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EDITORSPEAK

Sept, 2012

There are only two types of people in the world. One, who listens to the world. Other, whom the world listens. Life is but a journey from the first to the second position. This growth, whether individual or collective, needs information, knowledge and wisdom. We commit our Research Journal, laced with Sadbhavna, to this cause.

Research is an important component in education studies and teacher development. It rebuilds the learner in the educator. It emancipates teaching profession from dogma, prejudice, convenience, and ideologies. It replaces blind faith with logical rationality. It promotes evidence-based decisions. Research liberates education by challenging all restrictions.

However, as educational researches are mostly future-oriented, it must be published, communicated and shared with others to benefit the whole community of teachers. A dedicated Research Journal provides the researcher the much-needed window to the world. We again commit our research Journal, laced with Sadbhavna, to this cause.

We welcome all readers to comment, suggest and advise to improve the quality of the journal.

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MY STORY

When I was a boy, my mother had to cook meals for all four of us. My father used to work at Hindusthan Motors Limited, West Bengal. I remember an evening in particular when she had made dinner, after a long, hard days work. On that day not very long ago, it was months end, and we had no vegetable at home. Mama placed a plate of boiled rice and extremely stale *chapati* in front of Daddy. I remember waiting to see if he would notice. But, all daddy did was to reach for his *chapati*, smile at Mama and ask me how my day was at school. I don't remember what I told him that evening but I do remember watching him putting boiled rice on that ugly *chapatti*, sprinkle some salt, and making a roll of it. He ate every bit of that thing; never made a face or said a word about it! When I got up from the table that evening, I remember hearing Mama apologize to Daddy for not being able to offer anything good. And I'll never forget what he said. "Momu, I love rice rolls."

Later that evening, when I went to wish Daddy good night, I asked him if he really liked his *chapati* without any *sabji*, and in that way. He wrapped me in his arms and said, "Your Mama had a hard day's work today and she's real tired. And besides, a little occasional unsavory meal never hurt anybody!"

As I've grown older, I've thought about that evening many times. Life is not always fair. It is full of imperfect things and imperfect people. I'm not the best in anything; I have so many weaknesses and idiosyncrasies just like so many people. But what I've learned over the years is that learning to accept each other's faults and celebrating each others differences is one of the most important keys to creating healthy, growing, and lasting relationships.

And that's my prayer for all of you today; Let my God sort out all the good, bad and ugly parts of your life and gift you a lovely relationship where an ugly meal or any other imperfection is not such a big deal!

This can be extended to any relationship. In fact, understanding, is the real basis of all happier relationships, be it brother-sister, husband-wife, parent-child, partners or just plain old friendship! "Don't put the key to your happiness in someone else's pocket. Keep it in your own." So, please pass me that ugly *roti*, and yes, the stale one without curry will be just fine! You keep the better part of life for yourself.

Be kinder than necessary; because everybody you meet is fighting some kind of battle. Be genuinely interested in the other side's welfare. Because unless u give something, don't expect to get anything back.

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PERSONALITY PATTERN AND CREATIVITY OF STUDENTS OF GOVERNMENT AND NON-GOVERNMENT SECONDARY SCHOOLS

DR. RAM MOHAN TRIPATHI*
DR. AMARDEEP KAUR**

ABSTRACT

In the present study an attempt was made to find out the relationship of Personality pattern and Creativity of Government and Non-Government Secondary School students. The sample consisted of 200 students-100 from Government and 100 from Non-Government Secondary Schools of Dabwali city. Multidimensional Personality Inventory by Km. Manju Aggarwal and Verbal Test of Creative Thinking by Dr. Baqer Mehdi were administered. Subsequently the data were subjected to statistical analysis. Results clearly indicate that Government Secondary School students are more creative than Non-Government School students whereas Non-Government school students display better personality patterns in comparison to Government Secondary School students. Further significant difference was observed in the personality pattern of high and low creative school students.

Key Words:

Personality pattern, Creativity, Government Secondary School students, Non-Government Secondary School students.

INTRODUCTION

The desire and need to understand individuals is a universal one. Observe, when a group photo is given to one, who is among the group, would first look at the photo of self and then only at others. People go to astrologers, palmists or psychologists not only to predict their future but also to know about themselves. Well said Socrates, the great philosopher, "Know thyself".

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Understanding "personality pattern", one needs to dig deep into the term 'personality' derived from Latin Word 'persona' implying 'mask' or what we make our external appearance. But in modern scientific sense, personality is the sum total of various characteristics i.e. both external & internal of the individual which indicate a particular pattern of behavior of an individual. These characteristics or qualities of the individual are called traits.

G.W. All port (1937) defines personality as the dynamic organization within the individual of those psychophysical systems that determine his unique adjustment to his environment. This frames one of the aims of education to develop an integrated personality, suitably stuffed and equipped from all dimensions.

Educators attach a lot of importance to the development of high order cognitive abilities of learners. Creative thinking has been considered as the highest of the mental functions. It is something imaginative and innovative. Creativity refers to mental ability of divergent or open minded thought, mental orientation and capability of a person to evolve and develop to find new and superior solutions for complex and ambiguous problems. It also stands for capacity to accept challenges, freedom to exercise choice, readiness to change self and capacity to change one's environment.

Creativity is a vital concept in human behavior in general and education in particular. Further personality patterns are quite important in creative achievement. Whatever may be the reason behind shaping of a creative personality, it is beyond any doubt that any society, in order to survive, lip grade and enrich its existence must be lucky enough to have such gifted personalities in various fields in large numbers.

Creativity is a vital concept in human behavior in general and education in particular. Further personality patterns are quite important in creative achievement. A person may possess Creativity as a natural endowment or mature it as a result of various environmentally stimulating impacts that might have consciously or unconsciously affected his/her growth of personality. Whatever may be the reason behind shaping of a creative personality, it is

beyond any doubt that any society, in order to survive, upgrade and enrich its existence must be lucky enough to have such gifted personalities in various fields in large numbers.

OBJECTIVES OF THE STUDY

The study is aimed to achieve the following objectives:

- 1. To compare the personality patterns of Government and Non-Government Secondary School Students.
- 2. To compare the creativity of Government and Non-Government Secondary School Students.
- 3. To study the relationship between Personality Pattern and Creativity of Government and Non-Government Secondary School Students.

HYPOTHESES

- 1. There exists a significant difference in the personality pattern of the Government and Non Government Secondary School Students.
- 2. There exists a significant difference in the creativity of Government & Non-Government Secondary School Students.
- 3. There exists a significant relationship between Personality pattern and Creativity of Government and Non-Government Secondary School students.

SAMPLE

The present study was conducted on 200 students (100 Government and 100 Non-Government Secondary School Students) selected on the basis of random sampling technique.

RESEARCH TOOLS USED

- Multidimensional Personality Inventory, Km. Manju Aggarwal
- Verbal Test of Creative Thinking, Dr. Baqer Mehdi

\ANALYSIS AND INTERPRETATION OF DATA

TABLE-1

Showing significance of difference of Means of Personality of Government and Non-Government Secondary School students.

Group	N	Mean	S.D.	S.ED	t-ratio
Government Schools	100	237.6	23.87		
Non-Government Schools	100	260	18.97	3.04	7.34ns

ns = non-significant at 0.01 and 0.5 levels.

Table 1 shows the mean scores of personality of Government and Non-Government students as 237.6 and 260 respectively. The t-ratio was calculated as 7.34 which is not significant at both 0.01 and 0.05 levels of confidence. This reveals that there exists no significant difference in Personality of Government and Non-Government Secondary school students. Therefore the Hypothesis 1 stating that there exists a significant difference in the personality pattern of the Government and Non-Government Secondary school students stands rejected.

 $\label{eq:TABLE-2} \mbox{Showing significance of difference of Means of Creativity of Government} \\ \mbox{and Non-Government Secondary School students}.$

Group	N	Mean	S.D	S.ED	t-ratio
Government	100	49.90	4.35		
Schools				0.62	2.25ns
Non-Government Schools	100	51.3	4.45		

ns = non-significant at 0.01 level

Table 2 depicts the mean scores of creativity of Government and Non-Government students as 49.90 and 51.30 and their standard deviation as 4.35 and 4.45 respectively. The S.ED is 0.62. The t-ratio was calculated as 2.25 which is not significant as 0.01 level of confidence. This reveals that there

exists no significant relationship between the creativity of Government and Non-Government Secondary school students.

Therefore the Hypothesis 2 stating that there exists a significant difference between the creativity of the Government and Non-Government Secondary school students stands rejected.

TABLE -3

Showing the value of coefficient of correlation between personality pattern and creativity of Government and Non-Government Secondary School students.

Group	Correlation (r)
Government School Students (100)	0.16
Non-Government Schools Students (100)	0.26
Government and Non-Government Schools	0.19ns
Students (200)	

ns = non-significant at 0.01 levels

Table 3 shows the coefficient of correlation between Personality pattern and creativity of Government and Non-Government students. The coefficients of correlation came out to be positive but non-significant at .01 level of confidence (r=0.16, 0.26 & 0.19 respectively). This shows that there exists positive but non-significant relationship between personality pattern and creativity of Government and Non-Government school students.

Therefore the Hypothesis 3 stating that there exists a significant relationship between personality pattern and creativity of the Government and Non-Government Secondary school students stands rejected.

CONCLUSIONS

- 1. No significant difference has been found in personality of Government and Non-Government Secondary school students.
- 2. No significant difference has been found in creativity of Government and Non-Government Secondary school students.
- There exists a positive non- significant relationship between personality pattern and creativity of Government and Non-Government Secondary school students.

EDUCATIONAL IMPLICATIONS

Results of the present study revealed no significant difference in the Personality patterns of Government and non – Government School students, thereby, suggesting no biases with Students in the concerned field. But still we feel that only deprived or poor, especially rural section of society is interested or bound to study in Government Schools and the most preferred ones are the private schools. Further the finding of positive but non – Significant relationship between personality pattern and creativity of government and non – government Secondary School students also hints at practical implementation of Innovative Strategies of teaching so as to enhance creative thinking among students. Further a teacher can design his/her teaching strategies in accordance with the different personality patterns of his pupils. Creativity can best be nurtured in an environment which is conducive to it. As education means to draw out the best in child and man, it should sincerely strive to do so.

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STUDY OF ACADEMIC ACHIEVEMENT IN RELATION TO EMOTIONAL INTELLIGENCE OF ADOLESCENTS

DR. MANJINDER KAUR THANDI*

Education plays a paramount and significant role in building up the society. It signifies gain or performance carried out successfully by an individual or group on the completion of a task, whether it is academic, manual, personal or social. But today, greater premium is being laid on academic achievement of an individual. Academic achievement, being a crucial area and the main centre of educational research, has always been regarded as the core of educational growth, as it plays an important and most significant role in shaping the career of an individual and the course of his or her future education.

Academic achievement is used in broad sense; it is customarily concerned in an academic context to a greater extent with the development of knowledge, understanding and acquisition of skills.

Academic achievement has been considered as an important factor in life. Good academic record and its proper development to a certain extent determine the future of the child in this age of competition. At every step of life, the academic record speaks for the individuals. At the time of admission, for entrance in a job, for scholarship or for future studies, the good academic record is the only recommendation.

According to the "Good's Dictionary of Education", "achievement refers to certain levels of performance in school or college in a standardized series of educational tests." The term is used more generally to describe performance in the subjects of curriculum.

According to Traw (1960) "Academic achievement is the attained ability or degree of competence in school tasks usually as measured by standardized tests and expressed in age or grade units based on norms derived from a wide sampling of pupils' performance".

In other words, academic achievement may be defined as the competence that children actually show in the school subjects in which they have received instruction.

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EMOTIONAL INTELLIGENCE

Emotional intelligence is an asset, particularly in today's age and it is hailed as paramount. It is the mental ability we are born with, which gives us emotional sensitivity and our potential for emotional learning management skills, which can help us, maximize our long-term health, happiness and survival. It builds up the ability in self-adaptation for solving the stress problems and pressure of life in competing status of an individual. People who manage their own feelings well and deal effectively with others are more likely to live contented lives. A person with emotional intelligence knows how to listen, communicate, initiate change and deal with the problems.

Persons with well developed emotional skills see themselves realistically, always cope with unexpected change, control strong emotions and impulses and experience true empathy. People, who cannot marshal some control over their emotional life, get easily frustrated, over-react to perceived criticism, avoid reality, get angry easily and become pessimistic about life. So, emotional intelligence can help to accomplish family, team or organizational goals.

Emotional intelligence refers to a person's innate potential. Each individual is born with a certain potential for emotional sensitivity, emotional memory, emotional processing and emotional learning ability. These are four inborn components that form the core of one's emotional intelligence. Building one's emotional intelligence has a lifelong impact. Many parents and educators are alarmed by increasing levels of conflict in young school children from low self-esteem to early drug and alcohol use to depression. They are rushing to teach students the skills necessary for emotional intelligence.

According to Daniel Goleman, "Emotional intelligence is a master aptitude, a capacity that profoundly affects all other abilities, either facilitating or interfering with them".

RATIONALE OF THE STUDY

As we all know, modern age is called the age of competition. All Parents are worried about the future of their children. The period of adolescence is known as a period of "emotional upheavals" which lead to the psychological problems of adolescents. Awell-adjusted, emotionally intelligent person is considered as a symbol of progress. He understands his duty to perpetuate the race and develop social usefulness in himself as well as others.

Emotions are the prime movers of thought and conduct, which also gives the best and spice to life and important qualities to the personality. It is therefore, important for the parents and teachers to know and understand the nature of adolescents, for which it is necessary to know about their emotional intelligence. All these are the important factors which influence the academic achievement of adolescents. Therefore, parents, teachers and counselors cannot afford to ignore to identify and develop students' emotional intelligence in an appropriate manner, which in turn can improve their academic achievement.

Hence, it is very much appropriate and necessary to conduct a research study in this area so that they must know, what levels of emotional intelligence is helpful in enhancing students' achievement. With the changing times the student as a whole has become the center of concern, not only his reasoning capacities but also his creativity, emotions for others and to act appropriately based on this understanding.

Motivated by the above considerations and by the importance of emotional intelligence for the students and their effect on the academic achievement, the investigator has undertaken the present study.

REVIEW OF RELATED STUDIES

Thilagavathi (1990) in his study, "Academic achievement in relation to intelligence, creativity and anxiety", found positive and significant relationship between intelligence and achievement. Panda (1997) in his study, "Impact of creativity and adjustment on academic achievement," found positive and significant correlation between academic achievement and creativity. Lekhi (2005) in her study found that the variable of academic achievement has significant positive correlation with emotional maturity. In other words it was found out that the adolescents who were good in academic achievement were also high on emotional intelligence which may be one of the components of emotional maturity.

Bajwa and Pawan (2009) in their study on relative effectiveness of computer assisted instruction and traditional teaching on academic achievement in science found that effectiveness of C.A.I over the traditional teaching on academic achievement in science subject of IX grade students .Students liked

to learn with C.A.I. It makes their learning more interesting and facilitates teaching learning process.

Jagnoop kaur (2012) in her study on Impact of Socio –economic status on academic achievements of secondary school students found that there is positive relationship between the socio – economic status and academic achievement of students.

Emotional Intelligence: Finnegan (1998) in his study, "Measuring Emotional Intelligence. Where we are today", found out that emotional intelligence could lead to achievement from formal education years of child. Tapia (1998) explored the relationship of emotional intelligence and academic achievement and found that there existed low relationship between emotional intelligence and academic achievement. Miglani (2001) in his study, "Emotional Intelligence as related to Academic Achievement of Adolescents", found that there existed a significant relationship between emotional intelligence and academic achievement.

OBJECTIVES OF THE STUDY

- To find whether significant differences exist in academic achievement of male and female adolescents.
- 2. To find whether significant differences exist in emotional intelligence of male and female adolescents.
- 3. To find whether significant relationship exist between academic achievement and emotional intelligence of male adolescents.
- 4. To find whether significant relationship exist between academic achievement and emotional intelligence of female adolescents.

HYPOTHESES OF THE STUDY

- There is no significant difference in academic achievement of male and female adolescents.
- 2. There is no significant difference in emotional intelligence of male and female adolescents.
- 3. There is no significant relationship between academic achievement and

emotional intelligence of male adolescents.

4. There is no significant relationship between academic achievement and emotional intelligence of female adolescents.

METHOD

In the present study descriptive survey method of investigation was employed.

SAMPLE

Sample of 200 adolescents (100 male and 100 female) were selected randomly from the different senior secondary schools of Ludhiana city for the present study.

TOOLS USED

Following tools were used for the collection of data:-

- 1. Emotional Intelligence Scale (By Anukool, Sanjyot and Dhar, 2001).
- Academic achievement of the students was measured from their percentage of aggregate marks obtained in the matriculation examination.

STATISTICAL TECHNIQUES

- 1. Mean, S.D. and t-ratio techniques were used to analyze the data.
- 2. Co-efficient of correlation was also used to find the relationship between dependent and independent variables.

RESULTS & CONCLUSIONS

Table 1

Showing the significance of difference between the academic achievement of male and female adolescents

Category	N	Mean	S.D	't'	Level of Significance
Male	100	68.93	4.49	1.27	Insignificant
Female	100	68.11	4.62		

Table 1 reveals that the mean values of academic achievement of male and female adolescents are 68.93 and 68.11 respectively and S.D's are 4.49 and 4.62 respectively. The obtained t - value is 1.27, which is less than the required value i.e. 1.96 and 2.58 at 0.05 and 0.01 level of significance respectively. Therefore the difference is insignificant at both levels of significance.

Hence the hypothesis that there is no significant difference in the academic achievement of male and female students is accepted.

Table 2
Showing the significance of difference between the emotional intelligence of male and female adolescents

Category	N	Mean	S.D	'ť'	Level of
					Significance
Male	100	98.32	4.47	2.25	Significant at
Female	100	98.86	4.69		0.05 level of
					significance

Table 2 Shows that the mean values of scores of emotional intelligence of male and female adolescents are 98.32 and 96.86 respectively and S.D's are 4.47 and 4.69 respectively. The obtained t-value is 2.25 which are more than the required value at 0.05 level of significance .So; the difference is significant at 0.05 level of significance.

Hence, our hypothesis that there is no significant difference in emotional intelligence of male and female adolescents is accepted at 0.01 level of significance but rejected at 0.05 level of significance.

Table 3
Showing coefficient of correlation between academic achievement and emotional intelligence of male adolescents

Category	N	Mean	S.D	R
Academic	100	68.93	4.49	
Achievement				+0.69
Emotional	100	98.32	4.47	
Intelligence				

Table3 Reveals the Coefficient of correlation between the academic achievement and emotional intelligence comes out to be +0.69. The Positive sign indicates that there is significant relationship between academic achievement and emotional intelligence of male adolescents which means the higher the emotional intelligence, the better will be academic achievement. Hence, our hypothesis that there is no significant relationship between academic achievement and emotional intelligence of male students is

rejected.

Table 4
Showing coefficient of correlation between academic achievement and emotional intelligence of female adolescents.

Category	N	Mean	S.D	R
Academic	100	68.11	4.62	
Achievement				+0.72
Emotional	100	96.86	4.69	
Intelligence				

Table 4 reveals that the coefficient of correlation between academic achievement and emotional intelligence of female adolescents comes out to be +0.72. Therefore both the variables i.e. academic achievement and emotional intelligence are positively and significantly correlated which means higher the emotional intelligence, the higher is the academic achievement.

So, our hypothesis that there is no significant relationship between academic achievement and emotional intelligence of female adolescents is rejected.

CONCLUSIONS

From the obtained results of the present study, following conclusions were drawn:

There is no significant difference in academic achievement of male and female adolescents; means that sex has no effect on the academic achievement of adolescents

There is no significant difference in emotional intelligence of male and female adolescents at 0.01 level of significance.

There is significant relationship between academic achievement and emotional intelligence of male adolescents.

There is significant relationship between academic achievement and emotional intelligence of female adolescents.

SUGGESTIONS FOR FURTHER STUDY

The interested investigator can undertake any of the following suggestions for further study:

- 1. This study was delimited to the geographical area of Ludhiana city. A similar study can be conducted in other districts of Punjab.
- 2. A large sample can be taken to test the reliability of the results.
- 3. In the present study the factor of sex was taken. So, a study can be undertaken including various other factors such as rural/urban,

- private and government schools etc.
- 4. The present study was conducted on the adolescents studying in eleventh class. A similar study can be undertaken on the students of other classes.
- 5. In the present study the dependent variables was emotional intelligence. A similar study can be conducted taking other dependent variables such as adjustment, intelligence and creativity etc.

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EMOTIONAL INTELLIGENCE FOR PROFESSIONAL AND DEGREE COLLEGE TEACHERS

MRS. INDERJIT KAUR*
DR. RAJINDER PAL KAUR SIDHU**

ABSTRACT

Emotional Intelligence is the ability to understand your own emotions and those of people around you. The concept of emotional intelligence means you must have a self-awareness that enables you to recognize feelings and manage your emotions. Goleman summarizes emotional intelligence into the following components: Emotional self-awareness, managing one's own emotions, using emotions to maximize intellectual processing and decisionmaking, including self-motivation and developing empathy (the art of social relationships and managing emotions in others). It influences what we do: A sad designer can't design beautiful portrait. It affects who we meet: An angry nurse can't show his/ her empathy to ailing patient. It determines how we look: Unpleasing facial gesture of teacher demotivates students. It expresses how we feel: Just seeing our face, students can understand how we feel. It decides our course of life: Happiness is a voyage it is not destiny, job satisfaction of teachers depends on their attitude. It helps to express emotions appropriately. Escape from one problem is not solution for that problem, instead react naturally and try to find the root cause of that problem. A person starts using drugs just to hide his disappointment, this would add more pain to his life, better is if he gets conviction to overcome it. Emotional health of staff working in educational institution is key for its quality delivery. Positive Emotions of teacher would leave positive impact on students.

OBJECTIVES

- To explicate the concept of emotional intelligence.
- To familiarize with the domains of emotional intelligence.
- To familiarize with the stress and attrition of teacher.
- To represent the qualities of emotionally intelligent teacher.

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INTRODUCTION

The concept, emotional intelligence, taken together means how intelligently we can control our emotions. Emotional Intelligence refers to the capacity for reorganizing our feelings and those of others, for motivating ourselves and for managing emotions well in us and in our relationships.

Emotional Intelligence can have positive /negative impact on the life of an individual. The positive impacts include personal productivity; developing leaders; career success; team performance; motivation/empowerment; difficult clients; customer satisfaction, creativity and innovation; time management, work/life balance and stress reduction. The negative impacts include lack of innovation and creativity; decreased productivity. Career derailment; increased stress and health –care costs and high turnover.

An emotionally intelligent person undertakes the difficult task of perpetuating his race and seeks to develop social usefulness in himself, as well as, in others. It is the most important factor in predicting success and happiness in life. It is far better to have a high emotional intelligence, if one wants to be valued as a productive member of the society. People with high emotional intelligence generally have successful relationships with family, friends, and fellowworkers. They can channel their emotional energies towards achieving their goals.

EMOTIONAL INTELLIGENCE

Emotional Intelligence is increasingly relevant to organizational development and developing people, because the EQ principles provide a new way to understand and assess people's behaviors, management styles, attitudes, interpersonal skills, and potential. Emotional Intelligence is an important consideration in human resources planning, job profiling, recruitment interviewing and selection, management development, customer relations and customer service, and more.

Emotional Intelligence links strongly with concepts of love and spirituality: bringing compassion and humanity to work and also to 'Multiple Intelligence theory' which illustrates and measures the range of capabilities people possess and the fact that everybody has a value.

The Emotional Quotient (EQ) concept argues that Intelligence Quotient (IQ) or conventional intelligence is too narrow; that there are wider areas of emotional intelligence that dictate and enable how successful we are. Success requires more than IQ (Intelligence Quotient), which has tended to be the traditional

measure of intelligence, ignoring essential behavioral and character elements. We have all met people who are academically brilliant and yet are socially and inter-personally inept. We know that despite possessing a high IQ rating, success does not automatically follow.

EMOTIONAL INTELLIGENCE - TWO ASPECTS

The essential premise of Emotional Quotient (EQ) is: Success requires effective awareness, control and management of one's own emotions and those of other people.

EQ embraces two aspects of intelligence:

- Understanding yourself, your goals, intentions, responses, and behavior
- Understanding others, and their feelings.

EMOTIONAL INTELLIGENCE - THE FIVE DOMAINS

Goleman identified the five 'domains' of EQ as:

- 1. Knowing your emotions,
- 2. Managing your own emotions,
- 3. Motivating yourself,
- 4. Recognising and understanding other people's emotions,
- 5. Managing relationships i.e. managing the emotions of others.

E.L.Thorndike and Stein (1937) were the first psychologists who identified the term emotional intelligence and they found that its roots lie in the concept of social intelligence so he defined it as, "The ability to understand and manage men, women, boys and girls and to act wisely in human relations."

According to Goleman (1995) emotional intelligence is the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions within us and in our relationship.

Mayer and Salovey (1997), elaborated that emotional intelligence was the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge and to reflectively regulate emotions so as to promote emotional and intellectual growth. They studied that when a group of people saw an upsetting film, those who scored high -on emotional clarity (which is the ability to identify and give the name to a mood that is being experienced) recovered more quickly.

Wu (2004) discovered that to develop a psychometrically sound, self-report measure of emotional intelligence and examine the scores of vocational high school teachers by sex and age, 375 Taiwanese vocational high school teachers (186 men, 189 women) completed the 25-item Emotional Intelligence Scale of five domains: Self-awareness, Managing Emotions, Self-motivation, Empathy and Handling Relationships. Analysis indicated that these teachers reported higher scores on Self-awareness and Empathy but slightly lower on Managing Emotions. The women gave higher self-ratings on Self-awareness and Empathy than the men. There were also significant differences across age groups on Self-awareness, Self-motivation, Empathy and the Total score for the Emotional Intelligence Scale.

New research (Goad, 2005; Justice, 2005) has indicated the importance and value of emotional intelligence in teacher preparation programs. According to their research, Goad and Justice indicate that pre-service teacher education, induction experiences with mentoring, and alternative certification programs could be strengthened by providing emotional intelligence training in preparing new teachers. Emotional intelligence skills were linked to both classroom management performance and teacher retention factors for new and novice teachers. With the established relationship of emotional intelligence skills and academic achievement, students would benefit from learning and applying emotional intelligence skills to improve academic performance in school and college settings. With new research evidence linking emotional intelligence to instructional performance and as a factor in teacher retention, pre-service, new, and novice teachers could benefit from learning and using emotional intelligence skills for personal and professional development.

TEACHER STRESS AND ATTRITION

Teaching is a stressful profession. High levels of negative stress and emotional reactivity lead to burn-out or negative outcomes. Research findings suggest that unrealistic expectations between teacher training and reality of teaching, a lack of clear performance standards with constructive feedback, increasing physical demands and added responsibilities, inadequate pay and resources, and physically and psychologically dangerous work environments lead to teacher dissatisfaction and attrition. While teachers cannot control issues related to salary, teaching assignment, paperwork, class size, student behavior, or support from administrators, they can learn and choose to develop skilled behaviors to deal with stressors. Emotional intelligence skills are the keys to managing stress and the daily pressures of life and work.

THE EMOTIONALLY INTELLIGENT TEACHER

Emotionally healthy behavior is reflected in characteristic ways of (1) thinking, (2) identifying, managing, and expressing feelings, and (3) choosing effective behaviors. Becoming an emotionally intelligent teacher is a journey and process, not an arrival state or end result. Emotionally intelligent teachers are active in their orientation to students, work and life. They are resilient in response to negative stress and less likely to overwhelm themselves with pessimism and strong, negative emotions.

An emotionally intelligent teacher learns and applies emotional intelligence skills to improve:

- Physical and mental health by gaining knowledge/techniques to break the habit of emotional reactivity (Stress Management);
- Productivity and personal satisfaction by helping to harmonize their thinking and feeling minds (Self Esteem and Confidence);
- Self esteem and confidence by learning specific emotional intelligence skills (Positive Personal Change);
- Communication in personal and work relationships (Assertion);
- Ability to manage anxiety and improve performance under pressure (Anxiety Management);
- Ability to quickly establish and maintain effective interpersonal relationships(Comfort);
- Ability to understand and accept differences in others and diversity issues (Empathy);
- Ability to plan, formulate, implement effective problem solving procedures in stressful situations (Decision Making);
- Ability to positively impact, persuade, and influence others (Leadership);
- Ability to direct energy and motivation to accomplish personally meaningful goals (Drive Strength);
- Ability to manage time to meet goals and assignments (Time Management);
- Ability to complete tasks and responsibilities in a timely and dependable
- Manner (Commitment Ethic); and

 Ability to control and manage anger and improve performance under stressful conditions and situations (Anger Management).

The Emotional Skills Assessment Process and Emotional Learning System provide an assessment and learning process to help teachers develop a plan of action to learn and apply emotional intelligence skills. Teachers who intentionally develop emotional skills and model emotionally intelligent behavior on a daily basis experience more success and satisfaction in their professional career and life.

Emotionally intelligent teachers are more resilient and proactive in responding to stressors and less likely to react to stress. Teachers who model emotional intelligence are characterized by: intentional reflective (not reactive) behavior, more flexible (not resistant to change), assertive communication (not aggressive or passive), more optimistic and hopeful (not pessimistic and negative), and relies on skills and positive habits (not reactive habits).

Emotional intelligence (EI) is the area of cognitive ability involving traits and social skills that facilitate interpersonal behavior. Intelligence can be broadly defined as the capacity for goal-oriented adaptive behavior; emotional intelligence focuses on the aspects of intelligence that govern self-knowledge and social adaptation.

Goleman describes emotional intelligence as "managing feelings so that they are expressed appropriately and effectively, enabling people to work together smoothly toward their common goals."

According to Goleman, the four major skills that make up emotional intelligence are:

- Self-Awareness
- Self-Management
- Social Awareness
- Relationship Management.

SKILLS FOR DEVELOPMENT OF EMOTIONAL INTELLIGENCE

Self- Regard: just look upon yourself and regard your feelings, thinking, knowledge and decisions.

Self-Awareness: Being able to identify and label specific feelings in yourself and others; being able to discuss emotions and communicate clearly and directly.

Self Motivation: Make intelligent decisions using a healthy balance of emotions

and reason. First assess the situation and then behave.

Social: Increased ability to analyze and understand relationships, better at solving problems in relationships, more assertive and skilled at communication.

Stress Tolerance: Always try to avoid stress and use some relaxation techniques like meditation, music, yoga, spend some time with your family and friends, play different games etc.

Mood Management: Express anger appropriately without resorting to violence, fewer suspensions or expulsion, less aggressive or self-destructive behavior, more positive feelings about self, family and friends, better at handling stress.

Balance between personal life and work: Measure the degree to which work and personal life activities are prioritized so that neither is neglected.

Keep a Dairy: Always keep a pocket or small diary with you, whenever a problem arises note it down in your diary. Update your social networking website status and ask friends to comment on that issue, than analyze the comments and choose appropriate answer/resolution to dilemma.

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COMPARATIVE STUDY OF AIDS AWARENESS AMONG URBAN AND RURAL ADULTS

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ABSTRACT

The present study was conducted to know AIDS awareness among rural and urban adults. The sample consisted 60 adults (30 rural 30 urban) of district Una (H.P). To assess the AIDS awareness among rural and urban adults a questionnaire consisted of 30 items was prepared by investigator. For analysis of data t-test was applied. Results reveal that significant difference was found among (i) urban and rural adults (ii) urban and rural male adults (iii) urban and rural female adults.

INTRODUCTION

AIDS (Acquired Immune Deficiency Syndrome) is the late stage of infection caused by HIV (Human Immune Deficiency Virus). An HIV infected person (Medically known as an HIV positive person) is one who has the Human Immune Deficiency virus in her /his body. However, he/she will appear to be perfectly healthy and will be asymptomatic for many years. An asymptomatic HIV infected person does not have AIDS until his/her T lymphocyte count falls to 200 or less. All persons with AIDS are infected with HIV infection have AIDS. AIDS is only the end stage of this infection. These HIV are of two types. HIV1 and HIV2. Both virus belong to same family, but vary in their genetics make up. HIV1 was discovered in France in 1983 and is more prevalent in Europe and the Americans.

Whereas HIV_2 was discovered in 1986 and appears to more prevalent in Africa. Both HIV1 and HIV2 have been detected in India and both leads to AIDS.

SYMPTOMS OF AIDS

A person is diagnosed with AIDS when they have developed an AIDS related

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condition or symptom called opportunistic infection or an AIDS related cancer. The infection is called opportunistic, because they take advantage of the opportunity offered by a week end immune system. It is possible for someone to be diagnosed with AIDS even if they have not developed an opportunistic infection.

AIDS can be diagnosed when the number of immune (CD4) system cells in the blood of an HIV Positive, person drops below a certain level. HIV is transmitted by bodily fluid such as blood, system, breast milk and vaginal secretions. It causes diseases by infecting CD4 + helper, T-Cells, a type of white blood cells, that normally co-ordinates the immune response to infection and cancer.

DEFINITIONS

According to Sat Sharma (2007) "Aids includes all HIV-infected people who have fewer than 200 CD4 + cells micro litre of blood".

According to Ponnac Unanka (2008) "HIV/AIDS – Human Immune deficiency virus. A virus disability the immune system, either of two. Strains of retro virus HIV1 or HIV2 that destroys the immune system helper T-cells the loss of which causes AIDS.

SYMBOLS OF AIDS - RED RIBBON

"Symbol is used internationally to represent fight against AIDS".

Ist December is celebrated is international AIDS day.

The researchers show their keenness to study about this infection as Pandey (1997) who conducted AIDS: a preliminary awareness survey, at 15 locations in 6 states and covered 514 respondents found that (i) among the sexually active adults in the age group 20-46 a significant percent of men and women did not know about HIV2 a large percentage of male and female were aware about infection and spread of the disease and a virus is the pathogen and there is no known cure for the disease. (iii) More than 85 percent of the respondent revealed that there is no AIDS patient living in their area and (iv) of the 100 truck drivers interviewed 67 drivers admitted that they had visited female sex workers and about 38 had suffered from sexually transmitted diseases. As sandygrem et al (2008) conducted a study and found that pregnant women in

semey have poor knowledge about specific mother to child HIV transmission, they do not know about the means of receiving mother to child HIV infection. The information in the public hear program need to be improved. As Gakhar (1996) studied an overall Central programme and give route of transmission symptoms, test for AIDS detection, treatment and preventive measures for the AIDS. As Kalasagat et al (2006), conducted that AIDS awareness in the slum areas of Chennai is very poor. Corresponding awareness in the small areas will be much conventional E.C. methods targeting General population through mass media are not reaching the slum areas.

NEED OF THE STUDY

There are various dangerous diseases in the world, but these are under treatment. AIDS is very dangerous like other dangerous diseases but it has no under treatment. Our adults are facing this problem. They should have full knowledge regarding this. Central and State Governments both are trying to aware the public of the world, but due to lack of education in some areas people are not aware about this dangerous disease. So the researcher wants to know about AIDS awareness among the adults of rural and urban areas by conducting research.

OBJECTIVES

- 1. To study AIDS awareness among rural and urban adults.
- 2. To study AIDS awareness among rural and urban female adults regarding AIDS awareness.
- 3. To study AIDS awareness among rural and urban male adults.

HYPOTHESIS

- 1. There is no significant difference between rural and urban adults regarding AIDS awareness.
- 2. There is no significant difference between rural and urban female adults regarding AIDS awareness.
- 3. There is no significant difference between rural and urban male adults regarding AIDS awareness.

SAMPLE

The sample consulted of 60 adults, urban (15 male and 15 female) and 30 rural (15 male and 15 female) from Una district of H.P.

TOOLS

To assess the AIDS awareness among adults a questionnaire consisted of 30 items was prepared by investigator was applied.

STATISTICAL ANALYSIS

To compare the AIDS awareness among rural and urban adults t-test was applied.

ANALYSIS, INTERPRETATION AND DISCUSSION OF RESULTS

In the present study the data was collected through the questionnaire developed by investigator. The information gathered through this questionnaire, was scored and tabulated. The data was analysed and interpreted according to sex and by respondents, using statistical criterion, such as mean, standard deviation and t-ratio. The details of analysis, interpretation of data, discussion and results are presented below:

TABLE I t-value for AIDS awareness among rural and urban adults.

Group	N	М	SD	t-value	Level of Significance
Rural Adults	30	6.33	3.9		
Urban Students	30	8.8	2.64	3.94	0.05

The mean difference in AIDS awareness among rural and urban adults is significant at 0.05 level. Hence HO_1 is rejected. Table No.1 reveals that urban adults have much awareness (M=8.8) than rural adults (M=6.33)

TABLE 2 t-value for AIDS awareness among rural and urban male adults.

Group	N	М	SD	t-value	Level of Significance
Rural Adults	15	7.1	2.6		
Urban Adults	15	9.3	2.2	2.52	0.05

The mean difference in AIDS awareness among rural and urban female adults is significant at 0.05 level. Hence HO2 is rejected. Table No.2 reveals that urban female adults have much (M=9.3) AIDS awareness than rural female adults (M=7.1)

TABLE 3 t-value for AIDS awareness among rural and urban male adults.

Group	N	М	SD	t-value	Level of
					Significance
Rural Adults	15	2.8	2.7		
Urban Adults	15	2.8	3.9	2.83	0.05

The mean difference in AIDS awareness among rural and urban male adults is significant at 0.05 level. Hence HO3 is rejected. Table No.2 reveals that urban adults have much (M=3.9) AIDS awareness than rural adults (M=2.7)

CONCLUSIONS

The study reveals that

- 1. Urban adults have much awareness than rural adults.
- 2. Urban female adults have much awareness than rural female adults.
- 3. Urban male adults have much awareness than rural male adults.

EDUCATIONAL IMPLICATIONS

The results of the study would be very helpful for the members of the society, State Governments as well as Centre Governments to make plan to stop the spread of this disease and save the adults from this dangerous disease and increased the AIDS awareness by introducing various programmes in the rural areas. It would be also helpful to increase the life span of human beings of India like other countries. In order to create awareness among adults the following activities should be organised.

- 1. Seminars, workshops and declamation should be conducted to make the people aware about the AIDS.
- 2. To develop audio-visual aids, interactive exhibitions, permanent and temporary exhibitions.

- 3. To organize health care program.
- 4. Introduce AIDS education as compulsory subject.
- 5. Outside agencies or organizations should make a positive contribution to AIDS education by offering lectures and talks within schools and public.

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PERCEPTIONS OF STUDENTS, PARENTS AND TEACHERS REGARDING MID DAY MEAL SCHEME AND IT'S IMPACT ON ENROLMENT IN GOVERNMENT SCHOOLS

DR. ANITA MENON

ABSTRACT

The study attempt to assess the perception of teachers, students and parents regarding mid day meal scheme [MDMS] and its impact on enrolment, of students in primary schools of Amritsar district in Punjab. To gather information regarding the perceptions and impact of the scheme, 100 students, 60 parents, 40 teachers and 20 government officials were requested and asked to fill the questionnaire. In order to know the impact of the scheme data have been divided in two period's pre Mid-Day meals period (1999-00 to 2003-04) and post Mid-Day meals period (2005-06 to 2010-11) The results of the study shows that students, parents and, teachers have positive perceptions regarding MDMs and also the impact of MDMS is impressive in terms of enrolment and strength of students.

INTRODUCTION

"School is the center of education."

We all are agreeing with this statement but now the concept of education is not limited to just provide education only but also filling the empty stomach. An empty stomach makes a noise, which becomes the hurdle in the teaching learning process. Hence, the government has launched the program of midday-meal in the schools.

MID-DAY MEAL SCHEME

The Midday Meal Program / Scheme is the popular name for school meal programme in India which started in the 1960s.So,The meal provided in the mid of the day is called mid-day meal which is normally known as lunch, but here the term is related to the children of Government school who are provided lunch in the schools by the Government free of cost during the lunch break for

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improvement of enrolment, attendance and retention of the children as a motivational incentive to get higher rate of literacy (up to 100%) throughout the country. The key objectives of the scheme are: protecting children from classroom hunger, increasing school enrolment and attendance, improved socialisation among children belonging to all <u>castes</u>, addressing malnutrition, and social empowerment through provision of employment to women.

HISTORY

Mid-day meals scheme (MDMS) has a long history. The scheme for school students were first introduced in a Japanese private school in the late 1800s, in Brazil in the year 1938 and in the United States in the year 1946. Seeing the experiences of countries like Japan, Brazil, and United States, the Indian Government also motivated to implement this program

In India also mid-day meal in schools has had a long history. One of the pioneers of the scheme is Madras that started providing cooked meals to children in corporation schools in the Madras city in 1923. The program was introduced in a large scale in 1960s under the Chief Ministership of K. Kamaraj after visiting Sourashtra Higher Secondary School — Madurai. Linguistic minority people had implemented this program since 1922. The first major thrust came in 1982 when Chief Minister of Tamil Nadu, Dr. M. G. Ramachandran, decided to universalise the scheme for all children up to class 10. Tamil Nadu's midday meal program is among the best known in the country. Less known, but equally interesting is the history of Pondicherry, which started universal school feeding as early as 1930.

There is an interesting story about how K. Kamaraj got the idea of a noon meal scheme. He saw a few boys busy with their cows and goats. He asked one small boy, "What are you doing with these cows? Why didn't you go to school?" The boy immediately answered, "If I go to school, will you give me food to eat? I can learn only if I eat." The boy's retort sparked the entire process into establishing the midday meal program.

Several other states of India also have programs. The most notable among them is Gujarat that has had it since the late 1980s. Kerala started providing cooked meals in schools since 1995 and so did Madhya Pradesh and Orissa in small pockets. On November 28, 2001 the Supreme Court of India gave a landmark direction to government to provide cooked meals to all children in all government and government assisted primary schools. State governments resisted the direction vigorously initially, but the program has become almost universal by 2005. Recently Govt. of India has launched new mid day meal

scheme Website i.e. http://mdm.nic.in.

By 1990-91 the number of states implementing the mid day meal programme with their own resources on a large scale increased to twelve states. With a view to enhancing enrolment, attendance and retention of the students and simultaneously to improve the nutritional levels of the children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) had launched a Centrally Sponsored Scheme on 15th August 1995.

OBJECTIVES OF THE MDMS

The main objectives of the programme are:

- To increase the enrolment, retention of the students in the schools and to tone up the learning abilities of the beneficiaries, especially children belonging to poor and downtrodden sections of the society.
- To provide nutritious meal to the school going children for achieving the goal of healthy mind in a healthy body.
- To promote friendship and feelings of brotherhood among the children belonging to different castes, colour and creed by providing them meals together.

SYSTEM FOR RELEASE OF FUNDS

Funds are sanctioned and released at the State level by Finance Department. Director General of School Education draws the funds from the Treasury and funds are remitted to the District Education Officers through electronic transfer. Funds are released by District Education Officers to the Implementing Agency at village level i.e. Village Education Development Committee (VEDC)/Head Teacher of the schools.

In pursuance of the guidelines given in the Regional Review Meeting held on 06 Nov 2008, Mid-Day Meal Society has been registered. Release of funds to the society directly may further improve the situation.

DATA COLLECTION

Twenty schools from different blocks of Amritsar districts were selected for the study. Schools were identified on the basis of good practices followed in the implementation of mid day meal scheme. Fifteen schools out of twenty schools were elementary only and the remaining five schools were middle school.

The schools visited were having varying enrolments ranging from 71 to 303 in the primary sections. The attendance was short of the actual enrolment in all

the sampled schools. Number of teachers also varied from 1 to 10. Except for two schools, the remaining schools did not have sufficient number of teachers. Therefore the involvement of the teachers in the implementation of the mid day meal scheme was observed to be having additional responsibility as the teachers were involved in the multi grade teaching in eight schools.

TOOL

The self-made questionnaire was administered to the 40 teachers, 60 parents and 100 students of 20 government schools of Amritsar district only.

The investigator first explained the purpose of research to the Head of the school and teachers. They were requested to complete the objective responses to the questionnaire and convince their students that they should give their true, free and frank responses and opinions to the investigator.

It was made clear to all of them that their responses would be kept strictly confidential. They were ensured that the reply would be used only for the research purpose.

STATISTICAL TREATMENT

For assessing the perception of the teachers, parents and students about midday meal program percentages were calculated.

ANALYSIS, INTERPRETATION AND DISCUSSION

After the administering of questionnaire and collection of data from different sources, the data was tabulated and analyzed. Results were interpreted and conclusions were drawn.

The result are discussed under the following sub-heads:

A]. PERCEPTIONS OF STUDENTS ABOUT MDMS

- The reaction of students regarding the impact of MDMS has shown positive outcome.
- 73% students were of the view that they attend the school regularly unless they had serious health problem.
- 88% students supported their view regarding enjoyment of school timing after mid-day meal.
- There is a little percentage of students (9%) who gave the negative response regarding the preparation of the mid-day meal whereas 91% said that the preparation of mid-day meal is good.
- Regarding the raw material like vegetables, 76% of students responded

- that the raw material, which is brought to the school, is of good quality and fresh vegetables are brought for preparation of mid-day meal.
- 84% students supported the view that the food served to them is of satisfactory level and enough quantity of food is served to them.
- When the researcher asked regarding the wastage of food, 21% students gave their view that sometime they left the food if they do not like the menu of the day otherwise they don't. 79% students stated that they never wasted the food as they assumed that if they waste it today then how they will eat tomorrow?
- Almost all the students (93%) are in the favors that their teachers are serving the sufficient quantity of food to them every day.
- 85% students supported that they get the nutritional food under the MDMS.
- Almost all students (98%) felt that they never had any problem after eating the MDM.
- 87% students responded that they were unable to pay attention with empty stomach but after the provision of mid-day meal they are enjoying the studies.
- 76% students felt that they do not only enjoy the studies rather they have developed good habits like washing hands with soap before and after eating the food whereas 24% students stated that they had already following these manners before introduction of mid-day meal.
- After the introduction of mid-day meal, 93% students want to continue their study as they realize the importance of education and want to become something in their life.
- 83% supported that they get the right proportion of food.
- Regarding the varieties of food, 78% supported that they get different dishes on different days to maintain the variety in the food.
- Regarding the provision of the food by MDMP 83% students felt that they
 get the food according to their age group. They get the sufficient quantity of
 food as per their requirement.
- 83% of students enjoy the school timing as compared to home because they learn social behaviors from each other as well as from the teacher,

- whereas 17% of students enjoy the home as they feel free from any types of restriction.
- 76% students reported that quality of food provided in the school is better than the home whereas 24% students bring their lunch from their home.
- 86% students felt that their teachers are regular in the class.
- Nearly 93% students were supported the provision of the food during vacations and even in holidays.
- Regarding the positive change in the educational environment after MDM, 80% of students felt that it is conducive.
- Almost 74% girls students were of opinion that they get more time to study
 as the food is served in the school free of cost and preparation of food is not
 required at home and they get rid of home chores.
- 96% students supported their view regarding the purity of the food. They
 said they never found any insect or impurities in the prepared food
 whereas 4% said that sometime they found insects/odd materials in the
 prepared pulses. It may be due to the reason that their school has no
 kitchen shed.
- When investigator tried to take opinion regarding the sweet dish, 100% students gave response that they get sweet dish on Monday as well as on Saturday.
- 88% students have faith on their teachers and even they never saw their teachers took some portion of the food to their home whereas 12% students gave their opinion that they are not aware about this fact.

B]. PERCEPTIONS OF PARENTS ABOUT MDMS

- About 96% parents felt that their children are attending school regularly and they enjoy the school hours and for this the credit goes to MDMS.
- Regarding the quality of the meal, 84% parents gave their opinion that their children are happy with the meal served to them whereas 16% parents were of view that they do not like the sweet dish which is served on Saturday.
- 81% parents felt that they noticed improvement in their spirit and activeness as their stomach are not empty and they do their home works at home actively whereas 19% parents felt that they do not found any kind of improvement in the spirit and activeness in their child.
- Most of the parents (88%) reported that even on holidays their children are ready to attend the school with the same enthusiasm. 12% parents gave

- their view that little break is also important in the continuous study to make the mind fresh.
- Almost all the parents (96%) were in the favor of provision of food during the holidays. They said that at least for few hours the school should be open whereas negligible percent (4%) gave negative response.
- 78% parents felt that their children learn punctuality due to the reflection of MDMP whereas 22% parents are not supported the positive response as they felt that it is the responsibility of the parents to sent the child to the school in time.
- Regarding the interest in the study among the students, 88% parents felt that their child is showing the positive response in the studies whereas 12% parents showed negative response.
- 88% parents felt that after the provision of MDM at least they were escaped from the arrangement of lunch for their children every day.
- Nearly 92% parents would like to continue the study of their children because their children showing interest in the studies.
- 84% parents felt that after sending their girl child to the school their daughters are now free from the house chores.
- After the reflection of the MDM, 90% parents are in the favor of sending their girl child to school for education.
- Most of the students who come under the umbrella of MDMP belong to SC/ST and their parents do the labor work through which they hardly get the nutritional food. They felt that school is providing them the better food as compared to home. Most of the parents (88%) gave the positive response whereas about (12%) was not in the favor of this.
- 79% parents were of view that the changes in menu is also required like the
 government should also provide a fruit at least once a weak whereas 21%
 said that they are happy with the menu as at least their children are getting
 the lunch every day. This is enough for them.
- Most of the parents (91%) felt that their children are happily obeying the instructions given by us at home because they learnt many good things due to MDMP whereas 9% were disagreed with this.
- 76% parents felt that before MDMP, when children came back from the school they were very lazy, feel lethargic due to hunger or empty stomach but after the introduction of the MDMP, their children actively take participation in the home activity too.
- 96% of parents felt that their children are getting the dual benefit of food as

well as education during the school hours whereas 4% of parents do not favor the above statement.

- 93% of parents reported that their children are getting the food regularly.
- With the introduction of MDMP nearly 88% parents felt that their children become conscious regarding cleanliness and health. Not only this some were of view that health and nutritious status is also improved as their children got the opportunity of eating the nutritional meal in the school, which they would not get at home.
- All parents (100%) were aware of the MDMP and they too realized the positive impact of MDMP and said that it is the good step taken by the government.
- 98% of the parents were of the view that their children never had any problem after eating MDM in the school whereas negligible percentage (2%) were of opinion that problem occurs may be due to MDM or otherwise.

C]. PERCEPTIONS OF TEACHERS ABOUT MDM PROGRAMME

- 99% teachers feel that the reason behind the miracle of improved enrolment and retention rate of the children is nothing but the MDMP. Teachers feel that earlier children who went home for lunch never returned for afternoon session but after the introduction of MDMS the retention is observed not only for the whole day but also for the whole session.
- Nearly 83% of teachers said that the improvement regarding their mannerism, punctuality, obedience are also observed among the students whereas 17% are not agreed with the above statement.
- Many teachers (91%) felt that after the introduction of MDMP, many parents are now ready to send their girl child to school.
- Most of the teachers (83%) reported that the status of the girl child was also improved as they are also eating the same meal with the other children in the school.
- Nearly 93% teachers supported their view regarding drop-out that due to the reflection of MDMP it is reduced to a great extent.
- · Most of the teachers (88%) said that children had also improved their

eating habits and the credit goes to the MDMP whereas 12% of teachers gave the reason of improvement in the eating habits among the students is the efforts made by the teachers.

- The present study reported that nearly 81 % of the teachers believe that due to MDMP children become aware about taking the clean drinking water.
- 79% of the teachers observed that personal hygiene has also been improved among the children due to the reflection of the MDMP whereas 21% of teachers felt that the credit goes to parents as well as the teachers.
- Most of the teachers (78%) felt that the children are sure that they will get
 the meal so they do not worry about filling the empty stomach hence they
 give their full concentration on the study whereas 22% of teachers
 reported that after eating the meal students look lazy and dull.
- As the impact of MDMP showed the positive outcome regarding the attendance during the afternoon session throughout India, similarly the present study also showed the positive outcome in Amritsar district as 83% of teachers observed the enhancement in the attendance in the afternoon session whereas the 17% of teachers are disagreed with this as they believe that it is the interest or the curiosity to learn which calls them back to the school from the home during the noon session.
- The 84% of the teachers reported that they have observed the regularity of the SC/ST students after the reflection of the MDMP because they have realized the importance of education and they enjoy the studies. On the other side some percentage of the teachers (16%) do not agree with this.
- MDMS covered many advantages, it is not only confined to the enrolment and retention rather it also improved the sense of discipline among the students.87% of the teachers supported the above statement rest of the percentage of the teachers (13%) are of view that the credit goes to the respective teachers who teaches them about how to maintain the discipline in the school.
- Regarding the academic performance of the children, 84% teachers gave positive response. They opined that children not only showed their interest in studies rather maintain the discipline in the school.
- 93% of the teachers felt that students not only actively participate in the co-

- curricular activities rather they also showed their desire to participate at the state level and make the schools and parents proud.
- It is the MDMP due to which the students are getting the dual benefit of the education as well as food in the school. 96% of the teachers supported the said statement.
- 42.5% of the teachers reported that most of the teaching hours are spent on the purchasing /provision of the MDM whereas 57.5% were disagreed with this.
- Regarding the problem of provision of the MDM 42.5% of the teachers were of the opinion that lots of time is required for clearing the bills whereas the rest percentage of the teachers (57.5%) believed that they never had confronted with such problem till date.
- The burden on the shoulders of the teachers are raised due to the MDMP because 75% of the teachers reported that they have to maintain the record /files of the MDM which should be transferred to the other special persons appointed by the government. The teachers if free from such kind of burden, the result may be better than today. 35% of the teachers reported that all the teachers must share this kind of responsibility so that they never face any kind of the problem.
- Regarding MDM as a burden on the teachers, 70% teachers felt it as a burden as lot of time is required to maintain the record files, for clearing the bills and provision of MDM in schools.
- Due to number of responsibilities on the shoulder of the teachers, 60% of teachers believe on the suggestion of availability of more teachers to share these responsibilities. 40% of the teachers have never faced any problem regarding MDMP so they are happy with staff available.
- Despite so much of burden, 78% teachers observed the positive response on the Parent Teacher Association (PTA) meet but 22% of the teachers gave opinion that parents of some children could not sacrifice their one day income to attend the parent teacher meeting as they belong to labour class.
- 86% of the teachers reported that children are also showing their interest in the studies as they come back to school next day after the completion of the home works given by the teachers.
- 73% of the teachers opined that children never had any kind of health and nutritional problem after eating the mid-day meal whereas 27 % of teachers were disagreed with this.

• 89% of the teachers reported that the cooked food is properly utilized because they prepare the food quantity on the basis of the daily strength present in the school.

D]. ENROLMENT AND STRENGTH OF STUDENTS:

- Enrolment and Retention of Students in Primary Schools is one of the major concerns of the planners and policy makers in India. Scheme like midday meals has been launched to achieve this objective.
- We found that mid day meals lead to large and statistically significant increases in primary school enrolment. It was also observed that significant 13% increase in primary school enrolment, amounting to around 14 additional students in each primary school.

CONCLUSION

- Majority of the students felt that the quality and quantity of mid-day-meal is good and sufficient.
- It has a positive impact on the student's health and academic achievement.
- Majority of parents felt that their students are getting not only better meal but also ample opportunity for studies and that is why parents are sending even their girl child to school along with boys.
- Without any discrimination on the basis of gender, class, colour and creed all the children are taking the benefit of the MDMS.
- The SC/ST students show their desired interest in the field of education.
- Drop out rates have been reduced to great extent after the provision of MDMP.
- Eating habits, sense of discipline and personal hygiene is also improved among the students after the introduction of MDMS.
- The staff feels that there is a need to increase the number of teachers or separate staff should be appointed to look after the provision of mid-daymeal, maintaining the record files and clearing of the bills for strengthening the scheme.

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BURNOUT OF SCHOOL TEACHERS IN RELATION TO GENDER, AREA AND TYPE OF INSTITUTE

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ABSTRACT

The purpose of this study is to identify the difference in burnout of the school teachers in terms of gender, area and type of the institution. Maslach's Burnout Inventory Scale was administered to a sample of 200 school teachers which were randomly selected from different educational institution and different area. Descriptive statistics was used for analysis of the data. The t-value was applied .Analysis revealed 1) No significant difference exist in burnout of male and female teachers. 2) No significant mean difference exist in burnout of rural and urban school teachers.3) No significant mean difference exists in the burnout of govt. and private school.

INTRODUCTION

The teacher is an employee of an institution where the future of the nation is being shaped. According to first Prime minister of India Jawaharlal Nehru, "The future of the nation is being shaped in her classroom". Teacher plays an important role in nation building. If a teacher is mentally fit and free from all stress and strain, he will teach effectively in the classroom. His wisdom, knowledge and management of the class will depend upon the level of mental health and satisfaction of his life. Good mental health helps to the teacher to motivate and inspire the students. Motivation and inspiration are more important than anything else. The whole edifice of education stands on the shoulders of teachers. His teaching motivates and inspires the future generations of the country. Over the last few years burnout has become a buzzer which is used to convey an almost unlimited variety of social and personal problems.

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BURNOUT

Burnout is defined as a syndrome of emotional fatigue, alienation and reduced ability. It is a serious problem or condition in which people suffer from a negative change in feelings, attitudes and expectations. This is often followed by severe problem at the work place as well as in the private context. Affected person experiences fatigue, tiredness and it reduces their work abilities. Burnout refers to loss of enthusiasm, excitement and essence of mission in one's work. It causes a feeling of helplessness, negative self concept and attitudes towards work, life and other people. Burnout is a state of emotional, mental and physical exhaustion caused by excessive and prolonged stress. It occurs when we feel overwhelmed and unable to meet constant demands. As the stress continues, we begin to loose the interest or motivation that led us to take on a certain role in the first place. Burnout reduces our productivity and saps our energy, leaving us feeling increasingly helpless, cynical and resentful. Maslach (1986) has defined three key elements that appear in the burnout syndrome i.e. emotional exhaustion (EE), depersonalization (DP) and reduced personal accomplishment (PA) on the basis of clinical observation and case studies

Herbert Freudenberger (1974) defined burnout as, "The extinction of motivation or incentive, especially where one devotion to a cause or relationship fails to produce the desired results."

Reed(1979) defined burnout as the feeling of being locked into job routine.

Edelwich and Brodsky (1980) defined burnout as a progressive loss of idealism, energy, purpose and concern as a result of condition of work.

Maslach and Jackson(1981) said that burnout included emotional exertion resulting from chronic stress in human service, profession and occurs at any level in all jobs. The investigator considered burnout is another name of job stress.

RELEVANCE OF THE STUDY

Teaching is considered as a noblest profession. It is said that real democracy flourishes through education which can be imparted through healthy, happy and successful teachers. But now –a-days teachers are not imparting

education properly. They have lost the enthusiasm, excitement and essence in their mission. They are suffering from negative self concept and attitudes towards work. All this leads to a problem which is called burnout of teachers. Burnout reduces the productivity of teachers.

Some of the researchers have already tried to find out the factors responsible for the burnout of teachers. Fielding (1982) explored that personality characteristics of teachers and school climate affects the stress and burnout among teachers. K. M. Mishra (1990) analyzed the relationship of burnout to stress in teaching profession. Rama (1997) has found that the teacher with high span of teaching experience feels more burnout than teachers with low teaching experience. The present study will help to find out the level of burnout of school teacher and help in the remedy of burnout among school teachers so that teaching can be more effective.

OBJECTIVES

To find out the difference in burnout of male and female school teachers.

To find out the difference in burnout of rural and urban school teachers
To find out the difference in burnout of govt. and private school
teachers

HYPOTHESES

There exists no significant mean difference in the burnout of male and female school teachers.

There exists no significant mean difference in burnout of rural and urban school teachers.

There exists no significant mean difference in the burnout of govt. and private school teachers.

RESEARCH METHODOLOGY

Descriptive survey method was used in the present study. In the present study a random sample of 200 school teachers of district Ludhiana were selected. Equal number of male and female, rural and urban, govt. and private school teachers has were as a sample in the study.

TOOLS

Maslach Burnout Inventory (MBI) was designed for measuring the level of burnout among respondents. MBI contains three subscales i.e. emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA). The emotional exhaustion scale assesses the feeling of being emotionally over extended and exhausted by one's work. The depersonalization sub scale measures an unfeeling and impersonal response towards recipients of one's service, care, treatment or instructions. The personal accomplishment subscale assesses the feeling of competence and successful achievement in one's work with people. Alpha coefficients ranging from .71 to .90 for these subscales has been observed (Maslach, & Jackson, 1981).

STATISTICAL TECHNIQUES

Mean, S.D., t ratio was used to analyses the data..

RESULTS & CONCLUSION

TABLE 1
Significance of the Difference between Means of dimensions of Burnout of male and female School Teachers.

S.No.	Dimension	Group	N	M	S.D	SE_{M}	T-value	Level of
								significance
1.	EE	Male	100	17.36	9.19	0.92	0.68	Not
		Female	100	18.22	8.75	0.88		significant
2.	DP	Male	100	8.44	5.37	0.54	1.47	Not
		Female	100	7.36	4.98	0.50		significant
3.	PA	Male	100	33.77	9.19	0.92	3.35	at .01 level
		Female	100	37.64	7.00	0.70		

Table 1 revealed that no significant difference exists between emotional exhaustion of burnout of male and female teachers. The t-ratio was calculated as 0.68 which is not significant at .05 level of confidence. No significant difference exists between depersonalization dimension of burnout of male and female teachers. The t-ratio was calculated as 1.47 which is not significant at .05 level of confidence. A significant difference exists between personal accomplishment dimension of burnout of male and female teachers the t-ratio was calculated as 3.35 which is significant .01 level of confidence. Therefore

hypothesis 1 stating that there exists no significant mean difference in the burnout of male and female school teachers stands partially accepted.

TABLE 2
Significance of the Difference between Means of dimensions of Burnout of Rural and Urban School Teachers.

1.	EE	Rural	100	17.77	8.84	0.88	0.98	Not
		Urban	100	18.41	9.08	0.91		significant
2.	DP	Rural	100	7.72	5.04	0.50	0.49	Not
		Urban	100	8.08	5.37	0.54		significant
3.	PA	Rural	100	36.42	7.68	0.77	1.21	Not
		Urban	100	34.99	9.01	0.99		significant

Table 2 revealed that no significant difference exists between emotional exhaustion of burnout of rural and urban teachers. The t-ratio was calculated as 0.98 which is not significant at .05 level of confidence. No significant difference exists between depersonalization dimension of burnout of rural and urban teachers . The t-ratio was calculated as 0.49 which is not significant at .05 level of confidence. A significant difference exists between personal accomplishment dimension of burnout of rural and urban teachers The t-ratio was calculated as 1.21 which is not significant .05 level of confidence. Therefore hypothesis 2 stating that there exists no significant mean difference in burnout of rural and urban school teachers stands accepted.

TABLE 3
Significance of the Difference between Means of dimensions of Burnout of Govt and Private School Teachers

1.	EE	Govt.	100	17.59	8.92	0.89	0.32	Not
		Private	100	17.99	9.04	0.90		significant
2.	DP	Govt.	100	7.84	5.56	0.56	0.16	Not
		Private	100	7.96	4.83	0.48		significant
3.	PA	Govt.	100	36.05	8.12	0.81	0.58	Not significant
		Private	100	35.36	8.66	0.87		

Table 3 also revealed that no significant difference exists between emotional exhaustion of burnout of govt. and private teachers. The t-ratio was calculated as 0.98 which is not significant at .05 level of confidence. No significant

difference exists between depersonalization dimension of burnout of govt. and private teachers. The t-ratio was calculated as 0.16 which is not significant at .05 level of confidence. Table also revealed that a significant difference exists between personal accomplishment dimension of burnout of govt. and private teachers The t-ratio was calculated as 0.58 which is not significant .05 level of confidence. Therefore hypothesis 3 stating that there exists no significant mean difference in the burnout of govt. and private school teachers stands accepted.

INTERPRETATION

Result of this study show that no significant difference exists in burnout of school teachers according to gender, area and type of institute. The possible interpretation of the result may be that all teachers have same working condition, workload and responsibilities. They have same level of fatigue, frustration and tiredness from their work and feel emotionally drained from their work. These results support the findings of Grover (1983) and Bonn (1981).

EDUCATIONAL IMPLICATIONS

The result of present study may be discussed in seminars, refresher course and courses and workshop organized for teachers. This study reveals that burnout influences the effectiveness of teachers adversely. The government must create conditions to reduce burnout to improve the effectiveness of teachers. It is useful in making plans and policies for the betterment of teachers. The finding of the present study helps the teachers in making the teaching learning situations more effective & helpful in inspiring the teacher to achieve life satisfaction and to inculcate commitment to their teaching profession. The result of present study can be used as the hierarchical structure of wants, need and attitude of teachers and may help the performance of teachers by giving motivation, helping and prioritization.

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ATTITUDE OF RURAL PARENTS TOWARDS GIRLS EDUCATION

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ABSTRACT

This study is aimed at finding the attitude of rural parents toward girl's education. The investigation finds that there is a negative attitude towards the education of girls even though girl's education is drawing greater attention of our educationists and the government.

Education makes a man self-reliant and selfless. According to Aristotle, education means "Creation of sound mind in sound body". Education is a science as well as an art. It develops man's mind so that he may be able to enjoy the contemplation of supreme truth, goodness and beauty. There are different views about education from different philosophers, different educationists and different educational theories and practices.

Today, the need of education is largely felt, as there is realization and desire of education among people. In spite of this realization the education of girls is not given its due importance. Men continues to look down upon women. Women have been categorized as the weaker sex and as such they are dependent on men. Despite many social barriers limiting the freedom of women a social life, history has recorded many personalities who were outstanding in their life and society.

In today's society, the modern women will not be prepared to accept the view that marriage is woman's destiny. She would say that women have as much a right to be educated and become established in life as any man. A woman is in no way inferior to man and she has an equal right to be educated.

Women in the past did not deserve to be educated and were always were kept under control. Marriage was her only aim and devotion to her husband and his family was her sacred duty. There was no life for her outside the home. She did not enjoy any status in the society. At the turn of the century the earlier opposition to woman's education has fizzled out. However, a number of obstacles remained in the way of women's education. Most of these obstacles exist only in people's minds in the form of prejudice, traditional beliefs and cultural practices.

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However, as a result of efforts of social reformers, the upper middle class women of society had some sort of schooling. The rural and urban orthodox families still consider that educating a girl is unnecessary and even dangerous, because education makes her thinking independent. They feel that an educated and status oriented woman would refuse to be submissive. This resulted in the wide illiteracy of women, child marriages and lack of higher education.

The literate parents feel that education is compulsory for children whether they are boys or girls. Though the ultimate aim behind this is getting some job, most of the parents feel that children, both boys and girls, will get knowledge and learn social behavior like adjusting and understanding others, if they attend school. Besides getting knowledge, the children learn good manners. The educated parents also feel that education of girls should be encouraged, as the percentage of results in public examinations is greater in case of woman. There is no field a woman cannot enter equally as man. Therefore education of girls is a must.

The illiterate parents differ in their attitudes. Some are interested in sending the girls schools. Other feel that education for girls is not needed because they have to learn house hold work and help mothers in their work. They feel that if girls are educated, they may become proud and therefore will not be at mercy of their husband and in- laws. Due to this, many problems may arise. Even if girls are educated, dowry is demanded. So, it is a waste to spend money on girl's education.

On the whole, the researchers feel that generally there is negative attitude towards education of girls. In fact, some parents are indifferent towards girls education. Unless attitude among parents changes, the literacy rate of girls cannot be improved.

Girl's education is drawing greater attention of educationists, government, parents and public. According to statistics of the census of India, the graphs reveal to us that the percentage of educated women is very low in our country than men. so there is something fundamentally wrong or there may be some strong causes for uneducated women in our country. These causes should be found and proper solutions should be worked out so that all women receive education. Hence this study based on the attitudes of rural poverty towards girls' education is undertaken.

REVIEW OF RELATED RESEARCH

A summary of writings of recognized authorities and previous research provides sufficient evidence that the researchers are familiar with what is already known and what is still unknown and it helps to eliminate duplication while fixing useful objectives, forming appropriate hypotheses, drawing meaningful conclusions and making commendable suggestions.

Lakhar, B.(1976) Studied the progress of women's education in Assam from 1874 to 1970 and found that separate school for girls were opened after the advent of the British and missionaries. The missionaries were the first to start the schools for girls in Assam. In the beginning few girls attended these schools. Teachers were given rewards for securing enrolment of girls. Fees were compulsory for girls in primary schools but in upper primary and middle schools fees were abolished. The missionaries took a lead in the training of teachers. Training classes were opened at Nowgang and Silchar for vernacular teachers.

Das, R. (1979) studied the women's education in Assam in the post independence period(1947 to 1971) and its impact on the social life of the state and found that there was increasing trend or positive rate of growth during the period of study. Compared to increase in the number of men's colleges the women's colleges did not increase proportionately. There was a wide gap between the educational opportunities and facilities available to men in comparison to women.

Singh, V.(1988) investigated the extent and causes of dropout among girls in rural schools of Chandigarh. He found that the dropout rate of rural girls was higher at classes I in primary stage compared to other classes; with this rate going down in the higher grades the girls were weak in English and Mathematics. Parents were unwilling to send their daughters because of domestic reasons.

Jain, G. (1990) found that both rural and urban adolescent girls aspire to study science as their first preference and prefer government service at the first choice followed by banking, civil services and clerical work. The aspiration level of both rural and urban girls was found to be average.

Nayer, U. (1991) found that the provision of schooling / educational facilities for girls is low and its utilization is still lower on account of school, economic, attitudinal barriers and sheer physical distance. The curriculum and its transaction remain Sex- Stereotyped and biased. Poverty and hunger were

listed as the chief causes of non-enrolment and non attendances of girls.

Duggal, J. (1992) undertook a micro-study of access of scheduled castes girls to elementary education in rural Haryana and found that physical facilities in sample schools were inadequate and utilization was low.

Research Design

The problem chosen for this study was: 'An investigation into the attitude of the Rural Parents towards Girl's education' in relation to some variables. The variables considered in this study were sex and type of literacy. The hypotheses were formulated in null form.

A sample of one hundred rural parents was selected as sample of study using stratified random sampling technique. Out of total sample, 50 were literate parents and 50 were illiterate. Out of 50 literate, 25 were male and 25 were female; and out of 50 illiterate parents, 25 were male and 25 were female.

The researcher has constructed a tool and used it to find out the attitude of rural parents towards girls education

.

CONCLUSION AND RECOMMENDATIONS

The following are the conclusions drawn from the present study and these are followed by necessary discussion and recommendations.

Attitude of rural parents towards girl's education

Table 1 Attitude of rural parents towards Girls education

Sample size	Mean	Standard Deviation
100	126.2	12.9

The rural parents have highly favorable attitude toward girl's education.

It is a good sign to see highly favorable attitudes among rural parents toward education, which confirms that they realize the importance of girls education. Though the rural parents have highly favorable attitudes toward girl's education, the educational facilities that are available do not fulfill the ambitions and aspirations of the rural parents. Hence, it is the duty of the government to provide all the facilities and extend the necessary incentive to the concerned to promote girls education to desired level.

Table-2 Comparison of Attitude of Male and Female Rural Parents

Variables	Sample size	Mean	S.D.	Mean difference	C.R.
Male Parents	50	125.2	14.2	2.4	0.93*
Female Parents	50	127.6	11.3		

^{*}not significant at 0.01 level

The male and female rural parents are having a highly favorable attitude towards girls education without any significant difference between them.

This result reflects the importance accorded by both men and women parents to girl's education. As the families are closely knitted, both men and women are highly conscious about the role of education in the life of their girl child. Hence, it is the responsibility of authorities concerned to make the girls reach every level of education with ease.

Table-3 Comparison of Attitude of Literate and Illiterate Rural Parents toward girl's education

Variables	Sample size	Mean	S.D.	Mean difference	C.R.
Male Parents	50	125.6	14.2	1.4	0.53*
Female Parents	50	127	11.3		

ns = non-significant at 0.01 level

The Literate and Illiterate Rural Parents have highly favorable attitude toward girl's education without any significant difference.

Irrespective of the literacy status, both literate and illiterate rural parents are conscious about values that the girls desire from education. Because of this attitude alone, all the rural folks are sending their girls to schools and colleges along with their boys without showing any discrimination between them.

To support the efforts of rural parents, the government and authorities concerned need to extend all support to promote girls education.

More and more facilities should be provided for girls' education so that the position can improve since the attitudes are found favorable.

Parents should be motivated in various ways to send their daughters to school.

Appropriate incentive to attract more and more girls to educational institutions must be given.

Curriculum should be organized in such a way as to suit the girls.

School exclusively for girls should be increased.

Teachers should treat the girl students with due dignity and respect.

SUGGESTIONS FOR FURTHER RESEARCH

The following recommendations are worthy of consideration in view of the conclusions

Though the attitudes of people towards girls' education are favorable as is proved by the present study, girls education is still lagging behind boys education for which there may be other strong reasons. Hence, a scientific probe into the other causes for backlog in girls' education should be taken up.

A study may be taken up on girls' education in the tribal areas.

A study may be taken up in urban areas also.

A comparative study at different stages of education may be taken up.

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AGGRESSION AMONG ADOLESCENTS IN RELATION TO PARENT CHILD RELATIONSHIP

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ABSTRACT

The study explores the relationship between Aggression and Parent Child Relationship among Adolescents. Sample consists of 200 adolescents. Aggression Scale by R.L.Bharadwaj and Parenting Scale by R.L.Bharadwaj was used to collect the data. No significant relationship is found between aggression and different modes of parenting among adolescents.

PARENT CHILD RELATIONSHIP

Parents are the chief architects in shaping and reshaping the personality of a child. Loving and accepting parents provide healthy medium for the child to grow his energies into proper channels and exercise his potentials to the maximum (Kiran and Singh 1982). Whereas deprivation of opportunities to be loved and beloved retards the pattern of their speech development and affects the patterns of personalities. Parental rejection makes children fearful, insecure, jealous, aggressive and hostile. Proper and efficient upbringing of a child is a highly complex task. However, it is paradoxical that in our country at the macro-level this complexity is neither fully realized nor even appreciated by most of the educated Indians. Parents in this country bring-up their children on the basis of their own childhood experiences, folklore wisdom and close observation of other parent etc.

Hollis and Kuczynski (1997) defines Parenting as the concept of mutual contribution by parents and child. The parents and child have equal probability in contributing to the interactional basis of the relationship despite asymmetry in power. Although parents hold more power than child, the power of the child is found in the relationship that the child has with the parents. William Sears (2001) defines Parenting as the process of promoting and supporting the physical, emotional, social, and intellectual development of a child from infancy to adulthood. It is an activity of raising a child rather than the biological relationship.

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Miller, Diorio and Dudley (2009) conducted a study entitled, 'Parenting style and adolescents reaction to conflict: Is there a relationship?' The study was done to determine if the reactions of the adolescents towards hypothetical situations that can lead to conflict and violence varied parenting styles of their mothers. The result indicated that parenting style is associated with adolescent's reactions to hypothetical situations that can provoke conflict. The findings highlights the importance of considering parents and their approach to child rearing as a factor in the adolescent's ability to react to conflict.

Elias H. and Yee (2009) carried a study on 'The relationship between perceived parental and maternal parenting styles and students' academic achievements'. The sample consisted of 247 students in two secondary schools. The data were collected using questionnaire. Results show that majority of the students perceived both their father and mother as authoritative. The findings revealed that perceived parental and maternal permissive, authoritative parenting styles were not significantly correlated with students' academic achievement.

AGGRESSION

Aggression is a familiar term in common parlance, as well as a key concept in study of human behavior .Aggression is defined as physical or verbal behavior intended to harm. Aggression can neither be directed inward by self-multiliation or suicide, nor directed outwardly at another person. The main thing in aggression is that it is deliberate, accidents; injuries are not form of aggression.

Everyone has a commonsense notion that aggression involves one person injuring another. The injury may be result from a physical attack such as assault, rape or murder. The attack may be psychological involving ridicule disparagement and similar assaults on other feelings about themselves. Economic attacks include being fired or denied a promotion without justification. The social attacks may involve ostracizing a person, coercing a person through social influence or inflicting on someone a loss in social status. Aggression might be viewed as a motivational state, a personality characteristic, a response to frustration, an inherent drive or the fulfillment of a socially learned role requirement(Harre and Lamb,1983). Anderson and Huesmann (2003) defines aggression as the behaviour that is directed towards another individual carried out with the proximate (immediate) intent to cause harm .Ferguson and Beaver (2009) defines aggression as the

behaviour which is intended to increase the social dominance of the organism relative to the dominance position of other organism. Robert Faris, Susan Ennett(2010) carried out a study on 'Adolescent Aggression : The role of peer group status motives, peer aggression and group characteristics'. This study found that recent studies of youth aggression have emphasized the role of network-based peer influence processes. Other scholars have suggested that aggression is often motivated by status concerns. They integrate these two veins of research by considering the effects of peer status motivations on subsequent adolescent aggression, net of their own status motivations, prior aggression, and peer behavior. They also explore different levels at which peer effects may occur, considering the effects of reciprocated and unreciprocated friendships as well as larger, peer groups. They found that aggressive behavior of friends who do not reciprocate the adolescents friendship nomination has particular impact. The average status valuation of peer groups increases their members likelihood of aggression, even after controlling for their own attitudes about status, their friends attitudes, and their friends aggressive behavior. Murrav.Kantahyneeh (2008) investigated on 'Aggression and Perceptions of Parenting among Urban Public Middle School Students' This study explored the relationship between parenting and early adolescent aggression in an urban low-income, predominately African American sample. The first aim was to examine whether aggression-specific parenting practices and parenting style predicted subsequent early adolescent aggression. The second aim was to examine the extent to which parenting style moderated the relationship between aggression-specific parenting practices and subsequent early adolescent aggression. The third aim was to explore the bidirectional relationship between parenting (parenting style and aggression-specific parenting practices) and early adolescent aggression. Atotal of 209 sixth grade early adolescents attending two Baltimore City middle schools completed questionnaires about their overt and relational aggressive behaviors at two time points. Early adolescents also reported on their perceptions of a parent or guardian's parenting style (support/behavioral control and psychological control) and aggression-specific parenting practices (aggression-avoidance parenting practices and aggression-endorsing parenting practices). Adjusted logistic regression results indicated that early adolescents who reported having a parent who supported aggression avoidance strategies were less likely to engage in overt aggression. Study findings also showed that parent support for aggression avoidance strategies ameliorated the tendency toward

aggressive behavior when parenting styles were at their least protective levels. A bidirectional relationship between parenting and early adolescent aggression was not found; however, Structural Equation Modeling results indicated significant relationships between early adolescent aggression and subsequent parenting. Early adolescent overt and relational aggression predicted declines in parenting practices and parenting styles associated with buffering early adolescents from aggression.

Yoshito Kawabata, Lenneke R.A. Alink, Wan-Ling Tseng, Marinus H.van IJzendoorn, Nicki R.Crick (2011) carried a study on 'Maternal and paternal parenting styles associated with relational aggression in children and adolescents: A conceptual analysis and meta- analytic review'. The findings of this study suggested that dimensions of positive and negative parenting behaviors of mothers and fathers are associated with children's relational aggression and that these associations are- in case of father- contingent upon a number of sampling and procedural characteristics.

Rick Navert(2011) investigated a study on 'Negative parenting style contribute to child aggression'. They explored that mother's harsh parenting affected child emotion regulation more strongly than father's whereas harsh parenting emanating from fathers had a strong effect on child aggression. Father's harsh parenting also affected son more than daughters, whereas there was no gender differential effect with mother's harsh parenting.

OBJECTIVES

To study aggression among male and female adolescents.

To study parenting among male and female adolescents.

To study different modes of parenting among male and female adolescents.

To study relationship between aggression and different modes of parenting among adolescents.

HYPOTHESES

There will be no significant difference in aggression among male and female adolescents.

There will be no significant difference in parenting among male and female adolescents

There will be no significant difference in different modes of parenting among male and female adolescents.

There will be no significant relationship between aggression and different modes of parenting among adolescents.

SAMPLE

The primary purpose of the research is to discover the principles which have universal application. But to study the whole population in order to arrive at the generalization is impracticable, if not possible. The process of sampling makes it possible to draw valid inferences or generalizations on the basis of careful observation of variables within relatively small portion of population. In the present study, convenient sampling technique was employed. The sample comprised of 200 adolescents from selected schools of district Hoshiarpur. Among these 200 students there were 100 girls and 100 boys.

TABLE-1
List of Schools from where the data has been collected

Sr.No.	Name of the Schools
1.	Government Senior Secondary School, Atarpur
2.	D.A.V Public School, Talwara
3.	D.A.V Senior Secondary School, Tanda
4.	Silver Oak International Public School, Tanda
5.	G.K.S.M Government College, Tanda

TOOLS EMPLOYED

Parenting scale prepared by Dr. R.L.Bharadwaj, Dr. Harish Sharma and A.Garg(1998).

Aggression scale prepared by Dr.R.L.Bharadwaj(2005,2008)

STATISTICAL TECHNIQUES

The following statistical techniques were employed in order to analyze the data Mean Median and Mode

Standard Deviation

T-test

Correlation

ANALYSIS AND INTERPRETATION

TABLE- 2

Significance of difference in Aggression among male & female adolescents (N=200)

Aggression	Mean	N	Std. deviation	Std. Error Mean	t-Value	Significance
Male	81.8600	100	7.70808	.77081	1.858	.066NS
Female	79.5600	100	9.30007	9.3001		

***: Significant at 0.01 level

*** : Significant at 0.01 level

** : Significant at 0.05 level

NS: Non-significant

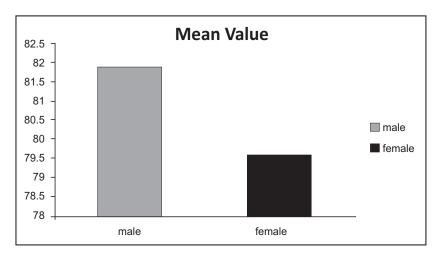


Fig. 1:Graph showing mean scores on aggression among male and female Adolescents

It is evident from table 2 that mean value of aggression of male adolescents is 81.8600 and that of female adolescents is 79.5600. This means aggression among male adolescents is more than that of female adolescents. The calculated t-value is 1.858 which is not significant at 0.05 level of significance. Therefore the null hypothesis that 'there will be no significant difference in aggression among male and female adolescents' is not rejected.

TABLE-3

Significance of difference in parenting among male and female adolescents (N=200)

Parenting	Mean	N	Std. deviation	Std.Error Mean	t- ValueZ	Significance
Male	7.0420	100	49.39247	4.93925	2.782	.006***
Female	7.2215	100	4.93925	4.95834	2.702	

*** : Significant at 0.01 level ** : Significant at 0.05 level

NS: Non-significant

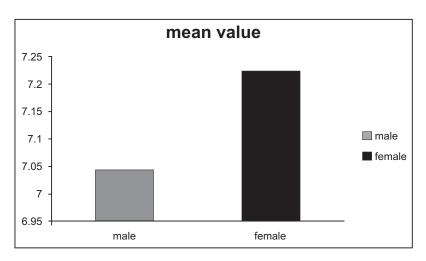


Fig.2: Graph showing mean scores on parenting among male and female adolescents

It is evident from table 3 that mean value of parenting of male adolescents is 7.0420 and that of female adolescents is 7.2215. This means scores on parenting among female adolescents is more than that of male adolescents. The calculated t-value is 2.782 which is significant at 0.01 level of significance. Therefore the null hypothesis that 'there will be no significant difference in parenting among male and female adolescents' is rejected.

TABLE -4

Significance of difference on different modes of parenting among male and female adolescents (N=200)

Modes of Parenting	Gender	Mean	N	Std. Deviation	Std. Error Mean	t-Value	Significance
Rejection vs.							
Acceptance(A)	Male	102.630	100	7.13457	.71346	.696	.488 NS
	Female	101.690	100	11.81054	1.18105		
Carelessness vs.							
Protection(B)	Male	90.2600	100	13.22427	1.32243	2.691	.008***
, ,	Female	95.2400	100	13.47135	1.34713		
Neglect vs.							
Indulgence(C)	Male	89.8900	100	14.41022	1.44102	1.252	.214 NS
• , ,	Female	92.1400	100	11.15367	1.11537		
Utopian expectation vs.							
Realism(D)	Male	116.0600	100	12.85413	1.28541	.887	.377 NS
	Female	114.3100	100	14.04013	1.40401		
Lenient standard vs.							
Moralism(E)	Male	89.8100	100	12.97838	1.29784	2.377	.019**
	Female	93.7500	100	11.53508	1.15351		
Freedom vs.							
Discipline(F)	Male	95.5500	100	17.40682	1.74068	1.312	.192 NS
	Female	98.5300	100	14.61040	1.46104		
Faulty role expectation							
vs. Realistic role	Male	78.5700	100	15.43134	1.54313	.571	.570 NS
expectation(G)	Female	79.7100	100	13.64654	1.36465		
Marital conflict vs.							
Marital adjustment(H)	Male	42.3900	100	8.39660	.83966	.650	.518 NS
	Female	43.0500	100	7.37779	.73778		

*** : Significant at 0.01 level ** : Significant at 0.05 level

ns: non-significant

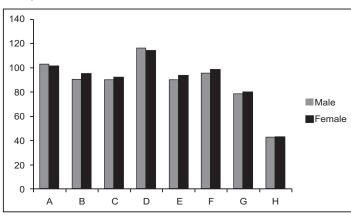


Fig. 3: Graph showing mean scores on different modes of parenting among male and female adolescents

It is evident from table 4 that mean value of A(rejection vs. acceptance mode of Parenting) of male adolescents is102.6300 and that of female adolescents is101.6900. This means that scores of male adolescents on A(rejection vs. acceptance mode of Parenting) is more than that of female adolescents. The calculated t-value is 0.696, which is not significant at 0.05 level of significance.

It is evident from table 4 that mean value of B (Carelessness vs. protection mode of Parenting) of male adolescents is 90.2600 and that of female adolescents is 95.2400. This means that scores of female adolescents on B (Carelessness vs. protection mode of Parenting) is more than that of male adolescents. The calculated t-value is 2.691 which is significant at 0.01 level of significance.

It is evident from table 4 that mean value of C (neglect vs. indulgence mode of Parenting) of male adolescents is 89.8900 and that of female adolescents is 92.1400. This means that scores of female adolescents on C (neglect vs. indulgence mode of Parenting) is more than that of male adolescents. The calculated t-value is 1.252 which is not significant at 0.05 level of significance.

It is evident from table 4 that mean value of D (utopian expectation vs. realism mode of parenting) of male adolescents is 116.0600 and that of male adolescents is 114.3100. This means that scores of male adolescents on D (utopian expectation vs. realism mode of parenting) is more than that of female adolescents. The calculated t-value is 0.887 which is not significant at 0.05 level of significance.

It is evident from table 4 that mean value of E (lenient standard vs. moralism mode of parenting) of male adolescents is 89.8100 and that of female adolescents is 93.7500. This means that scores of male adolescents on E (lenient standard vs. moralism mode of Parenting) is more than that of female adolescents. The calculated t-value is 2.377 which is significant at 0.05 level of significance but not significant at 0.01 level.

It is evident from table 4 that mean value of F (freedom vs. discipline mode of Parenting) of male adolescents is 95.5500 and that of female adolescents is 98.5300. This means that scores of female adolescents on F (freedom vs. discipline mode of Parenting) is more than that of male adolescents. The calculated t-value is 1.312 which is not significant at 0.05 level of significance.

It is evident from table 4 that mean value of G (faulty role expectation vs. realistic role expectation mode of parenting) of male adolescents is 78.5700 and that of female adolescents is 79.7100. This means that scores of female adolescents on G (faulty role expectation vs. realistic role expectation mode of Parenting) is more than that of male adolescents. The calculated t-value is 0.571 which is not significant at 0.05 level of significance.

It is evident from table 4 that mean value of H (marital conflict vs. marital adjustment mode of parenting) of male adolescents is 42.3900 and that of female adolescents 43.0500. This means that scores of female adolescents on (marital conflict vs. marital adjustment mode of Parenting) is more than that of male adolescents. The calculated t-value is 0.650 which is not significant at 0.05 level of significance.

Hence the hypothesis 'there will be no significant difference in different modes of parenting among male and female adolescents' is not rejected for the modes ' rejection vs. acceptance', 'neglect vs. indulgence', 'utopian expectation vs. realism', 'freedom vs. discipline', 'faulty role expectation vs. realistic role expectation', 'marital conflict vs. marital adjustment' and is rejected for the modes 'carelessness vs. protection 'and 'lenient standard vs. moralism'.

Table 5
Significance of coefficient of correlation between aggression and different modes of parenting (N=200)

Modes of Parenting	Mean	SD	r-value
Rejection vs. Acceptance(A)	102.1600	9.74367	0.069NS
Carelessness vs. Protection (B)	92.5700	13.54677	-0.044NS
Neglect vs. Indulgence (C)	91.0150	12.90221	0.026NS
Utopian expectation vs. Realism (D)	115.1850	13.45496	0.029NS
Lenient standard vs. Moralism (E)	91.7800	12.40528	-0.001NS
Freedom vs. Discipline (F)	97.0400	16.09858	0.088NS
Faulty role expectation vs.Realistic role expectation (G)	79.1400	14.54089	-0.116NS
Marital conflict vs. Marital adjustment (H)	42.7200	7.89069	-0.073NS

Fig.4 :Graph showing correlation between aggression and different modes of parenting among adolescents

Table 5 shows the value of coefficient of correlation between 'Aggression' and 'Rejection vs. Acceptance', mode of parenting among adolescents is 0.069 which is not significant at 0.05 level of significance.

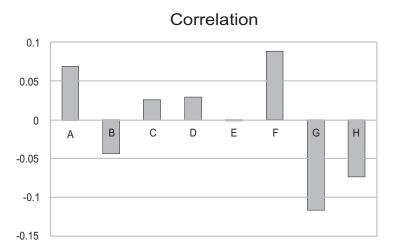


Table 5 shows the value of coefficient of correlation between 'Aggression' and 'Carelessness vs. protection', mode of parenting among adolescents is -0.044, which is not significant at 0.05 level of significance.

Table 5 shows the value of coefficient of correlation between 'Aggression' and 'Neglect vs. indulgence', mode of parenting among adolescents is 0.026, which is not significant at 0.05 level of significance.

Table 5 shows the value of coefficient of correlation between 'Aggression' and 'utopian expectation vs. realism', mode of parenting among adolescents is 0.029, which is not significant at 0.05 level of significance.

Table 5 shows the value of coefficient of correlation between 'Aggression' and 'lenient standard vs. moralism', mode of parenting among adolescents is - 0.001, which is not significant at 0.05 level of significance.

Table 5 shows the value of coefficient of correlation between 'Aggression' and 'freedom vs. discipline', mode of parenting among adolescents is 0.088, which is not significant at 0.05 level of significance.

Table 5 shows the value of coefficient of correlation between 'Aggression' and 'faulty role expectation vs.realistic role expectation', mode of parenting among adolescents is -0.116, which is not significant at 0.05 level of significance.

Table 5 shows the value of coefficient of correlation between 'Aggression' and 'marital conflict vs. marital adjustment', mode of parenting among adolescents is -0.073, which is not significant at 0.05 level of significance.

Hence the hypothesis that 'there will be no significant relationship between aggression and different modes of parenting among adolescents' is not rejected for all the modes of parenting.

CONCLUSIONS

No significant difference is found in the aggression among male and female adolescents.

Significant difference is found in parenting among male and female adolescents.

No significant difference is found on the different modes of parenting among male and female adolescents viz. 'rejection vs. acceptance', 'neglect vs. indulgence', 'utopian expectation vs. realism', 'freedom vs. discipline', 'faulty role expectation vs. realistic role expectation', 'marital conflict vs. marital adjustment' but significant difference is found in the modes 'carelessness vs. protection 'and 'lenient standard vs. moralism' of parenting among male and female adolescents.

No significant relationship is found between aggression and different modes of parenting among adolescents.

EDUCATIONAL IMPLICATIONS

The most outstanding characteristic of any research is that it must contribute something new to the development of the area concerned. Research work will not be considered complete in itself unless and until the research findings are put to some practical use. Parent child relationship is an important area of

study as due to changing social scenario, parents are not meeting the needs and expectations of their adolescent children. They are no more considered to be role model by their adolescent children as children are much more exposed to their moods of socialization and they learn the value system which is not their home value system but value system of society as a whole.

By doing this research my purpose was to tell the parents as to how they are perceived by their children irrespective of what they do for their children as life is 90 percent of how one perceives it. If the child does not perceive your intensions correctly, your relationship with the child is going to suffer. So this work can be a clear guideline for parents of adolescent children.

Secondly, aggression is rooting deeply into society and aggression in adolescents is not an exception. We come across many incidents of aggression (pertaining to the oneself or others) committed by adolescents. Daily newspapers also reveal increase in aggression among adolescents . Major causes of increase in aggression among youth is increasing materialism, over-competitiveness and over-expectations from society as a whole and adolescents in particular . This research shows that there is need to understand adolescents as they are sensitive and should be treated in a decent way by parents and by society at large.

Guidance and counseling can be provided to adolescents in order to reduce their aggression. Desirable changes should be made by parents to reduce their aggression. Parents and teachers should encourage the children and have affectionate attitude towards them. This research may provide guidelines to parents, teachers and counselors regarding treating aggression of adolescents.

Hence, the present study has multiple implications in the field of psychology and education. The findings of the study can become an important source of information and guidance for the parents and teachers to reduce aggression among the children in a proper way.

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EFFECT OF COMPUTER ASSISTED INSTRUCTIONS ON SCIENCE ACHIEVEMENT OF NINTH GRADE STUDENTS

MR. SUNIL KUMAR *

ABSTRACT

The well-known aim of science education is to teach the science concepts meaningfully and make students become aware of how these concepts can be used in their daily lives. In this process, learning the basic concepts during the primary and secondary education is very crucial in terms of learning the advanced concepts. Once traditional teaching methods are used in teaching science subjects, students understand subject at knowledge level and they usually memorize the science concepts without understanding the real meaning. As a result, they do not conceptualize the science concepts well as intended. Thus, all these factors influence student's attitudes, cognitive development and achievement in science and science education. study researcher studied effect of CAI on Science achievement of ninth grade students. The sample for the study comprised 115 class IX students. There were two sections of ninth class in Navjot Sr. Sec. School and Khalsa Public Sr. Sec. School situated in Amritsar. One section from each school was randomly assigned to experimental group and another section from each school constituted control group. The students of Experimental Group were taught through Computer Assisted Instructions. . Every day, 35 minutes' period was devoted for this purpose. This continued for 30 working days. The results of the study showed that Computer Assisted instructions were significantly superior to the Traditional Method in teaching and retention of Science.

INTRODUCTION

The well-known aim of science education is to teach the science concepts meaningfully and make students become aware of how these concepts can be used in their daily lives. In this process, learning the basic concepts during the primary and secondary education is very crucial in terms of learning the advanced concepts. It was argued that if new concepts were compatible with previous concepts, then meaningful learning would occur (Ausubel, 1968). It is important to know what prior knowledge students bring to a learning environment in order to help them construct new knowledge (Tsai, 2000).

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The concepts are not materials, events or creatures but they are units of thought assembled into certain groups. They exist in ideas and only the examples of the concepts are found in the real world. Difficult and hardly understandable concepts may be differently structured in students_mind. It is reported that students may have developed ideas about certain events and concepts before any formal instruction in science education (Amir & Tamir, 1994). The students conceptions, which may not be defined as scientific are named as "Misconception", "Alternative Conception", "Naive

Theories", and "children science" in the literature (Barker & Carr, 1989; Simpson & Arnold, 1982; Treagust, 1988). Once traditional teaching methods are used in teaching science subjects, students understand subject at knowledge level and they usually memorize the science concepts without understanding the real meaning. As a result, they do not conceptualize the science concepts well as intended. Thus, all these factors influence student's attitudes, cognitive development and achievement in science and science education. It is obvious that alternative teaching approaches needed to teach this sort of difficult concepts in science education. Today's information and communication technologies can be applied to science education. Among these technologies, the use of computers is the most popular and well known in educational settings.

Computer-assisted instruction (CAI) plays an important role in contemporary teaching and learning of science concepts (Chang, 2001). Besides, it is evident that for effective use of computers in science classroom, CAI Ms need to be developed. Computers can be used as a supplementary tool in order to reach to educational goals (Bayraktar, 2000).

Computer-assisted instruction (CAI): "Computer-assisted instruction" (CAI) refers to instruction or remediation presented on a computer. Computer-Assisted Instruction (CAI) is among the range of strategies being used to improve student achievement in school subjects, including Geometry.

CALis

Interactive learning Illustrative learning through animation, sound, and demonstration Individualized learning Learning at student's own pace Immediate feedback Cooperative learning CAI provides differentiated lessons to challenge students who are at risk, average, or gifted. These programs tutor and drill students, diagnose problems, keep records of student progress, and present material in print and other manifestations. It is believed that they reflect what good teachers do in the classroom.

Based on the degree of interaction between student and computer, researchers have identified three levels of CAI:

Drill and practice: The computer provides the student with exercises that reinforce the learning of specific skills taught in the classroom, and supplies immediate feedback on the correctness of the response

Tutorial: Tutorial CAI provides some information or clarifies certain concepts in addition to providing the student with practice exercises.

Dialogue: With this type of computer use, the student takes an active role in interacting with the computer, giving instructions in the form of a computer language so as to structure the student's own curriculum.

REVIEW OF LITERATURE

Many science teachers, researchers and other educators have recommended using CAIM in science classrooms. Some researchers argued that student achievement increases with the use of computers in science education (Chang, 2001; Coye & Stonebraker, 1994; Ferguson & Chapmen, 1993; Lee, 2001; Powell, Aeby, & Carpenter-Aebyc, 2003; Rowe & Gregor, 1999; Tsai & Chou, 2002). In addition, it is reported that student abilities and skills in scientific investigations are affected positively by CAI (Bayraktar, 2000; Shute & Bonar, 1986). Moreover, it is also stated that the use of computers makes students feel confident and helps them to discover interactions among the components of a complex system (Ramjus, 1990).

OBJECTIVES

To compare the adjusted mean scores of Science achievement of experimental and control group students by considering Pre-Science achievement and intelligence as covariate.

To compare the adjusted mean scores of retention in Science of experimental and control group students by considering Science achievement and intelligence as covariate.

HYPOTHESES

There is no significant difference in the adjusted mean scores of Science achievement of experimental and control group students by considering Pre-Science achievement and intelligence as covariate. There is no significant difference in the adjusted mean scores of retention in Science of experimental and control group students by considering Science achievement and intelligence as covariate.

SAMPLE

The sample for the study comprised 115 class IX students. There were two sections of ninth class in Navjot Sr. Sec. School and Khalsa Public Sr. Sec. School situated in Amritsar. One section from each school was randomly assigned to experimental group and another section from each school constituted control group. Navjot Sr. Sec. School was affiliated to PSEB whereas Khalsa Public Sr. Sec. School was affiliated to CBSE. New Delhi. The Medium of Instruction was Punjabi and English.

DESIGN

The study was designed on the lines of Non-equivalent Control Group Design. As per Campbell and Stanley (1963), the lay out of this design is given as under:

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TOOLS

Raven's Standard Progressive Matrices Test developed by Raven was selected for assessing Intelligence of students of the study. Science Achievement Test was prepared by the researcher himself to assess student's achievement in geometrical concepts.

METHOD

One section of ninth class of each of the two schools constituted the experimental group whereas another section of ninth class of these schools formed control group. The permission was taken from the Principals of these schools. The students of Experimental Group were taught through Computer Assisted Instructions. The rapport was established with the students. The

students were explained the objectives of this study. To begin with, the Science Achievement Test and Raven's Standard Progressive Matrices were administered. After this, they were taught through the CAI. Every day, 35 minutes' period was devoted for this purpose. This continued for 30 working days. At the end, the Achievement test was administered again on the students in the same way as done at the start of the experiment. On the other hand, the students of the Control Group continued with their Routine Activities and they were taught through Traditional Method. The same tools were administered on the Control Group students in the same way as done in the Experimental Group. To check the retention level, the Achievement Test was re administered on both the groups after a span of two months.

ANALYSES

The objective-wise data analysis was given below:

The first objective was "to compare the adjusted mean scores of Science achievement of experimental and control group students by considering Pre-Science achievement and intelligence as covariate". The data related to this objective was analyzed with the help of Analysis of Covariance (ANCOVA).

The results are given in the Table 1

Table 1

Summary of ANCOVA of Science achievement by considering Pre-Science achievement and intelligence as Covariate

Source of Variance	SS _{yx}	df	MSS _{y.x}	F _{y.x}
CAI	161.908	1	157.29	
Error	276.403	111	2.34	64.043**
Total		114		

^{**}Significant at 0.01 levels

From the Table 1, it can be seen that adjusted F-Value is 64.04, which is significant at 0.01 levels with df=1/111. It indicates that the adjusted mean scores of Science achievement of group taught by CAI and group taught by

Traditional Method differs significantly when Pre-Science achievement and intelligence were considered as covariate. Thus, the first null hypothesis, namely, "There is no significant difference in the adjusted mean scores of Science achievement of experimental and control group students by considering Pre- Science achievement and intelligence as covariate", is rejected. Further, the adjusted mean score of Science achievement of Experimental Method Group was 16.43, which is significantly higher than that of Traditional Method Group whose adjusted mean score of Science achievement was 13.25. It reflects that CAI was found to be significantly superior to the Traditional Method in teaching Science when both groups were matched with respect to Pre- Science achievement and intelligence. It may, therefore, be concluded that the CAI was found to be superior to Traditional Method in teaching Science.

The second objective was "to compare the adjusted mean scores of retention in Science of experimental and control group students by considering Science achievement and intelligence as covariate". The data related to this objective was analyzed with the help of Analysis of Covariance (ANCOVA).

The results are given in the Table 2

<u>Table 2</u> Summary of ANCOVA of Retention by considering Science achievement and intelligence as Covariate

Source of Variance	SS _{yx}	df	MSS _{y.x}	F _{y.x}
CAI	18.76	1	15.576	
Error	148.348	111	1.578	11.88**
Total		114		

^{**}Significant at 0.01 levels

From the Table 2, it can be seen that adjusted F-Value is 11.88, which is significant at 0.01 levels with df=1/111. It indicates that the adjusted mean scores of retention in Science group taught by CAI and group taught by Traditional Method differs significantly when Science achievement (post) and intelligence were considered as covariate. Thus, the second null hypothesis, namely, "There is no significant difference in the adjusted mean scores of retention in Science of experimental and control group students by

considering Science achievement and intelligence as covariate"., is rejected. Further, the adjusted mean score of retention in Science of Experimental Method Group was 14.64, which is significantly higher than that of Traditional Method Group whose adjusted mean score of retention in Science was 12.13. It reflects that CAI was found to be significantly superior to the Traditional Method in retention of Science when both groups were matched with respect to Science achievement and intelligence. It may, therefore, be concluded that the CAI was found to be superior to Traditional Method in retention of Science.

RESULTS

Computer Assisted instructions were found to be significantly superior to the Traditional Method in teaching Science when both groups were matched with respect to Pre-Science achievement and intelligence.

Computer Assisted instructions were found to be significantly superior to the Traditional Method in retention of Science when both groups were matched with respect to Science achievement and intelligence.

DISCUSSION

The results of the study showed that Computer Assisted instructions were significantly superior to the Traditional Method in teaching and retention of Science. The results of this study regarding the effectiveness of Computer Assisted instructions in Science are consistent with findings of previous research Studies of Chang, 2001; Cove & Stonebraker, 1994; Ferguson & Chapmen, 1993; Lee, 2001; Powell, Aeby, & Carpenter-Aebyc, 2003; Rowe & Gregor, 1999; Tjaden & Martin, 1995; Tsai & Chou, 2002. The improved results on the achievement test in the experimental group may be explained by the instructional method used with this group. Individualistic, interactive, illustrative and Cooperative learning in the experimental group enhanced critical thinking and higher level processing skills of the students. At the same time, students in the control group learned individually without the use of these strategies. The lower achievement scores of the control group may be explained by this factor. Students in the experimental group, while working with CAI, were expected to use a discovery approach to accomplish the goals of the activity. Discovery learning encourages and increases participation, enthusiasm, and inquiry, and improves the students' ability to learn new content. Students learn quickly and deeply as they use cognitive and critical

thinking skills. They master learning skills and gain confidence in their own abilities. These factors explain higher achievement test scores in the experimental group.

EDUCATIONAL IMPLICATIONS

Computer Assisted Instructions were found to be significantly superior to the Traditional Method in teaching and retention of Science. Thus, Computer Assisted Instructions are an effective and efficient way to teach Science in the specified period of time given in the curriculum. With carefully developed lesson plans that consider effective use of Computer Assisted Instructions, this approach promises an interesting way for Science teaching. In order to use Computer Assisted Instructions in the Science classroom teachers need to be trained on using the same in Science lessons. Science teachers may be given a chance to experience Computer Assisted Instructions in teacher preparation courses and in service teacher training programs. Teachers should have enough experiences and knowledge about the use of Computer Assisted Instructions in Science classes. It is also suggested that Computer Assisted Instructions in Science should be included in the teacher education curriculum of Science teachers so that they can make use of them while teaching Science to their students.

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A STUDY OF SOCIAL MATURITY AMONG BOYS AND GIRLS OF 10+2 STUDENTS

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INTRODUCTION

Education is a life long process. It is comprehensive term. The modern aim of education is the wholesome, balanced or harmonious development of the personality. It means moral, social, spiritual, intellectual, emotional and physical development. All these aspects are equally important for personality development. Personality does not exist in vacuum but to large extend depends upon social environment. Man has attained refinement by the process of education. It contributes to the growth and development of society. Education develops the individual like a flower which distributes its fragrance all over. Education provides mature person to this society. Mature person means a person who is adjusted to environment easily or a person who makes adjustment with environment easily.

Maturity implies a satisfactory fulfillment of one's potentialities. This means developing and issuing one's physical and mental abilities to the fullest extent. Maturity requires adjusting to and participating creatively in one's environment.

Today's citizen must be literate in the political, social, economic, scientific and artistic field. If he is taking an active and cooperative part in his social group then he is mature. If for some reasons he is not ready to act, feel and think in way appropriate according to his stage of physical and mental development, than he is an immature person.

DEFINITIONS OF MATURITY

According to H.S. Eysenck (1972), "Maturation is an autonomous process of somatic physiological and mental differentiation and integration spread over developmental stages and phases which are correlated to one another in a course of time, as the result of this process the individual's growth is completed

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and consolidated emotionally, mentally and spiritually as well as socially and he can thus adapt life."

According to Webster's Dictionary, "Maturity is the state or quality of being mature specially.

Social development is one of the educationally significant and important aspect of human growth. Social development means acquisition of the ability to behave in accordance with social norms, customs and expectations. Social development means social maturity. It means how much a person is socially mature. What are his relations with other human beings? How he deals with others. How he takes interest in others. How he makes his friends, so maturity has great impact on child's personality.

SOCIAL MATURITY

The world social maturity is also derived from two words.

Social + Maturity

Living in communities to adjust to the social world around him

DEFINITIONS OF SOCIAL MATURITY

According to Doll, "Social maturity has various aspects of social abilities as self-sufficient, occupational activities, communication, self- direction and social participation."

According to comprehensive dictionary of Psychological and Psychoanalytical terms, "Social maturity is the degree to which an individual has acquired the social and socialized behaviors that are usual and expected for his age or for his status or the social behavior characteristic of the supposedly typical adults, it is by no means clear just what behavior should be included and the term have a vague reference."

Thus, Social Maturity means attaining maturity in social relationships that is to establish good relations with family, neighbors, friends, playmates, classfellows, teachers and other members of the society for making and keeping friends. A person having a quality of friendliness and adjustable nature is considered a socially mature person.

JUSTIFICATION OF THE PROBLEM

The present study will help to have knowledge of social maturity of 10+2

students. The result will help to understand the need of controlling unwanted immaturity so as to ensure proper social development.

OBJECTIVES

The present problem endeavors for the realization of the following objectives :

To study the social maturity level of 10+2 class students.

To study the social maturity level among boys and girls of 10+2 class students.

To study difference of social maturity among private school girls and boys.

To study difference of social maturity among government school girls and boys.

To study difference of social maturity among private school girls and government school girls.

To study difference of social maturity among private school boys and government school boys.

To study the difference of social maturity level among private school students and government school students.

HYPOTHESES

There is no significant difference in the social maturity level among 10+2 class students.

There is no significant difference in the social maturity level among boys and girls of 10+2 class students.

There is no significant difference in the social maturity level among private school girls and boys.

There is no significant difference in the social maturity level among government school girls and boys.

There is no significant difference in the social maturity level among private school girls and government school girls.

There is no significant difference in the social maturity level among private school boys and government school boys.

There is no significant difference in the social maturity level among private school students and government school students.

SAMPLE

A random sample of 200 senior sec. students of government school (50 boys, 50 girls) and private schools (50 boys, 50 girls) of Dist. Ludhiana of Punjab was drawn giving due weightage to gender and type of institute.

DESIGN OF THE STUDY.

Descriptive method is used to organized, to analyze, to interpret the data concerning problem.

TOOLS .

A standardized test "Comprehensive scale of social maturity prepared by Roma Pal (1986) was used to assess the social maturity level among 10+2 students

STATISTICAL TECHNIQUE

After collecting the data statistical techniques - Mean, standard deviation, t-test and graphic presentation were used.

ANALYSIS AND INTERPRETATION

TABLE 1

Comparison of gender wise mean, standard deviation and t-value of social maturity of private school girls and boys

School = Pvt.	Sex	N	Mean	Std. Deviation	t-value
Social Maturity	Girls	50	151.92	8.780	4.462
	Boys	50	141.50	13.986	

^{*}Significant at 0.05 levels.

From Table 1, it is evident that Thus t-value is 4.462, which is significant at 0.05 levels. It indicates that the social maturity among girls and boys students of private school differ significantly.

TABLE 2

Comparison of gender wise mean, standard deviation and t-value of social maturity of government school girls and boys

School = Govt	Sex	N	Mean	Std. Deviation	t-value
Social Maturity	Girls	50	151.28	10.465	-2.482
	Boys	50	157.08	12.788	

^{*}Significant at 0.05 levels.

Table 2 shows that the t-value is -2.482 which is significant at 0.05 levels. It indicates that the social maturity among girls and boys of government school differ significantly.

TABLE 3

Comparison of faculty wise mean, standard deviation t-value of social maturity of girls of private and government school

Sex = Girls	School	N	Mean	Std. Deviation	t-value
Social Maturity	Govt.	50	151.28	10.465	331
	Pvt.	50	151.92	8.780	

ns = non significant at 0.05 levels.

From table 3, it is evident that the t-value is -0.331 which is not significant at 0.05 levels. It indicates that the social-maturity among girls of private and government school does not differ significantly.

TABLE 4

Comparison of faculty wise mean, standard deviation, and t-value of social maturity of boys of private and government school

Sex = Boys	School	N	Mean	Std. Deviation	t-value
Social Maturity	Govt.	50	157.08	12.788	5.813
	Pvt.	50	141.50	13.986	

^{*}Significant at 0.05 levels.

From table 4, it is evident that the t-value is 5.813 which is significant at 0.05 levels. It indicates that the social maturity among boys of private school and government school differ significantly.

TABLE 5 Comparison of gender wise mean, standard deviation, and t-value of social maturity of boys and girls.

	Sex	N	Mean	Std. Deviation	t-value
Social Maturity	Girls	100	151.60	9.616	1.269
	Boys	100	149.29	15.461	

ns = non significant at 0.05 levels.

Table 5 shows that the t-value is 1.269, which is not significant at 0.05 levels. It indicates that the social maturity level among girls and boys of private and government school students do not differ significantly.

TABLE 6
Comparison of faculty wise mean, standard deviation, and t-value of social maturity of private and government school students.

	School	N	Mean	Std. Deviation	t-value
Social Maturity	Govt.	100	154.18	11.985	4.270
	Pvt.	100	146.71	12.743	

^{*} Significant at 0.05 levels.

Table 6 shows that the t-value is 4.270, which is significant at 0.05 levels. It indicates that the social maturity level among private and government school students differ significantly.

TABLE 7
Showing the social maturity of 10+2 students

Showing the Social Maturity level of 10+2 Students						
N	N Mean Std. Deviation Range of Score Maturity Level					
200 150.445 12.895 149+ Highly Socially Matured						

Table 7 shows the mean of social maturity of 10+2 is 150.445 which fall in the category of highly socially matured persons.

FINDINGS OF THE STUDY

- All 10+2 students are socially matured whether they belong to private school or government school.
- It is found that there is no significant difference of social maturity level among girls and boys of 10+2 class students.
- It is observed that there is significant difference of social maturity level among private school girls and boys.
- The result shows that the social maturity level among government school girls and boys differ significantly.
- It is found that social maturity level among private and government school girls do not differ significantly.
- The result shows that social maturity level among private and government school boys differ significantly.
- It is found that social maturity level among private school students and government school students differ significantly.

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CORRELATES OF PUPILS' MATHEMATICAL CREATIVITY

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ABSTRACT

The aim of the present investigation was to study the relationship of mathematical creativity with mathematics anxiety, attitude towards mathematics, cognitive style, and meta-cognition separately. The survey method was used. The sample comprised 658 secondary school students selected from fifteen different schools of Jalandhar, Kapurthala and Shaheed Bhagat Singh Nagar Districts of Punjab State. Standardized tools were used to assess the variables, namely, mathematical creativity, mathematics anxiety, attitude towards mathematics, cognitive style, and metacognition. The data were analyzed with the help partial correlation technique. Mathematical creativity was found to be positively and significantly related with attitude towards mathematics, cognitive style, and meta-cognition.

INTRODUCTION

The identification and nurturing of mathematical talents and of creative thinkers became basic to the progress of any nation (Johny, 2008). A review of the literature about mathematical creativity reveals various definitions, and interpretations to this question. Sharma (2009) analyzed various definitions of mathematical creativity and operationally defined mathematical creativity as an ability to overcome fixation as well as conceptualizing, proposing, and even testing unusual solutions of problem(s) of mathematics.

Relationship between attitude towards mathematics and mathematical creativity was studied by Tuli (1981, 1985a, 1985b) and Singh (1988). Mathematical creativity was not significantly correlated with attitude towards mathematics (Tuli, 1981, 1985a and 1985b). Attitude towards mathematics was not significantly related to verbal mathematical creativity (Singh, 1988). Coefficients of correlation between non-verbal, and total mathematical creativity were found to be significantly related to attitude towards mathematics (Singh, 1988).

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Regarding the relationship of mathematics anxiety with mathematical creativity, Haylock (1987) found mathematical creativity was significantly inversely related to as well as mathematics anxiety. However, Fetterly (2010) neither confirmed nor denied the significant relationship between mathematical creativity and mathematics anxiety.

The relationship between mathematics achievement with various cognitive style dimensions and meta-cognition attracted the attention of several researchers worldwide. However, no study has been found in which relationship between mathematical creativity with cognitive style dimensions and meta-cognition has been explored.

While the research is inconclusive, mathematics anxiety, attitude towards mathematics, cognitive style, and meta-cognition may emerge as correlates of mathematical creativity. Moreover, mathematical creativity ensures the growth of the field of mathematics as a whole (Sriraman, 2004), so, it would be worth to study the relationship that may emerge between mathematical creativity and variables, like, mathematics anxiety, attitude towards mathematics, cognitive style, and meta-cognition. Keeping this in mind, it was thought to study mathematics anxiety, attitude towards mathematics, cognitive style, and meta-cognition in relation with mathematical creativity of the students.

OBJECTIVE

The specific objective of the study was:

To study the relationship of mathematical creativity with mathematics anxiety, attitude towards mathematics, cognitive style, and metacognition separately.

HYPOTHESES

In order to realize the objective of the study outlined above, the following statistical null hypotheses were formulated:

There is no significant correlation between mathematical creativity and mathematics anxiety of secondary school students by partialling out the influence of attitude towards mathematics, cognitive style, and meta-cognition.

There is no significant correlation between mathematical creativity and attitude towards mathematics of secondary school students by partialling out the influence of mathematics anxiety, cognitive style, and meta-cognition.

There is no significant correlation between mathematical creativity and cognitive style of secondary school students by partialling out the influence of mathematics anxiety, attitude towards mathematics, and meta-cognition.

There is no significant correlation between mathematical creativity and meta-cognition of secondary school students by partialling out the influence of mathematics anxiety, attitude towards mathematics, and cognitive style.

SAMPLE

In this study, 658 secondary school students were selected from fifteen different schools of Jalandhar, Kapurthala and Shaheed Bhagat Singh Nagar Districts of Punjab State. The participants varied by gender (male = 334 and female = 324) and grade (class VII = 280, Class IX = 172 and class X = 206).

INSTRUMENTS

The following instruments were used for collection of data:

Sharma and Sansanwal Mathematical Creativity Test (S²MCT). The mathematical creativity of students was assessed with the help of S² MCT developed in 2012.

Mathematics Anxiety Scale (MAS). This MAS developed by Sharma and Sansanwal (2011) was used as a measure of mathematics anxiety.

Attitude towards Mathematics Scale (ATMS). The ATMS developed by Sharma (2009) was used as a measure of students' attitude towards mathematics

Inventory of Metacognitive Self Regulation (IMSR). IMSR developed by Howard, McGee, Shia, & Hong (2000) was used a measure of students' meta-cognition score.

PROCEDURE

The instruments were administered and scored as per the directions of the respective manuals.

DATA ANALYSIS AND RESULTS

The objective of the present investigation was to study the relationship of mathematical creativity with mathematics anxiety, attitude towards mathematics, cognitive style, and metacognition separately. The data in respect of this objective were analysed by using partial correlation technique. The partial correlations between predictor and criterion variables are given in the Table 1

TABLE 1
Inter-correlations for mathematical creativity and the criterion variables

Variable	1	2	3	4
Mathematical creativity Predictor variable Mathematics a nxiety Attitude towards mathematics Cognitive style Metacognition	05	.14**	.09*	.18**

Ho1: Mathematical Creativity and Mathematics Anxiety

From Table 1, it can be seen that the partial correlation between mathematical creativity and mathematics anxiety while partialling out the influence of attitude towards mathematics, cognitive style, and meta-cognition was -.05, which is not significant at 0.05 level. In this context, the null hypothesis, namely, "There is no significant correlation between mathematical creativity and mathematics anxiety of secondary school students by partialling out the influence of attitude towards mathematics, cognitive style, and meta-cognition", is not rejected. It may, therefore, be said that mathematical creativity was not found to be significantly related with mathematics anxiety when effect of attitude towards mathematics, cognitive style, and meta-cognition was held constant.

Mathematical Creativity and Attitude towards Mathematics:

From Table 1, it can be seen that the partial correlation between mathematical creativity and attitude towards mathematics while partialling out the influence of mathematics anxiety, cognitive style, and meta-cognition was -.14, which is significant at 0.01 level. In this context, the null hypothesis, namely, "There is no significant correlation between mathematical creativity and attitude towards mathematics of secondary school students by partialling out the influence of mathematics anxiety, cognitive style, and meta-cognition", is rejected. It may, therefore, be said that mathematical creativity was found to be positively and

significantly related with attitude towards mathematics when effect of mathematics anxiety, cognitive style, and meta-cognition was held constant.

Mathematical Creativity and Cognitive Style:

From Table 1, it can be seen that the partial correlation between mathematical creativity and cognitive style while partialling out the influence of mathematics anxiety, attitude towards mathematics, and meta-cognition was -.09, which is significant at 0.05 level. In this context, the null hypothesis, namely, "There is no significant correlation between mathematical creativity and cognitive style of secondary school students by partialling out the influence of mathematics anxiety, attitude towards mathematics, and meta-cognition", is rejected. It may, therefore, be said that mathematical creativity was found to be positively and significantly related with cognitive style when effect of mathematics anxiety, attitude towards mathematics, and meta-cognition was held constant.

Mathematical Creativity and Meta-cognition:

From Table 1, it can be seen that the partial correlation between mathematical creativity and meta-cognition while partialling out the influence of mathematics anxiety, attitude towards mathematics, and cognitive style was 18, which is significant at 0.01 level. In this context, the null hypothesis, namely, "There is no significant correlation between mathematical creativity and meta-cognition of secondary school students by partialling out the influence of mathematics anxiety, attitude towards mathematics, and cognitive style", is rejected. It may, therefore, be said that mathematical creativity was found to be positively and significantly related with meta-cognition when effect of mathematics anxiety, attitude towards mathematics, and cognitive style was held constant.

DISCUSSION

The first finding was that mathematical creativity was not found to be significantly related with mathematics anxiety when effect of attitude towards mathematics, cognitive style, and meta-cognition was held constant. However, on further probe it was found that the bivariate relation between mathematical creativity and mathematics anxiety was -.17 (N= 658). So, the finding, like, Fatterly (2010) neither confirms nor denies the significant relationship between mathematical creativity and mathematics anxiety.

The second finding was that mathematical creativity was found to be positively and significantly related with attitude towards mathematics when effect of mathematics anxiety, cognitive style, and meta-cognition was held constant.

The finding is in contrast with Tuli (1981, 1985a, 1985b). The reason of the present finding may be that by having positive attitude towards mathematics, the students may have been receptive to the mathematical creativity problems. Their positive attitude may have removed the mental barriers of mathematical creativity. However, the contrasting nature of the findings suggests that further studies are needed to be certain about the relationship between mathematical creativity and attitude towards mathematics.

The third finding was that mathematical creativity was found to be positively and significantly related with cognitive style when effect of mathematics anxiety, attitude towards mathematics, and meta-cognition was held constant. Cognitive Style describes the way an individual thinks, perceives and remembers information, or his preferred approach to using such information to solve problems. In the present study, GEFT was used that assesses the field independent-dependent dimensions of cognitive style. Field-independent (FI) subjects are those with a greater capacity to break perceptual information down into its component parts and to focus attention on those parts which are relevant, without being distracted by the context. In contrast, field-dependent subjects are those with a greater difficulty to disembeded parts from their context (Tinajero & Paramo, 1998). The achievement in mathematics has been significantly related with Cognitive Style (Buriel, 1978; Vaidya and Chansky, 1980; Roberge and Flexer, 1983; Frank, 1986; Roszkowski and Snelbecker, 1987; Shrivastava, 1992; Tinajero, and Páramo, 1998; Peklaj, 2003; Saha, 2007; and Kenth, 2009). Moreover, the finding is in line with Miller (2007) who found that the more field-independent an individual, the higher the creativity score.

The last finding of the study was that mathematical creativity was found to be positively and significantly related with metacognition when effect of mathematics anxiety, attitude towards mathematics, and cognitive style was held constant. The finding is unique in the sense that no previous study was found in which relation between mathematical creativity and meta-cognition was studied.

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INSTRUCTION FOR AUTHORS

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