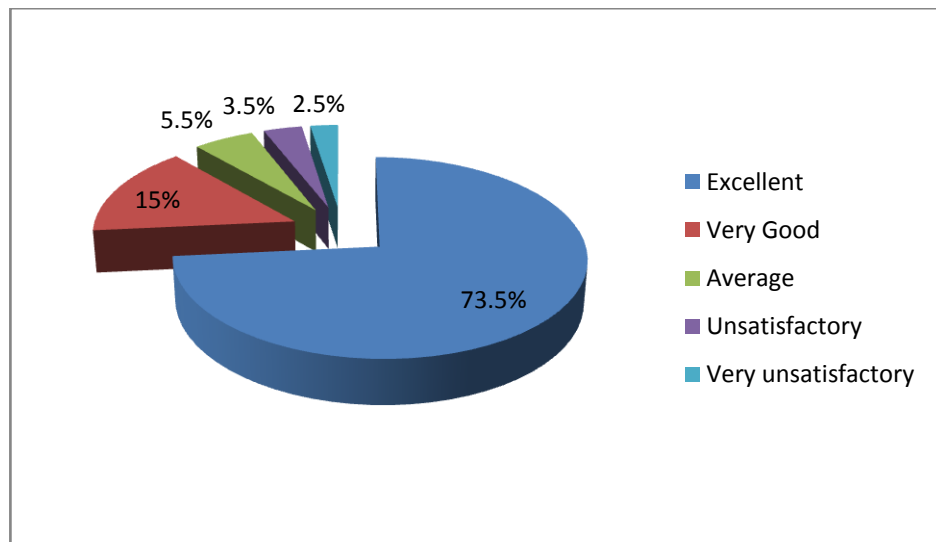


Fig 4.2: Showing the percentage of respondents falling on each level of study habits.

Table 4.3: Showing the levels of Creativity in case of Academically Gifted Students on Verbal and Non-Verbal tests of creativity (N=200).

Groups	Verbal Creativity	Percentage	Non Verbal Creativity	Percentage
High Creative	154	77	164	82
Low Creative	46	23	36	18
Total	200	100	200	100

A perusal of the above table reveals that 77% of Academically gifted male and female students on creativity (verbal) are high creative and 23% are low creative whereas, 82% of academically gifted male and female students on creativity (non-verbal) are high creative and 18% are low creative (non-verbal). This clearly shows that majority of academically gifted male and female students are highly creative and a small no. of students were found to be low creative

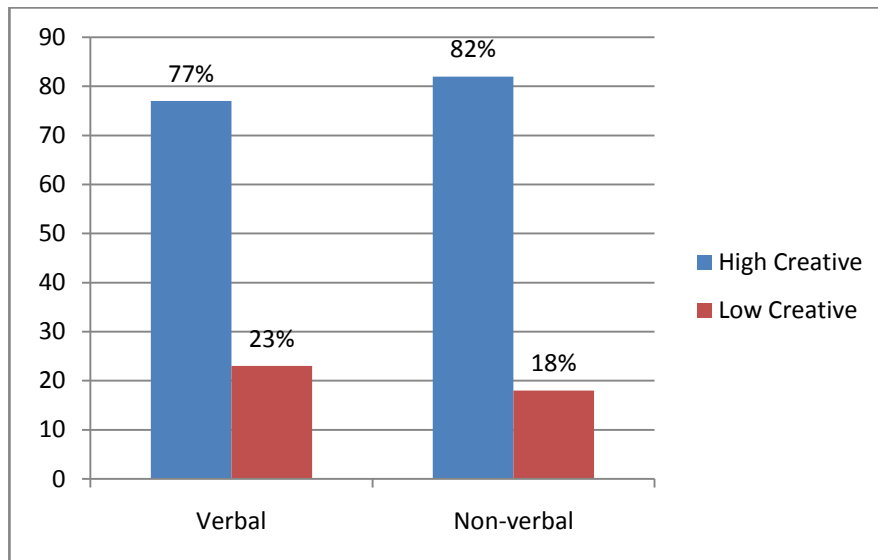


Fig 4.3: Showing the levels of Creativity in case of Academically Gifted Students on Verbal and Non-Verbal tests of creativity (N=200).

Table 4.4: Showing Mean and S.D of Academically gifted male and female students on each of the 14 personality factors (N=200).

S.No	Factors	Mean	S.D
1	A	5.39	1.75
2	B	7.03	1.66
3	C	6.04	1.4
4	D	6.29	1.6
5	E	5.37	1.81
6	F	5.51	1.83
7	G	6.04	1.62
8	H	5.31	1.76
9	I	7.1	2.01
10	J	6.76	1.54
11	Q ₁	6.6	1.62
12	Q ₂	6.74	1.55
13	Q ₃	6.1	1.64
14	Q ₄	6.62	1.93

A perusal of the above table reveals that Academically gifted students have secured a mean sten score of 5.39 with S.D of 1.75, on factor A (Reserved – warmhearted), on factor B i.e, (less intelligence – more intelligence), the students have secured a mean sten score of 7.03 with S.D of 1.66. On factor C (Emotionally unstable – Emotionally stable) the students have secured a mean sten score of 6.04 with S.D of 1.4. On factor D (Undemonstrative – Excitable) the groups have secure a mean sten score of 6.29 with S.D of 1.6. On factor E (Obedient – Assertive) the

students have secured a mean sten score of 5.37 with S.D of 1.81. On factor F (Sober – Enthusiastic) the students have secured a mean sten score of 5.51 with S.D of 1.83. On factor G (expedient- persistent), the students have secured a mean sten score of 6.04 with S.D of 1.62. On factor H (Shy – Adventurous) the students have secured a mean sten score of 5.3 with S.D of 1.76. On factor I (Tough minded – Tender minded) the students have secured a mean sten score of 7.1 with S.D of 2.01 which is the highest out of all 14 personality factors. On factor J (Vigours – Unwilling to act) the students have secured a mean sten score of 6.76 with S.D of 1.54. On factor Q₁ (Confident – Apprehensive) the students have secured a mean sten score of 6.6 with S.D of 1.62. On factor Q₂ (Sociably group dependent – Self sufficient) the students have secured a mean sten score of 6.74 with S.D of 1.55. on factor Q₃ (Uncontrolled – Controlled) the students the students have secured a mean sten score of 6.1 with S.D of 1.64 and on factor Q₄ (Relaxed – Tense) the students have secured a mean sten score of 6.62 with S.D of 1.93.

B. Comparison of Academically Gifted Male and Female Students on Academic Performance, Personality Structure, Creative Potential and Study Habits.

B .1:Performance Standard

In educational institutions, success is measured by academic performance, or how well a student meets standards set out by local government and the institution itself. As career competition grows ever more fierce in the working world, the importance of students doing well in school has caught the attention of parents, legislators and government education departments alike.

Table 4.5: Showing Comparison on academic performance standards of Academically gifted male and female students at 10+2 level.

Performance Standards	Male	Female
75-79	17	12
80-84	15	14
85-90	68	74
Total	100	100

The table reveals that out of 100 academically gifted male students 17% students have got 75 - 79% of marks at 10+2 level, 15% students have got 80-84% of marks at 10+2 level and 68% students have got 85-90% of marks at 10+2 level.

The table also reveals that out of 100 academically gifted female students 12% students have got 75-79% of marks at 10+2 level, 14% students have got 80-84% of marks and 74% students have got 85-90% of marks at 10+2 level. From the

above comparison between academically gifted male and female students, it clearly shows that majority of the students fall on 85-90% of marks at 10+2 examination.

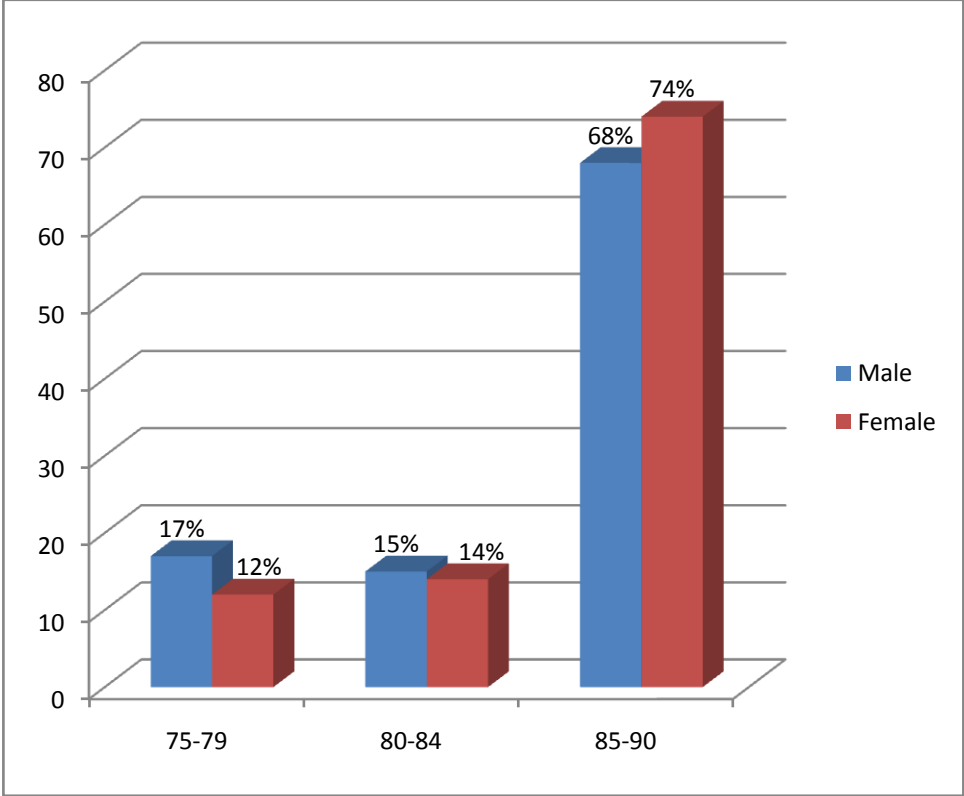


Fig 4.4: Showing Comparison on performance standards of academically gifted male and female students at 10+2 level

B.2 Personality

Personality is the total picture of man`s organized behavior especially characterized by his fellowmen in the characteristics pattern of behavior, cognition, emotions which may be experienced by the individual manifested to others.

Table 4.6: Showing Significance of difference between the mean scores of academically gifted Male and Female students on 14 personality factors (N=100 in each group).

Personality factors	Groups	Mean/SD	't' value	level of Significance
A	M	4.95/1.85	3.7	Significant at 0.01 level
	F	5.84/1.59		
B	M	6.63/1.87	3.72	Significant at 0.01 level
	F	7.45/1.31		
C	M	6.01/1.46	0.47	Not Significant
	F	6.01/1.33		
D	M	6.25/1.72	0.4	Not Significant
	F	6.32/1.48		
E	M	5.53/2.20	1.29	Not Significant
	F	5.22/1.56		
F	M	5.07/1.9	1.2	Not Significant
	F	5.36/1.61		
G	M	5.98/1.6	0.23	Not Significant
	F	6.1/1.61		
H	M	4.97/1.85	2.83	Significant at 0.01 level
	F	5.65/1.62		
I	M	6.50/2.16	4.8	Significant at 0.01 level
	F	7.7/1.65		
J	M	6.63/1.55	1.28	Not Significant
	F	6.9/1.52		
Q ₁	M	6.93/1.81	0.59	Not Significant
	F	6.8/1.39		
Q ₂	M	6.87/1.65	1.19	Not Significant
	F	6.62/1.44		
Q ₃	M	6.02/1.71	0.73	Not Significant
	F	6.19/1.56		
Q ₄	M	6.35/2.05	2.03	Significant at 0.05 level
	F	6.9/1.78		

A perusal of the table reveals that out of 14 comparisons five have turned out to be significant. It is interesting to note that in all these five comparisons, i.e A, B, H, I, Q₄ the mean difference favours female academically gifted students. This implies that academically gifted female students are more warmhearted, Intelligent, Adventurous, Tender Minded and more Tense. The difference between academically gifted male and female students were found to be not significant on factors C, D, E, F, G, J, Q₁, Q₂ and Q₃. This means that the two groups of students are somewhat similar on the continuum of *“Emotionally unstable – Emotionally stable,” “Undemonstrative – Excitable,” “Obedient – Assertive,” “Sober – Enthusiastic,” “Expedient – Persistent,” “Vigorous – Unwilling to Act,” “Confident – Apprehensive,” “Sociably group dependent – Self sufficient” and “Uncontrolled – Controlled”*.

B.3 Creativity

According to J. P. Guilford (1965) creativity is a form of divergent thinking. Divergent thinking is a kind of mental operation in which we think in different directions. Sometimes searching and sometimes seeking Variety. Divergent thinking leads to novel responses to a given stimuli. The unique feature of the divergent thinking is that a variety of responses are produced, to discover and define complex abilities that together make up creative thinking. The various variables of creativity are as: Sensitivity, Fluency, Flexibility, Originality, Redefinition and Elaboration.

Table 4.7: Showing the mean comparison of academically gifted male and female students on fluency dimension of creativity (verbal) N=200.

Groups	Mean	S.D	t-value	Level of Significance
Male gifted	16.25	8.86	1.06	Not significant
Female gifted	17.5	7.68		

The above table shows that t-value is 1.06 which is not significant at any level. This means that the groups under study i.e, the academically gifted male and female students do not differ significantly on fluency dimension of creativity (verbal).

Table 4.8: Showing the mean comparison of academically gifted male and female students on Flexibility dimension of creativity (verbal) N=200.

Groups	Mean	S.D	t-value	Level of Significance
Male gifted	12.3	9.28	3.68	Significant

Female gifted	17.29	9.88		at 0.01 level
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The above table shows that t-value is 3.68 which is significant at 0.01 level. This means that the two groups under study i.e, the academically gifted male and female students differ significantly on flexibility dimension of creativity (verbal).

Table 4.9: Showing the mean comparison of academically gifted male and female students on originality dimension of creativity (verbal) N=200.

Groups	Mean	S.D	t-value	Level of Significance
Male gifted	22.71	9.99	1.20	Not-Significant
Female gifted	24.38	9.79		

The above table shows that t-value is 1.20 which is not significant. This means that the groups under study i.e, academically gifted male and female students do not differ significantly on originality dimension of creativity (verbal).

Table 4.10: Showing the mean comparison (Overall dimension) of academically gifted male and female students on creativity (verbal).

Groups	Mean	S.D	t-value	Level of Significance
Male gifted (Verbal)	51.00	20.48	2.85	Significant at 0.01 level
Female gifted (Verbal)	59.00	19.62		

The above table shows that the t-value is 2.85 which is significant at 0.01 level. This means that the two groups under study i.e, male and female gifted students significantly differ on integrated mean scores of creativity (verbal).

Table 4.11: Showing the mean comparison of academically gifted male and female students on Elaboration dimension of creativity (Non-Verbal) N=200.

Groups	Mean	S.D	t-value	Level of Significance
Male gifted	16.82	9.8	0.09	Not-Significant
Female gifted	16.94	7.89		

The above table shows that the t-value is 0.09 which is not significant. This means that the two groups under study i.e, male and female gifted students do not differ significantly on elaboration dimension of creativity (non- verbal).

Table 4.12: Showing the mean comparison of academically gifted male and female students on originality dimension of creativity (Non- Verbal) N=200.

Groups	Mean	S.D	t-value	Level of Significance
Male gifted Verbal	40.23	10.4	4.54	Significant at 0.01 level
Female gifted Non-verbal	46.75	9.75		

The above table shows that the t-value is 4.54 which is significant at 0.01 level. This means that the two groups under study i.e, male and female gifted students differ significantly on originality dimension of creativity (verbal and non-verbal).

Table 4.13: Showing the mean comparison (overall dimension) of academically gifted male and female students on creativity (non-verbal).

Groups	Mean	S.D	t-value	Level of Significance
Male gifted (Non – Verbal)	57.00	14.68	3.64	Significant at 0.01 level
Female gifted (Non – Verbal)	64.00	12.47		

The above table shows that the t-value of 3.64 which is significant at 0.01 level. This means that the two groups under study i.e, academically gifted male and female students differ on integrated mean scores of creativity (non-verbal).

B.4: Study Habits

Study habits are the ways that we study. The habits that we have formed during our school years. Study habits can be “good” which means they work and help us to make “good grades” or “bad” which just means they don’t work and don’t help us make good grades.

Table 4.14: Showing the percentage of respondents falling on each level of study habits (N=100).

Levels	Male	Female
Excellent	75 (75%)	72 (68%)
V. Good	12 (12%)	18 (18%)
Average	6 (6%)	5 (5%)
Unsatisfactory	4 (4%)	3 (7%)
Very unsatisfactory	3 (3%)	2 (2%)

The above figure shows the percentage of respondents falling on each level of study habits. A perusal of the table shows that out of 100 Academically gifted male students 75% have excellent study habits, 12% have very good study habits, 6% have average study habits, 4% have unsatisfactory study habits and 3% have very unsatisfactory study habits while as seeing the percentage of Academically gifted female students 72% have excellent study habits, 18% have very good study habits, 5% have average study habits, 3% have unsatisfactory study habits and 2% have very unsatisfactory in their study habits.

As mentioned above the comparison of the two groups on their study habits has revealed that there exists no significant difference in the mean score of academically gifted male and female groups on study habits.

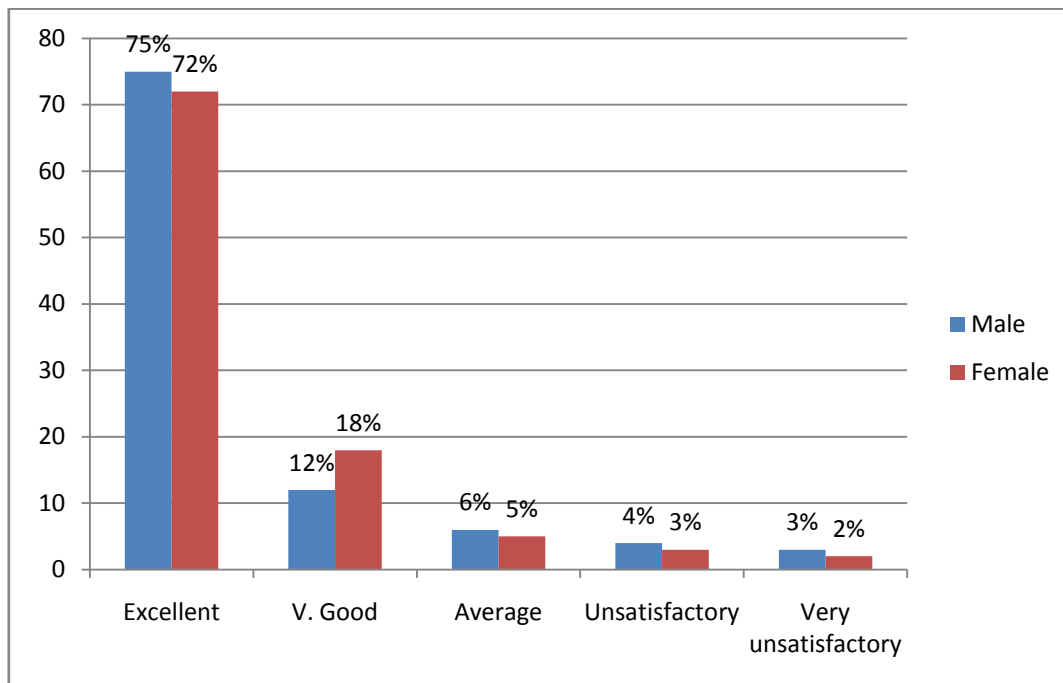


Fig 4.5: Showing the percentage of respondents falling on each level of study habits

Table 4.15: Showing the mean comparison of academically gifted male and female students on study habits.

Group	Mean	SD	't' value	Level of Significance
Male	66.96	7.01	0.643	Not Significant
Female	67.61	7.41		

A perusal of the above table shows that academically gifted male students have secured a mean score of 66.96 with S.D of 7.01 whereas the academically gifted female students have secured a mean score of 67.61 with S.D of 7.41. This means that Academically Gifted female students are slightly higher than the male

students on this variable. The two groups under study do not show any significant difference in their study habits.

DISCUSSION OF THE RESULTS

Academically gifted students differ from the general population of the students on the three personality skills i.e achievement, endurance and affiliation. Although as a group the academically gifted students differ from other students on these dimensions, not all gifted students looked the same. There were also differences within the academically gifted and talented group. The creative abilities, learning characteristics, study habits and personality structure often set them apart from their age mates. These students are fluent thinkers and able to generate possibilities, consequences or related ideas. They are flexible and able to use many different alternatives and approaches to problem solving. Academically gifted students also show a strong reference for variety, novelty and change.

The discussion of the results based on the analysis and interpretation of data is presented in the foregoing pages. The results are discussed as under:

1. Academic Performance Standard of Academically Gifted Students

While analyzing the performance standard of academically gifted male and female students, it has been found that 71% of the academically gifted male and female students fall in 85-90% on academic performance standard, 14.5% fall on 80-84% and 14.50% male and female academically gifted students fall on 75-79% on academic performance standard. This implies that majority of the male and female academically gifted students showed excellent performance at 10+2 examinations.

While comparing the male and female academically gifted students on performance standard, it has been found that 74% of the female and 68% of the male fall in the 85.90% performance of academic standard. 14% of the male and 15% female fall in 80-84% performance standard are 12% of the female and 17% of

the male fall in 75-79% performance standard. This implies that female academically gifted students showed better performance on their 10+2 examination than male academically gifted students. This finding is in tune with **Muhyieddeen Sh. Touq, Nawal H. Kamal & Alia T. Fada (2006)**, and **Aluja – Fabregat, Anton, blanch, Angel (2010)**, who have found that females showed higher academic achievement scores than males.

2. Comparison of Academically Gifted Male and Female Students on Personality Structure

While comparing the academically gifted female students on 14 personality factors, it has found that out of 14 comparison five have turned out to be significant. The female gifted students were found to be more outgoing, intelligent, adventurous, tender minded and more tense than the academically gifted male students. The academically gifted male and female students were found to be somewhat similar on **“Emotionally unstable– Emotionally Stable,” “Undemonstrative–Excitable”, “Obedient– Assertive”, “Sober-Enthusiastic” , “Expedient- Persistent”, “Vigorous–Unwilling to act”, “Confident–Apprehensive”, “Sociably group dependent – Self Sufficient” and “Uncontrolled – Controlled” .**

This finding is in tune with the **Olszewki – Kubilius, P. Kulieke, M.J. (1990)** who found that there is no significant difference between male and female gifted students on different dimensions of personality.

3. Creative Potential of Academically Gifted Students

Creativity is the most valued human quality. It is considered vital for shaping the man’s future. Hardly there may be any one to overlook the importance of creativity. But it is not enough to recognize its importance the more important is that how we can gather knowledge on scientific principles and thus the knowledge accumulated is used to help man in the development of his creative potential.

While analyzing the creativity of academically gifted male and female students on creativity. It has been found that 77% of the male and female academically gifted students were found high creative on verbal list of creativity and 82% students were high creative on non-verbal test of creativity. Whereas 23% students were found low creative on verbal and 18% academically gifted male and female were found low creative on non-verbal test of intelligence. While comparing the academically gifted male and female students on fluency dimension of verbal test of creativity, it has been found that there is no significant difference between male and female academically gifted students. The mean score favoured female students but the difference failed to arrive at any level of confidence. This implies that male and female academically gifted displayed somewhat similar creativity on fluency dimension.

While comparing academically gifted male and female students on flexibility dimension of creativity. It has been found that there is significant difference between male and female academically gifted students. It is interesting to note that female gifted students were found to be more flexible than male academically gifted students. Moreover, it was further found that there is no significant difference between male and female academically gifted students on originality dimension of creativity. Since the mean difference failed to arrive at any level of confidence. They implies that male and female academically gifted students displayed somewhat same originality. This finding is in line with the finding of **Ackerly, Edward (2006)**, who found that female students are more creative than the male students.

While comparing academically gifted male and female students on overall dimension of verbal test of creativity, it was found that there is significant difference between male and female academically gifted students on creativity and the difference favoured female academically gifted students. This implies that female academically gifted students are more creative than male academically gifted students.

While comparing the male and female academically gifted students on elaboration dimension of creativity. It was found that both academically gifted male and female students do not differ significantly on elaboration dimension of creativity. However the mean slightly favoured female students but the difference failed to arrive at any level of significance. This implies that both male and female academically gifted students possesses similar elaborative ability. Moreover, while comparing the male and female academically gifted students on originality dimension of creativity, the mean difference favoured female academically gifted students which indicates that female academically gifted students possesses better originality and novelty than the male academically gifted students.

While comparing, the male and female academically gifted students on overall dimension of test of creativity, it has been found that male and female academically gifted students differ significantly on non-verbal test of creativity. Since, the mean difference favoured female academically students which indicates that female academically gifted students are more creative than the male academically gifted students. This finding is in contrast with the findings of **Patel, R.K. (2002)** who found that there is no significant difference on overall scientific creativity among boys and girls of degree colleges.

4. Study Habits of Academically Gifted Students:

Study habits are the ways that we study. The habits that we have formed during our school years. Study habits can be “good” which means they work and help us to make good grades. Good study habits include being organized, keeping good notes and reading text books, listening in class and working every day. Without good study habits a student cannot succeed. To succeed, students must be able to appropriately assimilate course content, digest it, reflect on it, and be able to articulate that information in written and/or oral form. As mentioned earlier, it has been found that 71.5% of the academically gifted male and female students possess excellent study habits, 15% possesses very good, 5.5% possesses average, 5.5% possesses unsatisfactory and a small proportion of 2.5% of the academically gifted

male and female students possess very unsatisfactory study habits. This implies that majority of the academically gifted male and female students possess excellent study habits.

While comparing the study habits of male and female academically gifted students, It has been found that 75% of the male and 72% of the female academically gifted students were having excellent study habits. 12% of the male and 18% of the female were found to have very of study habits. 6% of the male and 5% of the female were found to have average, 4% of the male and 3% of the female were found to have satisfactory and small proportion of 3% of the male and 2% of the female academically gifted students were found to have unsatisfactory study habits. No significant difference was found between male and female academically gifted students on study habits, though the mean difference slightly favoured female academically gifted students but the difference failed to arrive at any level of confidence. This implies that male and female academically gifted students displayed somewhat similar study habits. This finding is in contrast with **Margaret A. Anderson, Nona A. Tollefson *et al.*, (1985)** and **Mills, C.J & Parker (2006)** who found that female students have good study habits than their counter parts.

Chapter - 5
Summary, Conclusion and
Suggestions

The present study was designed to identify and compare the differential personality characteristics, creative potential and study habits of two groups of students viz, academically gifted male and female students. After administering various statistical treatments, the data obtained for each variable has been analyzed and tabulated in the following manner:

- A. Description of sample subjects with respect to their Academic Performance, Study Habits, Creativity and Personality. (N=200).
- B. Comparison of Academically gifted male and female on Academic Performance, Personality Structure, Creative Potential and Study Habits. (N=100 in each group).

OBJECTIVES OF THE STUDY

The following objectives were formulated for the present study:

- 11. To identify the academically gifted 10+2 students.
- 12. To measure the personality dispositions of the academically gifted 10+2 students.
- 13. To measure the creative potential of the academically gifted 10+2 students.
- 14. To make an assessment of the study habits of academically gifted 10+2 students.
- 15. To compare male and female academically gifted students on personality structure, creative potential and study habits.

HYPOTHESES

The following hypotheses were formulated for the present investigation:

9. Academically gifted male and female 10+2 students do not differ significantly in their personality structure.
10. Academically gifted male and female 10+2 students do not differ significantly in their creative potential.
11. Academically gifted male and female 10+2 students do not differ significantly in their study habits.

SAMPLE

The total population of academically gifted students with the cut point of 75% of marks and above in aggregate served as the criteria for identification of academically gifted students for the present study. The sample for the present study consists of 5% of total toppers in higher secondary part-II examinations (10+2) for the session 2009-2010. The sample comprised of 200 academically gifted 10+2 students presently perusing their studies in different colleges and departments of university of Kashmir.

The total population of academically gifted students as per the result gazette of higher secondary part-II examination (10+2) regular students of session 2009-10 is given as under:

Stream	Boys	Girls	Total
Arts	233	238	471
Commerce	784	424	1208
Science	1560	1169	2729
Total			4408

The breakup of the sample of academically gifted male and female students is as under:

S.No	Name of the University/College	Class	Male	Female	Total
1.	University of Kashmir, Srinagar	1 st , 2 nd Year, BBA & LLB (integrated)	20	20	40
2.	SKUAST, (K) Srinagar	1 st , 2 nd year Bv.Sc	20	20	40
3.	Islamic University of Science & Technology, Pulwama	1 st , 2 nd year B.Tech`	20	20	40
4.	NIT, Srinagar	1 st , 2 nd year B.E Students	20	20	40
5.	Government Medical College, Srinagar	1 st , 2 nd year MBBS & BDS	20	20	40
Total			100	100	200

TOOLS

The following tools were employed for the purpose of collecting relevant data from the selected sample subjects:

7. The Junior High School personality questionnaire (14 HSPQ form A) by Cattell was administered to measure personality characteristics of the sample subjects.
8. Baqer Mehdi`s testes of creativity (Verbal and non-verbal) was used to measure the creative potential of the sample subjects.
9. Palsane and Sharma`s Study Habits Inventory (PSSHI) was administered on the sample subjects to measure their study habits.

STATISTICAL TREATMENTS

Various statistical methods including Mean, S.D, Percentage statistics and t-test, were used to analyze the data and draw inferences.

CONCLUSION

On the basis of analysis, interpretation and discussion of the results, certain meaningful conclusions have been drawn and are reported as under:

14. It was found that 71% of the academically gifted students fall in range of 85-90% of marks on Academic performance standard, 14.5% fall in the range of 80-84% marks and 14.5% academically gifted students fall in the range of 75-79% marks at 10+2 level.
15. It was found that 73.5% academically gifted students had excellent study habits, 15% having very good study habits, 5.5% were having average, 3.5% were having unsatisfactory study habits and a very small proportion of students 2.5% were having very unsatisfactory study habits
16. The study has revealed that 75% of academically gifted male students have excellent study habits, 12% have very good study habits, 6% have average, 4% have unsatisfactory and 3% have very unsatisfactory in their study habits, whereas 72% of academically gifted female students have excellent study habits, 18% have very good, 5% have average, 3% have satisfactory and 2% have very unsatisfactory in their study habits.
17. It has been found that 77% of the academically gifted students were found high creative on verbal creativity test and 23% students were found low creative on the same test. It was further found that 82% of the students were found high creative on non-verbal test of creativity and small proportion of students 18% were found low creative on the same test.
18. The study further revealed that on performance standards of academically gifted students 68% male and 74% female fall on 85-90% of marks at 10+2 level, 15% male and 14% female fall on 80-84% marks and 17% male and 12% female fall on 75-79% of marks at 10+2 level respectively.
19. It was found that academically gifted female students in comparison to male students differ significantly on personality factors A, B, H, I and Q₄ which

implies that female students are more warmhearted, intelligent, adventurous, tender minded and more tense.

20. Academically gifted male and female students were found somewhat similar on personality factors of 'C' (Emotionally unstable - Emotionally stable), 'D' (Undemonstrative – Excitable), 'E' (Obedient – Assertive), 'F' (Sober – Enthusiastic), 'H' (Expedient – Persistent), 'J' (Vigorous – Unwilling to act), 'Q₁' (Confident – Apprehensive), 'Q₂' (Sociably group dependent – Self Sufficient) and 'Q₃' (Uncontrolled – Controlled).
21. It was found that there is no significant difference between academically gifted male and female students on the fluency dimension of creativity (verbal).
22. There is significant difference between academically gifted male and female students on the flexibility dimension of creativity (verbal).
23. It has been found that there is no significant difference between academically gifted male and female students on originality dimension of creativity (verbal), however, there is significant difference between the academically gifted male and female students on originality dimension of creativity (non-verbal).
24. It was found that the two groups under study i.e, academically gifted male and female students differ significantly on overall dimension of creativity (verbal), moreover, the two groups under study i.e, academically gifted male and female students also differ significantly on overall dimension of creativity (non-verbal).
25. The study revealed that there is no significant difference between the academically gifted male and female students on elaboration dimension of creativity (non-verbal).
26. It has been found that there exists no significant difference in the study habits of academically gifted male and female students. Though the mean difference slightly favoured female gifted students but the difference failed to arrive as any level of confidence.

SUGGESTIONS FOR FURTHER RESEARCH

The following suggestions have been put forth for further research:-

1. The present study may be replicated on a large sample. Sample size may be increased with the inclusion of other variables.
2. Case studies of the twenty toppers in 12th class board examinations over a period of last five years may be undertaken to reveal personality and ability profiles of academically gifted students.
3. Since academic progress is closely related to study habits, therefore it is imperative that a battery of tests for the measurement of study habits be used to throw light on all the allied aspects of study habits.
4. In the present study, only creativity, personality factors and study habits variables were worked out, in addition to these variables other variables in coordination with creativity can be worked out to trace out the interactional effects of various variables on creativity like, intelligence, I-Q, Mental health etc.
5. A correlation study on creativity and innovational enhancement in the state of J&K can be conducted, as to trace the effect of creativity on innovational achievement.
6. A comparative study on professional and academic courses on the creativity and personality dimensions should be conducted.
7. There is a quite enhanced need to develop action oriented personality scales both in psychiatric and administrative departments to evaluate the real personality standards.
8. Orientation and refresher courses by UGC and ASC`s should be updated to expedite the study habits range in case of teachers so that they can perform their professional services effectively.

Chapter - 6
BIBLIOGRAPHY

- Agarwal, Rashmi and Amita. (2000), Televiewing pattern of adolescents and its Impact on their study Habits. Indian Educational Review, Vol. 36 (2), 48-61.
- Agrawal, Archana. (2002), Some Correlates of Academic Achievement. Indian Journal of Edu.Research Vol 21 (P. 75-76).
- Akhani, Pana Rathi (1999), Academic achievement, study Habits and Loneliness of Josore children of employed and unemployed Mothers. Indian educational abstracts Vol.1
- Albert, R.S. & Runce, M.A., (1999), "A History of Research on Creativity". in ed. Sternberg, R.J. Handbook of Creativity. Cambridge University Press.
- Anderson, J.R., (2000), Cognitive psychology and its implications. Worth Publishers.
- Balzac, Fred (2006), "Exploring the Brain's Role in Creativity". NeuroPsychiatry Reviews 7 (5): 1, 19–20.
- Barret, P.T (1998), The Eysenck personality questionnaire. An Examination of the factorial. Similarity of P, E, N across 34 countries. "Personality and individual differences Vol. 25 (P 805-819).
- Bean, R. K. (2003). The impact of personality support control on the A.A. of African, American and European American Adolescent. Journal of Adolescent Research Vol. 18 (P523-541).

- Best, J. W. (1983), Research and Education New Delhi: Prentice Hall of India Pvt.
- Bhoodev Singh (1993), "Measurement of creativity in young children". The Associated Publishers 2963/2. Kacha Bazar, Post Box No. 56. Amballa Kantt. 133001 (India).
- Bosato, V. (1998), Learning styles a cross sectional and longitudinal study in higher education. British Journal of Educational Psychology Vol. 68 (P.427-441)
- Brouwers (2004), A historical Analysis of empirical studies. Journal of cross-cultural Psychology Vol. 35 (P.251-262).
- Brown, William and Holtzman (1955), Way one H.A study Attitude questionnaire for predicting academic success. Journal of Edu. Psychology- (P: 46, 57, 84).
- Buch, M. B (1984), Third Survey of Research in Education. New Delhi: NCERT.
- Buch, M. B. (1979), Second Survey of Research in Education (1972-79) Case, Baroda; MSU.
- Buch, M. B. (1999), Fifth Survey of Research in Education, New Delhi: NCERT
- Buch, M.B. (1991), Fourth Survey of Research in Education, New Delhi: NCERT.
- Carolina Tinajero And M. Fernanda Paramo (1997), Pupils self assessments of academic attainment at 7, 11 and 16 year

effects of sex and ethnic group *British Journal of Educational Psychology*:

- Carson, S.H., Peterson, J.B., Higgins, D.M. (2005), Reliability, Validity, and Factor Structure of the Creative Achievement Questionnaire". *Creativity Research Journal* 17 (1): 37–50.
- Cattell, R. B. (1956), *Personality: A systematic theoretical and Factual study*: New York: Mc-Graw Hill.
- Chang. Lin (2004), Subjective overachievement in American and college students. *Journal of cross-cultural Psychology*. Vol. 35
- Christopher Bagley & Kanka Mallick (1998), Study Habits: "Field independence, cultural context and Academic achievement: a commentary *British Journal of Educational Psychology*: Vol 25.
- Craft, A., (2005), *Creativity in Schools: tensions and dilemmas*. Routledge. Dorst, K.
- Crow & Crow (1974), 'Adolescent Development And Adjustment'. New York: Mc. Graw Hill Book.
- Cury, F. (1997), Achievement goals and perceived ability predict investment in learning a sport task *British Journal of Educational Psychology* Vol.67 (P 293-309).
- Davila T., Epstein M.J. and Shelton RD (2007), *The creative enterprise: Managing innovative organizations and people*. Westport CT: Praeger Publishers.

- Deb, Madhu and Grewal, Hirdai Pal. (1990), Relationship between Study Habits and Academic achievement of undergraduate home science final year students. *Indian Educational Review*, Vol 25 (3) 71 74.
- Deopuria, R. P. (1997), Comparative study of the achievement of Class II students taught through teacher empowerment project and traditional teaching approach in some selected schools of Jabalpur District. In, *Teacher Empowerment and School Effectiveness at Primary Stage: International Perspective*. National Council of Educational Research and Training.
- Domingues, J.M., (2000), *Social creativity, collective subjectivity and contemporary modernity*. New York: St. Martin's.
- Donald E. Super, (1962), *Apprising vocational Fitness* Ansari Road New Delhi. Harper and Row
- Dorothy Rogers (1985), *Adolescents and youth prentice Hall* International Inc. London. Printed in U. S. A. (Revi. Edition)
- Dr. Mahender Reddy and Sarsani (2005), "Creativity in education" sarup and sons new Delhi- 110002.
- Dwivedi, Kamal (1998), *Personality co-relates and values perspective Psychological Researches*, Vol.2 1-(P.80-82).
- Eysenck, H. J. (1960), *The structure of Human Personality*. PMDPM: Methuen.

- Feldman, D.H., (1999), "The Development of Creativity". in ed. Sternberg, R.J. Handbook of Creativity. Cambridge University Press.
- Firdous, & Hussian Akbar (1999), Personality traits similarity as determinant of mate preferences. Perspectives in psychological Researches Vol. 21-(P.74-79)
- Florida R., (2002), The Rise of the Creative Class. North Melbourne: Pluto Press.
- Florida, R., (2002), The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life. Basic Books.
- Fredrich Bartlet (1969), Assessing Creative Thinking Abilities in Torrance Paul Experiments in Classroom Creativity. Mimosota: Bureau of Educational research.
- Fredrickson, B.L., (2001), The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions, American Psychologist, vol. 56.
- Freud, S. (1949), The history of Psychoanalytical movement. London: Hogarth Press.
- Frewd, S, (1953-54), On creativity and Unconscious. New York: Harper
- Fryer, D (1931), The measurement of interest in relation to human adjustment New York: Holt & Rinehart.

- Gakhar S.C., (2003), Emotional maturity of students at secondary stage-self concept and academic achievement. Journal of India Edu.
- Gaur, R. S., (1980), Personality characteristics of Urban and rural Adolescent students Indian education review. Vol.-15.
- Grewal Paul (1990), Relationship between study habits and Academic Achievement Indian Education review. In M. B. Buch (Ed.) fifth survey of education Research New Delhi: NCERT.
- Guilford J.P., (1965), General Psychology. Edition-2, Princeton, N.J Van Nostrand.
- Gulatia, A. (1984), A comparative study of Academic achievement in relation to personality self-perception, adjustment and values Un published Ph.D. Thesis, Punjab University, Chadigarh.
- Haugen, R. (1998), Attribution style and its relation to other personality dispositions. British journal of Educational Psychology Vol. 68. (P. 537-549).
- Hemberger, M. (1958), Realism and consistency in early adolescents aspirations and expectations. In D.E. Super and J. O. Crites. (Edu.) Appraising vocational fitness, New Delhi University Bookstall.
- Holling Worth (1928), Some cultural aspects of emotional maturity. In Arthur, T.J., (Edu.). The psychology of Adolescence, (IInd Edition) London. The Mc. Millian company limited.

- Hota A.K., (2001), Talent and Creativity: Published By. Sarup & Sons
4740/23 Andsari Road New Delhi II Ed.
- Ihsan Al-Issa (1970), Cross-Cultural Studies of Behaviour. New York:
Holt Rinehart and Winston Inc.
- Jafar Mohmud (2004), Introduction to Psychology A.P.H. Publishing
Corporation 5 Ansari Road Duryagang New Delhi 110002.
- Jeffery. G., (2005), The Creative College: Building a successful
learning culture in the arts. Trentham Books.
- Jesrild, A. T. (1963), The Psychology of Adolescent (second Edition)
New York: Mc Graw Hill.
- Joseph C. Kush (1996), Field-dependence, Cognitive Ability, and
Academic Achievement in Anglo American and Mexican
American Students British Journal of Educational Psychology:
Vol. 67.
- Kapoor, Shashi S., Shalini (1994), A study of secondary motives in
relation to Cattell's personality dimensions. Indian Journal of
clinical psychology. Vol. 21 (P. 1-6).
- Khan, N., (2007-08), "Creativity and Aspiration". (I-Edition) Rajat
Publications, 4675/21 Ansari Road Darya Ganj, New Delhi-
110002.
- Khare Suniti & Grewal, Avinash; (1997), Relationship among speed of
information processing ability creativity and academic
achievement. In M. B. Buch (Edu.) fifth Survey of
Educational Research New Delhi: NCERT

Khare, Suniti & Grewal, Avinash; (1997), Relationship among speed of information processing ability creativity and academic achievement. In M. B. Buch (Edu.) fifth Survey of Educational Research New Delhi: NCERT.

Khatoon, Jameela; (1994-95), Socio-cultural differences in personality patterns of Adolescent girls. Perspectives in Psychological Researches, vol. 17-(P.30-32)

Konstable, K. Anu & K. Talvi (2002), Exploring the sources of variation in the structure of personality traits across cultures. Personality Psychology, Vol. 91-(P.44-83).

Kraft, U., (2005), “Unleashing Creativity”. Scientific American Mind April: 16–23.

Kruger, K.C., (2005), “Teacher Beliefs and Student Achievement in Urban Schools Serving African American Students”, The Journal of Educational Research, Vol. 99, Issue 2, Heldref Publications, Gale Group: 87.

Kush, J.C. (1996), Field dependence, cognitive ability and academic achievement in Anglo American and Mexican American students. Journal of cross-cultural Psychology vol. 27 (P-561-575).

Kush, J.C. (1996), Field dependence, cognitive ability and academic achievement in Anglo American and Mexican American students. Journal of cross-cultural Psychology vol. 27 (P-561-575).

- Kusuma A., (1997), "Creativity and cognitive styles in children".
Discovery Publishing House new Delhi 110002.
- Kylen, S.F., & Shani, A. B. R., (2002), Triggering creativity in teams:
An exploratory investigation. *Creativity and Innovation
Management*, 11, 17-30.
- Lewin, K. (1935), The meaning of personality. In Uday Shanker, Edu.
Personality development, New Delhi Atma Ram & Sons
Delhi.
- Madhosh, A.G. (1989), personality co-relates of socio-metric status: A
study of sub-cultural group differences *Indian Education
review*. Vol 24 (P. 1-6).
- Mathur, Gul & Sharma Prachi (2001), A study of career maturity
among Adolescent psycholingua Vol. 31, (P. 85-88).
- Mattoo, M. I., (1991), "Vocational interests, adjustment problems and
scholastic achievement of high and low creative students".
(Unpublished Ph.D. Thesis, Deptt. of Edu. Uni. of Kashmir-
1991).
- Mead (1935), Cultural Personality. In Morris, R & Turner, R. H. *Social
Psychology inc. The American Sociological Association*
- Mishra, Brundaban (1999), Personality patterns of school students: A
cross cultural study *Journal of Indian Education* Vol. XXV
(P.43-49).
- Miss Rubeena Salma (2007), "Sex differences in self concept and
achievement motivation among secondary school Students".

- Mitzel, E. Harold (1982), Encyclopedia of Educational Research. Fifth Edition, New York: A Division of Macmillan Publishers.
- Mohan, Radha, (1997), A discriminate function model for identification of high school students on the basis of academic achievement. Journal of Educational Research and Extension, Vol. 34(2), 34-49.
- Mohan, V. & Randhawa, A. (1977), A study of Academic Achievement aptitude and Vocational preferences of high school children from different types of schools.
- Moneroe, W. (1982), Encyclopedia of Educational Research New York: Macmillan Company.
- Morilly, G. J. (1964), The Science of Educational Research New Delhi: Eurasia Publishing House.
- Morris I. Stein & Shirley J Heinze (1964), "Creativity and individual" summaries of selected literature in Psychology and psychiatry.
- Morris I. Stein & Shirley J Heinze (1964), "Creativity and individual" summaries of selected literature in Psychology and psychiatry.
- Murray, H.A., (1938), Explorations in Personality. London; Oxford University Press.
- Murray, H.A., (1938), Explorations in Personality. London; Oxford University Press.
- Nafialiankim Caroline (1988), An investigation in to the attitude and study Habits related to achievement in Mathematics of class

IX students in Shillong. In M.B. Buch (Ed) Fifth survey of Educational Research New Delhi: NCERT.

Nair, P.V. (1999), A comparative study of certain personality variables of pre-degree students of regular and correspondence streams. *Experiments in Education*, Vol. XXVII (2), 35-38.

Nayar P. R. (1988-92), *Research in Psychology of Education: A trend Report*. In M. B. Buch. (Ed.) Fifth survey of educational Research New Delhi: NCERT.

Neeraj (2002), A comparative study of Family Environment Achievement motivation and self esteem of students of vocational and Academic streams. *Indian Educational Research Journal*.

Neil Humphery (2002), Teacher and pupil rating of self esteem in developmental dyslexia *British Journal on Special Education*.

Neil Humphery (2002), Teacher and pupil rating of self esteem in developmental dyslexia *British Journal on Special Education*.

Nickerson, R.S., (1999), "Enhancing Creativity". in ed. Sternberg, R.J.. *Handbook of Creativity*. Cambridge University Press.

Nickerson, R.S., (1999), "Enhancing Creativity". in ed. Sternberg, R.J.. *Handbook of Creativity*. Cambridge University Press.

Nirmala Kaushik, and Sunita Rani, (2005), A comparative study of achievement motivation, home environment and parent child relationship of adolescents. *Journal of Psychological Research* 2005, Vol. 49.

- Nirmala Kaushik, and Sunita Rani, (2005), A comparative study of achievement motivation, home environment and parent child relationship of adolescents. *Journal of Psychological Research* 2005, Vol. 49.
- Nola M. Purdie and John A. Hattie (1995), The effect of motivation training on approaches to learning and self concept, *British Journal of Edu. Psychology* (1995) 65, 227-235.
- Oakley K., (2007), *Educating for the Creative Workforce: Rethinking Arts and Education*. ARC Centre of Excellence for Creative Industries and Innovation.
- Ogden, R. M. (1926), Topic: The meaning of Personality In Uday Shanker. *Personality development* New Delhi: Atma Ram & Sons
- O'Hara, L.A. & Sternberg, R.J., (1999), "Creativity and Intelligence". in ed. Sternberg, R.J., *Handbook of Creativity*. Cambridge University Press.
- Pareek, D. L. (1990), A comparative study of self concept personality traits and aspirations of the adolescent studying in central schools, state Govt. schools and private schools in Rajasthan. Unpublished doctoral dissertation University of Rajasthan.
- Parek, Udai (1974), *Hand Book of Psychological and Social Instruments* Indian institute of management Ahmedabad: Samasthi

- Parmsh, C.R.A (1964), Dimension of personality and achievement in scholastic subjects. Indian journal of Psychology. Vol. 51. No. 4, P 302-6.
- Patel, M.R. (1996), Study habits of pupils and its Impact upon their Academic Achievement. The progress of Education, Vol. LXXI (4), 74-76.
- Rather A. R., (2002), "Towards Multitalent teaching Approach". Insight Journal of Applied Research in Education. Vol. I Spring 2002 No. pp 75-84.
- Rather A.R., (2001), Creativity its Recognition and Development. Published by Sarup and Sons. Ansari Road 4740/23 Ansari Road New Delhi II Ed.
- Rather A.R., (2006), Dynamics of Educational Technology: Anmol Publications Pvt. Ltd. - First Publication.
- Reddy, T. Raja Shekher (2004), "Creativity in Student Teachers". Discovering Publishing House, New Delhi.
- Roe, Anne (1956). The Psychology of occupations. New York: John Willey & Sons.
- Runco Mark, A., (2004), "Annual Review of Psychology", Vol. 55: 657-687, 2004.
- Saawage, R.D. (1962), Personality factors and academic performance, British Journal of Educational Psychology, Vol. 32, No. 3, PP. 251.

- Samia Jabeen (1993), "Effect of problem solving and traditional methods of teaching mathematics on creativity- A comparative Study". (Unpublished M. Phil. Thesis, Deptt. of Edu. Uni. of Kashmir-1993).
- Shanker, Uday (1992), Personality Development New Delhi: Atma Ram and Sons.
- Sharma, Savita Kumari (2003), Effect of study habits and self concept on Wastage and Stagnation among Scheduled Caste Students of Primary Classes. Research Journal of Philosophy and Social Science, 2003 (1&2). 73-78.
- Sheikh, G.Q. (1994), A study of personality traits, Psychogenic needs and Academic Achievement of rural and urban female adolescent students in relation to their cognitive style. Unpublished dissertation.
- Sinha, D. (1970), Academic Achievers and Non achievers. Allahabad: United Publishers.
- Sternberg, R.J., Lubart, T.I., (1999), "The Concept of Creativity: Prospects and Paradigms". In Ed. Sternberg, R.J.. Handbook of Creativity. Cambridge University Press.
- Suchedeva, M.S & Gupta V.K., (2003), Essentials of Instructional Technology-Vinod Publishing, Ludhiana.
- Tharp T. and Reiter M., (2003), The creative habit: Learn it and use it for life: A practical guide. New York: Simon & Schuster.

- Thukur, R. N. (1989), An adaptation of Cattell's high school personality questionnaire for Gujarati children of Age 12 through 18. In M. B. Buch. Fifth survey of Educational Research New Delhi: NCERT.
- Thurstone, L.L., (1952), Creative talent-application of psychology New York: Harper and Row Publishers.
- Tomas, C.P. (2003), Personality predicts academic performance: Evidence from two longitudinal University samples. Journal of research in personality Vol. 37. (P. 319-338).
- Torrance, E. Paul (1966), Rewarding Creative Behaviour Experiments in Classroom Creativity. New Jersey: Prentice Hall.Inc.
- Verma, J. (1986), Difference in the personality patterns of high and low creative Adolescents in schools. Indian Education review Vol. 21. No.1 (NCERT) Jan.
- Verma, Saroj & K. (1999), Difference in the personality pattern of high and low Creative Adolescents in schools. Indian Education review Vol, 21. No.1 (NCERT) January.
- Vernon, P. E., (1957), Personality test and Assessment. London: Methuen& Company.
- Vittoria, P (1992), Achieving goals and their co-relates among American and Chinese students. Journal of Cross-cultural psychology. P 645-660.

William C., (1994), "Creativity in Young Children", Journal of Creative Behaviour, London, Front Group of Publications, 2101-2106.

Willis, G. H., (1996), "School Climates: Creativity and Environment", Vol. 35, Issue 19, Blackwell Publications, 926.

Yeri Cross, N., (2001), "Creativity in the design process: co-evolution of problem-solution". Design Studies 22 (5): 425-437.

Appendices



Jr.-Sr.

FORM A

1968 Edition

HSPQ

WHAT TO DO: You have a Booklet and an Answer Sheet. Write your name, age, etc., on the Answer Sheet where it tells you to.

The Booklet before you has in it questions about your interests and your likes and dislikes. Although you are to read the questions in *this* Booklet, *you must put your answers on the Answer Sheet*, making sure that the number of your answer *matches* the number of the question in the Booklet.

First, we shall give you two examples so that you will know exactly what to do. After each of the questions there are three answers. Read the following examples and fill in the right boxes where it says Example 1 and Example 2, on the Answer Sheet, below your name. Fill in the left-hand box if your answer choice is the "a" answer, the middle box if your choice is the "b" answer, and the right-hand box if you choose the "c" answer.

EXAMPLES:

- | | |
|---|--|
| 1. Which would you rather do:
a. visit a zoo,
b. uncertain,
c. go up in an airplane? | 2. If you have a quarrel, do you
make friends again quickly?
a. yes, b. in between, c. no. |
|---|--|

As you see from these examples, there are *usually* no right or wrong answers, although sometimes a correct answer is expected. Each person is different and you should say only what is true for *you*. You can always find one answer that suits you a *little* better than the others, so never leave a question without marking one of the answers.

Inside you will find more questions like the ones above. When you are told to turn the page, begin with number 1 and go on until you finish all the questions. In answering them, please keep these four points in mind:

1. Answer the questions frankly and truthfully. There is no advantage in giving an untrue answer about yourself because you think it is the "right thing to say."
2. Answer the questions as quickly as you can. Don't spend too much time thinking about them. Give the first, natural answer that comes to you. Some questions may seem much like others, but no two are exactly alike so your answers will often be different too.
3. Use the middle answer *only* when it is *absolutely impossible* to decide on one of the other choices. In other words, the "a" or the "c" answer should be used *most* of the time.
4. Don't skip any questions. Sometimes a statement may not seem to apply to you, but answer every question, somehow.

If there is anything you don't understand, please ask your questions now. If you have no question now, but later on come across a word you don't know, ask the examiner then.

DO NOT TURN PAGE UNTIL TOLD TO DO SO

1. Have you understood the instructions?
a. yes, b. uncertain, c. no.
2. At a picnic would you rather spend some time
a. exploring the woods alone,
b. uncertain,
c. playing around the campfire with the crowd?
3. In a group discussion, do you like to tell what you think?
a. yes, b. sometimes, c. no.
4. When you do a foolish thing, do you feel so bad that you wish the earth would just swallow you up?
a. yes, b. perhaps, c. no.
5. Do you find it easy to keep an exciting secret?
a. yes, b. sometimes, c. no.
6. When you decide something, do you:
a. wonder if you may want to change your mind,
b. in between,
c. feel sure you're satisfied with it?
7. Can you work hard on something, without being bothered if there's a lot of noise around you?
a. yes, b. perhaps, c. no.
8. If friends' ideas differ from yours, do you keep from saying yours are better, so as not to hurt their feelings?
a. yes, b. sometimes, c. no.
9. Do you usually ask someone else to help you when you have a hard problem?
a. seldom, b. sometimes, c. often.
10. Would you say that *some* rules and regulations are stupid and out of date?
a. yes, and I don't bother with them if I can help it,
b. uncertain,
c. no, most rules are necessary and should be obeyed.
11. Which of these says better what you are like?
a. a dependable leader,
b. in between,
c. charming, good looking.
12. Do you sometimes feel, before a big party or outing, that you are not so interested in going?
a. yes, b. perhaps, c. no.
13. When you rightly feel angry with people, do you think it's all right for you to shout at them?
a. yes, b. perhaps, c. no.
14. When classmates play a joke on you, do you usually enjoy it as much as others without feeling at all upset?
a. yes, b. perhaps, c. no.
15. Are there times when you think, "People are so unreasonable, they can't even be trusted to look after their own good"?
a. true, b. perhaps, c. false.
16. Can you stay cheerful even when things go wrong?
a. yes, b. uncertain, c. no.
17. Do you try to keep up with the fads of your classmates?
a. yes, b. sometimes, c. no.
18. Do most people have more friends than you do?
a. yes, b. uncertain, c. no.
19. Would you rather be:
a. a traveling TV actor,
b. uncertain,
c. a medical doctor?
20. Do you think that life runs more smoothly and more satisfyingly for you than for many other people?
a. yes, b. perhaps, c. no.
21. Do you have trouble remembering someone's joke well enough to tell it yourself?
a. yes, b. sometimes, c. no.

22. Have you enjoyed being in drama, such as school plays?
a. yes, b. uncertain, c. no.
23. "Mend" means the same as:
a. repair, b. heal, c. patch.
24. "Truth" is the opposite of:
a. fancy, b. falsehood, c. denial.
25. Do you completely understand what you read in school?
a. yes, b. usually, c. no.
26. When chalk screeches on the blackboard does it "give you the shivers"?
a. yes, b. perhaps, c. no.
27. When something goes all wrong, do you get very angry with people before you start to think what can be done about it?
a. often, b. sometimes, c. seldom.
28. When you finish school, would you like to:
a. do something that will make people like you, though you are poor,
b. uncertain,
c. make a lot of money?
29. Do you avoid going into narrow caves or climbing to high places?
a. yes, b. sometimes, c. no.
30. Are you always ready to show, in front of everyone, how well you can do things compared with others?
a. yes, b. perhaps, c. no.
31. Do you ask advice from your parents about the best things to do at school?
a. often, b. sometimes, c. seldom.
32. Can you talk to a group of strangers without stammering a little or without finding it hard to say what you want to?
a. yes, b. perhaps, c. no.
33. Do some types of movies upset you?
a. yes, b. perhaps, c. no.
34. Would you enjoy more watching a boxing match than a beautiful dance?
a. yes, b. perhaps, c. no.
35. If someone has been unkind to you, do you soon trust him again and give him another chance?
a. yes, b. perhaps, c. no.
36. Do you sometimes feel you are not much good, and that you never do anything worthwhile?
a. yes, b. perhaps, c. no.
37. When a group of people are doing something, do you:
a. take an active part in what they are doing,
b. in between,
c. usually only watch?
38. Do you tend to be quiet when out with a group of friends?
a. yes, b. sometimes, c. no.
39. Do people say you are a person who can always be counted on to do things exactly and properly?
a. yes, b. perhaps, c. no.
40. When you read an adventure story, do you:
a. just enjoy the story as it goes along,
b. uncertain,
c. get bothered whether it's going to end happily?
41. Does it bother you if you have to sit still and wait for something to begin?
a. yes, b. in between, c. no.

42. Do you feel hurt if people borrow your things without asking you?
a. yes, b. perhaps, c. no.
43. "Firm" is the opposite of:
a. easy, b. kind, c. loose.
44. "Rich" is to "money" as "sad" is to:
a. trouble, b. friends, c. land.
45. Have you always got along really well with your parents, brothers, and sisters?
a. yes, b. in between, c. no.
46. If your classmates leave you out of a game, do you:
a. think it just an accident,
b. in between,
c. feel hurt and angry?
47. Do people say you are sometimes excitable and scatterbrained though they think you are a fine person?
a. yes, b. perhaps, c. no.
48. When you are on a bus or train, do you talk:
a. in your ordinary voice,
b. in between,
c. as quietly as possible?
49. Which would you rather be:
a. the most popular person in school,
b. uncertain,
c. the person with the best grades?
50. In a group of people, are you generally one of those who tells jokes and funny stories?
a. yes, b. perhaps, c. no.
51. Do you like to tell people to follow proper rules and regulations?
a. yes, b. sometimes, c. no.
52. Are your feelings easily hurt?
a. yes, b. perhaps, c. no.
53. In a play, would you rather act the part of a famous teacher of art than that of a tough pirate?
a. yes, b. perhaps, c. no.
54. Which course would you rather take:
a. practical mathematics,
b. uncertain,
c. foreign language or drama?
55. Would you rather spend free time:
a. by yourself, on a book or stamp collection,
b. uncertain,
c. working under others in a group project?
56. Do you feel that you are getting along well, and that you do everything that could be expected of you?
a. yes, b. perhaps, c. no.
57. Do you have trouble acting like or being like other people expect you to be?
a. yes, b. uncertain, c. no.
58. If you found you had nothing to do some evening, would you:
a. call up some friends and do something with them,
b. not sure,
c. read a good book or work on a hobby?
59. Would you like to be extremely good-looking, so that people would notice you wherever you go?
a. yes, b. perhaps, c. no.
60. When something important is coming up, such as a test or a big game, do you:
a. stay very calm and relaxed,
b. in between,
c. get very tense and worried?
61. If someone puts on noisy music while you are trying to work, do you feel you *must* get away?
a. yes, b. perhaps, c. no.

62. In dancing or music, do you pick up a new rhythm easily?
a. yes, b. sometimes, c. no.
63. "Run" is to "pant" as "eat" is to:
a. exercise, b. indigestion, c. sleep.
64. If Joan's mother is my father's sister, what relation is Joan's father to my brother?
a. second cousin, b. grandfather, c. uncle.
65. Do you often make big plans and get excited about them, only to find that they just won't work out?
a. yes, b. occasionally, c. no.
66. When things go wrong and upset you, do you believe in:
a. just smiling,
b. in between,
c. making a fuss?
67. Do you often remember things differently from other people, so that you have to disagree about what really happened?
a. yes, b. perhaps, c. no.
68. Are there times when you feel so pleased with the world that you just have to sing and shout?
a. yes, b. perhaps, c. no.
69. When you are ready for a job, would you like one that:
a. is steady and safe, even if it takes hard work,
b. uncertain,
c. has lots of change and meetings with lively people?
70. Do you like doing really unexpected and startling things to people?
a. yes, b. once in a while, c. no.
71. If everyone were doing something you think is wrong, would you:
a. go along with them,
b. uncertain,
c. do what you think is right?
72. Can you work just as well, without feeling uncomfortable, when people are watching you?
a. yes, b. perhaps, c. no.
73. Would you rather spend a free afternoon:
a. in a place with beautiful pictures and gardens,
b. uncertain,
c. in a duck shooting match?
74. Would you rather spend an afternoon by a lake:
a. watching dangerous speed boat racing,
b. uncertain,
c. walking by the lovely shore with a friend?
75. When you are in a group, do you spend more time:
a. enjoying the friendship,
b. uncertain,
c. watching what happens?
76. Can you always tell what your real feelings are, for example, whether you are tired or just bored?
a. yes, b. perhaps, c. no.
77. When things are going wonderfully, do you:
a. actually almost "jump with joy,"
b. uncertain,
c. feel good inside, while appearing calm?
78. Would you rather be:
a. a builder of bridges,
b. uncertain,
c. a member of a traveling circus?
79. When something is bothering you a lot, do you think it's better to:
a. try to ignore it until you cool off,
b. uncertain,
c. blow off steam?
80. Do you sometimes say silly things, just to see what people will say?
a. yes, b. perhaps, c. no.
81. When you do poorly in an important game, do you:
a. say, "This is just a game."
b. uncertain,
c. get angry and "kick yourself"?

82. Do you go out of your way to avoid crowded buses and streets?
a. yes, b. perhaps, c. no.
83. "Usually" means the same as:
a. sometimes, b. always, c. generally.
84. The grandmother of the daughter of my brother's sister is my:
a. mother, b. sister-in-law, c. niece.
85. Are you almost always contented?
a. yes, b. in between, c. no.
86. If you keep breaking and accidentally wasting things when you are making something, do you keep calm just the same?
a. yes, b. perhaps, c. no, I get furious.
87. Have you ever felt dissatisfied and said to yourself, "I bet I could run this school better than the teachers do"?
a. yes, b. perhaps, c. no.
88. Would you rather be:
a. someone who plans homes and parks,
b. uncertain,
c. a singer or member of a dance band?
89. If you had a chance to do something really wild and adventurous, but also rather dangerous would you:
a. probably not do it,
b. not sure,
c. certainly do it?
90. When you have homework to do, do you:
a. very often just not do it,
b. in between,
c. always get it done on time?
91. Do you usually discuss your activities with your parents?
a. yes, b. sometimes, c. no.
92. When the class is discussing something, do you usually have something to say?
a. almost never,
b. once in a while,
c. always.
93. Do you stand up before your class without looking nervous and ill-at-ease?
a. yes, b. perhaps, c. no.
94. Which would you rather watch on a fine evening:
a. car racing,
b. uncertain,
c. an open-air musical play?
95. Have you ever thought what you would do if you were the only person left in the world?
a. yes, b. not sure, c. no.
96. Do you learn games quickly?
a. yes, b. in between, c. no.
97. Do you wish you could learn to be more carefree and lighthearted about your school work?
a. yes, b. perhaps, c. no.
98. Are you, like a lot of people, slightly afraid of lightning?
a. yes, b. perhaps, c. no.
99. Do you ever suggest to the teacher a new subject for the class to discuss?
a. yes, b. perhaps, c. no.
100. Would you rather spend a break between morning and afternoon classes in:
a. a card game,
b. uncertain,
c. catching up on homework?
101. When you are walking in a quiet street in the dark, do you often get the feeling you are being followed?
a. yes, b. perhaps, c. no.

102. In talking with your classmates, do you dislike telling your most private feelings?
a. yes, b. sometimes, c. no.
103. When you go into a new group, do you:
a. quickly feel you know everyone,
b. in between,
c. take a long time to get to know people?
104. Look at these five words: *mostly, gladly, chiefly, mainly, highly*. The word that does not belong with the others is:
a. mostly, b. gladly, c. highly.
105. Do you sometimes feel happy and sometimes feel depressed without real reason?
a. yes, b. uncertain, c. no.
106. When people around you laugh and talk while you are listening to radio or TV:
a. are you happy,
b. in between,
c. does it spoil things and annoy you?
107. If you accidentally say something odd in company, do you stay uncomfortable a long time and find it hard to forget?
a. yes, b. perhaps, c. no.
108. Which would you rather read about:
a. how to win at basketball,
b. uncertain,
c. how to be nice to everyone?
109. Are you best thought of as a person who:
a. thinks, b. in between, c. acts?
110. Do you spend most of your weekly allowance for fun (instead of saving some for future needs)?
a. yes, b. perhaps, c. no.
111. Do other people often get in your way?
a. yes, b. in between, c. no.
112. How would you rate yourself?
a. inclined to be moody,
b. in between,
c. not at all moody.
113. How often do you go places or do things with a group of friends:
a. very often, b. sometimes, c. hardly ever.
114. What kind of movie do you like best?
a. musicals, b. uncertain, c. war stories.
115. Do you get in trouble more often by saying to a group that wants to do something:
a. "Let's go!"
b. uncertain,
c. "I'd rather not join in"?
116. When you were growing up, did you expect the world to be:
a. kinder and more considerate than it is,
b. uncertain,
c. tougher and harder than it is?
117. Do you find it easy to go up and introduce yourself to an important person?
a. yes, b. perhaps, c. no.
118. Do you think that often a committee of your classmates takes more time and makes poorer decisions than one person would?
a. yes, b. perhaps, c. no.
119. Do you feel you are doing pretty much what you should be doing in life?
a. yes, b. uncertain, c. no.
120. Do you sometimes feel so mixed up that you don't know what you are doing?
a. yes, b. perhaps, c. no.
121. When someone is disagreeing with you, do you:
a. let him say all he has to say,
b. uncertain,
c. tend to interrupt before he finishes?

122. Would you rather live:
 a. in a deep forest, with only the song of birds,
 b. uncertain,
 c. on a busy street corner, where a lot happens?
123. If you were to work on a railroad, would you rather:
 a. be a conductor and talk to the passengers,
 b. uncertain,
 c. be the engineer and run the train?
124. Look at these five words: *below, beside, above, behind, between*. The word that does not belong with the others is:
 a. below, b. between, c. beside
125. If someone asks you to do a new and difficult job; do you:
 a. feel glad and show what you can do,
 b. in between,
 c. feel you will make a mess of it?
126. When you raise your hand to answer a question in class, and many others raise their hands too, do you get excited?
 a. sometimes, b. not often, c. never.
127. Would you rather be:
 a. a teacher, b. uncertain, c. a scientist?
128. On your birthday, do you prefer:
 a. to be asked beforehand to choose the present you want,
 b. uncertain,
 c. to have the fun of getting a present that's a complete surprise?
129. Are you very careful not to hurt anyone's feelings or startle anyone, even in fun?
 a. yes, b. perhaps, c. no.
130. If you were working with groups in class, would you rather:
 a. walk around to carry things from one person to another,
 b. uncertain,
 c. specialize in showing people how to do one difficult part?
131. Do you take trouble to be sure you are right before you say anything in class?
 a. always, b. generally, c. not usually.
132. Are you so afraid of what might happen that you avoid making decisions one way or the other?
 a. often, b. sometimes, c. never.
133. When things are frightening, can you laugh and not be bothered?
 a. yes, b. perhaps, c. no.
134. Do some books and plays almost make you cry?
 a. yes, often, b. sometimes, c. no, never.
135. Would you like better, when in the country:
 a. running a class picnic,
 b. uncertain,
 c. learning to know all the different trees in the woods?
136. In group discussions, do you often find yourself:
 a. taking a lone stand,
 b. uncertain,
 c. agreeing with the group?
137. Do your feelings get so bottled up that you feel you could burst?
 a. often, b. sometimes, c. seldom.
138. Which kind of friends do you like? Those who like to:
 a. "kid around,"
 b. uncertain
 c. be more serious?
139. If you were not a human being, would you rather be:
 a. an eagle on a far mountain,
 b. uncertain,
 c. a seal, in a seal colony by the seashore?
140. Are you usually a very careful person?
 a. yes, b. in between, c. no.
141. Do small troubles sometimes "get on your nerves" even though you know that they are not very important?
 a. yes, b. perhaps, c. no.
142. Are you sure you have answered *every* question?
 a. yes, b. perhaps, c. no.

ANSWER SHEET : The Jr. - Sr. H. S. P. Q. FORM

The Psycho Centre

NAME _____ AGE _____ SEX _____ SCHOOL _____ TODAY'S DATE _____

FIRST _____ LAST _____ MTHS. _____ G. OR B. _____
 INSTRUCTIONS : PUT A CROSS IN THE BOX BELOW WHICH IS NUMBERED THE SAME AS THAT YOU ARE ANSWERING IN THE TEST BOOKLET.
 EXAMPLE 1 : a b c EXAMPLE 2 : a b c

Page 2	Page 3	Page 4	Page 5	Page 6	Page 7	Page 8	Check ★	Factor	Do not write here	
									Raw	Std.
1	a b c	a b c	a b c	a b c	a b c	a b c	122	A		
2	a b c	a b c	a b c	a b c	a b c	a b c	123	B		
3	a b c	a b c	a b c	a b c	a b c	a b c	124	C		
4	a b c	a b c	a b c	a b c	a b c	a b c	125	D		
5	a b c	a b c	a b c	a b c	a b c	a b c	126	E		
6	a b c	a b c	a b c	a b c	a b c	a b c	127	F		
7	a b c	a b c	a b c	a b c	a b c	a b c	128	G		
8	a b c	a b c	a b c	a b c	a b c	a b c	129	H		
9	a b c	a b c	a b c	a b c	a b c	a b c	130	I		
10	a b c	a b c	a b c	a b c	a b c	a b c	131	J		
11	a b c	a b c	a b c	a b c	a b c	a b c	132	O		
12	a b c	a b c	a b c	a b c	a b c	a b c	133	Q ₂		
13	a b c	a b c	a b c	a b c	a b c	a b c	134	Q ₃		
14	a b c	a b c	a b c	a b c	a b c	a b c	135	Q ₄		
15	a b c	a b c	a b c	a b c	a b c	a b c	136			
16	a b c	a b c	a b c	a b c	a b c	a b c	137			
17	a b c	a b c	a b c	a b c	a b c	a b c	138			
18	a b c	a b c	a b c	a b c	a b c	a b c	139			
19	a b c	a b c	a b c	a b c	a b c	a b c	140			
20	a b c	a b c	a b c	a b c	a b c	a b c	141			
21	a b c	a b c	a b c	a b c	a b c	a b c	142			
End Pg. 2	End Pg. 3	End Pg. 4	End Pg. 5	End Pg. 6	End Pg. 7	End Pg. 8				

★ Check

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T. M. No. 458715

Dr. Bages Mohali (Aligarh)

Consumable booklet
of

T C F

(English Version)

Name— Class—
Date of Birth— Age— Sex—
Name of Institution—
Father's Name— Occupation—
City— State— Date—

INSTRUCTIONS

Creative thinking has played a very important role in man's life. People have achieved great things with the help of their thinking and imagination. In this booklet you will find some interesting figures which will require the use of your imagination in working with them. The purpose is to see how quickly and imaginatively you can work with these figures in order to make interesting pictures out of them. Take the given figure as the base and then draw a novel and interesting picture on that base. Apply your best thinking in drawing the pictures. Draw the picture from your imagination and give an appropriate title to it to explain what you have drawn. There are no right or wrong drawings. You are to use your imaginations as much as you can to give us as elaborate and interesting a picture as possible.

The tasks in this booklet are divided into THREE ACTIVITIES. Each ACTIVITY is separately timed. Within the time limit for the activity you may work on the different drawings according to your speed. When you finish one drawing, go to the next in the same ACTIVITY. If necessary, you may return to the previous one again for any addition you want to make in your drawing. Remember that you have not to go to the next ACTIVITY until the time for the first ACTIVITY is over and you are told to proceed further.

At the end, you will be given 5 MINUTES EXTRA time which you may use to add new ideas to any drawing of any activity in which you want to do additional work.

Please do not omit any task. Start your work only when you are told to do so.

Estd. 1971

364926

NATIONAL PSYCHOLOGICAL CORPORATION

4/230, KACHERI GHAT, AGRA - 282 004

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Activity 1

PICTURE CONSTRUCTION

Directions :-

On the following page you have been given two simple line drawings. Using them as a base or a part you have to draw pictures which you consider both novel and interesting. You can turn the page in any way you like to begin to draw your picture. Think of a picture which you feel no one else would be able to make. Try to add as many ideas as you can to make the picture interesting and novel.

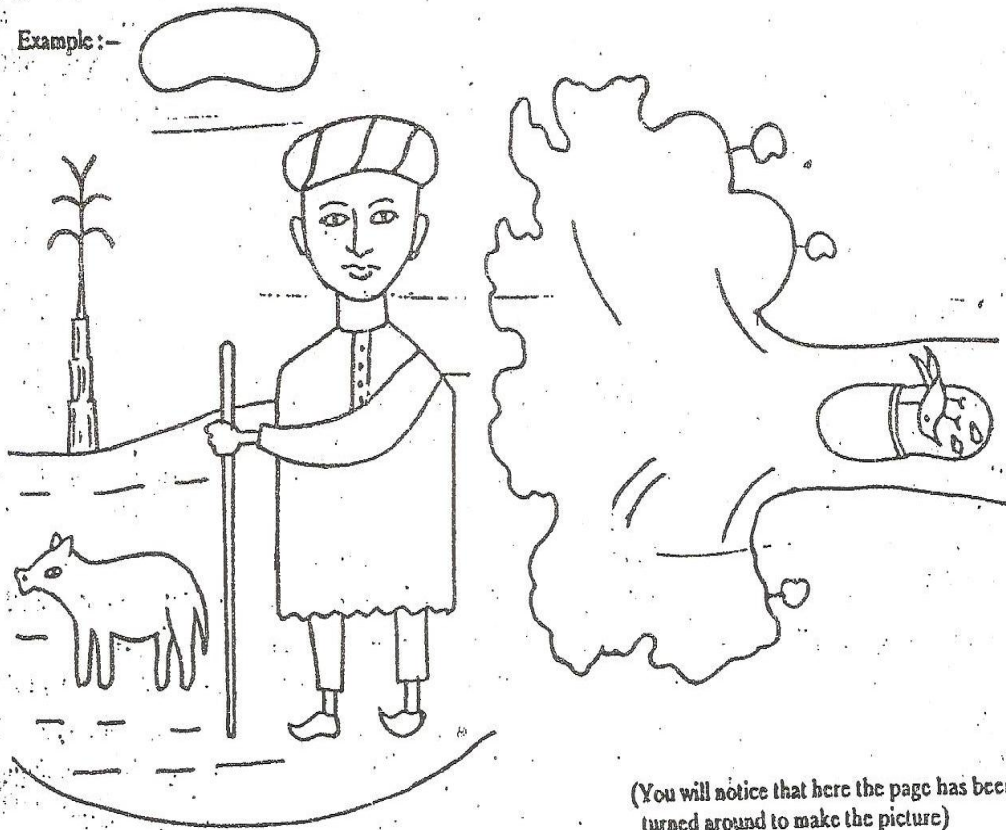
When you have completed the picture, give a title to it in the space provided for. Try to make the title as interesting and unusual as possible, which will show how imaginatively you can think.

You need not give much attention to accuracy and beauty of the picture. What is more important is that how novel and interesting is the picture you have drawn. Copying will not be of any help.

You will be given 10 minutes to complete this ACTIVITY. You will be told the time after 5 minutes so that you may move on to the next item in the ACTIVITY.

You will find that the figure given at your left has been used as a part in both the pictures. In the first picture, it has been used as a cap, and the other as hollow in the tree. You have to make only one picture with one part.

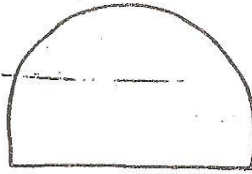
Example :-



Title : A man gazing a pig.

(You will notice that here the page has been turned around to make the picture)

Title : A bird's nest in the hollow of a tree.



Title: _____

2.



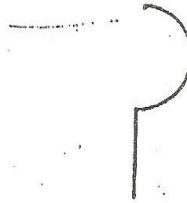
Title: _____

3.



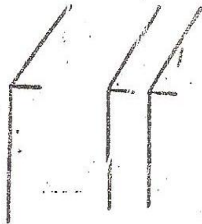
Title:

4.



Title:

5.



Title:

6.



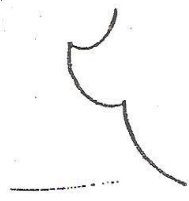
Title:

7.



Title: _____

8.



Title: _____

9.



Title: _____

10.



Title: _____

Directions :—

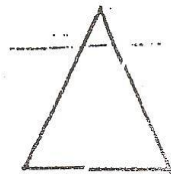
On the following pages you have been given two types of geometrical figures, namely a triangle and an ellipse. You can think of many objects or pictures which you can make with the help of these two figures using them as the main part.

You have to make each picture as interesting and unusual as possible. Each picture should be different from the other and must convey a complete idea. Try to think of objects which no one else might have thought of. After completing each picture give a title to it in the space provided. Try to make the title as interesting as possible which will show how imaginatively you can think.

It is not necessary that you first finish all the triangles, and then go to the ellipses. When you find that no new ideas are coming to you on triangles, immediately move on to ellipses. Try to make as novel and interesting pictures as possible.

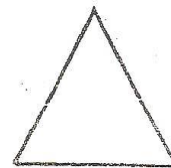
You will be given 10 minutes to complete this ACTIVITY.

1.



Title :

2.



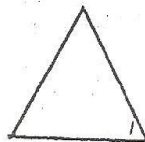
Title :

3.



Title:

4.



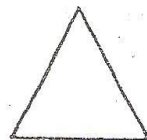
Title:

5.



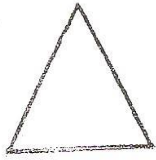
Title:

6.



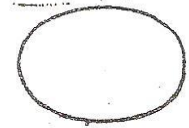
Title:

7.



Title:

8.



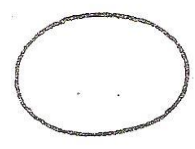
Title:

9.



Title:

10.



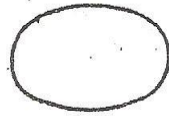
Title:

11.



Title:

12.



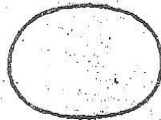
Title:

13.



Title:

14.



Title:



Confidential

Consumable Booklet

of

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(English Version)

T. M. No. 458715 Dr. Baqer Mehdi (New Delhi)

Please fill up the following :—

Name---

Age---

Class---

School/College---

Father's/Guardian's name---

Occupation---

Home address---

Date---

General Instructions

In this booklet you will find mentioned some interesting problems which will require the use of your thinking ability and imagination to solve them. The purpose is to see how quickly and imaginatively you can think under situations which require novel ways of dealing with them. Read each problem carefully and apply your best thinking in giving the responses. Write your responses either in English or in your mother tongue. Responses have to be given briefly but clearly in the space provided under each problem. Give a serial number to each of your responses. There are no right or wrong responses to any of these problems. Therefore use your imagination to think of as many responses as you can.

The problems are divided into *Four Activities*. Each Activity is separately timed. Within the time-limit for each Activity, you may work on the different problems according to your speed. When you finish one problem, go to the next. If necessary, you may return to the previous one again for any addition you would like to make. Remember that you have not to go the next Activity until the time for the first Activity is over and you are told to proceed further.

At the end you will be given *5 minutes extra time*, which you may use at any problem of any Activity in which you want to do additional work.

Please do not omit any problem.

Estd. 1971

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4/230, KACHERI GHAT, AGRA - 282 004

Activity 1

What will happen, if**Directions**

1. On this and the next page, you have been given some situations which will appear to you impossible. You have to think what would happen if such situations actually arise.
2. Give as many ideas as may come to your mind but try to think as many novel ideas as you possibly can. Ideas which you think no one else might have thought of what would be the best. Write your responses in the space provided for.
3. You will be given 15 MINUTES for this activity. After every five minutes you will be told the time so that you may move on to the next problem in the activity.

An example has been given which will help you to know what you have to do.

Example

Question : What will happen if birds and animals start speaking like man ?

Responses : (i) This world will change into a different kind of society.

(ii) New leaders will emerge from amongst the animals.

(iii) It is possible that a donkey will become our leader.

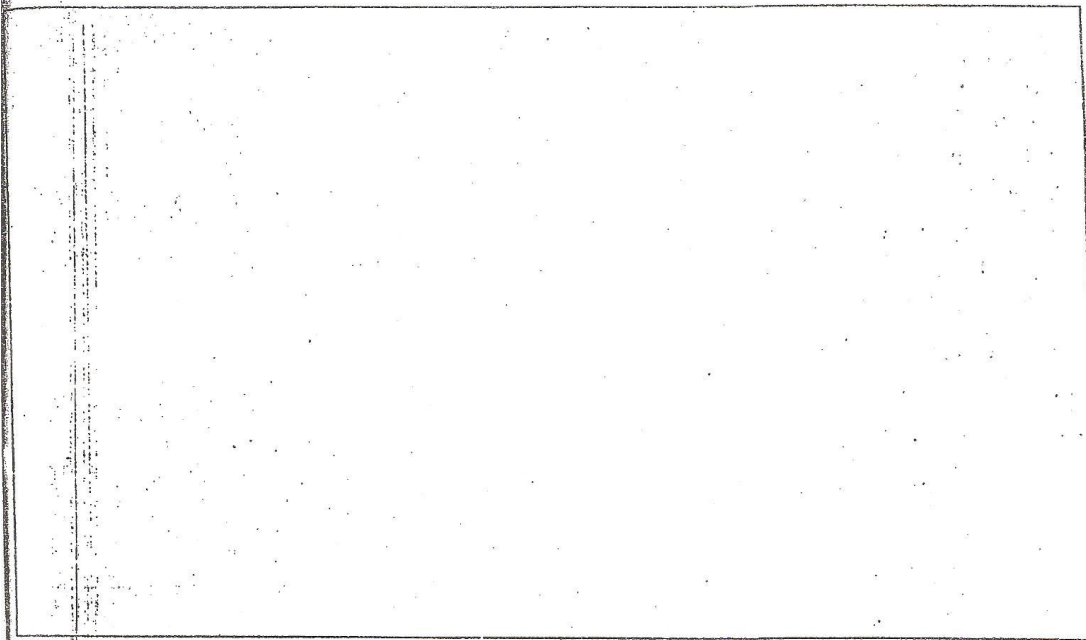
(iv) It is also possible that he becomes our Prime Minister.

(v) Men may confide their secrets to their animal friends, etc

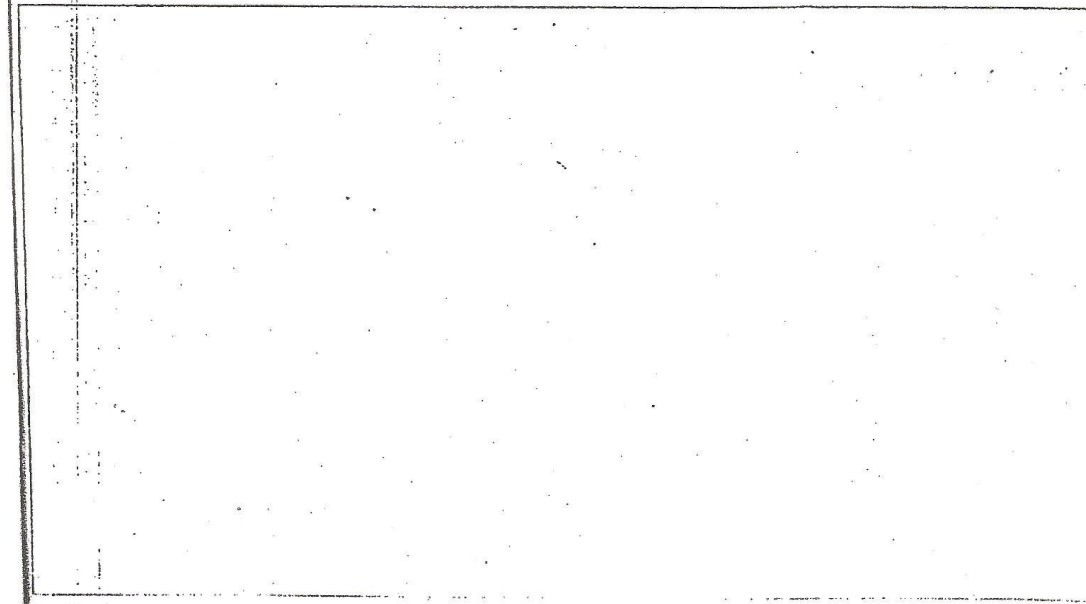
PROBLEMS

1. What will happen if man flies like birds ?

2. What will happen if your school is put on wheels ?



3. What will happen if man does not require any food to eat ?



Activity 2

NOVEL USES OF THINGS**Directions**

1. On this and the next page, you have been given names of certain things which could be used in many different ways. You have to think in how many different and new ways the things may be used.
2. Write as many uses as you can, but do try to think also those which are novel, that is, those which you think no one else might have thought of.
3. You will be given 12 minutes for this activity. After every four minutes you will be told the time so that you may move on to the next item in the activity.

Below is given an example which will help you to know what you have to do.

Example : News-paper

- Uses :*
- (i) To read the news.
 - (ii) To make paper Toys.
 - (iii) To get protection from the sun.
 - (iv) To wrap something.
 - (v) To cover a dirty place, etc.

PROBLEMS

1. Piece of stone

--

Wooden stick

Blank space for writing ideas related to 'Wooden stick'.

Water

Blank space for writing ideas related to 'Water'.

Activity 3

SIMILARITIES**Directions**

1. On this and the next page, you have been given pairs of words which can be related to each other in many different ways. You have to think in how many different and new ways are they related.
2. Write as many relationships as you can, but also try to think those which are novel, that is, those which you think no one else might have thought of.
3. You will be given 15 minutes for this activity. After every 5 minutes you will be told the time so that you may move on to the next problem in the activity.

Below is given an example which will help you to know what you have to do.

Example : Man and animal

Relationship : (i) Both have life.

(ii) Both need food and water.

(iii) Both can fall ill.

(iv) Both are afraid of enemy.

(v) Both have the experience of feeling cold and hot, etc.

PROBLEMS

1. Tree and House

2. Chair and Ladder

[Empty writing area for '2. Chair and Ladder']

3. Air and Water

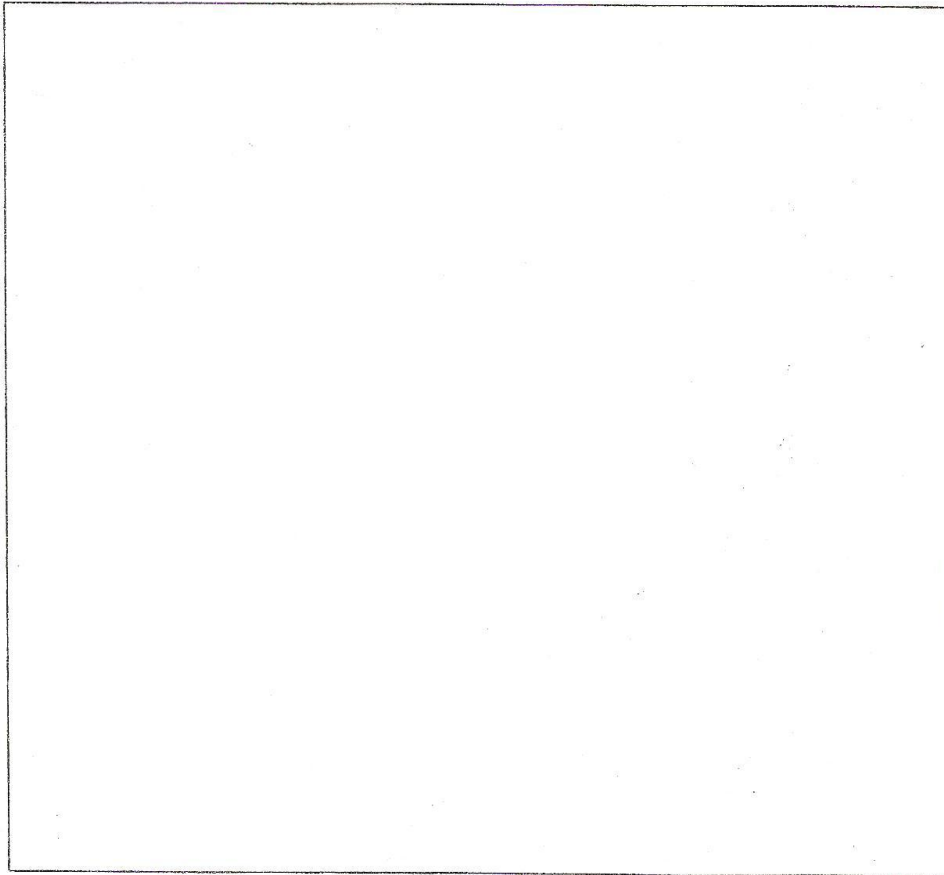
[Empty writing area for '3. Air and Water']

Activity 4 Making Things More Interesting and useful
Directions

Just keep in mind a simple model of a horse. You have to imagine in what ways you can change this sample model into an interesting and novel one for children to play with. You may think of adding any number of parts or accessories in order to make it really interesting and fascinating for children. Do not bother about the cost of new parts or accessories that you would like to use in order to make the toy model interesting and fascinating for children.

Write all the ideas which come to your mind in a serial order in the space given below.

You will be given 6 minutes for this creativity.

A large empty rectangular box with a thin black border, intended for the student to write their ideas in a serial order. The box is currently blank.



T. M. No. 458715

Prof. M.N. Palsane (Pune)
Anuradha Sharma (Agra)

Consumable Booklet

of

P S S H I

(English Version)

Please give the following informations :—

Name.....

Age..... Sex..... Class.....

College/School.....

INSTRUCTIONS

Much of your success in the examinations depend upon the way you study your School/College subjects. Following are the statements describing your habits of study. We wish to know your study habits so that we may help you in getting better marks in your examination. Your active cooperation, therefore, is absolutely needed.

Please read the following statements. Three alternatives are given for your answers (A) Always or Mostly, (B) Sometimes, (C) Rarely or Never. The example will help you in understanding the mode of answers.

Alternatives

Always or Mostly	Some- times	Rarely or Never
(A)	(B)	(C)

• I take notes when I study.

It you take notes always, then select alternatives (A) and cross mark it, if you take note sometimes, then select alternative (B) and cross mark it, and if you rarely or never take notes, then select alternative (C) and cross mark it. There is no time limit, but give answer to all statements as honestly and carefully as you can within 20 minutes.

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Statements	Always or Mostly (A)	Some times (B)	Rarely or Never (C)
1. I study everyday.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I study at a particular time of the day.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I do my home work daily.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. If I have to study for a longer time, I take rest in between.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I have all the required books and other relevant materials of study with me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. For the time of study, I get disturbed by the surroundings at the time of the study.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I develop automatic interest in the subject as soon as I start studying it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I realise the importance of the subjects for my future career.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Other stray thoughts gradually flow in, as soon as I settle down for the study.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I read the main points before I read the chapter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I take down notes while reading.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. I try to recall the matter after reading it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I continue my reading despite the difficulties in understanding meaning of some of the words.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. I read very carefully in order to understand every point.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I never read silently.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. According to the importance and difficulty of the subject matter, I change and adjust speed of my reading.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Statements</i>	Always or Mostly (A)	Some times (B)	Rarely or Never (C)
17. I study figures and graphs very carefully while reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. During the class room teaching, I take down notes very sincerely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. At home, I compare my class notes with the notes from the text books.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. I take help of anybody, if I do not follow anything.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. I study the subject matter at home thoroughly before it is taught in the class room.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. I read books whenever I get free time whether at home or in the school/college.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. I attend my classes regularly in time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*24. I frequently remain absent from class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. If a matter is to be learnt by heart, I read and memorize it part by part.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*26. I cram certain things without understanding.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. I revise the subject matter from time to time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. I study in the library regularly.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. During examination days also, I sleep as usual in the night.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Before writing the answers to the questions in the examination, I read very carefully the entire question paper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. In the examination, I answer the question in their serial order.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. I divide the time according to the matter to be answered in respect of the number of questions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Statements	Mostly (A)	times (B)	Never (C)
33. Before examination, I read my own notes carefully.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. I prepare for the examinations from the guides/notes available in the market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. I draw an outline of answers of each question, before writing answers to the questions in the examination.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. I feel tense at the beginning of the examination.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. After the examination, I realise that I have made some mistakes in the answers I have written or I have forgotten some important points.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38. I carefully record my examination results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39. I single out my weak subjects on the strength of my examination results.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40. I try to make up my deficiency in the weak subjects to my best.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*41. I get disappointed, if the examination result is not favourable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*42. I have a tendency to compare my marks with others after the results are declared.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
*43. I think that I can improve fairly my study habits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44. I get guidance about proper study habit from my teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45. I will take advantage if a guidance programme in study habits is arranged.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Palsane and Sharma Study Habit Inventory (PSSHI) English Version.

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