

**A Study of Creativity and Self-confidence
of D.El.Ed. Pupil-Teachers**

THESIS

Submitted for the Award of the Degree of

Doctor of Philosophy

in

EDUCATION

Submitted by

ANKITA SHUKLA

Under the Supervision of

PROF. HARISHANKAR SINGH



DEPARTMENT OF EDUCATION

(School of Education)

BABASAHEB BHIMRAO AMBEDKAR UNIVERSITY

(A Central University)

Lucknow - 226025 (U.P.)

Enrolment No. 920/17

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DECLARATION

I, hereby declare that the entire thesis entitled “**A Study of Creativity and Self-confidence of D.El.Ed. Pupil-Teachers**” submitted to the Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow for the award of Degree of Doctor of Philosophy (Ph.D.) in Education. It is my original work and it has not previously been produced for the award of any degree, diploma, and fellowship or similar other titles anywhere, this research study is carried out under the supervision of **Prof. Harishankar Singh**, Department of Education and School of Education (SoE), Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow, Uttar Pradesh, India. I also declare that the thesis submitted by me is essentially free from all kinds of plagiarism.

Date: 27/09/2021

Place: Lucknow

Researcher

अंकिता शुक्ला

ANKITA SHUKLA



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CERTIFICATE

This is to certify that the thesis titled "A Study of Creativity and Self-confidence of D.El.Ed. Pupil-Teachers" submitted by Ankita Shukla is an original research work and has not been previously submitted in part or full for the award of any other degree or diploma to this or any other university.

The thesis submitted to Babasaheb Bhimrao Ambedkar University (A Central University), Lucknow satisfies all the requirement as stipulated in the Doctor of Philosophy (Ph.D.) regulations-1999 as amended in 2008/2010/2013 and it is fit for submission and evaluation for the award of the degree of Doctor of Philosophy of the University.

Date: 27.09.2021

Place: Lucknow

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(Ankita Shukla)

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CHAPTER- I

INTRODUCTION

CHAPTER- I

INTRODUCTION

"All education proceeds by the participation of the individual in the social consciousness of the race." (**John Dewey, 1897**).

Education is the most potent weapon to bring about change in society. It has the power to revolutionize any society. No country can achieve sustainable socio-economic development without a proper education system. Education not only enriches people's understanding of the world but also improves the quality of their lives and leads to social benefits. As John Locke stated, plants are developed by cultivation and men by education. Thus every country must have a concrete and broad vision of education. The quality of education lies on the teacher's shoulders, who are the foundation stone to the educational process. According to NCTE (1998), the most crucial element in any educational program is the teacher. He is the one who is primarily responsible for the implementation of the educational process at any stage. So, it is a challenge for policymakers to make adequate plans for enriching teacher education in the country. Teacher education plays a vital role in developing the skills of our prospective teachers (Rani. A, 2017).The American Commission on Teacher Education observed that a nation's quality is determined by the quality of its citizens. The quality of its citizens is decided by the quality of their education, which ultimately relies on their teacher's quality (American council report, 1968).

Teaching and learning have been a well-established tradition in our country and this tradition has continued to retain its strength even in the adverse circumstances. After independence, tremendous efforts were directed to nurture and transform the teacher education system in our country. Initially, the teacher education model was adopted from Britain, but after independence, continuous efforts were directed towards modifying it according to the need of our tradition and culture. With the growth and expansion of school education, the teacher training institutes came under tremendous pressure to build quality teacher.

In India, there are various teacher training programmes like N.T.T., B.T.C., D.El.Ed., B.El.Ed., B.Ed. and M.Ed..These programmes are directed towards training prospective teachers to teach at various stages of the education system, like in pre-primary, primary, secondary and senior secondary schools and at colleges and universities. Skill and confidence are the demand of the modern era, and the field of education is no exception. With the change in the education system, expansion of school education, and universal elementary education, the demand for skilled and confident teachers has increased enormously. Thus, the prime responsibility of teacher training institutes is to train their pupil-teachers effectively.

Teacher training is imperative for learning in the classroom. A teacher should be creative and confident as they will play a crucial role in the development of the creative potential of school students in a positive way. In 1977 Government of India constituted a review committee to review the whole curriculum and find suitable suggestions for obligatory modifications. The Committee suggested that creative education is the need of the era. The Committee gave the following recommendation, "If the purpose of education is to nurture the child's capabilities to the full and to give our people not only a useful occupation but a full and abundant life, then the creative urge in the children must in every possible way be actively stimulated and cultivated in as many directions as possible". Similarly, as suggested by NCERT, the prime objective of primary education should be that children should be able to express themselves freely during Creative activities and should be able to acquire habits of self-learning. (NCERT, 1975).

1.1 CREATIVITY

Creatures on earth exist with all kinds of variations and abilities. Some come with fewer advantages, while others lie on the positive extreme of variation and may be seen as privileged and favoured creation. A creative individual is included in such category. Creative individuals not only think differently but also feel differently. Creativity present in an individual may result in something valuable. Therefore, it needs to be nurtured in favourable conditions. In this way, the environment's role can never be underestimated in terms of training, education, and opportunities. It makes all of us in the capacity of

teacher, parent and well-wisher of creative children to acquaint ourselves with the meaning nature and process of creativity to promote and nurture children's talent.

Creativity, in a literal sense, stand for the ability to create or produce something. It should not be confused with talent, skill, or intelligence. It is not doing something better than others; instead, it is about thinking, exploring, discovering and imaging. It is a way of seeing and responding to things differently. Creativity is not confined to any specific age, gender, creed, colour and religion. It resides in every human in some quantity.

1.1.1 Product Definitions

Some of the major definitions of creativity are:

According to **Stein (1960)**, "Creation is an activity which brings something new and which has utility. Thus creativity reshapes the horizons of human understanding".

Inrelle & Drevhal (1956), Defines creativity as an attribute of creating new things.

According to **Morgan (1960)**, "Individuals involvement in the unique development of something is known as creativity".

Guilford states, 'Creativity is sometimes referred to as creative productivity and sometimes as creative potential'.

According to **Drevhal (1956)**, "Creativity is a person's ability to create compositional goods based on concepts that are fundamentally unique or novel and previously unknown to the creator. Among people and includes chiefly the factors of seeing problems, fluency, flexibility, originality persistency".

Barron (1969) looks at Creativity as "Energy being put to work constructively".

According to **Berdyayev (1969)**, "The creative act is a free and independent force, immanently inherent only in a person, a personality. Only something arising in the original substance and possessing the power to increase power in the world can be true creativity. Creativity is an original act of personalities in the world".

Wallach & Kogan (1965) suggest a similar notion according to him. 'Greater creativity should be indicated by the ability to produce more associations that are unique'.

According to **Freud**, "Sublimation of repressed unconscious wishes and prenatal and libidinal urges determine creativity".

Passi (1972) stated, 'Creativity is a multidimensional, verbal and non-Verbal attribute that is differentially distributed. The meaning of creative thinking is that the predictions or inferences drawn by the individual are original, ingenious and unusual'.

The creative thinker explores new areas and makes new observations, new predictions and new inferences". (**Gray, 1954**).

1.1.2 Process Definitions

Osborn (1948) is known as the pioneer of creative education and was the father of the 'brainstorming method'.

Osborn divides the creative process into the five following phases.

1. Orientation
2. Preparation
3. Analysis and Ideation
4. Incubation
5. Evaluation

Simpson (1922) defines Creativity as the "initiative which one manifests by his power to break away from the usual sequence of thought into an altogether different pattern of thought".

1.1.3 Experience Definitions

As mentioned earlier, **Maslow** was the proponent of subjective experience in creativity. He emphasized the importance of the flash of insight-the transcendent sensation itself-without any

reference to whether it will ever result in anything tangible. Thus, the important issue is not the 'inspire product', but the 'inspire moment'.

According to **Vinake (1952)**, creativity is 'an integrated harmony between the external world of reality and individual's internalized needs'.

The path of creative insight is often thin and dim. It is not a happening in which some abstraction bursts full-blown into consciousness; it results from an intensive effort at seeking new structures of known information of a long mixing of ideas often 'felt' rather than cognized. It is only the jelling that we 'know' (**Marrifield, 1976**).

Hutchinson (1949) says, "By creative effort, I mean the initiation and execution of some work of literature, art, music, or science which is essentially new".

"Some consider creativity as a combination of many abilities running through many spheres of human activity. It is manifested in a variety of ways through essentially it is the process of bringing something new into birth" (**May1953**).

Jha (1978) defined creativity as "The manifestation of uncommon talent in terms of novel and original products (whether ideas or effects) commanding high professional estimate of their worth".

According to **Gray (1954)**, "A creative thinker tries to find out new areas and make new observations, new predictions and draw further inferences".

According to the **Dictionary of Psychology**, creative thinking means "the achievement of a new relationship among the parts of the experience".

According to **Wallas (1926)**, creativity has four stages; preparation, incubation, inspiration, or illumination, and verification.

"The creative idea comes as a flash of insight or a sudden thought" (**Harriman, 1947**).

Fromm (1959), defines the conditions of creativity "As the capacity for wonder, the ability to face contradiction and tension, orient oneself towards the new, be aware of the experience, and respond fully to such awareness".

According to **Goldenson (1984)**, “Creativity means the ability to apply original ideas to the solution of problems; the development of theories, techniques, or devices; or the production of novel forms of art, literature, philosophy, or science”.

According to **Arnold (1963)**, “Creativity involves the re-arrangement of past experiences, with possibly some changes into new patterns to satisfy some expressed or implied need”.

From the above discussion, the investigator would like to explain creativity in the following manner:

- Creativity is a mode of thinking.
- Creative thinking involves entering into an altogether different pattern of thought.
- Creative thinking involves becoming sensitive to problems, obstacles, deficiencies, gaps in knowledge, missing elements, etc.
- Creative thinking involves breaking away from the usual sequence of thought, getting away from the main track, or breaking out the mould.
- Creativity is the tendency to experiment with novel ideas.
- The net result of this type of thinking is a novel work.
- The creative thinking ability aims at avoiding the commonplace and apparent solutions.
- A novel work implies a new association or combination of existing elements.

1.1.4 Dimensions of Creativity

(a) The sensitivity of the problem:

Human life has several problems. Sometimes we are surrounded by many issues, but we are unaware of those problems. A creative person always senses the problem instantaneously and tries to find a proper, satisfactory and acceptable solution.

(b) Ideational fluency:

A creative person can express their views very fluently on a particular problem or topic. They have many ideas and opinions about the same topic and problem.

(c) Flexibility:

Thinking of a creative person is not rigid; they are flexible in their views. The ideas of the creative person are not in the same way and type. The ideas belong to different categories.

(d) Originality:

Originality is an essential element of creativity. While expressing his ideas on a certain topic or devising solutions for everyday problems, a creative person will put forward such ideas as original or indirectly based on ideas previously read or heard. To determine this ability, an original idea out of the whole ideas expressed by an individual should be counted. An idea advanced by only two or three percent of the subjects can be accepted as an original idea. Thus statistical infrequency is the criterion to determine the originality of reasonable use.

(e) Transformation:

The ability to transform the existing objects into novel ones is also included in creativity. To ascertain this ability, the students are required to give meanings or uses of an object rather than its usual or most common meaning or use.

(f) Curiosity:

Curiosity is an important element of creativity. The creative person is always anxious to understand each and everything in his universe. He remains restless until he is able to understand completely what he has heard or read. Such individuals with limitless curiosity succeed in making discoveries and inventions.

1.1.5 Theoretical Framework

Major Theories of Creativity

Theories of creativity as theoretical premises highlight the various aspects of creativity like the concept, factors, the role of heredity and the environment. Psychologists,

sociologists and educationists did intensive researches and evolved certain ideas and approaches known as theories of creativity.

Classical Approach

A. Classical Theory of Creativity

It is a primitive approach for describing creativity and creative people. It has its origin in the belief that creativity is nothing but a few people's bizarre acts. This theory is also called the Divine Theory or the Theory of Madness. It has been derived from the ancient belief that men of genius had a guardian spirit or demon which whispered in their ears. It was also believed where divine spirit favoured man and made them prophets, and evil spirits made them insane. The exceptional in any way invited segregation. For the perpetuation of these ideas, the people's logic was simple. Since they found it hard to believe that creative thought could originate within human minds, such a breakthrough has to come from outside.

B. Psychoanalytical Approach

This approach proposes that creativity as one's personality trait get fixed in formative years of life. It also emphasizes that one's unconscious drive or motive plays a role in creativity. Major theories related to this approach are :

a) Freud's Theory of Creativity:

Freud emphasized the role of sex as a primary or drive of one's unconscious responsible for causing one to engage in one or the other type of creative expression. He was deeply convinced that people are motivated to be creative when they are sexually unsatisfied. Their unsatisfied wishes lie dormant in their unconscious after being suppressed. This suppression begins at a very early age. Since these needs are not virtually met, these may give birth to daydreams and fantasies, while in some, such repression may lead to maladjustment of personality in others, it may lead to creative expression. In this way, a defence mechanism known as sublimation (the repression of unacceptable drives followed by their conversion at the unconscious

level to an acceptable one) is primarily responsible for an individual's creativity. Freud cited many examples of the contribution of the process of sublimation of artistic creations. As one such example, he elaborated that Leonardo da Vinci's many paintings of the Madonna were nothing but a result of his sublimated longing for sexual fulfillment with a mother figure since he lost his own mother early in his life.

b) Ernest Kris' Theory :

In his theory, he used the concept of regression, a type of defence mechanism, for the explanation of one's creativity. He believed that any creative work needs to look at problems in fresh and innovative ways. However, our experiences and attitude, coupled with a closed mindset, functional fixity, rigidity and following a non-risk path, prove a barrier to our creativity. Kris stated that all acts of creativity are performed in a state of regression. In this stage, the boundaries between the unconscious and conscious mind are debilitated, and the unconscious is more readily available to awareness.

c) Jung's Theory :

According to him, the unconscious of an individual's mind is composed of his personal consciousness and the collective unconscious. While the personal unconscious carries one's personal past in terms of individual experiences, including those having to do with sex, the collective unconscious stores the vague memories of the whole human race's experiences. While humans receive ideas from their personal unconscious for the creative output, the great ideas in their highly creative form come from the collective unconscious a deeper source. Carl Jung thus tried to have a two-fold division of one's creative functioning; psychological and visionary. While the psychological ones were attributed to one's unconscious, the visionary ones were associated with the collective unconscious. The art of using both types of one's unconscious thought thus may be said a potent force behind one's level of creativity.

d) Adler's Theory:

Alfred Adler, a student of Freud, stated a compensatory theory of creativity. According to him, a person is engaged in a creative activity mainly to seek some compensation for his perceived inferiority. Like other psychoanalysts, he also attributed one's past related to

childhood to perceive his being inferior. He further stated that compensation for the perceived inferiority develops from conscious rather than unconscious efforts. Unlike Freud, Adler held a power motive, the urge to be superior and gain power responsible for one's creative functioning. He postulated that one tries to compensate for his inadequacies by picking up a lifestyle loaded with creativity or helping him strive for positive growth and self-actualization. Their engagement in creating functioning thus serves their urge to gain power and do away with their feeling of inadequacies or inferiority by getting social recognition. Those who are more creative are regarded as more beneficial to serve a social function (Adler, 1917).

C. Behaviouristic Approach

The principal propagator of this approach was J.B. Watson and B.F. Skinner, assigned too much importance to one's environment for fashioning and shaping one's behaviour, including the creative one. Conditioning and psychic material available in one's unconscious memories are thus the primary elements in the behavioural explanation of creativity. According to them, creativity results first from accessing psychic material available in one's unconscious and then synthesizing it in the context of an immediate stimulus (problem). Finally, the creation of the problem's solution may be further reinforced if others appreciate his creation. (Skinner, 1972). Thus, behaviourist's approach lies much in making use of the previously known or learned things available in the form of unconscious memories.

Humanistic Approach

The humanistic approach was proposed by humanistic psychologists like Abraham Maslow, Carl Rogers and Erich Fromm. This approach emphasized the more significant role of positive, self-fulfilling human beings' creativity rather than their unconscious drives, compensation for deficits, or mechanical learning. Maslow theorized that creativity, instead of being limited to the first five years, as advocated by psychoanalysts, may be cultivated throughout the life span. He held the satisfaction of various types of human, institutional needs responsible for one or the other types of human behaviour. In his conceptualization of the hierarchy of human needs, he put the needs like psychological, safety, belongingness and love, esteem in the category of deficiency needs and the needs like self-actualization and aesthetic in the category of being needs' to make them worth feeling like human beings. He proposed that it is the urge for the satisfaction of higher-order human needs that sets an

individual on a creative path. While most of us remain lying on the lower levels for satisfying our lower level needs, the creative people strive towards the higher levels of the satisfaction of their needs and can create and live the lives of self-actualized, healthy human beings, describing a perfect link between creativity and one's attempts for fulfilling his higher-order needs.

Cognitive Approaches

The cognitive approach to creativity mainly concentrates on emphasizing the role of one's mental or intellectual capacity and its utilization by the individual being in his creative acts.

a) Galton:

Theorized that our conscious mind is like space totally filled with objects and ideas. New input can come into this plenum from the unconscious of our mind with the help of a mechanism known as an association. Thus, this type of linkage is responsible for the upsurge of novel and new ideas leading to creative acts. The ability to seek such association between one's conscious and unconscious mind is entirely inherited, and creativity must have a strong inherited base. Galton presented his views by narrating the frequency of creativity with certain well-known families in his work, *Heredity Genius* (1870).

b) William James:

While disagreeing with Francis Galton's one-sided views about the inheritance of association of ideas resulting in one's creativity, he was one of the first to propose that the circumstances of one's upbringing were more important than genes in this regard. In tune with Freud, he also suggested that one's originality in his ideas stems up from his ability to get in touch with his unconscious (James, 1890).

c) Graham Wallas:

Gave the unconscious a key place in one's creative process by laying down its four distinct stages named as preparation, incubation, illumination and verification. The emergence of a solution, the creation of something new and novel, which emerges in the third stage of illumination, has a significant link

with the ideas lying in one's unconscious, which may be evolved in one's consciousness during the 2nd stage of the creative process, i.e. incubation. We will be dealing with all the stages of one's creative process in detail later in this chapter.

d) Max Wertheimer:

A well-known gestalt psychologist postulated that one's creative thinking is the function of formation and alteration of gestalts (i.e. mental patterns or forms) on the part of a creative thinker. Creative solutions are often obtained, perceiving by an existing gestalt) in a new or noble way. It is therefore essential that for arriving at some original and noble solution to our problem, we should try to get a unique point of view on the whole of our problem rather than trying to rearrange its parts, meaning thereby to bring a change in the totality of our approach rather than mending our fences here and there in parts.

e) Wolfgang Kohler:

He brought an idea of sudden insight into the solution of the problems and evolution of creative acts with his well-known experiments on chimpanzees. He proposed that to arrive at a solution to a problem or create something new; one has to perceive the situation as a whole in its well-organized gestalt form. Then by weighing all the possibilities available for the solution of the problem, he may catch hold of the right one as a result of immediate insight. With such a view, he tried to convey that reorganization or restructuring one's field of perception or mental concepts may result in creativity.

D. Contemporary Approach

The contemporary approach represents the ideas and views expressed by some of our contemporary psychologists to explain one's creativity. Some of the contemporary theories are:

a) Guilford's theory

J.P. Guilford (1959) has developed a theory in the name of 'structure of the intellect', which may prove immensely helpful in understanding one's creative thinking and creative output. In his model, he has named five different elements like cognition,

memory, convergent thinking, divergent thinking and evaluation responsible for carrying out intellectual functioning on the part of an individual. Out of these five elements, Guilford proposes that while cognition, memory and evaluation may play a role of assistive factors, both types of thinking-divergent and convergent, may play a relatively substantial role in carrying out the operation of creative thinking resulted in one or the other type of creative output. In their collaborative approach, while divergent thinking helps one arrive at a wide range of ideas leading to a problem, convergent thinking plays its role in identifying and selecting the most workable or appropriate one among the possible solutions arrived at through inductive thinking. In this way, Guilford has tried to provide a factual intellectual basis for the creative functioning of the creative.

1.1.6 Conceptual Framework of the Study

The present study examines the creativity level among D.El.Ed Pupil-Teachers following J.P. Guilford's concept of creativity. J.P. Guilford gave the ideal of Structure of Intellect in 1950 and prepared a model in 1956.

In his model, he had mentioned three different elements like cognition, memory, convergent thinking, divergent thinking and evaluation underlying intellectual functioning; out of these, convergent and divergent thinking plays an essential role in carrying out the operation of creativity. J.P. Guilford gave six divergent production abilities.

- Ideational Fluency
- Associational Fluency
- Expressional Fluency
- Spontaneous Fluency
- Originally
- Semantic Elaboration

Later, word fluency and adaptive flexibility were also added. This research measures creativity. Keeping in view the four major divergent production abilities mentioned by Guilford Fluency, Flexibility, Originality and Elaboration.

1.1.7 Investigating and Studying Creativity

Creativity like intelligence or personality has been an abstract concept, a phenomenon that cannot be seen, felt, or operated upon in the test tube or laboratory-controlled conditions. Intelligence is what is presented before us through the administration of one or the other intelligence test or demonstrated through one's behaviour, known as intelligent behaviour. The same may also happen with creativity when we try to use some or the other testing or non-testing devices for its measurement. However, investigation and measurement related to creativity carry some advantages compared to intelligence, as we can cover more grounds for our efforts. It can be investigated by adopting the following three basic approaches: creativity as a process, creativity as a product, and creativity as an attribute of one's personality.

1.1.8 Tests for Measuring Creativity

a) **Wallach and Kogan (1965)** designed the following tests for measuring Creativity-

- **Instances Test-** It is the first of the verbal techniques of the author. In this, the child is asked to generate possible instances of a class that is specified in verbal terms.
- **Generate Uses Test-** It is the second of three verbal techniques. In this test, the child has to generate possible uses for verbally specified objects
- **Similarities Test-** In this test child has to generate possible similarities between pairs of verbally specified objects.
- **Pattern Meanings Test-** It is one of the two creativity assessment techniques involving visual rather than verbal stimulus materials.
- **Line Meanings Test-** In this second creativity procedure involving visual stimulus materials, the child is confronted with one or another kind of line drawings and is asked to generate meanings or interpretations relevant to the form of the line in question. The lines were adopted from Tagiuri (1960). Each line is a single continuous unit, in contrast to the discrete elements comprising the preceding instrument's patterns.

b) **Getzels and Jackson (1962)** constructed five tests to measure Creativity. The tests are briefly described below:

- **Word Association Test:**

The Test is presented with twenty-five words, each of which has multiple meanings (ex., Arm, cap, duck, fair, pitch, punch, sack, tender). The subject has to write as many meanings of the word as he can.

- **Uses Test:**

This examination poses five different items (bricks, pencils, paper, clips, toothpicks, sheets of paper) to the subject and asks him to write as many different uses as he can for each object. The idea for this test is derived from two similar tests used by Guilford in his factor analytic studies of cognitive ability.

- **Hidden shapes Test :**

This Test is part of the theoretical test battery of Cattells (1956) and consists of 18 geometric figures, each of which is accompanied by four more difficult figures. The role of the subjects is to classify the complicated figures under which the specific figure appears.

- **Fables Test:**

This test consists of four fables whose last lines are missing. The student is required to supply a moralistic, humorous and sad ending for each fable.

- **Makeup Problems Test:**

This test consists of four complex paragraphs, each containing many numerical statements about activities such as buying a house, building a swimming pool, and the like. For each paragraph, the student uses the information given to make as many mathematical problems as possible within the time limit. But the issues must be capable of a solution though he is not required to solve the issues.

According to **Arasteh and Arasteh (1976)**, the most comprehensive evaluation of imagination is made by Torrance and his colleagues (1960a, 1960b, 1960c, 1961, 1992, 1962a, 1963a, 1964). They administered the Minnesota Creative Thought Assessments (MTCT) to several thousand school children. These experiments are a reasonably sharp divergence from Guilford and his associates factor form tests (Guilford, Merrifield and Cox, 1961: Merrifield, Guilford and Gershon, 1963) and vary from the battery built by Wallach and Kogan (1965), Containing steps that reflect artistic impulses of a similar nature (Torrance,1968).

c) Torrance (1962) categorized the different subtests of the Minnesota Tests of Creative Thinking into three groups:

- i. Verbal tasks using verbal stimuli,
- ii. Verbal tasks using nonverbal stimuli, and
- iii. Nonverbal tasks.

The different subtests used by Torrance are briefly described below:

Verbal tasks using verbal stimuli

- **Just Suppose Test:**

The subject is faced with an unlikely scenario in the just assumed test and asked to think about all the potential consequences from the inclusion of a new or uncertain variable. The verbal statement of the unlikely situation is accompanied by a drawing of the situation. Blanks are provided under the verbal statement for responses.

- **Imaginative Stories Task:**

The imaginative stories task calls for writing 'the most interesting and exciting story on a topic related to animals or people having some divergent characteristics. ex. The dancing monkey, Puppet uncle, etc. The subjects may use their own views and create a new topic and write on it.

- **Unusual Uses Task:**

In these unusual uses, task subjects make everyday objects, especially with interesting and unique uses like tin, books, and logs etc.

- **Impossibilities Task:**

Guilford and his collaborators initially used the impossibilities role. But Torrance has made a range of changes to the simple mission. The subjects are asked to mention as many challenges as they can in this assignment.

- **Measure of Consequences:**

Guilford and his colleagues were the first to use the effects test in 1951. Torrance made some improvements for its adaptation. He selected three unexpected scenarios, and the children were asked to list their implications.

- **Situations Task:**

The situation task, this test was designed to measure the ability to see what needs to be done was modeled after **Guilford (1951)**. Three common problems were given to subjects, and they were asked to give as many solutions to the problems as they could.

- **Common Problems Task:**

This was also an adaptation of one of the **Guilford's (1951)** tests built to test the ability to see flaws, needs, and shortcomings. The subjects were given typical scenarios in this assignment and were asked to think about as many problems as they could in accordance with these situations.

- **Mother Hubbard Problems:**

This task was devised to adapt the 'situations task' for oral administration in the primary classes. However, it was found to be helpful in older groups as a group-administered task also.

- **Improvements Task:**

This test was an adaptation of Guilford's apparatus examination (1952), which determined the ability to see flaws. The subjects were given a list of everyday objects in this assignment and asked to give as many ways to improve each object. They are asked not to bother about whether or not it is possible to implement the changes thought of.

- **Cow Jumping Problem:**

The cow jumping problems is a companion assignment for the 'mother Hubbard issue. It has been administered to the same classes under similar circumstances. The task is to learn all the possible things that might have resulted when the cow leapt over the moon.

II. Verbal Tasks Using Non-Verbal Stimuli

- **Ask and Guess Test:**

First, the person has to think of all potential questions about what they see in a given image, emphasising questions that can be solved by simply looking at the picture. He is then asked to make conclusions or propose theories about the possible triggers of the incident seen and their effects- both immediate and distant.

- **Product Improvement Task:**

Popular toys are included in this challenge, and children are asked to find out as many changes as possible that will make the toy more enjoyable to play with.

- **Unusual Uses Task:**

This task is accompanied by the product improvement task and unusual uses task. In this assignment, children are asked to think about the most creative, fascinating and unique use of the given toy rather than as a plaything. For the toy as it is, or as it may be altered, these uses may be.

III. Non-Verbal Tasks

- **Circles and Squares Task:**

In one of them, a page of forty-two circles is faced with the subject and asked to draw objects or photographs that form a large part of the circle. Again, squares are used instead of triangles in the alternative.

- **Picture Construction or Shape Task:**

In this job, a piece of coloured paper of a particular form, a jelly bean or triangle and a sheet of white paper is given to the children. Children are expected to conceive an image in which an integral element is specified. Then, they need to print on the white sheet anywhere they choose to and add pencil lines to create some new images. They have to think about the image's name and write it on the bottom.

- **Task on Incomplete Figures:**

This is an adaptation of Kate Franck's drawing completion test' used by Barron (1958). First, an ordinary white sheet is divided into six sections (squares), each having a separate figure of a stimulus. Then, by adding as many lines to the six numbers, the subjects are asked to draw certain novel objects or architecture. Mehdi (1973), Passi (1979), etc., used it on hindi-speaking infants.

1.2 MEANING AND DEFINITIONS OF SELF-CONFIDENCE

According to **Burton & Platts (2011)**, confidence is the willingness to take responsible and successful actions in any circumstance, however difficult it might seem. Confidence is a feeling that makes one believe that one can do something with ease and tranquility. It makes an individual optimistic and happy about themselves.

The oxford dictionary describes self-confidence as trusting one's abilities, values, and judgment.

According to **Al Hebaish & Mohammad (2012)**, a positive mindset helps individual

perceive themselves and their circumstances favourably and objectively, is known as self-confidence. Therefore, self-confident individuals are capable of perceiving various situations and can tackle these situations with sufficient self-knowledge.

Owen (2018) stated that self-confidence is a willingness to stand alone, feel free, be aware of one's strength, and face everything in life with courage and conviction. Self-confident people trust their abilities, have a general sense of control in their lives and believe that they can do what they want, plan and expect within reason. Self-confidence is a belief in oneself and one's abilities, a trusting or relying on a mental attitude. The broadest and frequently cited definition of Self-confidence within psychology is Rosenberg's (1965), who described it as a favourable or unfavourable attitude toward the self. There are two sub-categories of self-confidence; intrinsic self-confidence and extrinsic self-confidence.

1.2.1 Advantages of Building Self-confidence

The following advantages of building self-confidence among learners during the teaching-learning process are given by Pavlik. The increase in self-confidence gives

- **Increased sense of self-worth:**

In the learners: the more self-confident learners are, the more they value themselves and their abilities.

- **Happiness and Joy:**

More happiness and joy in their life: the more self-confident a learner is, the happier they are with themselves, and they enjoy their life.

- **Less tension and fear:**

Students can embrace, adjust, understand, gain, and prosper from any situation in life when trust is high. In this sense, uncertainty and apprehension are automatically replaced by stronger confidence in themselves and their capacities.

- **Freedom from fear in culture :**

The more a learner feels protected from his self-worth, the less concerned he is about what people think of them in social settings.

- **A peaceful mind and less stress:**

More peace of mind and less stress: liberation from self-doubt, apprehension, and paranoia inherently transform into greater peace of mind and more stress-free life.

- **Energetic in motion and motivated:**

Confident students can fulfill tasks they wish to accomplish (such as personal ambitions or dreams), the more driven and energized they are to take steps to reach them.

- **Greater Success:**

Of the above advantages, you do tasks that a learner needs to do more effectively and efficiently, ensuring that you will succeed in life.

- **More Resilience:**

Confidence gives the skills and coping methods to handle setbacks and failure. Of course, self-confidence doesn't mean the learners won't sometimes fail. But they will know you can address challenges and not be crippled by them.

1.2.2 Steps to Build Self-confidence

Lawrence (2006) has suggested the following steps to be followed by an instructor or teacher to boost the student's self-confidence. Firstly, the teacher can instill confidence in them by praising the process of learning followed by students and the work ethic exhibited by them along the way of learning. Secondly, teaching the students about the necessity and value of failure in their life and telling them that they need to recalibrate and try again with a different approach after failures. Thirdly creating autonomy in the

teaching-learning process by letting students make choices and believing in their abilities. Fourthly providing diversity in teaching with innovative strategies that cater to a variety of interests and strengths possessed by the students, thus creating more opportunities for them to nurture their talents, creativity and passions—fifthly pushing and challenging students out of their comfort zone and challenging them to do things beyond their current range. Sixthly, setting realistic expectations and goals so that they don't fall short and feel discouraged anytime. Seventhly, giving opportunities for peer recognition as students generally crave validation and recognition from their peers. Receiving compliments about their strengths help they enhance their confidence. Making them self-aware by knowing themselves, acknowledge their weaknesses and understanding their strengths making them Positive thinkers by changing restrictive attitudes and beliefs. Lastly acting and imagining being confident. As more they speak and behave confidently, the more confident they become. The Greek philosopher Socrates has said, 'to discover you, think for yourself'. Keeping this saying in mind and looking at the above-given steps for building self-confidence, it is evident that the happiest and most influential people in this world.

1.2.3 Importance of Self-confidence

A self-confident person meets every challenging situation and every obstacle of life with full enthusiasm for finding its solution. Self-confidence plays a vital role in individual growth as well as the nation's growth. Miller has suggested that self-development will enable the relationship between the leadership behaviour of the administrator and the environment both if there is good self-confidence. **Swami Vivekanand** said that "You cannot believe in God until you believe in yourself". Emerson has rightly said that "the prime secret of success is self-confidence".

Mr. A.P.J. Abdul Kalam in his speech on the eve of 58th independence Day-2004, stressed on the literacy of people. He also said that it is essential to increase people's self-confidence so that a nation can progress vigorously.

1.3 TEACHER EDUCATION

It is accepted at the global level that the chief aspect of education is the transmission of knowledge to the next generation, making them proud of our nation and teaching them to respect human dignity. Therefore, the fundamental purposes of teacher education are to make a powerful education system. Today we talk about globalization and knowledge exchange with other nations. Education plays a prominent role in doing so. It is widely accepted that teacher education has immense potential to influence the education of children, teachers, teacher educators, and others and provide newer and more effective ways of mitigating some of the challenges being faced by our country's educational system.

NCTE has defined teacher education as a program of education, research, and training to teach from pre-primary to higher education level. The teacher education programme is focused on enhancing teacher's efficiency and capabilities for empowering skills.

According to the **Goods Dictionary**, Education encompasses all the formal and non-formal activities and experiences that help a person to become qualified to assume responsibilities as a member of the educational profession and discharge his duties more effectively.

It is a well-known fact that attempts to improve school education have not varied over time, until the 1990s in India. Government statistics on school education after Independence (1947) mainly show the extent of enrolment, dropout rates, and the percentage of trained practising teachers. From the 21st century, however, school education reached a point where it was inevitable to emphasize rates and the percentage of trained practising teachers. And Pre Service Teacher Education remains a matter of great concern. (NCERT 2005: 107).

The development, quality, and transformation of Pre Service Teacher Education demand an analytical review because the teachers training are a major area of concern (Government of India 2009: 44). However, the **National Curriculum Framework 2005** (NCF, 2005) of the NCERT discloses that curricula and textbooks on teacher education have never been critically examined by the student-teacher or the regular teacher (NCERT, 2005).

NCF 2005 suggested that one of the significant, essential changes in teacher education is to recognize that a student-teacher is 'an active participant rather than a passive recipient' (NCERT 2005). Notwithstanding this perceptive guidance, teacher education is still not given much importance, let alone being a subject of meticulous research studies. Student teachers are still treated as mute receivers who need only to be trained; the rest will follow by osmosis. How could it ever be a moot question? I argue that if we want to offer children quality school education, it is imperative to 'first provide the best education and training to those who will teach them' as **Wideen and Tisher (1990)** have remarked. Elementary pre-service teacher education is the initial training for student teachers at pre-service teacher education institutions, which must fundamentally transformed.

Since the development of a national model of elementary pre-service teacher education with equal and uniform quality is vital, the **National Policy on Education 1986 (NPE, 1986)** announced the establishment of the District Institute of Education and Training (D.I.E.T). With the immense diversity of India, the D.I.E.T had adopted a flexible approach. The Elementary Pre Service Teacher Education at each D.I.E.T is a two-year course that would accept student teachers who had completed twelve years of schooling. In 1989, the Ministry of Human Resource Development (MHRD) further published detailed guidelines (**District Institutes of Education and Training: Guidelines, hereafter Guidelines**) for the D.I.E.T system. They stated that India needs a 'third-district level tier (**MHRD, 1989**) for elementary pre-service teacher education system, which is closer to the field' (**MHRD, 1989**). Each state prescribes an elementary pre-service teacher education (P.S.T.E) curriculum based on the national council for teacher education (N.C.T.E) framework. Both the D.I.E.T (a government institution) and other pre-service teacher education institutions (private and government institutions) follow the pre-service teacher education. Pre-service teacher education curriculum prepared, examined, and certified by the state government. D.I.E.T is also supposed to guide and supervise other elementary pre-service teacher education institutions in the district.

The need for starting an elementary pre-service teacher education at the district level is not new. For example, as a state-level plan, the state of Jammu and Kashmir established the "District Institute of Education" in the late 1970s ' to improve the content of teachers training in the educational institutions as well as to keep the teachers abreast of the new development in the field of education (NIEPA, 1979). An institute in each district imparts basic education training and a refresher course to improve teacher training and familiarize teachers with new developments in the field of education. The D.I.E.T system announced by the National Policy of Education 1986

covered all the districts through a centrally sponsored scheme which was expected to strengthen elementary teacher education at pre and in-service levels. It was also supposed to conduct district-level research on education while maintaining links with both the state and centre. Thus, at last, forty years after Independence, a decentralized system of academic support for elementary education became a reality.

'What is the data on teachers' qualifications? A study of Elementary Education in Rural India' conducted at the end of the 1990s demonstrated that primary teachers 'means years of education varied 'between 9.9 years and 14.5 years in village schools (Vaidyanathan and Gopinathan Nair, 2001). The Public Report on Basic Education (PROBE, 1999), conducted in the same period, presented data that most primary teachers completed secondary school education (10 years). Nearly two-thirds of them finished some type of Pre Service Teacher Education. Yet; Pre Service Teacher Education was a' comparatively brief affair-typically one or two short-duration courses of about ten days at a time' (PROBE 1999: 56) as a professional qualification. Both the studies confirmed that even at the end of the 1990s, there were practising teachers who lacked either the academic or the professional qualification as suggested by NPE,1986, that is, twelve years of schooling as a minimum, educational qualification and at least two years of Pre Service Teacher Education as a professional qualification. Education has only recently received an increasing emphasis on the crucial aspect of quality and the availability of qualified and motivated teachers' (NCERT, 2005). Given the highly competitive and global world of today, capable teachers encourage pupils in active learning.

The child-centred approach values a child's need, interest, and aptitude' (Arora 1995: 88) and is a term familiar to teachers in school education. Elementary teachers are among the first persons that children meet at the gateway to the world of socialization and practical knowledge. NCF-2005 rightly stated that elementary school days are a period of 'tremendous cognitive development, and shapes reason, intellect and social skills' (NCERT, 2005). In India and other countries, children's teaching emphasises meta-cognitive knowledge and meta-cognitive experiences (Arthur and Cremin 2010: 59). This means self-reflection and active problem-solving. Tremendous stress was placed on the in-service training of teachers in the primary education initiatives in the mid-1990s.

In teacher education, knowledge acquisition was placed in the curriculum, and such knowledge was 'accepted without question' (NCERT 2005). Concerning school teachers, NCF 2005 articulates that the 'voice of the teacher should be heard by those higher up' (NCERT, 2005) since

top-level decisions on education ultimately affect the child in the classroom'. Further, even though NPE 1986 stated that teacher education was a 'continuous process' (MHRD 1986a: 26), yet till the 1990s, administrators didn't show appropriate concern about potential teachers and pre-service student-teachers. The aspect of initial education for school teachers and elementary pre-service teacher education was both ignored and neglected.

The D.I.E.T is an important area for research in elementary pre-service teacher education in the country as it covers all the districts and, at the same time, recognizes the decentralized structure of each D.I.E.T. This conjunction makes it possible to analyze the general aspects of the elementary pre-service teacher education system, particularly local circumstances and distinct factors inherent in each district. It is an accepted fact that the DIET system and its elementary pre-service teacher education malfunction according to the **District Institutes of Education and Training: A National Evaluation (2001)**, conducted by the National Institute of Educational Planning and Administration (NIEPA, presently NUEPA), more than a decade after its first establishment. It affirms that the pre-service teacher education programme is not offered in some states and asserts that this absence has 'a serious implication for staff structure and no attention seems to have been directed in this context' (NIEPA, 2001). Furthermore, infrastructure and educational equipment available to each DIET are inadequate and unable to deliver quality pre-service teacher education.

Further, NIEPA (2001) mentions that 'shortfall in teaching positions in many states has adversely affected the quality of teacher training. This national-level evaluation reveals that at some DIETs, because of the shortage of teaching staff, the academic year did not commence as scheduled. What had worsened the situation is that due to some dysfunctional facets, serious attention is not paid to elementary P.S.T.E at some DIETs. The NIEPA (2001) evaluation proposes a 'holistic review of P.S.T.E' if the long-term improvement is desirable. Yet, in a consultation, D.I.E.T: Potential and Possibilities (2007), D.I.E.T are identified as an important nodal institution for re-organising pre and in-service teacher education and development of elementary PSTE potential sites' for achieving quality elementary PSTE (NIAS 2007: 20). Twenty-five years have elapsed since the establishment of Pre Service Teacher Education in DIETs. This is an ample time to focus attention on the pursuit of quality in Pre Service Teacher Education as a critical issue, together with quality elementary education. This is my rationale for research on elementary Pre Service Teacher Education in the DIET system.

1.4 STATEMENT OF THE PROBLEM

The researcher is of the view that teacher's characteristics like Creativity and self-confidence plays a vital role in their own behavior in the classroom and also in the development of behaviour of those whom they teach. This is because a teacher has a very significant role in any educational program. It is the teacher who is mainly responsible for the implementation of the educational process at any stage. Thus the present investigation aimed at analyzing the creativity and self-confidence of pupil-teachers concerning certain variables like gender, stream and self-confidence level.

The following is the problem to be studied:

“A Study of Creativity and Self - confidence of D.El.Ed. Pupil -Teachers”

1.5 NEED AND JUSTIFICATION

The schools in India are generally interested in encouraging students to gain higher academic scores. At each level of education, whether primary, secondary or higher, teachers never think beyond it. The world we live in is changing rapidly, giving birth to various new kinds of problems. In such a scenario, it becomes society's social and moral obligation to make our forthcoming generations aware and armed to deal with any kind of problem in any situation. In such circumstances, a huge responsibility lies on the shoulders of our educational institutions, which needs to focus on encouraging creativity and self-confidence among students. As stressed by the Ministry of Education report (Govt. of India-2002), self-confidence is crucial for students. Self-confidence is a behavioural attribute of students and an essential factor for accomplishing success in academics and life. A student can be self-confident and creative only when he receives proper guidance, motivation and encouragement during his years of education. To inculcate such skills in students, they need quality teaching. A teacher himself needs to be confident and creative to develop such skills among his students. Therefore this study is focused on under training pre- services teachers. Creativity and self-confidence are the two most essential qualities for pupil-teachers and the demand of the present era. Only a creative and self-confident teacher can fulfill the country's needs. They are the only ones who can devise and select proper tactics for teaching. Since only creative and self-

confident teachers can change the students. Thus the present study aims to investigate pupil-teachers' creativity and self-confidence levels. This study also seeks to reveal the relationship between self-confidence and creativity.

1.6 OPERATIONAL DEFINITION OF THE TERMS USED

The important term used in this study are defined as follows:

Creativity

In this research, Creativity means pupils ability to keep their minds open and modify their ideas to achieve a creative result. It is focused mainly on four dimensions (1) Fluency, (2) Flexibility, (3) Originality, (4) Elaboration.

Self-confidence

In this research, self-confidence refers to an individual's perceived ability to act effectively in a situation to overcome from problems and to find the right solution.

D.El.Ed.

In this research, Pre-service teachers are those would be teachers who are pursuing a Diploma in Elementary Education in Uttar Pradesh.

1.7 OBJECTIVES OF THE STUDY

1. To study the relationship between Creativity and Self-confidence of D.El.Ed. Pupil-Teachers.
2. To study the relationship between Creativity and Self-confidence of D.El.Ed. male Pupil-Teachers.
3. To study the relationship between Creativity and Self-confidence of D.El.Ed. female Pupil-Teachers.
4. To study the relationship between Creativity and Self-confidence of D.El.Ed Arts stream Pupil-Teachers.
5. To study the relationship between Creativity and Self-confidence of D.El.Ed. Science stream Pupil-Teachers.

6. To study the relationship between Creativity and Self-confidence of D.El.Ed Arts stream male Pupil-Teachers.
7. To study the relationship between Creativity to study and Self-confidence of D.El.Ed Art stream female Pupil-Teachers.
8. To study the relationship between Creativity and Self-confidence of D.El.Ed. Science stream male Pupil-Teachers.
9. To study the relation in Creativity and Self-confidence of D.El.Ed. Science stream female Pupil-Teachers.

1.8 HYPOTHESES OF THE STUDY

1. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. Pupil-Teachers.
2. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. male Pupil-Teachers.
3. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. female Pupil-Teachers.
4. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. Arts stream Pupil-Teachers.
5. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. Science stream Pupil-Teachers.
6. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. Arts stream male Pupil-Teachers.
7. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. Arts stream female Pupil-Teachers.
8. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. Science stream male Pupil-Teachers.
9. There is no significant relationship between Creativity and Self-confidence of D.El.Ed. Science stream female Pupil-Teachers.

1.9 SCOPE AND DELIMITATION OF STUDY

In this research, a detailed study of the creativity and self-confidence of pupil-teachers has been conducted. In addition, an attempt was made to explore the correlation between creativity and self-confidence of the pupil-teachers.

Delimitations-

1. The present study is delimited to D.El.Ed. pupil-teachers only.
2. The present study is delimited to finding out the inter-relationship between two dependent variables, i.e. creativity and self-confidence of pupil-teachers only.
3. The study is further delimited to 250 pupil-teachers of D.El.Ed. course only.

1.10 ORGANIZATION OF THESIS

The current thesis comprises of five chapters.

The first chapter builds up the context of the present study. It acquaints readers with the educational context in which the study has been situated. It outlines the educational context, beginning with teacher's issues, teacher's attributes, teacher preparation and reflection and emergent questions. It is pertinent to understand the context in which this study has been conducted.

Chapter two is centred around situating perspectives for the present study.

Chapter three deals with the research design of the study. It presents the rationale of the approach used in the study. The study has been conducted in a phased manner. It presents the selection of techniques for collecting data, the process of identifying cases, data collection procedures and statistical techniques.

Chapter four presents analysis and interpretation of data collected during fieldwork.

In **Chapter five** each research objective is discussed in light of the findings of the study. It summarizes the study and presents a conclusion by elaborating upon the findings presented in chapters and context, framework, fieldwork and research design presented in chapters two and three.

CHAPTER- II

REVIEW OF RELATED LITERATURE

CHAPTER-II

REVIEW OF RELATED LITERATURE

The review of literature is an integral part of any research. It is the beginning step that evaluates information about the area of research and puts forward work done in the selected area of study. It provides not only direction but also a theoretical base for the research. A review of literature should be able to describe, summarize, and evaluate the literature related to the study. It should also ascertain the nature of the research. Irrelevant works should be discarded, and those which are peripheral should be looked at critically. According to J.W. Best, 'almost all knowledge about human beings can be found in books and libraries. Unlike other animals who have to make a new beginning, man develops with the knowledge he had accumulated and recorded in the past'. With the help of the past, we make our future brighter in the same way we make our researches worthy by using past studies. Borg had rightly said that the related literature is the foundation of all future research works. With the help of past references, researcher can conclude his findings.

2.0 IMPORTANCE OF THE RELATED LITERATURE REVIEW

- The related review literature helps the researcher to delimit his problems.
- It helps in the avoidance of unintentional duplication.
- Review of related literature provides a meaningful way for the knowledge. The researcher can avoid the useless and unfruitful problems with the help of review literature.
- The previous studies help to the researcher in selecting the appropriate methods and tools for his investigation.
- Recommendation of previous researchers for further research gives the idea to new untouched research area. it is helpful for new researcher in selecting their problem.
- By reviewing the related literature, the researcher is able to formulate a hypothesis and appropriate research design suitable to the problem in the hand of the researcher.

2.1 IDENTIFICATION OF RELATED REVIEW LITERATURE

Primary sources:

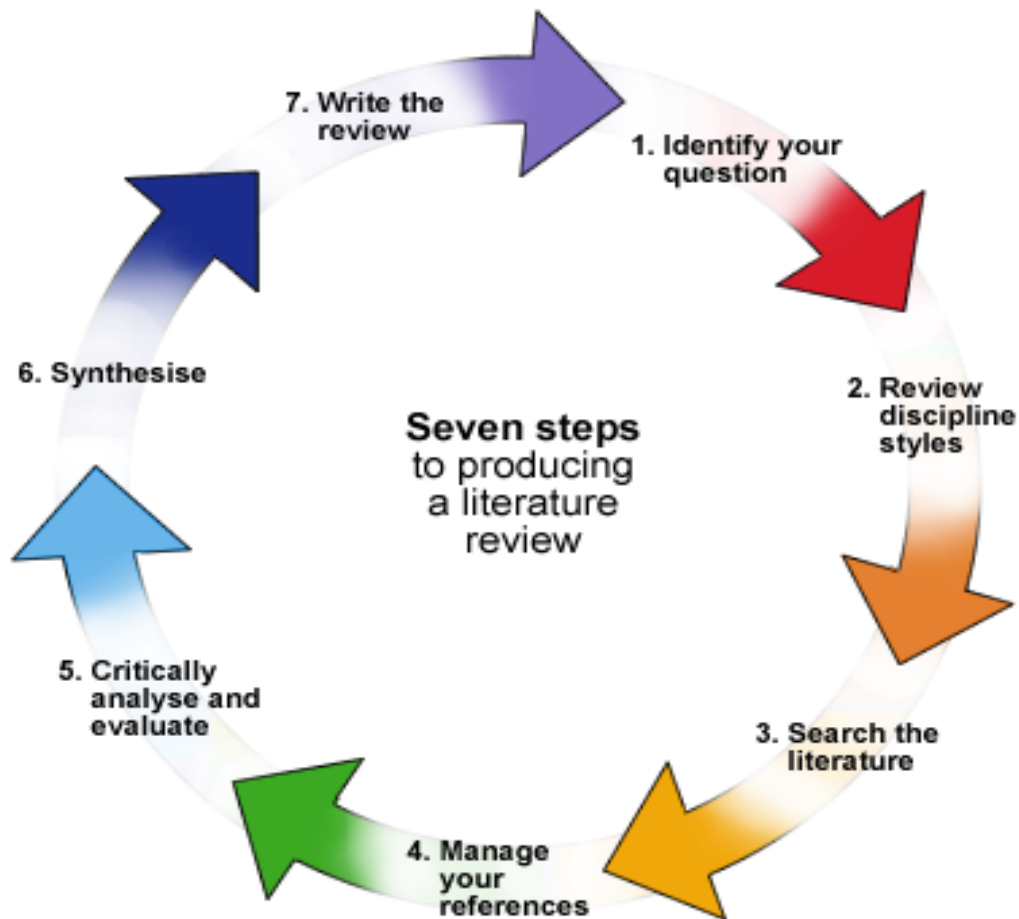
This is a direct source of collecting material for the study. Individuals have observed occurrences and carry them out. The researcher is directly participating in collecting material. In the primary sources of information, the author reports his own work directly in the form of research articles, books, monographs, dissertations and theses. The primary resources are authentic and more practical, but it is a time-consuming process.

Secondary sources:

Secondary source is an indirect source for getting material related to the study. In these sources, the author or investigator is not directly observing and participating in collecting materials such as encyclopedias, indexes, abstracts, biographies, and textbooks.

2.2 STEPS OF PRODUCING A LITERATURE REVIEW

- IDENTIFY YOUR QUESTION
- REVIEW DISCIPLINE STYLES
- SEARCH THE LITERATURE
- MANAGE YOUR REFERENCES
- CRITICALLY ANALYSE AND EVALUATE
- SYNTHESISE
- WRITE THE REVIEW



The literature review cycle – Source : Image created by University of Sheffield

2.3 STUDIES CONDUCTED IN ABROAD

Hall, Evelyn (1990) studied the effect of performed gender, performer skill level, and opponent gender on self-confidence in a competitive situation. Results of the study showed that level of self-confidence of females was not lower than males.

Kalaian A. H. and Freeman D. J. (1994) conducted a study aimed at knowing the gender differences in self-confidence & educational beliefs among secondary teacher candidates. It was a longitudinal investigation. The researcher examined gender differences among secondary teacher candidates. Three categories of criterion measures by the researcher the first one were (1) self-confidence levels in teaching, (2) expected sources of professional knowledge, & (3) educational orientations and

beliefs. Relative to males, females entered teacher preparation programs with lower levels of confidence in themselves as teachers and higher expectations for what they would gain from education courses and practical experiences related to teaching. The differences showed in self-confidence, and educational beliefs persisted to program completion.

Einarson, Marne, Santiago, Anna (1996) studied factors that acted as effective background in academic self- efficacy and academic self-confidence. The researcher wanted to find out these key factors among engineering and graduate science students: an investigation of gender and ethnic differences. The study reveals the gender and ethnic differences were the effective domain of academic self-confidence, academic self-efficacy.

N. Wooldridge and N. Richardson (1998) exploration of assertiveness and self-confidence could be improved by using effective teaching methods. The main finding of the study was effective teaching methods were very useful for enhancing assertiveness and self-confidence. The study was helpful for people with learning disabilities.

Stools (1999) investigation of the importance of self-confidence in performance among adult undergraduate college students. The populations of the study were adult undergraduate college students. This article presents a model of college outcomes to address the key elements that affect their learning and to stimulate research and theory building about adults' experience in college. It provides a review of the literature and a comprehensive model that considers the relationships between six significant elements related to adults' undergraduate collegiate experiences: (a) prior experiences; (b) orienting frameworks such as motivation, self- confidence, and value system; (c) adult's cognition or the declarative, procedural, and self-regulating knowledge structures and processes; (d) the "connecting classroom" as the central avenue for social engagement and for negotiating to mean for learning; (e) the life-world environment and the concurrent work, family, and community settings; and (i) the different types and levels of learning outcomes experienced by adults.

Barlow (2000) conducted a study “a shift in perspective or paradigm can be seen as the essential and defining phenomenon of creativity”. Interestingly taking the shift as

the actual act of creativity, not the idea generation itself, he points to the “aha” experience as revalidation that creativity has occurred. He states that if a team’s view point “Shifts to a new view point that the group ‘knows’ is closer to the real problem, then the team can be said to have been creative. By deliberately working to discover problem statements that better reflect the problem, teams in his research more quickly achieved advantageous insight.

Sun Shijin et al. (2000) the study was conducted to find out the effect of group counselling in improving the Self-Confidence of college students. An experimental research method was used. For group counselling, an elaboration design was used. Pre and post activities of the participants were observed by using five scales. Through analyzing the results of the scales and using other quantitative methods, we found that: 1) Group counselling could improve the self-confidence of the students effectively. 2) Group counselling was effective for developing targets. The results of the research had some reference value for the future study and application of group counselling.

Wilson and Carlton (2000) explored the sources of sport-confidence of senior adult, college, and high school athletes. The aim of the study is to know the gender effect on the self-confidence of sports students. The main findings of the study revealed that numerous spring sources of self-confidence differed between and within gender.

Zingler, Albert and Heller, Kurt A. (2000) this study evaluated students in the 8th grade of German college preparatory schools, before formal chemistry instruction, for prior knowledge of chemistry, their self-concept regarding chemistry, their gender-bound attitudes toward chemistry, and their fear of chemistry. Fixing indicated that girls already expressed a significantly lower level of self-confidence regarding chemistry the boys.

Ziegler, Albert, Heller, Kurt (2000) a study was conducted for exploring the conditions for self-confidence among boys and girls achievement in chemistry. The aim of the study was to know the gender effect. The result showed that girls were significantly low achievers of self-confidence than boys.

Beth Casey et al. (2001), a sample of one hundred and seven grade eight students, were compared in spatial-mechanical skills with mathematics Self-Confidence as mediators of gender differences in mathematics. Using items that showed the largest male and female advantage, respectively, on the Third International Mathematics and Science Study (TIMSS) U. S. data, we created mathematics Male and Female subtests from it on the 8th grade TIMSS; Using path-analytic techniques, we decomposed a significant gender/mathematics correlation, favouring males, on the TIMSS-Male subtest into direct and indirect effects. We found only indirect effects. A spatial-mechanical composite accounted for 74% of the total indirect effects, whereas mathematics Self-Confidence accounted for 26%. By 8th grade, girls' relatively poorer spatial- mechanical skills contribute to lower scores on types of mathematics at which boys typically excel.

Jung (2001) conducted a study to determine the “effects of transformational and transactional leadership styles on creativity by the group members”. In this study, the variables were divergent thinking fluency and flexibility. The sample was evaluated on these variables. The result of the study showed that leadership was recognized as a social influence.

Benabou & Tirole (2002) study was conducted for analyzing self-confidence and its role in motivation. The self-confidence model was built by the investigator. In this research, the model researcher describes the people who have imperfect knowledge about their abilities. They took most tasks as a complement to effort in determining performance. Higher self-confidence thus enhanced motivation and this created incentives for the manipulation of self-perception. This model had effective applications. The first application of the model- was used for self-handicapping: to avoid negativity about their ability. Second application was selective memory or awareness management: people were (endogenously) more likely to remember or consciously acknowledge their successes than their failures. This, in turn, helps explain the widely documented prevalence of self-serving beliefs --that is, the fact that most people have over-optimistic assessments of their own abilities and other desirable traits. The researcher analyzed the "psychological immune system" and showed that it typically leads to multiple equilibria

in cognitive strategies, self-confidence, and behaviour. Moreover, while active self-esteem maintenance could

improve ex-ante welfare, it could also be self-defeating. Systematically "looking on the bright side", avoiding "negative" thoughts and people, etc., could thus be beneficial in certain environments; but in other circumstances, one could only lose by playing such games with oneself, and it would be better to always "accept who you were" and "be honest with yourself".

Cheng and Furnham (2002) study was conducted to explore that peer relations, self-confidence, and school performance correlated with self-rated happiness (OHI) and loneliness (UCLALS) in adolescents. Personality traits (EPQ), self-confidence (PEI), friendship and school grades were all significantly oppositely correlated with happiness and loneliness. This was a co-relational study. Regression analysis was used as a statistical technique. The study revealed that extraversion and neuroticism were direct predictors of happiness and self-confidence, while psychotics and extraversion were direct predictors of loneliness. The effect of sex on happiness and loneliness was moderated by friendship and neuroticism and by neuroticism and psychoticism, respectively. Extraversion was also a significant predictor of general confidence and social interactions, which directly influenced loneliness whilst psychoticism was a direct predictor of loneliness. Self-rated school performance was the only direct predictor of happiness, whereas general confidence and social interactions were related to adolescents' self-reported loneliness.

Klassen (2002) investigated a study that examined the self-efficacy and collective efficacy beliefs of Indo-Canadian and Anglo- Canadian early adolescent students. The research participants included 112 Anglo- Canadian and 158 Indo-Canadian (children of Punjabi Sikh immigrants) grade 7 students. On a 22-item measure of math's performance, the Indo-Canadian students earned a significantly higher score than the Anglo-Canadian students and also rated their self-efficacy at a higher level. There were no differences between the groups in terms of calibration of self-efficacy and performance. In a multiple regression analysis, self-efficacy was the only motivation variable that predicted math

performance for both groups. For Anglo-Canadian students, previous math grade was the only other significant predictor of performance; for the Indo-Canadian students, math self-concept was the other significant predictor. Of the hypothesized four sources of efficacy beliefs, emotional arousal was the strongest predictor of efficacy for both cultural groups. Past performance was the next strongest predictor for Anglo-Canadians, while for the Indo-Canadian students; the vicarious experience was the second significant predictor of self-efficacy. For the sample as a whole, the students who were most accurate in their calibration performed at a higher level than students who underestimated or overestimated their performance. For the group task, collective efficacy was the best predictor of group performance for the Anglo-Canadians, whereas previous math grades predicted group performance more strongly for the Indo-Canadians. Counter to predictions of higher overall collectivism, the Indo-Canadians displayed higher levels of vertical individualism and vertical collectivism than the other group. Implications of the influence of the vertical aspect of Indo-Canadians on self-appraisal were discussed.

Lopez and Gormtey (2002) studied to observe stability and change in adult attachment style over the first-year college transition in relation to Self-confidence coping and distress patterns. The objectives of the study were to know the (i) Change group was significant main effects on Sc ratings and problem coping styles. (ii) Time and change group was significant main and interaction effects on the set of distress measures. The implication of the findings for an attachment theory informed perspective on the transitional adjustment of entering freshmen was discussed.

Peter Carruthers (2002) a study was developed for exploring the cognitive appearance of species. The researcher defended two individual claims. At first, he argued that essentially the same cognitive resources by adult creative thinking and problem solving, on the one hand, and by childhood pretend to play or to generate and to reason with suppositions. It was the evolutionary function of childhood Pretend was to practice and enhance adult forms of creativity. This also showed how our species first appearance in southern Africa 100,000 years ago and the creative explosion of cultural, technological and artistic change which placed within dispersed human population some 60,000 years later.

Christopher M. Tavani and Susan C. Losh (2003) studied the relationships among students' academic performances, expectations, motivations, and Self-Confidence. This was a co relational study. The sample consisted of four thousand twelve students from south eastern university summer. The effects of parental education levels on students' performances have also been studied. Significant positive correlations were found among all variables. These variables were also all significant predictors of students' academic performances. Gender was statistically significant effects on students' expectations and Self-Confidence levels. These results were consistent with previous studies and provided additional pathways for future research.

Hanton, Evans and Neil (2003) investigated the effect of hardiness, its subcomponents and skill level upon the intensity and direction dimensions of competitive trait anxiety and Self-Confidence intensity. It was getting partially supported the hypotheses that elite athletes high in hardiness, commitment and control would demonstrate a lower level of worry and a more facilitative interpretation of the anxiety response. Self-confidence analysis revealed significant interaction for the commitment and skill interaction only. No interaction was found between skill level and challenge, although main effects were evident for intensity (challenge) and direction (skill level). These findings identify hardiness as an important personality construct within a sport-specific situation and provide support for skill level as being a vital individual difference variable when measuring competitive anxiety. The role of Self-confidence and possible coping behaviours are also discussed, as are measurement issues regarding the cognitive term of "Worry" and "Concern".

Stoel et al. (2003) conducted a longitudinal study for the analysis of school investment self-confidence and language ability. For this researcher was created a Latent growth curve (LGC) analysis of longitudinal data for pupils' school investment, self-confidence and language ability. A multivariate model was tested that relates the three developmental processes to each other and to intelligence. All processes show significant differences between children in their developmental curves. The increase in language ability and the decrease in school investment correspond with the hypothesis. No hypothesis was formulated about self-confidence, but an increase for some and a decrease

for others were found. The hypothesis that development in language ability, school investment, and self-confidence was mutually positively associated was supported, as was the hypothesis that intelligence accounts for some of the differences in language ability. School investment, self-confidence, and intelligence each explain a different part of development in language ability.

Hannula et al. (2004) investigator explored the development of understanding and self-confidence in mathematics. In this article, the sample was collected by survey method. The sample consisted of three thousand fifty-seven students. This was a longitudinal study of fifth-graders and seventh-graders and, one and a half years later, a follow-up of ten classes (One hundred ninety-one pupils). The longitudinal data indicated that the learning of mathematics was influenced by a pupil's mathematics-related beliefs, especially self-confidence. In addition, pupils' level of understanding fractions also influences their developing understanding of infinity. These relationships between different variables also depend on pupils' gender and age.

Macuka, Prtotic and Soric (2004) investigated the contribution of the parent-child relationship quality to the level of a child's self-esteem. The study's sample consisted of one hundred twenty-seven students, seventy-two males and fifty-five females (of seventh-grade of primary school). The questionnaire was administrated for the assessment of various aspects of family relations. The data was collected with the help of Coppersmith's scale of self-esteem. The main findings of the investigation revealed the differences between males and females in the assessment of the perceived father control: males showed a significant tendency to have a higher rate of the perception of father control. There was a significant correlation between self-esteem and school achievements. The results showed a considerable contribution of different aspects of family functioning to the development of a positive self-image in the period of early adolescence. However, it is important to state that different relations within a family have different effects on boys and girls.

Mc Nair, R.L. (2004) this study was focused on the self-esteem of college students in relation to social, academic, role models, identities, emotional support etc. The samples of study were college students of Des Moines Area Community college. The finding revealed that self-esteem depended on people's perception of their role models. The role models are chosen by students on the basis of their identification with them. Therefore, good self-esteem helps people to choose positive role models.

Michael McCarthy and Ronald Carter (2004) this study has investigated the use of spoken language as narrative and related storytelling genres. The study reported an initial investigation of five million words of everyday spoken English and discussed social contexts in which creative use of languages was manifested. The main finding of this research was that creative language use showed the nature of the interpersonal relationship and plays an important role in the construction of identities and facilitates symmetrical and informal talk. These were also argued that different creative patterns of the talk were produced for different purposes, those clines and continue the best capture such distinctions and that application of understandings to language learning and teaching.

Partington, K. (2004) this study was concerned with determining the impact of self-esteem on academic achievement and educational aspiration of adolescents. The sample of the study was male and female students of classes tenth and eleventh, in the age group of 15 to 19 years. The study revealed that students with higher maturity levels and self-esteem had a higher level of academic achievement future aspiration than their counterparts.

Rosamond Mitchell and Cynthia Martin (2004) paper present some preliminary findings from a longitudinal study of French teaching learning at two secondary schools in southern England. The main aim of the project was to document the development in French of a cohort of 60, 11-13 year - old over a two year period, with a focus on the place in their development to prefer phrases or 'chunks' of language and to this development to their classroom experiences are also documented. In particular, we compare teachers' beliefs about class learning with the evidence on learners' progression derived from the project's own elicitation. This also intends to contribute to the growing literature of language teacher's craft knowledge that has not systematically linked the study of teacher beliefs with second language learning.

Paul Vogt (2005) investigated the productive creativity of children in a computational model of the emerging evolution of compositional structures in language. Previously it was the composition structures in language when the language was transmitted from one generation to the next as a transmission bottleneck. In the current study, the language was in most simulations-transmitted horizontally. It was shown that such a horizontal transmission scenario does not need externally because the children face an implicit when they start speaking early in life. The

children were a driving force for inventing grammatical structures. The studied model was the creative dividing force for the emergence and stable evolution of compositional language, which had been the dividing force for the emergence in language.

Seo, Lee and Kim (2005) investigated “Korean Science Teachers Understanding of Creativity gifted Education.” The results of the study revealed that the science teachers had a thorough understanding of the cognitive component and the strong association of creativity with intellectual ability. To enable their understanding to a more balanced view, personality and environment components should be emphasized.

Vamadevappa (2005) conducted a correlational study. The research was found the relationship of self-concept and achievement in Biology in pre-university science students. The research was conducted on a sample of four hundred eighty university students of the science department. The main findings of the study showed that there was a positive relationship between self-confidence and achievement in Biology. Underachievers and overachievers differ significantly in their self-confidence. The study also put forward that underachievers had low self-confidence. From this, it was depicted in the results of the study that low self-confidence was the cause of underachievement in Biology.

Barry and Kanematsu (2006) studied creative thinking in Japan. In this study, the Japanese children were provided with enjoyable and productive learning experiences in science through science fair teaching approach. It also gave children an opportunity to design and display their creative posters. The main findings were revealed that out of forty students, thirty-nine students fully enjoyed the creative fair. In addition, the parents, teachers, principals, and members of the media were impressed with the great event.

Ghobaribanab and Hejazi (2006) tried to find out the relationship between self-confidence and assertiveness with academic achievement of normal students and gifted. The study revealed that that gifted students were better in self-confidence, academic achievement and assertiveness. The findings revealed that students’ academic achievement can be predicted by assertiveness and self-confidence of students.

Jakobsson (2006) investigated the connection between the pupil-teachers' self-confidence and their successful completion of studies. The sample of the study was seventy pupil-teachers in Sweden, completing a 10 week course. The result showed that a significant connection between the student's self-confidence after successfully completing their studies. The investigation also showed that during the first week of the course the students had a very good understanding of their own potential to complete their studies. Main findings of the study had been extracted using statistical analysis of students' understanding of the concepts of knowledge and learning as well as self-confidence. The practical implications of the research had proposed that, different types of learning could be developed for student support services to improve self-confidence.

Karatzias, Chouliara, Power and Swanson (2006) the present study focused on the association between the personalities constructs of self-esteem/affectivity and General Well Being (GWB) in Scottish adolescents. 425 secondary school pupils were selected as the sample of the study. Findings showed that self-esteem was the strongest predictor of mood. It was also had strong influence on the anxiety of well-being domain. School self-esteem strongly influenced physical well-being of the students, whereas negative affectivity was the strongest predictor of anxiety well-being domain. However age and gender were not significantly associated with general well-being. The study also provided evidences regarding the high association between GWB and personality factors in adult and adolescent populations.

Karatzias, Chouliara, Power and Swanson (2006) investigated that the association between the personalities constructs of self-esteem/affectivity and General Well Being (GWB) in Scott is adolescents. The sample consisted four hundred twenty five secondary school pupils completed the P.G. General Well Being Scale, the Hare Self Esteem Scale (HSES) and the Positive and Negative Affect Schedule combined self-esteem, positive and negative affectivity, age and gender accounted for 49.7% of the total GWB variance, 24.9% of the physical well-being variance, 41.6% of the mood/affect well-being variance, 33.3% of the anxiety well-being variance and 44.3% of the self/others well-being variance. Home self-esteem was found the strongest predictor of mood/affect and self/others well-being domains as well as well-being total. It was also the second best predictor of anxiety well-being domain. School self-esteem was the strongest predictor of physical well-being, whereas negative affectivity was the strongest predictor of anxiety well-being domain. However age and gender were not significantly

associated with GWB, total or domain specific. The study also provided evidence regarding the high association between GWB and personality factors in adult and adolescent populations.

Konvalina (2006) a study was conducted to find the relationship between self-assessment, achievement, and confidence in basic mathematics skills. The sample of the study was thirty college students enrolled in a self-paced developmental mathematics course. Students were randomly assigned to either an experimental group that performed a written self-assessment before each test, or to a control group that had not performed the written self-assessment. The main findings revealed that significant differences were found between the groups in achievement or general confidence in basic mathematical skills. However, the experimental group consistently had a higher confidence mean over a twenty five item basic skills inventory and scored higher on a significant proportion of skills. A highly significant correlation was found between skill confidence and achievement over the twenty five basic skills for the combined groups. A significant correlation was found between group confidence and group achievement for the experimental group, but not for the control group.

Kristen M. Kemple, Gigi M. David and Yiping Wang (2006) conducted a study for measurements of shyness, self-esteem, and creativity was administered to sixty four preschool children. The researcher found that the correlation analyses revealed a positive relation between self-esteem and creativity, and a negative relation between shyness and creativity. Analyses of covariance (ANCOVAs) revealed that the relation between shyness and creativity continued to exist after self-esteem was covaried. The results of the research was suggested that future research examining the contributions of social style and social competence to young children's creative potential.

Aldous (2007) made a study named "Creativity, problem solving and innovative science : Insights from history, cognitive psychology and neuroscience. "The study would do well to attend to the non-cognitive as well as the cognitive elements in science and mathematics learning , problem solving and innovative science and teaching. The main findings of the study revealed that the gap between the non- cognitive elements of feeling and intuition and its role in learning and teaching and the role of emotion in cognition holds the potential for important innovations in the science learning and the practice of teaching.

Ashtian, Mohammad, Khodapanahi and Tarkhorani (2007) conducted a study to find out association of characteristics of adolescents' personality with their academic achievement. The sample consisted one thousand three hundred fourteen students of Tehran's high schools. Simple random technique was used for the sample selection. Data were collected with the help of self-esteem inventory of Cooper smith, self-concept inventory of Beck. State-Trait anxiety inventory of Spielberger and depression inventory by Beck. The major revelation of the study was that self-esteem and self-concept were correlated with each other and these two had positively impacted academic achievement. An increase in self-concept and self-esteem lead to decrease of anxiety and there existed a negative significant relation between self-concept, self-esteem and depression which lead to decrease in academic achievement of the students.

Chang (2007) investigated that adolescence could be a time when teens attempt to reconcile their own desires and needs with the wishes of their parents. While some adolescents get through this period of time without many problems; others tend to experience many negative effects. It was possible that the parent's role in the relationship may play a part in the development of a teenager's self-esteem and self- satisfaction. Cultural values such as the Asian American emphasis on interdependence and family harmony may influence the type of parenting style these parents may choose to adopt. A study was performed with one hundred fifty-six teenagers from central New Jersey to determine the effects of parenting style on teenagers' self-esteem and overall satisfaction with their parents and themselves. The main finding of the study was that there were no significant differences between race and authoritative parenting style; however, significant differences was found in that Asian American parents tended to be more authoritarian than their Caucasian counterparts. Furthermore, authoritative parenting was found to be associated with higher self-esteem and satisfaction. Results of the study were discussed in terms of the impact of cultural expectations on adolescents' satisfaction with self and with their parents.

Ciarrochi, Heaven and Davies (2007) studied the distinctiveness of three "positive thinking" variables (self-esteem, trait hope, and positive attribution style) in predicting future high school grades, teacher-rated adjustment, and students' reports of their

affective states. Seven hundred eighty-four high school students (three hundred eighty-two males and three hundred ninety-four females; eight had not indicated their gender) completed Time -1 measures of verbal and numerical ability, positive thinking, and indices of emotional well-being (positive affect, sadness, fear, and hostility), and Time -2 measurement of hope, self-esteem, and emotional well-being. Multi-level random coefficient modelling revealed that each positive thinking variable was distinctive in some contexts but not others, Hope was a predictor of positive affect and the best predictor of grades, negative attribution style was the best predictor of increases in hostility and fear, and low self-esteem was the best predictor of increment in sadness. It was also found that sadness at Time-1 predicted decrease in self-esteem at Time -2. The finding of the study was discussed with reference to the importance of positive thinking for building resilience.

H.G. Widdowson (2007) studied in his current renewal of interest in language creativity raised a number of intriguing problems. According to the editors, these papers were not concerned with creativity in a general pragmatic sense but more specific poetic creativity, which they define following as a focus on the message for its own sake. Creativity was a function of how the message with other speech at conditions and so has to be accounted for in general pragmatic terms

Huang, Norman, Zabinski, Calfas and Patrick (2007) investigated a study of body image and self-esteem among adolescents undergoing an intervention targeting dietary and physical activity behaviours. They were focused to determine the effect of a one-year intervention targeting physical activity, sedentary and diet behaviours among adolescents on self-reported body image and self-esteem. Adverse effects on body satisfaction and self-esteem were not observed among adolescents undergoing this behavioural intervention. These results revealed that a behavioural intervention directed at improving physical activity and diet habits might be safely undertaken by adolescents, including those who were at risk for being overweight with and without adverse psychological consequences. The inclusion of specific elements in the intervention that directly addressed body image and self-esteem issues may have reduced the risk for negative psychological effects.

Janet Holmes (2007) conducted the research tradition associating humour with creativity although relatively researchers focused on the use of humour among professionals in particular workplaces. The analysis of data was provided evidence that humour was not only contributed construction of effective workplace relationships, but may also stimulate intellectual activity of direct relevance to the achievement of workplace objectives the use of humour to foster workplace creativity. The result was suggested that the first category was persuasive. Workplace creativity was less frequent and tends to characterize some communities of practice more the others. Interestingly the effective use of workplace humour to generate new idea and stimulate intellectual progress was strongly associated with what had been labeled transformational leadership.

Martinez, Garcia and Yubero (2007) studied the relationship between parenting styles and self- esteem among one thousand two hundred thirty nine, 11- to 15-yr.- old Brazilian adolescents (54% females; Mean of age = 13.4 yr., Standard Deviation= 1.4). The researcher were divided four groups of Teenagers' families .There were 1 to 4 groups (Authoritative, Authoritarian, Indulgent, or Neglectful) which were formed on adolescents' answers to the ESPA29 Parental Socialization Scale. Participants were completed the AF5 Multidimensional Self- Esteem Scale. The Multidimensional Self- Esteem Scale were appraised these five dimensions: Academic, Social, Emotional, Family, and Physical. Data Analyses revealed that Brazilian adolescents from indulgent families scored equal (Academic and Social) or higher (Family) in self- esteem than adolescents from authoritative families. Adolescents from indulgent families scored higher than adolescents from authoritarian and neglectful families in four self-esteem dimensions, academic, social, family, and physical. Adolescents from authoritative families scored higher than adolescents from authoritarian and neglectful families in three self-esteem dimensions, academic, social, and family. These results were suggested that authoritative parenting was not associated with optimum self- esteem in Brazil.

Martinez and Garcia (2007) investigated that the relationship of parenting styles with adolescents' outcomes. The population of the study was Spanish adolescents. The sample of the study was one thousand four hundred fifty six teenagers from 13 to 16 years of age, of whom 54.3% were females, reported on their parents' child-rearing practices. The teenagers' parents were classified into one of four groups (authoritative,

authoritarian, indulgent, or neglectful). The adolescents were then contrasted on two different outcomes: (1) priority given to Schwartz's self-transcendence (universalism and benevolence) and conservation (security, conformity, and tradition) values and (2) level of self-esteem (appraised in five domains: academic, social, emotional, family and physical). The results showed that Spanish adolescents from indulgent households have the same or better outcomes than adolescents from authoritative homes. Parenting was related with two self-esteem dimensions—academic and family and with all the self-transcendence and conservation values. Adolescents of indulgent parents showed highest scores in self-esteem whereas adolescents from authoritarian parents obtained the worst results. In contrast, there were no differences between the priority given by adolescents of authoritative and indulgent parents to any of the self-transcendence and conservation values, whereas adolescents of authoritarian and neglectful parents, in general, assign the lowest priority to all of these values.

Philip (2007) studied a co-relational research. Researcher revealed the relationship among self-esteem intelligence, achievement motivation, home environment, science creativity and achievement in science among students of higher secondary school in Kerala. Normative survey method was used by researcher for the collection of data. The study was revealed the interactive effect among the variables—intelligence, scientific creativity, achievement motivation, home environment in science.

Ronald carter (2007) investigated the topic “Respect to special issue of applied linguistics devoted to language creativity in every context” is an article published in this special issue which at the same time three main areas are identified as of especial significant need for more empirical participant based research into processes and contexts of everyday language within a broader social and contextual frame of aesthetics, the need for further exploration of different critical and salient moments in discourse when creativity was a key component in social interaction and finally the need for creativity research to extended boundaries second language teaching research by producing stronger links between language and literature teaching.

Chun-Yen Changa and Wei-Ying Cheng (2008) investigated the interrelationship between science achievement of senior high school students and their Self-Confidence also their interest in science was investigated in the study. The sample of the research was one thousand forty four of 11th grade students. Some support was found for the relationship between the achievement

orientations and the sport-confidence/ competitive orientation constructs of Valley. Also, a multivariate relationship was supported between the sport-confidence/achievement orientation predictor constructs and the self-confidence, anxiety, and performance of adolescent figure skaters in sport competition. Self-confidence related to self-assuredness in one's personal judgment, ability, power, etc. It was a feeling conscious of one's ability or dependence on oneself under certain circumstances, faith or belief that he or she would act in a right proper or effective way. It was referred to a person's perceived ability to tackle situations successfully and independently. A self-confident person was perceived himself to be socially competent, emotionally mature, intellectually adequate, successful, satisfied, decisive, optimistic, independent, self-reliant, self-assured, forward moving, fairly assertive and having leadership qualities.

Driscoll, Russell and Crockett (2008) investigated a study to find the generational patterns of parenting styles. The researcher was found the relationships between parenting styles and adolescent well-being among youth of Mexican origin, and the role of generational parenting style patterns in explaining generational patterns in youth behavior (delinquency and alcohol problems) and psychological well-being (depression and self-esteem). In this research, researcher was used two waves of data from the National Longitudinal Study of Adolescent Health. The proportion of teens with permissive parents increased with generation; other parenting styles declined. The rate of youth with behavioral problems was increased with generation. Self-esteem was improved with generation; depression scores had not. Bivariate generational patterns of behavioral and psychological outcomes were a function of the patterns seen for youth with permissive parents, coupled with the increase in the proportion of permissive parents with each successive generation. In contrast, these outcomes had not arisen with generation for youth with authoritative parents.

Morgan and Brodie-Walker (2008) conducted a study to find the impact of a distressed environment on self-esteem in Jamaican adolescent females and to assess the impact of behavioral patterns on self-esteem. This was an experimental research. The sample of the study was African-Jamaicans students of ages 13-17 years. The researcher was classified two groups one from a Place of Safety (experimental group) and the other one was local high schools (control group). For the data collection of the study

Rosenberg Self-Esteem Scale and Child Behavior Checklist were used. All students were completed the Rosenberg Self-Esteem Scale (RSES) while the experimental group were also completed the Child Behavior Checklist (CBCL). Participants in the experimental group were classified as either internalizes (depressed, anxious and summarizing), externalizes (exhibiting aggressive, disruptive behaviors), both (externalizers and internalizes) or other (reporting no or very few symptoms). It was hypothesized that the participants residing in the Place of Safety would report lower levels of self- esteem in comparison to the control group. Secondly, the 'both' group would report lower levels of self- esteem than any other group. Main findings of the study was indicated no differences in self -esteem scores; however, statistical significance was found between 'externalizes' and 'both' groups ($p = 0.006$). This study was challenged the assumptions of self- esteem and its relationship to behavioral and emotional problems.

Netto (2008) investigated a study on reflective thinking strategy of teaching on certain cognitive and affective variables. The population of the study was secondary school students. The researcher was made three groups with high, average and low level of creativity. Shows no significant difference between the groups with regards to their achievement. This study confirmed that the reflective thinking strategy is equally effective for pupils irrespective of their creativity.

Otacioglu (2008) conducted a study for the problem solving ability and the level of self-confidence of prospective teacher. The main aim of the research was to determine whether the education that prospective teachers in different fields receive was related to their levels of problem solving skills and self-confidence. The sample of the study was consisted one hundred sixty two students who were studying for their bachelor's degree in Marmara University. Data was collected with the help of Problem Solving Inventory and Individual Information Forms were also used in this investigation. The statistical techniques of the study were t-test, Kruskal Wallis-H, and Mann Whitney U tests. The result of the study showed that the relations between students' self-confidence and problem solving skills were negative and correlation between two variables showed opposite relation, one variable was not decisive in the other.

Pullmann and Allik (2008) investigated the self-reported academic self-confidence. Researcher found the academic self-confidence that was self-reported was a powerful and

correctly predicted school achievement, it was also seen that low general self-confidence and not high was a significantly predicted school performance when academic self-confidence and multi-co linearity were under control. The study was conducted on Estonian students and university students and the data was taken from nationally representative sample (N = four thousand five hundred seventy two). Two compensatory mechanisms-defensive pessimism and self-protective enhancement were used to explain the paradox of low self-confidence: the result of the study revealed that students who were academically successful viewed themselves more critically view and students with lesser academic abilities elevated their general self-esteem to compensate for their academic under-achievement. No correlation was found between self -confidence and academic achievement of the students.

Alias and Hafir (2009) conducted a co-relational study to found a relationship between stimuli that induces confidence, cognitive performance and academic self-confidence among engineering students. The sample for research was derived from two different groups of engineering students from a polytechnic in Malaysia. The confidence inducing stimulus (positive or negative) was the independent variable of the study, dependent variable was cognitive performance and ASC was the hypothesized mediating variable. The main findings of the study revealed higher (3.08) of positive group that was statistically significantly compared to the ASC level of negative group (2.67) and a statistically significantly higher cognitive performance was demonstrated by the positive group as compared with the negative group that was 71% and 54%. It was thus revealed that enhancement of ASC level among engineering students could elevate their cognitive performance.

Claire-Marie and Martina (2009) conducted an investigation to exploring three creative activities designed to teach students about earth, space science. Researcher was allow them to explore and express their understanding in imaginative and subjective ways. The investigation showed that creativity was an important quality in science with the hope that this would broaden their perceptions of the practice and learning of science.

Nunez, Anne-Marie (2009) investigated a study for the development of model predicting academic self-confidence for 2nd year Latina college students. The result of the study revealed that forms of academic, cultural, social, and intercultural capital were positively associated with academic self-confidence. The prevalence cross-racial interaction was negatively associated with

academic self-confidence. The study was suggested policy and programming implications to support the development of Latina/o students' academic self-confidence.

Stepan (2009) investigate a study to found the role of mothers' and fathers' internal working models of self and attachment in child loneliness, empathy, and self -esteem in pre- adolescence. The main findings of the study revealed that fathers', though not mothers, internal working models of self, accessed via self-reported self- esteem, were significant predictors of child self- esteem, empathy and loneliness in pre-adolescence. The results showed that robust and pervasive relations between indicators of fathers' internal working models of self and attachment and children's self -esteem and loneliness and that many of these relations remained significant even when gender, stressful life events, and pubertal development were included in analyses. The findings revealed that when fathers had more positive self-models, and more positive models of their attachment history and romantic attachment relationships, children had greater self- esteem and were less lonely in pre-adolescence. The discussion focuses on the importance of fathers to child well- being in pre-adolescence and the validity of self-report measures of attachment, and particularly of romantic attachment, in the context of intergenerational attachment studies.

H. Ali, A. Ramazan, and I. Abdullah (2010) conducted a study to found the self-confidence levels of students in terms of some variables. The sample of the study had of one hundred sixty eight students of Aksaray University. A scale measuring self- confidence levels was used for data collection. Collected data were analyzed by the help of descriptive analyses, t-test and ANOVA. The findings of the study revealed that there existed a significant difference between males and females.

Burton, Pauline, et al (2010) conducted studies, which were carried out between 1999 and 2001, illustrate how pedagogical discourses of creativity such as creative tasks, the creative process and communities of practice were more significant at classroom level than simple East41West dichotomies, and how such discourses could be productive both for teachers and students despite institutional and social constraints.

Tin, Tan Bee, et al (2010) suggested that the several characteristics of creativity being highlighted: honesty, reality, truthfulness, and personal value. The poems were voted on and the ones which received the greatest number of votes were also analyzed. The more creative poems demonstrated higher degrees of language play and creative language use. This paper suggests

several activities which could be conducted by teachers and students in other contexts to help them examine their own explicit and implicit views on creativity.

Vealey and Campbell (2010) investigated the study to find the determine what achievement goal orientations were present in adolescent figure skaters, examine the relationship between the goal orientations conceptualized by Maehr and Nicholls (1980) and those 64 conceptualized by Vealey (1986), and investigated the influence of different goal orientations on the pre-competitive self-confidence, precompetitive anxiety, and actual performance of adolescent skaters. The sample of the study consisted one hundred six youth figure skaters participating in regional competition. These skaters were found to have two achievement goal orientations which were termed extrinsic and task orientations. A multivariate relationship was supported between the sport-confidence/achievement orientation predictor constructs and the self-confidence, anxiety, and performance of adolescent figure skaters in sport competitions. Self- confidence relates to self-assuredness in one's personal judgment, ability, power, etc. It was a feeling or consciousness of one's powers or of reliance on one's circumstances, faith or belief that one would act in a right proper or effective way. A self-confident person was perceived himself to socially competent, emotionally mature, intellectually adequate, successful, satisfied, decisive, optimistic, independent, self- reliant, self -assured, forward moving, fairly assertive and having leadership qualities.

Booth and Gerard (2011) conducted a study to find the relation between self-confidence and academic achievement for young adolescents. Researcher was used the mixed methodology design to investigate the study. In this study the researcher was included two Western cultural contexts: the United States and England. Data were collected for both Quantitative and qualitative analysis. a sample of eighty six North American and eighty six British adolescents was used to find out the relationship between self-esteem and academic achievement from the commencement of the academic session to the end during their 11th–12th year of age. The main finding of the study revealed that fall of self-confidence was related to multiple indicators of academic achievement in later years. It also showed that country differences appeared at the end of the year, while math's had a consistent relationship with self-confidence in the context of both countries.

British students' self-perceptions more accurately reflected their academic experience as compared with the students from the United States as was revealed during qualitative analysis.

Maksic, Slavics, et al (2011) conducted the aim of this paper was to investigate implicit theories of educational researchers on creativity and the potential to support creativity in schools. We used qualitative thematic analysis of material produced by twenty seven educational experts from Serbia. Personal explicit theories about manifestations of creativity were mainly based on qualities and behavior of a creative person, while there were notable differences in manifestations of creativity at different ages. There was a prevalent belief that the school could contribute to the development of creativity to a large extent. The paper broadens the field of investigation into implicit theories on creativity, from exploring the creative personality to a developmental dimension of creativity and to the possibilities of supporting creativity in the school setting.

Kleitman, S. and Gibsun, J. (2011) investigated the Meta cognitive beliefs, self-confidence and primary learning environment of six grade students. Meta cognition was an essential element of a self-regulated approach to learning. The main objective of the study was to find out relationship between perceptions of one's own competence, academic self-efficacy and reasoning abilities, and their function in anticipating the self-confidence traits .The study also focused on identifying the role of major factors in the classroom that predict self-beliefs, traits of self-confidence and academic achievement in 6th year students (N = 177).The techniques used to find out these relationships were EFA and Path analysis. The results of the study suggested that Meta cognitive competency beliefs and academic self-efficacy defined a major factor. Meta cognitive Belief served as major element in prediction of self-confidence. Mastery over goal-orientation and self-efficacy with teacher indirectly predicted Meta cognitive Beliefs.

Sedighe Salaril, Hossein Jenaabadi (2011) the present study compared self-confidence and creativity of normal and gifted high school students of two districts in Zahedan. The researcher adopted the casual-comparative method for the study. From the statistical population of 8530 male and female high school students, a sample of 368 students were selected. Moradi's Inventory of the Level of self-confidence (2011) and Abedi Creativity Test were used for data collection. The data collected was analyzed using MANOVA and t-test. The results of the analysis revealed that there was difference between normal students and gifted students with respect to their creativity. a significant difference was found between the level of self-confidence

of normal students and gifted high school students. Also no significant difference was found between the creativity and self-confidence of male and female students.

Sabira Kleitman, Jennifar Gibsun (2011) studied the Meta cognitive beliefs, self-confidence and primary learning environment of six grade students. Meta cognition is an essential element in self-regulated approach towards learning. This study investigated the relationships between academic self-efficacy and of one's perceptions memory competence, reasoning abilities, and their role in defining the self- confidence. The study determined the function of classroom factors to predict academic achievement, self-confidence and self-belief trait in Year 6 students (N = 177). To determine these relationships EFA and Path 60 analysis was used. The hypothesized path model was tested in a similar manner to establish whether or not hypothesized relationships were compatible with data collected. The findings of the study showed that Meta cognitive competency beliefs and academic self-efficacy served as major factor and key predictor of self-confidence. Students who had stronger Meta cognitive Beliefs not occupied behaviours which were in self- handicapping. Common factors for self -efficacy scale were intelligence, gender and a proxy for, school fees which were controlled in the study. This study was important to realize the role of both Meta cognitive theories in educational practices.

Al-Hebaish (2012) the study aimed to investigate relationship between general self-confidence and academic achievement. A sample of fifty three undergraduate female students of English majors in the oral presentation class at the Taibah University was collected. The findings of the study showed that there was a strong, relationship between academic achievement and general self-confidence. Those who got high score in general self- confidence questionnaire had good oral performance test ratings, too. It was proposed that language instructors should improve self-confidence among their students in order to strengthen their oral performance.

Ott, Michela, et al (2012) conducted a study related to digital creativity. Researcher was find out that the results of the study, which were presented and discussed, confirm the hypothesis that digital tools could contribute to fostering creativity. Collected data analysis of the available showed that during the 3-year study, students' creative skills and attitudes appreciably increased,

in particular those related to figuring out and enacting original solution strategies for the digital games at hand.

Perez (2012) conducted a study to determine gender differences in various aspects of psychological well-being. The population of the study was Filipino college students. The sample was formed five hundred eighty eight college students from various schools in the Philippines participated in this project (boys- 110; girls -478). The subjects completed eight scales measuring different aspects of psychological well-being. The research revealed that gender differences were found in terms of daily spiritual experience, father relationship, peer relationship autonomy, positive relations with others, and purpose in life. No gender differences were found in the aspects of positive effect, negative effect, mother relationship, teacher relationship, environmental mastery, personal growth, and self-acceptance keeping in view the above literature one may now proceed towards the problem and hypotheses.

Suh, Taewon, et al (2012) found that the results show that client learning from agency services was the result of the creative process of the agency and the creativity of the service outcome itself. Client learning from marketing services also varied depending on different performance ratings. Originality/value: The study elucidates client learning as the central process of value co-creation in the brand value chain. It was produces several unique findings and managerial takeaways for building up better co-creation environments in the context of business-to-business services.

Alacapinar, Fusun (2013) this study was explored the creativity among boys and girls. Creativity was measured on the dimension of average fluency, flexibility, originality, elaboration, and total scores of classes. Fluency, flexibility, originality, elaboration, and total scores of the 5th graders were the highest as compared to other classes. On the other hand, the 6th grade students' scores were the lowest. The results showed that the creativity scores increased from third class to fifth class and decreased from class sixth to eighth. These stressed that there was a significant relation between class level, gender, and creativity. The significant difference exhibited by total creativity scores could be explained by the fact that their ideas and products related to high scorers of creativity enjoyed the support of their friends, families, and teachers. In order to improve children's creative thinking, teachers and the parents should be supported by further training programs, positive feedback , zero punishment, encouragement to create something new, were few of the steps that could be taken to promote creativity.

Maclellan, E. (2013) this study employed an analytical technique of concept analysis to review, theories, concept which explained the role of teacher in generation of self –confidence among learners. Self- confidence was found to be a robust and stable psychological construct which can be enhanced among learners with teachers’ attention towards development of knowledge of learners and social engagement. Emotional well-being and enhanced opportunities of knowledge were two major sources of self -confidence. It was important that learners engage in meta-cognitive activities thus it is important for teachers to plan activities accordingly

Niu, Weihua, et al (2013) investigated the article integrates the seven papers of the two special issues with a special focus on discussing the differences in people's beliefs about creativity between the Chinese and American cultures: How it was conceived, evaluated, and nurtured. It was used three metaphors to capture major differences in these aspects, and highlights areas with profound cultural variations in conceptions and creative education for future research.

Ryo Okada (2013) the objective of the research was to study Friendship Motivation, aggression and self-esteem in Japanese undergraduate students. In this research the total 100- 101 undergraduate associated with self-determined friendship motivation and self-esteem.

Yuanyan Hu and et al. (2013) the main aim of this investigation was to study loneliness and their relationship to explicit and implicit self-esteem. For the data collection Self-esteem Scale and Loneliness Scale was used. Self-Esteem was very important factor for everyone. It was lead to success and when the level of self-esteem decrease the man also feels loneliness. In this study the result of correlation indicted that low self-esteem was strongly related with loneliness.

Zhaojun Teng, Yanling Liu (2013) this research explored the effect of neuroticism on the self-esteem and aggressive emotion among Chinese adolescents. For this purpose a cross sectional study was conducted with a sample of total 1085 Chinese adolescents. To collect data a battery of questionnaire was constructed for self -esteem, neuroticism and aggressive emotions. The result of the present study indicates that adolescents were faced with many problems and they feel low Self-Esteemed under such cases they often react like an aggressive person and this all traits are seen in neuroticism. A mediating role of neuroticism was found in both males and females. So, the role of Neuroticism in the Relation between Self-Esteem and aggressive emotions was very strange.

Kathrin Schaffhuser and et al. (2014) conducted a study to investigate the dyadic longitudinal interplay between neuroticism. Self-esteem and individual and shared aspects of relationship

satisfaction in intimate parterres. The main findings of the study revealed that strong relationship satisfaction could be both outcome and predictor depending on the personality trait. Students were selected. Friendship motivation, aggression and self-esteem scale were provided them. The result of the f-test showed that Self-determined friendship motivation predicted lower levels of anger, hostility and physical aggression and that hostility and anger predicted lower level, of self-esteem. Verbal aggression was found to be positively.

Karimi, A., and Saadatmand., Z. (2014) this study focuses on the relationship between academic achievement and self-confidence of students in the city of Isfahan. The study employed descriptive correlation method. Sample of the study was collected through stratified random sampling. SPSS software was used to analyse the data. Correlations of test, analysis of variance, regression analysis were used for statistical analysis. Results indicated a positive relationship between self-confidence and educational and academic motivation of students.

Sarkova, M., Sleskova, M.B., Geckova, A.M., and Katreniakova, Z. (2014) this study explored the relationship and experience of school and their influence on the development wellbeing, self- esteem and social adjustment of the students. It covered a sample of 3694 students of elementary school in Slovakia results of the study revealed that peer and pupil-teacher relationship had a significant impact on the students' psychological well-being, depression, anxiety and social dysfunction. Students who had good relationship at school reported to have greater self-esteem and self-confidence.

Edwads, Emily et al., (2015) conducted a study with the some variables for developing linguistic self-confidence. Research helps to understanding about listening comprehension skills, together with an awareness of other carriers of meaning, were central to the development of linguistic self-confidence. For this learner, a cyclical interaction between L2 self –confidence, WTC, and L2 proficiency was evident. The findings of the research had implications for language teachers, providing important insights into the way that critical events and decisions in the participants learning journey may contribute to the development of self-confidence.

Sabeti, Shari (2015) suggested that the main analysis employs anthropological theories of creativity and ageing in order to question the cultural assumptions about creativity and the period of older age informing theory and practice. In this study researcher argued that the value of creative writing for the individuals studied lies both in the fact that it was a relational (rather than

individual) process and a means of being in the present. Findings of the research was contradict traditional conceptions about creativity as future- oriented and older people as retrospective; they also raise questions about narratives of empowerment, individual agency and the importance of "reminiscence" in some of the literature on older adult learning.

Zacher, Hannes, et al., (2015) conducted a study to find out the students' perceptions of professors' transformational leadership positively predicted professors' ratings of their students' creativity above and beyond students' perceptions of professors' passive-avoidant and transactional leadership. Contrary to expectations, students' perceptions of professors' passive-avoidant and transactional leadership had not significantly predict professors' ratings of students' creativity. Implications for future research on leadership and creativity as well as tentative practical applications of the findings in higher education settings were discussed.

Nafiati, D.A. (2017) the present study investigated the influence partial and simultaneous motivation, confidence and creativity of the economic students of Senior High School. A sample of 126 students of social science was collected for the study. The tools for data collection were questionnaire, documentation and observation. The result revealed that learning creativity, self-confidence and learning motivation beneficial impact on the learning of economics. The findings of the study can guide teachers to enhance self-confidence, learning creativity and learning motivation, among students .the study implicated that students should not completely depend on the subject matter provided by the teachers, but they should work more independently and actively.

Nemerzitski Stanislav (2017) studied "Implicit theories of creativity of secondary school students" .The population of the study was secondary schools of Estonia and Russia. Researcher wanted to identify possible differences in how students from different cultural backgrounds define creativity although students from Russia tends to identify creativity more with novel ideas, students from Estonia defined creativity more in terms of self-expression.

Sedighe Salari1, Hossein Jenaabadi (2017) this study made comparison between creativity and self-confidence of normal and gifted students of high school in Zahedan. It used the casual-comparative method for research .a sample of 368 male and female students was collected for the study. Moradi's Inventory of the Level of Self-Confidence and Abedi Creativity Test were administered . The data obtained was analyzed using MANOVA and independent t-test and. The results of the study revealed that there was significant difference in creativity of normal and

gifted students. There was a significant difference between the level of self-confidence of normal and gifted students. But there was no difference between male and female students with regard to their creativity and self-confidence.

Sihotang, Setiawan and Saragi (2017) investigated a study aimed to analyze the student's learning outcomes that were learned by Group Investigation (GI) learning strategy was higher than learning result student civic education which was taught by Student Team Achievement Division (STAD) learning strategy, students level of self-confidence and the interaction of learning strategies and self-confidence in influencing student's learning outcomes .The population of this study was the students of class-v Elementary School, Medan Tembung. The sample was formed by 2 classes with the number of sixty students. Research instruments to measure learning outcomes. A multiple-choice test forms were used as research instruments to with and questionnaires for students' self-confidence. The data analysis technique used two-way ANOVA. The research findings showed: (1) there was a difference in learning outcomes of students of civic education using Group Investigation strategy with those of STAD strategy. The learning outcomes of students of civic education using Group Investigation learning strategy was an average value of 89.23, while the learning outcomes student of civic education using STAD learning strategies was an average score of 83.67, (2) there was a difference in learning outcomes Student civic education has a belief High self-esteem with low self- confidence. Students who have high confidence with the average value of civic education learning outcomes of 89.55, while students who have low confidence to get the average value is 83.55, (3) There was interaction learning strategies and confidence in affecting learning outcomes student civic education.

Barlot, B. (2018) It was explored multivariate relationship between creativity in domains of music, literary verbal graphic Among adolescents. Creative productions were measured by four raters using consensus model of SEM. The study revealed the role self-esteem in domain of music creativity. While creative self- esteem was mainly related to domain general aspects of creativity other domains of self- esteem and creativity were domain relevant.

Akbari and Sahibzada (2020) this study was aimed at measuring self-confidence of students and its influence on their process of learning. It was conducted at Kandahar University. The study was descriptive in nature and a sample of 1375 was collected for investigation. Quantitative questionnaire was used to collect data .The findings of the research revealed that self -confidence played an important role in earning process. Students with greater self -confidence excelled in various areas where as students who had low self-confidence were less participative in learning process Also students with high self -confidence participated in various activities, enjoyed learning and had less anxiety and increased goal seeking attitude. Thus the study indicated a positive relationship between Self-Confidence, success and academic achievement.

2.4 STUDIES CONDUCTED IN INDIA

E. P. Torrance (1968) conducted a study to found males and females verbal creativity. In this research, the investigator was used Mean, S.D. and T-test for data analyze. The study did not find any significant difference between males and females in all the variables of verbal creativity. Only one variables of creativity was showed a different result it was originality. There was significant difference in the originality of males and females.

Mehdi, B (1973) investigated the relationship between creativity and intelligence and academic achievement. This was a co-relational study. The study investigated relationship between creativity and intelligence, and aimed at finding out the relationship between Academic achievement and creativity. The sample of the study was formed with four hundred fifty nine students. In this sample researcher was made two groups one had two hundred fifty nine boys from urban residential backgrounds and second group had two hundred boys from rural residential backgrounds. These students were studying in classes VII and VIII of various intermediate colleges. The age of these students ranged from 12 to 13+ years. Data were collected by the help of the verbal and Nonverbal tests of creativity by Mehdi, the Mohsin's Group test of General Intelligence and the Raven's Progressive Matrices. The result of the study revealed that there was slightly negative relation between creativity and intelligence in the urban sample, and there was positively related with respect to the rural sample and there was a significant relationship between creativity and academic achievement.

Goswamy (1978) conducted a study to find the relationship among self-concept, intelligence, scholastic achievement and adjustment of adolescent .The result showed that Self- Concept and

Intelligence was significantly positive correlated. There was a significant positive correlation between self-concept and scholastic achievement. Self- concept and Adjustment were positively correlated.

Singh, R. J. (1978) conducted a comparative study into the Psychological and Sociological background of Creative and Non-creative pupil-teachers. In this study researcher was designed to compare the high and low creative pupil- teachers in terms of values, personality adjustment, and teacher's attitude. The sample of the study was consisted four hundred forty two pupil-teachers of B.Ed. from Lucknow. Torrance tests of Creativity, Ojha study of values, California Test of personality and Minnesota Teacher Attitude Inventory were used for data collection. The main findings of the study were, the creative group was significantly higher than the non-creative group as regards the economic value. Out of sixteen dimensions of personality, the creative group showed significantly better adjustment with respect to the sense of personal freedom and social standards.

Jarial, Gurpal Singh (1981) the objectives of the study were a positively significant relationship was found between the verbal and non-verbal creativity and intelligence of the students. Student's academic achievement was positively and significantly related to their verbal and non-verbal creativity scores. Males and Females were significantly different in verbal and non-verbal creativity tests.

Chada and Ghose (1985) found a statistically significant difference between males and females on all the component of creativity. The result is in line with those of Getzels and Jackson (1962), Passi (1972), Hussain (1974), Singh (1975), Pandit (1976), Brodley (1996) who found that females scored higher than males on all the four components of creativity.

Lsverne, M.R. (1985) this investigation was conducted with some personality factors of creative pupil-teachers. The research was comparison of high, average and low creative pupil-teachers. The three dimensions of creativity were taken for the investigation and total creativity in terms of certain personality components, sex, teaching, competence and achievement levels. The sample of the study was formed with two hundred ten B.Ed. pupil-teachers. They were selected from four teacher training institution of Lucknow. The sample of the study was selected by the Simple random selection. Torrance test of Creative Thinking was used for collecting data of creativity and 16 PF for personality components. 'F' ratios for the effect of fluency were significant for dominance, reserved vs. outgoing, humbersvs assertive and tough-minded vs. tender minded. The

'F' ratios for the effect of total creativity were significant for empathy, self-confidence, reserved vs. outgoing, sober vs. happy-go-lucky and tough-minded vs. tender minded.

Agnihotry (1986) conducted a study to exploring self-confidence of adolescents as a function of subculture affiliation and sex. The findings of the study showed a notable difference in females of hindu girls and Muslim girl's self-confidence. There was significant difference between Muslim and Brahmin males self-confidence. There was no significant difference in gender.

Raina (1986) investigated a study on "Psycho- social correlates of scientific creativity among high school students". The findings of research was that there was a significant achievement in science was significantly related with scientific creativity and the problem solving ability was significantly related to the three components of scientific creativity viz., fluency, flexibility, and originality. Again the findings of the study showed that the missionary school students were more creative than those of private and government school students.

Shukla and Sharma (1987) administered a scientific creativity Scale on three hundred thirty urban, tribal, rural and refugee students in the middle schools to test for components of creativity as fluency, flexibility and originality. The result were drawn the data of three hundred thirty students. The study was concluded the tribal student scored lowest and the rural pupils scored higher in fluency than the refugees.

Choudhary (1989) studied the relationship between figural creative thinking abilities if student-teachers and intellectual climatic index of the classroom. The researcher was found the relationship between figural creative thinking abilities of student-teachers on the one hand, and teacher-cantered intellectual climate of the classroom, on the other. The sample of the study was formed with the hundred teacher-pupil-teachers-forty six male and fifty four female drawn from one of the colleges of education to Haryana. For the measurement of the creativity the Torrence Tests of Creative Thinking-Figural Form A (TTCT Figural), and the Jangira Interaction Analysis Category System (JIACS) were used. The data collected was analysed using Mean, SD and 't' test. Major findings of the study was revealed that high creative teachers as compared to the less creative teachers talked more (both lecturing and asking questions) at the convergent, divergent and evaluative levels and less at the cognitive memory level. In the classrooms of high creative teachers (barring a few exceptions), pupils responded significantly more at the convergent and divergent levels and less at the factual level as compared to the students of the less creative teachers. Creative teachers had not welcome pupil participation at the factual level; they (high on

figural originality) had welcome pupil initiation, especially of volunteering information at this level.

Datta (1989) a study was conducted to explore the differences in scientific creativity among high school students. The revelation of the study was that there was a notable difference in the males and females scientific creativity. Scientific creativity depends on many factors like intelligence, academic achievement and socio-economic status. The researchers were selected fluency, flexibility and originality as a dominant factor for knowing scientific creativity.

Gill (1989) this investigation was done to find out the role of strategies of training on problem solving skills, creativity and cerebral dominance in personality, cognitive style and intelligence. The objective of the study to know the influence of training strategies and intelligence.

Nangal, Nangal and Pathani (1989) this study was conducted for knowing the adolescent's personality and self-concept. The major findings of the study that there was significant relation among self- concept and personality with academic achievement and adjustment.

Sharma and Verma (1989) this was a correlation study. The variable of the study was self-confidence and economic performance. The main aim of the study to find out the relationship between economic performance and self-confidence of students. The study revealed that there relation between self-confidence and economic performance of students was not significant.

Singh et al. (1989) an investigation was conducted to explore the personality characteristics of high and low creative college students. The projective test was used for data collection. The sample consisted one hundred seventy five college students of intermediate level who knew Hindi language and were within the age of 17-20 years. The findings of the study showed that high creative adolescents were more extroverts as compared with their counterpart and there was a positive relationship between intelligence and academic achievement.

Mittal (1990) investigated a study on self- concept of the scheduled caste and non -scheduled caste students. This was a comparative study. The main findings was of the study that scheduled caste and non- scheduled caste students was not differ significantly on all the dimensions of self-concept except for the feeling of inadequacy. Scheduled caste girls and boys had not differ significantly on achievement, aspiration and self-confidence. Non- scheduled caste girls and boys differ on emotional stability.

Nayal (1990) studied self- concept of male and female students of both urban and rural areas in the arts, science and commerce streams. He found that; (i) There was no significant difference between male and female regarding self-concept. (ii) The level of Self- Concept is comparatively high of the urban students than rural students. (iii) Self- Concept level is high in science students than arts and commerce students. Self- Concept level is high of public school products than other school's students.

Pandit, (1990) the aims of the investigation were to compare the creativity of male and female students. To the creativity in relation to adjustment and to study the creativity in relation to scholastic achievement. The study was carried out on 240 students studying in class IXth in six higher secondary schools of Indore city. The measuring tools were the Adjustment Inventory for school students standardized by Sinha and Singh. Socio-economic status scale developed by Kuppuswamy, and the achievement score of the students of class VIII. The analysis of the data was done by employing t-test and product moment correlation. The findings of the study stated female students were significantly higher than male students in each of the areas of creativity, that is, fluency, flexibility, and originality. Science students were significantly higher than arts students in fluency, flexibility and originality.

Pareek (1990) conducted a comparative study to find out the relationship among personality-traits, self- concept, and aspiration of students in central, government and private schools of Rajasthan. The results revealed that the former two were reported to be more intelligent and imaginative and the latter more practical, with a higher percentage showing average self- concept.

Sheikh (1990) investigated cognitive style of students with respect to, creativity, intelligence and academic achievement of 185 students in government schools. The results showed that group which was more intelligent and creative group tend to be more independent as compared with group which is average with low intelligence creativity. Although group which was highly intelligent did not show any significant difference in their cognitive styles. Also female students had greater field independence than male adolescent.

Vijay Laxmi (1991) studied to find the relationship between self-confidence and adjustment of family reared and institution reared children and disclosed that the self-confidence of these children's was related to their personality adjustment.

Kaur (1992) investigated the relationship between intelligence, creativity, and academic achievement of class 11th boys and revealed that relationship between intelligence and creativity

was positive but low. It was also seen that academic achievement influenced the correlation between intelligence and creativity and there was a non-linear relationship that existed between the two. Relationship between creativity commonly influenced the correlation between academic achievement and intelligence. The relationship between academic achievement and creativity was low and between creativity and academic achievement was linear.

Kitisook (1992) conducted a study to find the effects of gender and the use of information on the development of self-confidence during early stages of learning a motor task. The results indicate that gender differences and information may have influenced self-confidence, as well as dependent variables related to self-confidence during the initial stages of learning the balance task. The investigator further revealed the relationship between self-confidence and gender difference and suggests that the self-confidence level of females is lower than those of males only at beginning stage of learning a new task.

Kumar, Anil (1992) studied the relationship between creativity in science and certain demographic variables of secondary school students. The study showed that there exists a significant relationship between each component of creativity in science and total creativity in science with each demographic variables, viz, sex, local and socio-economic status.

Pandey (1992) this study focused on divergent thinking in relation to cognitive style, self concept, scholastic achievement, and interest pattern. With an objective to investigate the correlation between divergent thinking, cognitive style, interest pattern, self concept and scholastic achievement this study took a sample of 349 students of class 10th and revealed a notable relationship between divergent thinking and cognitive style, scholastic achievement and cognitive style; significant correlation between and different dimensions of divergent thinking and cognitive style showed that learners who had complex analytical cognitive had greater ability of divergent thinking; it also showed that scholastic achievement of these learners were due their divergent thinking and they performed well in field independently.

Purwar (1992) conducted the study to find out the effect of sex on self-confidence and to observe self-confidence among rural, urban, scheduled caste and non-scheduled caste students. On the basis of the findings he concluded that; (i) Rural students had higher self-confidence than urban students. (ii) Self-confidence of non SC students was significantly higher than SC students. (iii) No effects of sex were observed on the self-confidence. (iv) The average of self-

confidence of non SC students among the four groups that is rural boys, urban boys, rural girls, urban girls were significantly higher than scheduled caste students of their four groups.

Rangappa (1992) this study investigated relationship between reading ability and self concept in relation to mathematical achievement of class 7th students. The aim of the study was to find out whether there existed a difference in academic achievement among boys and girls, rural and urban students. A sample of 1000 students in the age of 12.5 years was taken for the study. The results showed that the urban school students performed better in mathematics than the rural students.

Roy (1992) this study focused on scientific creativity and personality differentials of adolescents with relation to their environment. With the aim of the study was to find out the personality differences between high and low creative students with reference to Cattell's trait theory. It was revealed that typically high creative adolescents were more, critically, resolved and abstract thinkers. They are more emotionally stable, and excitable. They were more independent, serious, prudent and more relaxed than low scientific creative adolescents.

Verma and Sangeeta (1992) conducted a study to find out the level of self-confidence between male and female students. Results reveal that male and female school going children belonging to high average and low SES did not exhibit any marked difference in their mean score of self-confidence.

Pathi (1993) investigated the relationship between cognitive preference styles and academic self-concept of science students and concluded that; (i) Memory style was negatively and significantly correlated with academic self-concept in science students, whereas questioning style was negatively and less significantly related with academic self-concept in science students. (ii) Application style was positively and significantly related to academic self-concept in science students. (iii) There was no gender differences found in cognitive preference styles.

Sansanwal and Sharma (1993) analyzed scientific creativity as a function of self-confidence and concluded that the mean of scientific creativity score of students having high self-confidence differed significantly from low self-confidence group.

Sundararajan and Selvaraj Ganagguru (1993) have studied the relationship between achievement motivation and academic achievement of high school pupils. It was found that although boys scored well in the academic achievement motivation but girls better off in academic

achievement. It was further noted that the relationship between academic achievement and achievement motivation was not significant.

Agarwal (1994) conducted a correlation investigation between sex and general self-concept in the students of IX grade. Researcher wanted to find out the gender effect. The population of the study was ninth grade students. He studied on male and female students and revealed that the mean score of girls was greater than those of boys in the case of identity, self-satisfaction behaviour, physical, moral ethical, personal, self-criticism, total self-concept and its instability dimension. In the remaining two cases (family and social self), the values for two sexes were almost identical. Findings disclose the superiority of girls over boys in their role specific self-concept.

Nanda et al. (1994) conducted a correlation study of cognitive style and creativity on academic achievement. The sample consisted five hundred fifty adolescents. The research explored the relationship between rural and urban student. The main finding of the study that rural students were less intelligent than urban students. It was seen that rural students had lesser academic aspiration than the urban students; and there was a positive correlation between scholastic success of both urban and rural and this positive nature of correlation was remarkable.

Sohi (1994) investigated a comparative study on self-concepts and rigidity in relation to creativity among Xth grade students. The main Findings of the study were revealed that there was a significant correlation between creativity and self-concepts. Creativity and self-concepts were positively correlated. Self-concept was found to be a good predictor of creativity but it was less efficient locus of control. Prediction of composite creativity and its dimensions was not found significantly higher in both boys and girls.

Avanua (1995) investigated a comparative study to find the certain correlates of self-concept among students. The population of the study was Government high school in Karnataka and Navodaya Vidyalayas. This study was concluded on certain variables of self-concept. In this study researcher was found the co-relations among state government high school students and Navodaya Vidyalaya students. The result of the study was

revealed that the self-concept profile of Navodaya Vidyalaya students better than Government High School students in Karnataka.

Bhatnagar (1995) in his comparative study observed the level of self-confidence among rural and urban male and female students and concluded that; (i) Urban boys are significantly better on self-confidence than rural boys. (ii) Urban girls are significantly better on self-confidence than rural girls. (iii) Boys and girls of rural background do not differ significantly on self-confidence. (iv) Boys and girls of certain background do not differ significantly on self-confidence. (v) Urban girls are significantly better on self-confidence than rural boys. (vi) Urban boys are better than rural girls on self-confidence. (vii) Sex does not account for self-confidence. (viii) Urban students have high self-confidence in comparison to rural students.

Panda (1997) this study investigated the impact of adjustment and creativity on academic achievement .the results revealed that adjustment and creativity was significant elements factors for the academic achievement and progress of a student. The relationship was revealed through correlation between creativity and academic achievement. The study suggested that proper stress should be given to development of creative power among the students to make them secure better an academically.

Kumari (1998) studied relationship between personality, creativity, and problem solving with scholastic achievement .The objective of the study the relationship between problem solving and academic achievement. A sample of 545senior secondary school was taken for the study and it was seen that there was a positive correlation between mathematical achievement and intelligence.

Radha (1998) this study aimed to discriminate functional model for academic achievement in high school by taking, medium of instruction, creativity, religion, socio economic status, gender and type of school as an independent variable. It showed that there was a marginal difference between academic achievement of girls and boys which was statistically insignificant. English medium school students were high achievers than Malayam medium schools students. Academic achievement was promoted among Navodaya Vidyalayas followed by unaided schools. Government schools did not show

any category among the high achiever. It was also found that socio economic status appeared was best predictor of academic achievement.

Gupta, (1999) investigated the effectiveness of self-concept enhancements program in relation to self-concept of under graduate students and concluded that; (i) Students were found to have favourable reaction towards the self-concept enhancement program. (ii) Self-concept enhancement program was found to be effectively used in enhancing self-concept of undergraduate female students. (iii) The trend of enhancement of self-concept was found to be linear as self-concept increased gradually from the start of treatment to the end of treatment.

Reddy, T.R (1999) attempts to study creativity of teacher-pupil-teachers of DIETs. The study was conducted on 120 male and 120 female teacher pupil-teachers studying in 3 DIETs. For testing the creativity of the subjects a Battery of Creativity Test in Telugu Language developed and standardized by Venkata Rami Reddy were used. Findings: (1) the difference found between female and male teacher pupil-teachers with regard to their creativity was not significant. (2) Significant difference was found among teacher-pupil-teachers belonging to different DIETs regarding their creativity.

Aziz and Shah (2001) conducted a study to find out the relationship of responsibility and academic self-concept with drug addiction among university students and stated that the university students who did not abuse drug were found to be more responsible with higher academic self-concept as compared to their addict counterparts.

Haneeshia (2001) compared Scientific Creativity between DPEP and non DPEP school pupils in Kerala state. The study found that there was a significant difference between the two groups with respect to flexibility, fluency, total creativity and originality.

Kumari, Sushama (2001) conducted a study to observe adolescents attitudes towards gender role in relation to development of self-concept and social awareness and concluded that; (i) Both girls and boys individually were more possessive about their own roles, which are assigned by the society, but generally have contradictory opinion for the

opposite gender roles. (ii) Significant difference was observed in the attitude of adolescent girls and boys towards various AGR aspects. (iii) Girls scored lower on self-concept scale as compared to boys.

Saxena (2001) studied self-concept in term of socio-economic and cultural setting in first divisionary of high school students and found that the students who secured first division in high school examination and belong to middle socio-economic status possess higher self-concept than those who were either from higher socio-economic status or low economic status.

Asthana and Srivastav (2002) examined a comparative study on English Medium students and Hindi Medium students in relation to their self-concept. The findings unveil that English medium students and Hindi medium students do not differ in terms of personally perceived self but they showed significant difference in terms of socially perceived self.

Bischoff and Borton (2002) determined the most common pathway toward the development of clinical self-confidence for therapist during the first year of client-content. Telephone interviews conducted with 39 recent graduates of a master's level marriage and family therapy program. Ss were asked to graph their development of clinical self-confidence over the first 12 month of their clinical experience. Results reveal 3 stage model of therapist development. The implications for training within each stage of development identified with an emphasize on the role of the supervisor.

Lopez and Gormtey (2002) conducted a study to observe stability and change in adult attachment style over the first year college transition in relation to Self-confidence coping and distress patterns and concluded that; (i) Change group had significant main effects on Sc ratings and problem coping styles. (ii) Time and change group had significant main and interaction effects on the set of distress measures. Implication of the findings for an attachment theory in formed perspective on the transitional adjustment of entering freshmen is discussed.

Smith and Lisa F. (2002) studied the effect of confidence and self perception in test taking skill on test performance. Findings revealed that the confidence was related to test performance but self-perception of test-taking skill was not. The results are discussed in term of assisting student in building confidence in the classroom to bolster test performance.

Srivastva (2002) investigated the effect of self-concept on the learning style preferences of rural and urban high school's students and found that; (i) With the increasing self-concept the rural boys showed their increasing preferences towards flexible non-individualistic, visual, field-dependent, long attention span, motivation-cantered and environment free learning styles. (ii) As the self-concept level of the urban boys increased they showed increasing preferences to flexible, non-individualistic, and visual, field dependent, long attention space, motivation cantered and environment free learning styles.

Banerjee (2003) this study investigated cognitive style and adjustment patterns of creative and non -creative students. The main objective of the study was to find out the relationship between creativity and cognitive style and between cognitive style and adjustment. A sample of 567 students was taken for the study .the result showed that that there was a significant correlation between cognitive style and creativity but the difference between cognitive style of VII & VIII grade students there was not significant. Also adjustment patterns and cognitive style and showed no difference.

Christopher M. Tavani and Susan C. Losh (2003) examined the relationships among students' academic performances, expectations, motivations, and self-confidence during a summer orientation at a large southeastern university (n = 4,012). The effects of parental education levels on students' performances were also studied. Significant positive correlations were found among all variables. These variables were also all significant predictors of students' academic performances. Gender had statistically significant effects on students' expectations and Self-Confidence levels. These results are consistent with previous studies and provide additional pathways for future research.

Dipika, Shah and Manivannan (2003) made a study of the self-confidence of visually impaired children in integrated and special schools in Tamil Nadu. A sample of 320 visually impaired children was selected as the sample through stratified random sampling procedure. The tools used students 'self-confidence scale (SCS) based on the Likert scale of summated ratings. Main relevations of the study were: 1. difference between the scores of visually impaired children in self-confidence on the basis of the gender was not significant. 2. There was no significant interaction between independent variables gender and nature of impairment as far as the scores of visually impaired children in self – confidence are concerned is tenable. 3. There was no significant interaction between independent variables gender and nature of schools as far as the scores of visually impaired children in self-confidence are concerned. 4. There was no significant interaction between independent variables such as gender; nature of impairment and nature of schools as far as the scores of visually impaired children in self- confidence are concerned.

Gakhar (2003) investigated the effect of self concept and emotional maturity on academic achievement of students at secondary school. The aim of the study was to find out the difference between emotional maturity of girls and boys, of both rural and urban area, private schools and government schools. A sample of 200 students of secondary school was collected. The results showed that there was a negative correlation between emotional maturity and intelligence. Emotional maturity and academic achievement of girls and boys showed positive and significant correlation.

Gakhar et al. (2003) this study focused on finding out relationship between personality, creativity and problem solving ability of students in relation to their scholastic achievement. A sample of 545 students from senior secondary school was taken for the study. The results of the study revealed that there existed a positive correlation between problem solving ability and academic achievement in mathematics.

Pajares (2003) examined the contribution made by the self-efficacy component. A brief overview of Bandura's social cognitive theory and of self-efficacy in first provided, followed by a description of the manner in which writing self-efficacy are typically

operationalized and assessed. This followed by a synthesis of research findings that address the relationship between writing self-efficacy, other motivation constructs related to writing, and writing outcomes in academic settings. These findings demonstrate that student's confidence in their writing capabilities influences their writing motivation as well as various writing outcomes in school.

Deshmukh (2004) studied self- concept and anxiety among athletes and non- athletes. The result revealed that no significant difference existed between the scores of self- concept among non- athletes and athletes. Also mean scores of anxiety among non- athletes and athletes showed no significant difference.

Panda, Kaul and Mittal (2004) studied a comparative study to analyse self–confidence in male and female sport persons. The researcher was found the gender effect on self- confidence. The result revealed that female sport persons were significantly having less self–confidence than male sports person.

Subramaniam, Leena Mathew (2004) investigated assessing self-confidence, mental health & frustration among injured sportsmen & women. The sample of the study was consisted sixty of which thirty were sportsmen and used to the other assess self- confidence thirty were sportswomen. Data was collected with the help of Rekha Agnihotri's self-confidence tool and Tavier personality inventory (TPI) was used to assess mental health and Chauhan and Tiwari's frustration scale was used to assess frustration. The findings of the study showed: 1. significant differences in the self- confidence and frustration between injured sportsmen and sportswomen. 2. There was no significant difference in mental health between injured sportsmen and sportswomen. 3. There were no interrelationships between self-Confidence and mental health, self- confidence and frustration, and mental health and frustration of both.

Sujatha A. Kishna Rao (2004) explored the role of psychology and psychologists to in identifying creativity and giftedness in students particularly the children in the classroom. The authors highlights that the different possibilities in the context of identifying creativity and giftedness in people particularly the children in the classroom. The author highlight that the different possibilities context of identifying talent and creativity of the

individual. Research found that teachers in India and elsewhere, because of their view of an ideal pupil were not unduly punishing the good guesser: The child who was persistent and was willing to take risks. The educational system ultimately leaves a mark and affects creativity and innovation in every field of human endeavor. At the root of this set of values the importance of creativity could be nurtured for the benefit of the individual. It's that nurturing giftness would essentially require a strong underpinning in an understanding of the nature and nurture of creativity.

T. Rajashekhar Reddy (2004) studied male and female pupil-teachers creativity. Researcher wanted to justify the study of Torrance 1962 and Getzels and Jacksons 1962. The researcher was used the Wallach and Kogan 1965 tool for the research. The sample consisted two hundred forty pupil-teachers. The sample of the study was selected by random selection from three diets. There was no significance difference in male and female pupil-teacher's creativity.

Bhatt, (2005) investigated a comparative research for exploring the variables. Aspiration, self-confidence and risk taking were the variables of the study. The study concluded that male's sports groups were more significant in self-confidence than the individual players. Females playing group games were significantly higher on self-confidence than males playing individual games. Sports persons playing group games were significantly having high self-confidence than sports person playing individual games. Sex had not account for generating self-confidence among adolescents.

Fartiyal (2005) studied home-environment, level of aspiration, and self-confidence as predictors of achievement motivation. This study was conducted on professional and non-professional college students. The result of the study found that there was the significant relation between self-confidence and motivation.

Sindhu (2005) investigated a co-relational study: the variables of creativity, classroom adjustment and academic achievement. The population of the study was higher secondary level students. The main findings of values of coefficient of correlation revealed that there was significant relationship between creativity, classroom, adjustment and academic achievement taken in pairs. It was also concluded that the combined effect of

variables of creativity and class room adjustment on academic achievement will be significant.

Pastey, G. S., and Aminbhavi, V.A. (2006) the present study aimed to find out the impact of emotional maturity on adolescents' self-confidence and stress. 105 adolescents of classes XI and XII in Karnataka were taken as the sample of the study. The study revealed that highly emotionally mature adolescents had more stress and high level of self- confidence than their counterparts. It also showed that educational level of parents had significant impact on the self-confidence. Adolescents with more number of siblings had greater self -confidence.

Rattan, Kang, Thakur and Parthi (2006) examined that the current society emphasizes physical appearance and physical fitness. Individual's self-esteem has been shown to be linked with physical appearance. A random sample comprising of 100 male and 100 female (N=200) adolescents was selected. The subjects were administered the Current Thoughts Scale and the Dieting Beliefs Scale for assessing their state self esteem and their weight locus of control. Boys had significantly higher appearance self esteem than girls, while girls had significantly higher dieting belief in comparison to boys. Performance self esteem was positively and significantly correlated with social self esteem and appearance self esteem in the total sample, and the sub-samples comprising of boys and girls.

Meera et al. (2008) investigated correlation between self esteem, learning environment and social science achievement. It was found that in social studies academic achievement differs with difference in the self esteem of students. Students with poor socio-economic conditions had lower self esteem and their achievement was also low.

Paltasingh (2008) this study investigated relationship creativity, intelligence and achievement scores of students in secondary schools. The objective of the study was to see whether there exists correlation between intelligence and creativity and science achievement and intelligence. A sample of 180 students of IX class was taken from secondary schools of Oriya medium. The results of the study showed that found that a significant positive correlation existed among the variables. Science achievement and

creativity were positively correlated. Similarly positive relationship existed between intelligence and science achievement.

Rajesh (2008) this study was conducted to determine relationship between self-concept and creativity and its role in academic achievement of students in higher secondary schools. The study showed that there exists significant relationship between creativity and self-concept on academic achievement among higher secondary school students. The study revealed relationship between creativity and academic achievement was not significant but a significant relationship was found between creativity and self-concept.

S. T. Arunadevi and N. O. Nellaiyapen (2008) had conducted a study on “A study of language creativity of std IX students in relation to certain selected variables”. The sample consisted of 425 IX students in Kanyamumaree district. The result showed that there existed no significant difference in language creativity of students in private and government schools. Also no significant difference was found between urban and rural girls and boys of IX standard.

S.V. Bhaskar Reddy (2008) the study aimed at finding out whether male and female student teachers differ in their creativity. Tools used for the study were Battery of Creativity tests developed and standardized by Venkatrami Reddy S.V. University, Tirupathi. 200 male and female student teachers selected at random from the colleges of education in Hyderabad. The study found that no significant difference existed between female and male student teachers with respect to their creativity.

Tirath Singh and Parminder Kaur (2008) studied focused on how self-confidence of student teachers was effected by meditation in relation to religion and gender. Sample of the study were used 152 student teachers of B.Ed. The tools were used self- confidence inventory (1987) in Hindi developed by the Dr. Rekha Agnihotry, and Raven’s standard progressive matrices developed by J. Raven, J.C. Raven and J.H. Court (revised 2000) were used. Revelations of the study were of the study were: 1. Anotable effect of gender was found on self- confidence when pre-self-confidence was taken as a covariate. 2. There was no significant effect of interaction between meditation and gender on self-confidence when pre-self-confidence was taken as a covariate. 3. There was no

significant effect of interaction between meditation and gender on self-confidence when pre-self-confidence and pre-general intelligence were taken as covariates.

Aruna et al. (2009) this study focused on investigating the role of social phobia, school management and socio-economic status in achievement in social studies. private and government schools were paired for collection of the data. The findings of the study showed that social phobia, school management and socio-economic status did not influence achievement in social studies .it also showed that factors like gender influenced achievement. Also a significant difference in the achievement in social sciences was found among urban and rural girls and boys.

Dhall et al. (2009) a study was conducted to know relationship between intelligence, academic achievement and self-confidence of students in secondary schools. A sample of 1000 secondary school students was collected. The study revealed that a significant relationship existed between intelligence and academic achievement students in secondary schools. A notable difference was found in intelligence of female and male students. Academic achievement of female and male students also showed a significant difference. Test achievement score son instructional mode of female and male students and cognitive style factors were not found significant.

Farokhzad (2009) studied the perceived family environment and positive mental states viz. Happiness, optimism and hope among the adolescents of two different cultures, Iran and India. The total sample comprised 400 adolescents aged 16-19 from Iran and India; Out of which, half were males and half were females. Family environment scale, The Oxford Happiness Questionnaire, Adult Trait Hope Scale and The Life Orientation Test were performed and raw scores were subjected for various statistical analyses viz. Results clearly show that the family environment dimensions viz. relationship, personal growth (Goal Oriented), and system maintenance, are correlated with positive mental states viz. happiness, optimism and hope among the adolescents of the two above-mentioned cultures. It was also shown that there are cultural and gender differences among the studied variables.

Gurubasappa (2009) this study aimed to find out the correlation between self concept intelligence and academic achievement of students in secondary schools. The main objective of the study was to investigate self concept and intelligence as correlates of the academic achievement. A sample of 400 secondary school students. The results of the study revealed that self concept, intelligence and academic achievement. The other factors that influenced self concept and academic achievement were medium of instruction, gender, type of school, socio economic status and locality of the students.

Kaur, J., Rana, J. S., and Kaur, R. (2009) this study explored the role of academic and home environment on self concept. The sample of the study was 300 adolescents of class nine. The major findings of the study showed the relationship between academic achievement and self concept was positively correlated. A significant relationship was also found between protectiveness, conformity, rewards and nurturance component of home environment. emotional self concept of adolescents was affected by supervision at home number siblings at home more over girls had better self concept as compared to boys .

Mohanty (2009) this study aimed to find out social correlates of academic achievement of primary school girls in the rural areas who were underprivileged. The major findings of the study were that: 1) socio economic status acted as a significant correlate. 2) there was a notable correlation between academic achievement and home environment in case of low achievers only.3) there was no relationship found between achievement level of high and low achievers and school environment.

Noorjehan et al. (2009) in this study factors influencing academic achievement of class 9th mathematics was investigated. It was found that factors like attitude towards mathematics, achievement motivation, mathematical creativity and level of anxiety affected the achievement in mathematics in secondary schools. It was recommended that co-curricular activities should be included to improve the performance of the students in mathematics.

Singh (2009) studied self-confidence the level of academic anxiety, and their relationship with academic achievement of secondary school students. The sample consisted of 180

students from the secondary school. The major relevations of the study showed a significant correlation between academic achievement and academic anxiety. Academic achievement and self-confidence were also positively correlated and the confidence level in female and male was not significantly different in the study.

Singh and Udainiya (2009) investigated the effects of type of family and gender on self-efficacy and well-being of adolescents. Family is the source of support of any individual and one of the motivating factors for human being to grow and achieve. One hundred adolescents (50 boys and 50 girls) from joint and nuclear families were administrated the measures of self-efficacy and well-being. Data were analyzed by ANOVA. Results revealed a significant effect of type of family and gender on self-efficacy. The interaction between type of family and gender was also found to be significant; however neither family type nor gender had significant effect on the measure of well-being.

Aryana (2010) investigated the relationship between self-esteem and academic achievement. The sample consisted hundred students of pre-university from Qaemshahr schools. For the measuring self-esteem researcher was used coppersmith questionnaire and for the finding academic achievement of students. She had used current and previous semester's grades of students. The study found out that there was a significantly positive relationship between academic achievement and self-esteem pre-university students in qaemshahr schools.

Godwin and Krishna Prasad (2010) investigated motivation and self-esteem of the socially challenged higher secondary students. Moderate level of achievement motivation is noticed among the socially challenged higher secondary students. There are significant differences in achievement motivation with reference to gender, age and social status. Female students of 15 years of age and ST students have higher achievement motivation than the male students, students of 16-17 years of age and SC and MBC students respectively.

Pravithalakshmi (2010) studied the effectiveness of constructivist approach on creativity in Hindi at secondary level. In the study researcher found that constructivist

learning provides enormous opportunities for each and every student in the process of developing the creative potentialities.

Parvathamma and Sharanamma (2010) investigated the relationship between the level of anxiety and self-confidence level and its relationship with academic achievement. In the present study researcher used simple random selection technique for school selection. Six high schools of Chamrajnagar taluk were selected from Karnataka. The sample consisted three hundred students they were selected by simple random selection technique. In this study researcher were selected fifty students from each school including males and females. Self-confidence was measured by checklist which was developed (M. Basavanna), anxiety scale (Prof: D.N. Srivastava & Dr. Govind Tiwari), school records for academic achievement. Main findings of the study were: 1. A significant difference was found between level of anxiety level of females and males. 2. A significant difference was found between the level self-confidence levels of female and male.

Zahra, Arif and Yousuf (2010) studied the relationship between academic achievement and self-confidence of graduation students. A sample of one thousand five hundred students was collected for the study. The sample was selected by using two stage cluster sampling technique. Tool for data collecting was self-descriptive Questionnaire. Factor analysis was employed to explore the pattern of inter-item correlations of the questionnaire. The result of the study was that physical self-confidence and social self-confidences were not significant relation with academic achievement and academic achievement was self-confidence were significantly related but there was weak correlation unrelated to academic achievement and a significant but weak correlation was found between academic self-confidence and academic achievement.

Sabira Kleitman, Jennifar Gibsun (2011) in the present study was conducted correlation between self-confidence and Meta cognitive beliefs and primary learning environment was explored among class sixth students. This study was a correlational study. The study also aimed to find out the factors that played major role in the classroom to predict the self-confidence trait self-beliefs and the academic achievement in of class

6th students. To determine these relationships EFA and Path 60 analysis were used. The findings suggested that Meta cognitive competency beliefs and academic self-efficacy served as key predictors of self-confidence.

Sanjayan (2011) investigated that the impact of knowledge management practices for improving creativity of teachers. This was the correlational study. The main findings of the study that there was a positive relation between knowledge management process, knowledge, socialization, knowledge externalization and internalization with creativity of college teachers of undergraduate level .

D. little Flower (2012) investigated “A study of creativity of higher secondary school students in relation to certain selected variables”. Eight hundred higher secondary school students studying in puducherry educational district of puducherry state were the sample of the study. The findings of the study showed that average self-confidence of the whole sample of the study .There was no effect of gender, religion, school type (aided, self-finance and govt.). There was no significant difference between male and female, Hindu, Christian and Muslim, self-fiancé, government aided and government, rural and urban higher secondary school students with respect to their self- confidence.

Gangadhar RaoKallave Maheshwar (2012) investigated a study of scientific creativity of secondary level students. In this study one school was chosen by non – purposive method out of normal (average) schools and one Navodaya school was selected by purposive method of sampling. Hundred students of std. 9th were selected by lottery method. Fifty students were selected from each school. The result revealed that the originality was more dominant.

Kant Ravi (2012) studied the relationship between creativity and T.V. viewing habits of secondary school students. Four hundred secondary school students were selected as a sample of the study of Rampur city. T.V. viewing habits questionnaire and Verbal test of creativity were used for the data collection. The result revealed that T.V viewing was negatively related to creativity but overall, T.V. viewing was positively related to creativity of secondary school students. In this study relationship between creativity and T.V. viewing was not significant.

Mahmoudi (2012) conducted a comparative study related with adjustment, type of family environment and self- esteem among adolescence. The sample of the study was consisted five hundred sixty adolescence students from Mysore and Yasouj cities. Simple random selection method was used for sample selection. The sample consisted of five hundred sixty students of standard IX (three hundred ten Students from Mysore city and two hundred fifty students from Yasouj city). The result of this study revealed that Indian and Iranian students differed significantly in all areas of adjustment. With respect to self-esteem, Indian students had significantly higher self -esteem scores in all the components except for lie self -esteem than their Iranian counter parts. On the whole, Indian students had significantly better family environment than Iranian students. The interaction effect of self -esteem and family environment for various adjustments were found to be not-significant for among Indian and Iranian samples.

Rezaei, Ali (2012) the study was conducted to know the self-efficacy found that female students scored higher on collective, gender-based self-confidence but their personal feeling about their gender was more negative and their general self-efficacy was not different from the self-efficacy of male students.

Tripathy and Srivastava, (2012) studied on human inferiority and feelings of insecurity that academic achievement influences the level of self-confidence. The sample of the research was hundred students. Quota sampling technique was used for sample selection from the Dev Sanskriti Vishwavidyalaya, Haridwar, (Uttarakhand). Researcher had taken two groups of the students. One group had high academic achievement and second group had low academic achievement. Researcher had selected fifty students from each group in their sample. They were again divided into two subgroups of 25 males and 25 females. It was found in the study that there existed a significant relationship between level of self-confidence and academic achievement of the students. Students with high self-confidence showed higher academic achievement and students with low self-confidence had low level of self-confidence and were low academic achievers.

Dalalsuman and Rani Geeta (2013) conducted a correlational research to investigate relationship between intelligence and creativity of senior secondary student. The sample

of the study was six hundred forty students. The sample was selected from the simple random selection method from the various schools of Haryana state. The thinking creativity test was used developed by Dr. Baqer Mehdi. The intelligence group test of mental ability developed by Dr. S.S. Jalota was used for data collection. The main findings showed that there was significant relationship between creativity and intelligence of senior secondary students.

Reena (2013) investigated a study to know the self-esteem, scientific attitude and achievements in academics of students in class 10th. The main purpose of the study was reveal these varriables. The main findings of the study were that high school students had better scientific attitude and its leads them to high level of self-Esteem and Academic Achievement.

Wadhwa S. and Yadav K. S. (2013) this study aimed to investigate creativity and academic achievement in life of adolescents. The main aim of this investigation was to study creativity and academic achievement of adolescents studying in English medium schools. The sample of study was consisted eighty English medium students. The creativity and academic achievement scales were provided them for collecting data. The result revealed that t-tests hewed that creativity and Academic achievement of Adolescents were more seen in English Medium school students.

Armand Chatard (2014) the purpose of the research was explored the national differences in self-Esteem across fifty five nations. The research was reflected suicide rates in these fifty five nations. T-test revealed the results that suicide was common in nations with relatively low levels of Self-Esteem.

Malik and Yougesh (2014) the main purpose of this investigation to find the impact of self-confidence on academic achievement. For these purpose two hundred students of Rohtak areas, studying in 11th class were selected as sample. Simple random sampling method was used for sample selection. The result revealed that academic achievement of students with high and low self-confidence was significantly different.

Mohammad Aryana (2014) the study was related with the self-esteem and academic achievement of pre-university students. This was a correlational study. The objective of the study was to find out relationship between academic achievement and self-esteem and among pre-university students. The sample of the study was pre-university students. For the data collection of self-esteem and Academic achievement Scale was used. The t-test was used as statistical technique. The study showed the relationship between Academic achievement and self-esteem and among the secondary school students. The results of the study stated that higher self.-Esteem played an important role in strengthening academic achievement of students.

Surapura Math Kotreshwar Swamy (2014) explored a study of relationship between the academic achievement and creativity and of students of secondary school. A sample of hundred students was taken for the study from different high schools in Kollegalataluk. The study revealed that a positive relationship existed between academic achievement and creativity of class eight students. There was no difference in the creativity of females and males of class eight student.

Gurler (2015) conducted a study to find out the link between self-confidence and speaking ability achievement of the students. The sample of the research consisted seventy seven preparatory students from departments, English language teaching department and English language and literature. This was a co-relational study. For the data collection of self-confidence a questionnaire was applied to the students and for speaking ability achievement a testing model was applied. The longitudinal data was collected. The data were evaluated with the help of Social Sciences Statistical Kit. The main finding of the study was that the self-confidence and speech abilities were significantly correlative.

Dr. Jamir. K. (2016) conducted a comparative study to find out the self-confidence among the adolescence of slum and public schools. The objectives of the study were found the level of self-confidence and compared it from slum school with public schools. The sample consisted hundred students fifty from slum schools and fifty from public schools of Faridabad .the sample was selected by the simple random selection method.

Survey method was used for the study. For the data collection self-confidence scale was used which was developed by Prof. Juyal and Talmiya. A significant difference was found between slum schools and public school students.

Verma and Kumari (2016) studied the academic achievement of children at elementary stage in relation to their self-confidence. This was a correlational study. The sample consisted three hundred subjects of Ludhiana (Punjab). For the sample selection researcher was used the Multi stage random sampling technique. Mean, S.D., t-test and correlation statistical techniques were used in this research for analyzing the collected data. The study revealed a significant correlation between academic achievement and self-confidence of students in elementary school. Although no significant difference was found between self-confidence of female and male students in elementary school. There was no significant difference in the academic achievement of elementary school students with high and low self- confidence.

Kamboj, M. (2016) this study investigated difference between levels of creativity between girls and boys. Sample of 25 girls and 25 boys who were studying in two secondary schools of Rewa city was collected for the study. Torrance test of creativity was administered to obtain the results. The findings of the study showed that boys differed from girls in measure of fluency and originality. But others measures such as flexibility, and total creativity were similar which means girls in our society need to be encouraged to take risk and be active.

Arya, M. (2017) the present study aimed to assess association between academic achievement and creativity. The samples of the study were three hundred students of classes eight, ninth and tenth. The study showed no relationship between academic achievement and creativity of the students.

Hooda and Devi (2018) the present study focused on the cognitive style, problem solving abilities, educational aspiration and achievement of secondary school students and its role in their self-confidence. In this descriptive study the sample were 400 secondary school students elected through multi-stage random sampling technique. These students were selected from secondary private schools affiliated to Central Board of Secondary Education. The findings showed that there existed a positive relationship between cognitive style, problem solving ability and achievement of students and their self-confidence. It also showed that educational aspiration was the strongest predictor of self-confidence in comparison to problem solving ability and achievement of secondary school students.

CHAPTER- III

METHODOLOGY

CHAPTER- III

METHODOLOGY

The present chapter of the research deals with the research methods and procedures that were followed during this study. It contains a detailed description of research methodology, sampling design, tools used and statistics for analysis and interpretation of data. According to **Kerlinger (1964)**, a research design is a blueprint of the plan, which contains the structure and strategy of the investigation devised to obtain answers to research questions. Thus, reduced to the simplest term, a research design is a strategy of mapping, a statement that defines the objective of the inquiry, procedures for collecting the pieces of evidence, analysing the evidence and reporting the findings.

This chapter explains the study's design, sampling technique, selection of the variables, data collection, sources and methods, reliability and validity of the tools. During the course of the present research, the investigator had made honest efforts to be systematic and scientific in her approach to arrive at a meaningful conclusion.

This study aims to find out the correlation between creativity and self-confidence of D.El.Ed pupil-teachers in Sitapur district. As the nature of the study is concerned, it requires descriptive analysis of the creativity and self-confidence of D.El.Ed. Pupil-teachers. Thus the researcher had followed the descriptive survey method. The description of the various steps employed in this regard is under the following sections:

1. Research Methodology
2. Tools Used
3. The Population of the Study
4. Sample and Sampling Technique Used
5. Procedure Followed
6. Statistical Technique Used

1.1 RESEARCH METHODOLOGY

According to **M. Verma**, “Method is only in the abstract. As logical entities that can distinguish between matter and methods form an organic whole. The matter determines the method; analogously objective determines the means and content and spirit determine the style and form in literature”. Research methods are essential in the research process. Many steps are followed to find a proper solution to a research problem. A research method depends on the nature of the research problem, objectives, hypothesis, analysis, interpretation, inferences and generalization. Many research methods are used in educational research as, the historical method, survey method, casual-comparative method, genetic method experimental, ex-post-facto method, etc.>`

Research methods are categorized as follows:

- Historical Research
- Descriptive Research
- Experimental Research

1.1.1 The Descriptive Research Method

Descriptive research mainly focuses on describing events in the present, although it often considers past events and influences related to current conditions.

According to **Best and Kahn (2000)**, a descriptive study deals with describing and interpreting the event, concerning itself with the conditions, the opinion held, and the processes that are going on. It also studies the visible effects and tendencies that are developing. Although It is mainly concerned with the present, it often considers past events and influences related to current situations.

According to **Gephart and Ingle**, “The ultimate aim of descriptive research is to classify events so that later research can employ an unequivocal terminology and to lessen the confusion coming from ad hoc definitions. But the purpose of descriptive research is to establish a clear description of materials and phenomena under investigation”.

As stated by **Good (1963)**, “Descriptive studies may include present facts or current conditions concerning the nature of groups of person, a number of objects, or a class of events and may involve the procedures of induction, analysis, classification, enumeration, or measurement”.

International Encyclopedia of Psychology (1996) concludes, “Descriptive research is nearly self-explanatory; it occurs when the researcher wants merely to characterize the behaviours of an individual or a group. Thus, for example, a survey of the students of a high school to ascertain the level of alcohol use”.

Field research, interview, questionnaire and schedule are the study methods of descriptive research.

3.1.2 Steps of Descriptive Research

- Selection of the problem
- Statement and definition of the problem
- Identification of data
- Selection or development of tools
- Selection of the sample
- Data collection
- Data Analysis and Interpretation
- Writing of the research report

3.1.3 Objectives of Research Methods

According to **Tueneig and Robe**, the following are the four objectives of the research:

- To ascertain the present situation of the phenomena
- To determine the nature, composition and processes that define selected phenomena
- To find out the growth, development, change and position of certain events.
- To study the cause and effect relationship between certain events.

In the current research, the researcher had used the descriptive survey method, which serves the nature of the problem. Descriptive analysis is related to the present. In which are searcher studies current phenomena. The main aim of descriptive research is to tell what is.

3.1.4 Significance of Descriptive Research

- Descriptive research determines the present trends and gives the solution to current practical problems.
- Descriptive research provides suggestions for future plans. It focuses on needs, reveals practices, and gives pertinent data to forward-looking persons and busy in future planning.
- It also helps in fashioning many tools with which research is conducted, in the development of instruments for measuring many things in quantitative analysis, and various data-gathering instruments like checklists, schedules, score and rating scales.
- Descriptive research provides the background ideas and data from which much more advanced laboratory or controlled studies or causal relations are made.

The objectives initiating the present study's design and strategy required the collection of data pertaining to pupil teacher's creativity and self-confidence. In addition to this collection of pupil-teacher's data and fulfillment of the objectives, required ascertainment of the relationship between pupil-teacher characteristics as creativity and self-confidence and data.

3.2 TOOLS USED

Collection of the data for the study of any problem is a significant step of the research. For this, the researcher uses different types of devices in technical language; it is called tools or instruments. Besides some specific requirements for the particular purpose for which they are used, all the useful tools should have some general qualities like reliability and validity. To collect the relevant data of the present study, the following standardized tools were used:

Variable of the study	The tool used for its measurement
Creativity	Dr. K. N. Sharma's Divergent Production Abilities-s (DPA-s)

Self-confidence	Dr. Rekha Gupta's Self-Confidence Inventory (SCI)
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Although each one of the two tools was chosen primarily for their basic characteristics, namely, validity, reliability, and objectivity, other significant reasons for their selection could be appreciated in the light of their remaining basic features. These considerations govern the description of the tools below.

3.2.1 Measurement of the Self-confidence

The SCI has been designed in Hindi to assess the level of self-confidence among adolescents and adults. The abbreviated name has been used so that the respondent may not decipher the test's real purpose and take it well.

The personality pattern is a unified multidimensional structure in which the core or centre of gravity is the self (**Breckenridge and Vincent, 1965**). Into this structure, many patterns of response tendencies are integrated, known as 'traits. Traits are closely related to and influenced by the concept of self. Self-confidence is one of the personality traits. The self is a composite of one's thoughts, feelings, strivings, hopes, fears and fantasies. His view of what he is, what he has been, what he might become, and his attitude pertaining to his worth. Self-Confidence is a positive attitude of oneself towards one's self-concept. It is an attribute of the perceived self. According to **Basavanna (1975)**, self-confidence is a person's perceived ability to manage situations successfully without taking help from others and positively evaluate oneself. In general terms, self-confidence refers to an individual's ability to act efficiently in a situation, to overcome obstacles and do things correctly. A self-confident person has the following qualities: he thinks of himself as socially competent, emotionally mature, intellectually adequate, successful, satisfied, decisive, optimistic, independent, self-assured, forward-moving, fairly assertive, and have leadership qualities.

Item-Analysis

The initial form of the inventory consisted of ninety true-false type items. It was administered on a sample of 200 individuals. After that, extreme groups were identified by taking bottom scores of 27%. The validity index of each item was determined based on the proportion of true and false answers for each item. The validity index of each item was taken out with the help of Flanagan's

Table of normalized biserial coefficients. The acquired validity indices ranged between .07 and .73. The things that had validity indices of .25 and above were retained for the final form of the inventory. Thus, the final inventory had 56 items.

Standardization Sample

The inventory was then administered in two far-off cities of Uttar Pradesh. One was Meerut in the Western U.P, and the second one was Allahabad in the Central U.P. to collect a sample of 2074 individuals of both the gender (Males N=748, Females N=1326).

Reliability

The obtained reliability coefficient and the index of reliability are reported in Table 1.

Method	N	Reliability Coefficient	Index of Reliability
Split-Half	362	.91	.95
K-R Formula	200	.89	.94
Test-Retest (After one month)	116	.78	.88

Validity

For analysis of items, validity coefficients were determined for each item by the biserial correction method, and only those items which yielded .25 or above biserial correction with the total score were retained.

The inventory was validated by correlating the scores obtained with the subject's scores on Basavanna's (1975) self-confidence inventory. The validity coefficient obtained is .82, which is significant beyond .01 levels.

Instructions for Administration

1. The nature of inventory is self-administering. However, during group administration, the examiner read the instructions given in the test booklet to ease administration.

2. There is no fixed time limit; usually, a person takes 20 minutes to complete the inventory.

Scoring

The inventory can be scored manually. A score of one is given for a response indicative of lack of self-confidence, i.e. for making cross [×] to ‘xvr’ response to item nos. 2, 7, 23, 31, 40, 41, 43, 44, 45, 53, 54, 55 and for making cross [×] to ‘lgh’ response to the rest of the items. Hence, the lower the score, the higher would be the level of self-confidence and vice-versa.

SCORING TABLE

Sr. No.	Right	Wrong	Sr. No.	Right	Wrong
1.	1	0	29.	1	0
2.	0	1	30.	1	0
3.	1	0	31.	0	1
4.	1	0	32.	1	0
5.	1	0	33.	1	0
6.	1	0	34.	1	0
7.	0	1	35.	1	0
8.	1	0	36.	1	0
9.	1	0	37.	1	0
10.	1	0	38.	1	0
11.	1	0	39.	1	0
12.	1	0	40.	0	1
13.	1	0	41.	0	1
14.	1	0	42.	1	0
15.	1	0	43.	0	1
16.	1	0	44.	0	1
17.	1	0	45.	0	1
18.	1	0	46.	1	0
19.	1	0	47.	1	0
20.	1	0	48.	1	0
21.	1	0	49.	1	0
22.	1	0	50.	1	0
23.	0	1	51.	1	0
24.	1	0	52.	1	0
25.	1	0	53.	0	1
26.	1	0	54.	0	1
27.	1	0	55.	0	1
28.	1	0	56.	1	0

Norms

The norms have been prepared on a sample of 2074 individuals. Mean, S.D. and standard error of means for the total sample are recorded in Table 2.

TABLE -2

Mean, S.D. and SE_M

N	M	S.D.	SE_M
2074	25.59	10.25	0.22

To convert raw scores into Z-score, to interpret the level of self-confidence. The Z-score norms have been given in Table 3. Norms for interpretation of the level of self-confidence have been given in Table 4.

TABLE-3

Z-Score Norms

Mean : 25-59

SD : 10.25

N=2074

RAW Score	z-Score	RAW Score	z-Score	RAW Score	z-Score	RAW Score	z-Score
00	-2.49	15	-1.03	30	+0.43	45	+1.90
01	-2.40	16	-0.94	31	+0.52	46	+1.99
02	-2.30	17	-0.84	32	+0.62	47	+2.09
03	-2.20	18	-0.74	33	+0.72	48	+2.19
04	-2.10	19	-0.64	34	+0.82	49	+2.29
05	-2.00	20	-0.54	35	+0.92	50	+2.39
06	-1.92	21	-0.45	36	+1.01	51	+2.47
07	-1.82	22	-0.35	37	+1.11	52	+2.57
08	-1.72	23	-0.25	38	+1.21	53	+2.67
09	-1.62	24	-0.15	39	+1.31	54	+2.77
10	-1.52	25	-0.05	40	+1.41	55	+2.87
11	-1.43	26	+0.04	41	+1.50	56	+2.98
12	-1.33	27	+0.13	42	+1.60		
13	-1.23	28	+0.23	43	+1.70		
14	-1.13	29	+0.33	44	+1.80		

TABLE-4

Norms for Interpretation of the Level of Self-Confidence

Sr. No.	Range of Z-scores	Grade	Level of Self-Confidence
1.	+2.01 and above	A	Extremely Low
2.	+1.26 to + 2.00	B	Highly Low
3.	+0.51 to + 1.25	C	Above Average Low
4.	-0.50 to + 0.50	D	Average/Moderate
5.	-0.51 to – 1.25	E	Above Average High
6.	-1.26 to – 2.00	F	Very High
7.	-2.01 and below	G	Extremely High

TABLE-5

Percentile Equivalents of Raw Scores

Percentile Norms	Raw Scores
P ₉₉	49
P ₉₀	39
P ₈₀	34
P ₇₅ (Q ₃)	33
P ₇₀	31
P ₆₀	28
P ₅₀ (Md)	25
P ₄₀	23
P ₃₀	20
P ₂₅ (Q ₁)	18
P ₂₀	16
P ₁₀	12
P ₅	9
P ₁	5

Use of inventory

Gupta and Agnihotri (1985) studied self-confidence as a function of perceived maternal child-rearing behaviour. The analysis of data revealed that the boys with low self-confidence considered their mothers to be controlling, inconsistent in using discipline, accepting and having an acceptance of individualization. Moreover, perceptions of maternal withdrawal of relations and non-enforcement were associated with high self-confidence in boys. On the other hand, the girls with low self-confidence perceived rejection, inconsistent discipline, lax discipline, instilling persistent anxiety and non-enforcement, etc.

There is a positive relationship between the sense of alienation and lack of self-confidence. If the feeling of alienation is high, the level of self-confidence is low (Agnihotri, 1986).

With regard to sex difference, a significant difference was not obtained at the level of self-confidence in boys and girls. The effect of sub-culture affiliation was also investigated. Among girls, the Muslim girls were found to be the more self-confident and the Vaish girls, the most self-confident. The Muslim and Brahmin sub-cultures boys were more self-confident than the Vaish and the Schedule and Backward Castes boys (Agnihotri, 1985).

3.2.2 Measurement of the Creativity

THE BATTERY

The battery of divergent production abilities contains six tests for measurement of the eight abilities given below:

TABLE-1

Divergent Production Abilities and their Test Names

Sr. No.	Test	Divergent Production Ability
I.	Production of words	Word Fluency
II.	Use of things	Ideational Fluency
III.	similarities	Associational Fluency
IV.	Construction of sentences	Expressional Fluency
V.	Use of test	Spontaneous Flexibility
VI.	Tiles	Adaptive Flexibility
VII.	Tiles	Originality
VIII.	Solution/ completion	Elaboration

From the above table, it is clear that mainly there are only four divergent production abilities: Fluency, flexibility, originality and elaboration. However, each sub-ability is measured separately. In the present battery, one test can measure two abilities each through a psychometric variation. For example, the test of uses of things can measure ideational fluency and spontaneous flexibility, and the Tiles Test can measure adaptive flexibility and originality. Therefore, only six tests are required to measure eight abilities. This battery can be used on children, adolescents and adults.

1. Word Production Test (WPT)

This test contains five items indicating the subject to write more and more words starting or ending or both with a given letter, or using a particular note; items 1 and 4 require to write words ending with [S 'k] and [Q =] item 3 requires to write words ending with [R, j] item 2 requires the use of [T, r] at the start and end of each word, and item 5 requires the use of [G, K] letter at any place of the word.

There is no need to provide standard instructions. But for each item, short instruction is sufficient to write what is to be done by the subject. Spaces have been provided after each item to write the words. Thurstone first started the use of such items. The wrong words were deleted, and total response words counted, which indicates the 'word fluency score'.

2. Uses of Things Test [UTT]

The test contains five items in the form of names of everyday things. The subject is required to write more and more, and diverse uses of those things. Spaces have been provided for writing the uses in phrases and short sentences. Such items have been used in many foreign tests. Instructions were written on the overleaf. The two instructional phrases "more and more" and "diverse" are necessary to extract ideational fluency and spontaneous flexibility, respectively.

To all the five items, the total number of correct answers gives the "ideational fluency score. The number of classes or trains of thought to all five items shall give us the 'spontaneous flexibility score'. For example, if one writes, responses to the example word use of 'word' as (1) to make a chair, (2) to make a table, (3) to make cot, (4) to burn, (5) to beat, the first three responses shall be scored as one since they all indicate one train of thought, i.e. to make furniture, whereas the fourth and fifth responses shall also get one score each since they are of different ideas. Thus to the above example responses, the ideational fluency score shall be 5, while the spontaneous flexibility score shall be only 3.

3. Similarities Test [ST]

The test contains six words which are names of things and qualities of which the subject is required to write synonyms or relate as many words as he can. Such items are used in many foreign tests. However, as we were interested more in positive relations rather than negative, only synonyms were used. The instructions, for example, are written overleaf in clear. The total number of appropriate response words to all the items shall indicate 'associational fluency score'.

4. Sentence Construction Test [SCT]

There are five items in this test. In the first four items, four letters are placed at little distances and five in the fifth. These indicate the first letters of words with which the subject has to make some sentences. Such items are used in other countries also. The subject was asked to write as many

sentences as he could use those letters. Spaces have been provided for writing the sentences in each item. Clear instructions, with an example, are given on the overleaf. The total number of appropriate sentences shall indicate the 'expressional fluency score'.

5. Titles Test [TT]

This test has three short stories of three to four lines. The subject is required to give as many titles as he can to each story.

The instructions to this effect are given overleaf. Space is provided for writing titles for each story.

6. Solution Test [ST]

Three problems were given, and the subject was required to give solutions (suggestions) to solve the problem.

The subject is supposed to give as many solutions as he can appropriate for solving the problem.

SCORING & TIME LIMIT

Part – 1: Total Time: Two Minutes

Writing words: Five sub-tests.

Scoring for each sub-test

One mark for each correct word.

Maximum 5 marks for each sub-test.

Total Maximum Marks: $5 \times 5 = 25$

Part – 2: Total Time: Two Minutes

Writing the Uses: Five sub-tests.

Scoring for each sub-test

One mark for each correct use.

Maximum 5 marks for each sub-test.

Total Maximum Mark: $5 \times 5 = 25$ marks.

Part – 3: Total Time: Two Minutes

Writing the Meaning or Relation Six Sub-test.

Scoring for each sub-test

1 marks for each correct Meaning/Relation.

Maximum 5 marks for each sub-test.

Total Maximum Marks: $6 \times 5 = 30$

Part – 4 : Total Time: Five Minutes

Sentence Construction : 5 sub-tests.

Scoring for each sub-test

One mark for each correct sentence.

Maximum 4 marks for each sub-test.

Total Maximum Marks: $5 \times 4 = 20$ marks.

Part – 5: Total Time: Two Minutes

Writing the title of the story : 3 sub-test.

Scoring for each sub-test

One mark for each correct title.

Total Maximum 5 marks for each sub-test.

Total Maximum marks: $3 \times 5 = 15$ marks.

Part – 6: Total Time: Three Minutes

Solution Writing: 3 sub-tests

1 & 2 Solution Writing

3 Story Completion

Scoring for each sub-test

For Solution Writing :

1 mark for each solution.

Total Maximum 5 marks for each sub-test.

Total Maximum Marks: $2 \times 5 = 10$ marks.

*Story Completion :

Maximum 5 marks for Completion.

Story : 5 Marks

* **Total Time for the Full Test: 16 Minutes.**

* **Maximum Possible Score: 130 Marks.**

Part – I: Maximum Marks: 25

Part – II: Maximum Marks: 25

Part – III: Maximum Marks: 30

Part – IV: Maximum Marks: 20

Part – V: Maximum Marks: 15

Part – VI: Maximum Marks: 15

Standardization of the Test

The divergent production ability test was standardized on a sample of 44 students, both male and female. The average age of the sample was 13.80 years.

Reliability

The Test-re-test reliabilities of the battery are given in the table below:

TABLE-2

Test-retest Reliabilities of the Test

Sr. No.	Name of Test	Reliabilities
I.	Production of words	.67

II.	Uses of Things	.80
III.	Similarities	.68
IV.	Construction of sentences	.84
V.	Titles	.85
VI.	Salutations/Completion	.82

Validity

To ensure content validity, a consistent and planned effort has been made to administer the test stimuli, test tasks, instructions and scoring procedures based on the theory and research on creativity or divergent production abilities or creative thinking abilities.

The following tables show the correlations of the battery with Baqer Mehdi's test of creative thinking.

TABLE-3

Product Moment Correlations between Divergent Production, Abilities and Baqer Mehdi's Test of Creative Thinking (verbal) (N=40)

Divergent Production Abilities	BAQER MEHDI'S TEST DIMENSIONS				Creativity	
	Fluency	Flexibility	Originality	Elaboration		
				N.V.		V.
Word Fluency	.48	.32	.36	.31	.40	.50
Ideational Fluency	.58	.40	.40	.42	.52	.43
Associational Fluency	.66	.51	.38	.36	.48	.33
Expressional Fluency	.63	.36	.51	.38	.47	.37
Spontaneous Flexibility	.47	.58	.40	.43	.50	.39
Adaptive Flexibility	.43	.60	.42	.42	.45	.48
Originality	.31	.35	.58	.33	.32	.43
Elaborations	.46	.35	.32	.41	.50	.44
Creativity	.44	.48	.39	.40	.44	.49

Statistical Results

Statistical results for the full test of divergent production ability are as following :

N: 443	Mean : 78.50	SD = 14.80
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Norms

Based on the above mentioned statistical results, z-Score Norms have been developed, and the same has been presented in Table 4.

Norms of interpretation of the level of divergent production abilities have been presented in Table 5.

TABLE-4

Z-Score Norms for Divergent Production Abilities

(Full Test)

Mean: 78.50

SD: 14.80

N= 443

RAW Score	z- Score	RAW Score	z- Score	RAW Score	z- Score	RAW Score	z- Score
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41	-2.53	61	-1.18	81	+0.16	101	+1.52
42	-2.46	62	-1.11	82	+0.23	102	+1.58
43	-2.39	63	-1.04	83	+0.30	103	+1.65
44	-2.33	64	-0.97	84	+0.37	104	+1.72
45	-2.26	65	-0.91	85	+0.43	105	+1.79
46	-2.19	66	-0.64	86	+0.50	106	+1.85
47	-2.12	67	-0.77	87	+0.57	107	+1.92
48	-2.06	68	-0.60	88	+0.64	108	+1.99
49	-1.99	69	-0.64	89	+0.70	109	+2.06
50	-1.92	70	-0.57	90	+0.77	110	+2.12
51	-1.85	71	-0.50	91	+0.84	111	+2.19
52	-1.79	72	-0.43	92	+0.91	112	+2.26
53	-1.72	73	-0.37	93	+0.97	113	+2.33
54	-1.65	74	-0.30	94	+1.04	114	+2.39
55	-1.58	75	-0.23	95	+1.11	115	+2.46
56	-1.52	76	-0.16	96	+1.18	116	+2.53
57	-1.45	77	-0.10	97	+1.24	117	+2.60
58	-1.38	78	-0.03	98	+1.31	118	+2.66
59	-1.31	79	+0.03	99	+1.38	119	+2.73
60	-1.24	80	+0.10	100	+1.45	120	+2.80

TABLE-5

Norms for Interpretation of the Level of Divergent Production Abilities

Sr. No.	Range of Raw Score	Range of z-Score	Grade	Level of Divergent Production Abilities
1.	109 and more	+2.01 & above	A	Extremely High
2.	98 to 108	+1.26 to +2.00	B	High

3.	87 to 97	+0.51 to +1.25	C	Above Average
4.	71 to 86	-0.50 to +0.50	D	Average/Moderate
5.	60 to 70	-1.25 to -0.51	E	Below Average
6.	49 to 59	-2.00 to -1.26	F	Low
7.	48 and less	-2.01 & below	G	Extremely Low

3.3 POPULATION OF THE STUDY

According to **John W Best**, “A population is any group of individuals that have one or more characteristics in common that are of interest to the investigator. The population may be all the restricted part of the group. A sample is an observation and analysis. By observing the characteristics of the sample, one can make certain inferences about the characteristics of the population from which it is drawn. Contrary to some popular opinion, samples are not selected haphazardly; they are chosen randomly in a systematic way, so that chance or the operation of probability can be utilized”.

Hakim and Asthana pointed out that “A population is the aggregate of all the cases that confirm to some designated set of specification”.

A large group of individuals from which a sample is selected for research purposes is known as population. The researcher faced a widespread technical problem that of determining how much may confidently be said about a population from what is known of a sample or ascertaining the degree of confidence, that may be placed in the inferences drawn.

The population of the present study included all the Pupil-Teachers studying in D.El.Ed. Arts and Science background in five colleges of Sitapur district.

3.4 SAMPLE AND SAMPLING TECHNIQUE USED

Sample and Sampling

A sample is the smallest part of the whole which has all the characteristics of the whole. Thus, a sample is representative of the whole. It is a small proportion of the population that represents all the traits and characteristics of the population. The sampling technique involves unique methods to select a group of subjects from the parent study and enables the researcher to perform an

investigation. Since it is impossible to collect data from every respondent relevant to our research, but only from some fractional part of the respondents in the social sciences, this process of selecting the fractional part is called sampling. **David S. Fox**. A good sample is unbiased and representative of the whole population.

Srivastava, Bhatt Kulikar (1980) and Verma (1966) have also opined that sometimes an investigator deliberately selects a sample of equal size or different size but not necessarily proportional to stratum size from the various strata. This is often done to increase the representation of very small strata in the total sample or reduce the sample size in case of large and homogenous strata. The researcher takes the sample from an urban background with the same family structure and social surroundings to control the variable.

The technique of selecting a sample from the whole is called sampling.

According to **David and Fox**, “In social science, it is not possible to collect data from every respondent relevant to our study, but only from some fractional part is called sampling”.

According to **W. G. Cacharn**, “In every branch of science we lack the resources; to study more, we select a fragment of the phenomenon that might advance our knowledge”.

Selecting any part of a population or universe that represents that population or universe is known as sampling.

For sample selection researcher can be used the following sampling techniques:

Probability Sampling Techniques

- Simple Random Sampling
- Stratified sampling
- Cluster Sampling
- Systematic Sampling
- Multistage sampling
- Sequential Sampling
- Double sampling

Non-Probability Sampling Techniques

- Convenience Sampling
- Purposive Sampling
- Quota Sampling

(A) Sampling Technique

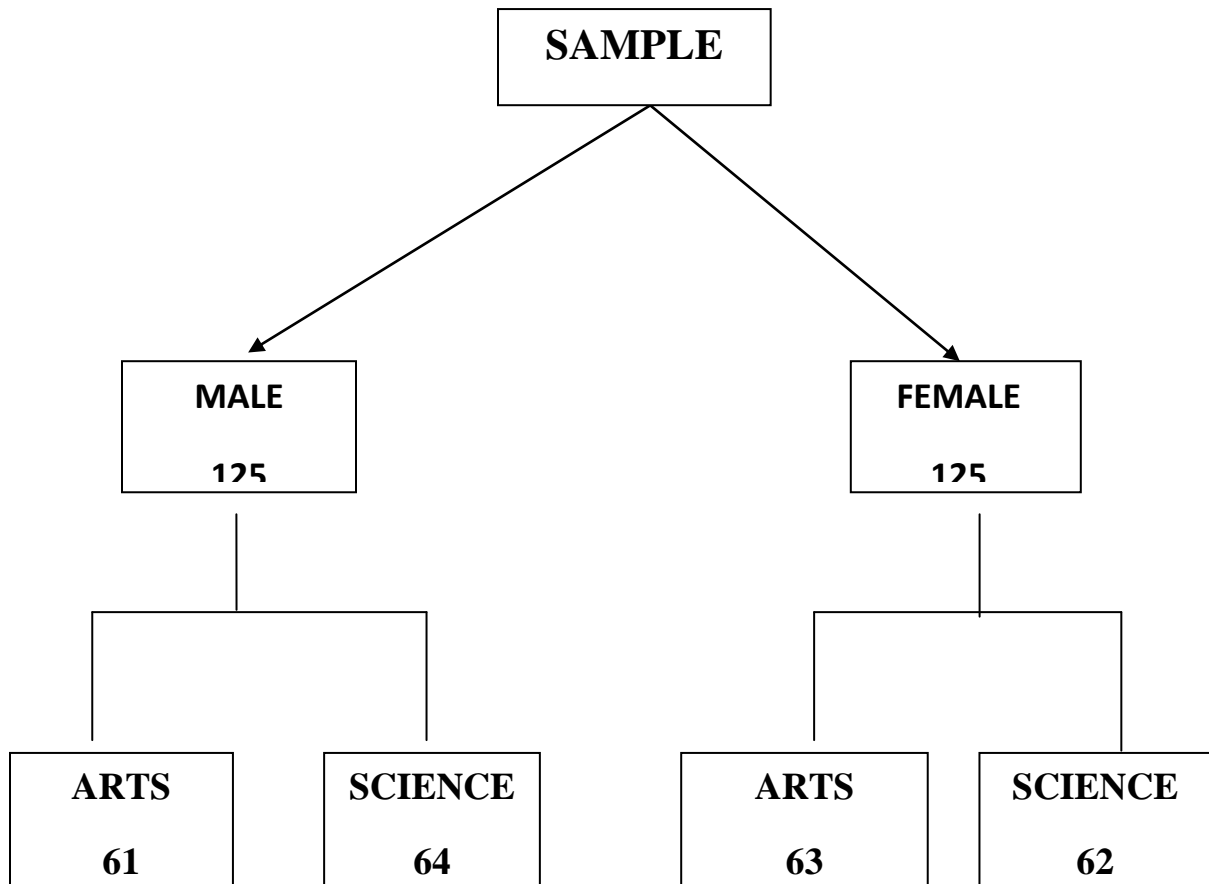
Simple random sampling is a sampling technique that selects a population in such a manner that every individual in the population has an equal chance of being chosen. The selection of any one individual is also in no way tied to the selection of any other.

The researcher followed the following steps:

1. **Defining the Population:** In the present study, the population has been described as the pupil-teachers of D.El.Ed. of Sitapur district U.P.
2. **Listing of all the units in the population:** The researcher had identified all units in the population and numbered them accordingly.
3. **Selection of Sample Size:** In this study simple random sampling technique has been used. First of all, a list of all D.El.Ed. institutions of the Sitapur district was prepared. After that, the institutions were randomly selected from a simple lottery method. Then the sample of pupil-teacher was selected randomly from each selected institution. The present study was conducted on two hundred and fifty pupil-teachers from the humanities and science group in equal numbers from the five institutions located in the district. The logical chorology of this sample structure was fifty pupil-teachers from each of the five institutions ($50 * 5 = 250$).

S. No.	Name of the institution	No. of Pupil-Teachers from each institute
1.	District Teaching And Training institution, Khairabad, Sitapur.	50
2.	Buniyad Mahavidyalaya, Kanayatpur, Sitapur.	50
3.	Sai Baba Shivraj Singh Chauhan Mahavidyalaya, Uljapur, Sitapur	50

4.	Shivam Agrawal Memorial Degree College, Sitapur.	50
5.	Regency Institute of Management And Technology, Rasyaura, Sitapur.	50



4. Contacting the Principal of colleges having D.El.Ed. classes

The researcher personally contacted the principals of the selected five colleges for running D.El.Ed. classes. She explained to them the significance of the study and secured their permission to conduct the study in their colleges.

5. Contacting the head and staff of the Education department

After securing the principal's permission to conduct the study, she contacted the head and teachers of the education department of each of the selected colleges constituting the sample of the study. She sought their cooperation in the context of the relevance of the study to teacher education. They agreed to extend such cooperation as was necessary for the conduct of the study.

6. Establishing rapport with the sample

The sample chosen in the manner described above were personally contacted by the researcher to establish a rapport. The researcher explained to the subjects the purpose and significance of the study.

7. Administering the tool

The data related to the characteristics of the teacher subjects of the sample as creativity and self-confidence were estimated with the help of Dr K.N. Sharma's DPA-s and Dr. Rocha Gupta's SCI-gr. DPA-s was used for finding creativity and SCI for self-confidence.

While administering each of these tests, the procedure laid down in their manuals was followed. However, to ensure proper testing conditions during the administration of the different tests, such precautions were observed as administering only over test on the same group of subjects on the same day for minimizing fatigue among the subjects.

Besides this, each subject was allotted a separate and comfortable chair and tables and the tests were administered in a room with proper light and air provision. All the tests were administered during morning hours because the subjects are fresh and free from the effects of mental fatigue during this period of the day. Instructions to the subjects were read from the manual of the tests in a loud and distinct voice. Doubts and confusions raised by any of the subjects regarding a test were clarified and removed. Subjects were asked to begin attempting items of a test from the first page and to continue to attempt them upto its last page.

8. Collection of the test answers sheet

The investigator personally collected the test answer sheets after being completed by the subjects.

9. Scoring the tests

Each one of the test answer sheets of the subjects on whom the test, namely, Dr. Rekha Gupta's self-confidence inventory and Dr. K.N. Sharma's divergent production abilities battery, were scored precisely following the procedure laid down in these test's manual.

10. Processing the Data

After scoring the tests and obtaining the data pertaining to pupil-teacher's self-confidence and creativity, the investigator proceeded to process the data to achieve the objectives of the study and test its hypothesis. The results obtained after processing the data in the manner described above have been presented and organized in the succeeding chapter.

3.5 STATISTICAL TECHNIQUE USED

The past few years or more have been a period of extremely rapid and significant development in statistical theory and practice. Yet, while many of the recent contributions-particularly those of R. A. Fisher and his students-appear to have almost revolutionary significance for educational research, research workers in this field have in general failed to recognize their amazing possibilities, or at any rate, have not widely realized these possibilities in practice.

Measures of Relationship

The relationship between two or more paired variables or two more sets of data is called correlation. This is measured and represented by the coefficient of correlation. The Pearson's product-moment correlation coefficient (r) is the most extensively used measure of correlation. This measure is used where the variables are quantitative, i.e. on the interval or ratio scale. Other methods of correlation have been developed for the use of nominal and ordinal variables. One measure commonly used to describe the relationship between two nominal variables is the contingency coefficient. The technique, which is used for ordinal variables, is a rank-order correlation.

Whenever two variables of the same group are related in such a manner that an increase or decrease leads to the increase or decrease of another variable, they are said to be correlated.

Generally, correlation is of two types:

- (i) Positive correlation (+) and
- (ii) Negative correlation (-).

According to **Guilford**, “A coefficient of correlation is a single number that tells us as to what extent two things are related, to what extent variation in one goes with variations in the other”.

3.5.1 Utility, Need and Importance of Correlation

- With the help of correlation between two subjects, the ability of a student in one subject can be estimated on the basis of his ability in another subject.
- Correlation is very popular in action research.
- Correlation is beneficial for vocational and educational guidance to the students.

3.5.2 Pearson’s Product –Moment Coefficient of Correlation(r**)**

This is the most popular and precise method used. The researcher has used this method for the calculation of correlation. This coefficient is calculated by changing raw score into sigma scores and finding the mean value of their cross-products

$$r = \frac{\sum(Z_x)(Z_y)}{N}$$

3.5.3 Characteristics of Pearson’s Product –Moment

- This method can be used to calculate the coefficient of correlation of variables in large samples.
- The samples in research works are always large, so research works requiring calculation of correlation make use of this method.

3.5.4 Limitations of Pearson’s Product –Moment

- Calculation of coefficient of correlation using this method for a small sample takes much time.
- All formulae in this method are long.

CHAPTER- IV

DATA ANALYSIS AND INTERPRETATION

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

According to **Shamoo and Resnik (2003)**, “Data analysis is a process or systematic application of statistical tools used by researchers to derive insights over the years”.

Data analysis is an essential task in any research process as it not only helps in reducing voluminous datasets into smaller segments but also reveals new findings and solutions to a problem. Data analysis entails unforeseen information that a researcher might not come across at the initiation of research; therefore, when a researcher begins the data analysis process, the journey of exploratory research starts simultaneously.

Analysis of data involves various steps such as editing, classifying, and tabulating quantitative information. Editing means checking of the data for accuracy, usefulness and completeness. After that, data is classified into different categories, classes, groups or heads. The research organises the data on the basis of the nature of the problem, the hypothesis to be verified, or by the responses or the characteristic of the problem selected.

Good, C.V., Barr, A.S., Scates, D.E.(1941) mentioned four analyse data:

1. Thinking in terms of significant tables.
2. Carefully examining the statement of the problem and original records.
3. Discussion of the problem.
4. Statistical calculation of the problem.

Statistical techniques have significantly helped in the analysis of data. It refers to the method of producing and understanding data according to logical reasoning. It serves two primary purposes:

1. Summarizing and analyzing the data
2. Providing an objective basis for the interpretation of data.

There are two types of statistics:

- a) Descriptive statistics: This is used to describe various aspects of the sample or population in totality. It limits generalization to a particular group of individuals.

The measures of descriptive statistics commonly used in educational researches are:

- Measures of Central Tendency
 - Mean
 - Median
 - Mode
- Measures of Dispersion or variability
 - Range
 - Variance
 - Standard Deviation
- Measures of Relative position
 - Standard Scores
 - Percentile Rank
 - Percentile Score
- Measures of Relationship
 - Coefficient of Correlation

b) Inferential Statistics: These are the procedure to draw inferences or conclusions about the population under study. It uses descriptive statistics to draw inferences from the data.

4.2 STATISTICAL TECHNIQUE USED

The researcher used the following statistical technique:

Coefficient of Correlation: Correlation is the relationship between two or more sets of data. The degree of relationship is measured and presented by the coefficient of correlation.

PEARSON'S PRODUCT-MOMENT COEFFICIENT OF CORRELATION(r**)** this is the most popular and precise method used. The researcher has used this method for the calculation of correlation. This coefficient is calculated by converting raw scores into sigma scores and finding the mean value of their cross-products.

$$r = \frac{\Sigma(Z_x)(Z_y)}{N}$$

CHARACTERISTICS OF PEARSON'S PRODUCT-MOMENT

- This method can be used to calculate the coefficient of correlation of variables in large samples.
- The samples in research works are always large, so research works requiring calculation of correlation make use of this method.

LIMITATIONS OF PEARSON'S PRODUCT-MOMENT

- Calculation of coefficient of correlation using this method for a small sample takes much time.
- All formulae in this method are long.

TABLE NO. 4.1

Table showing coefficient of correlation between Creativity and Self-confidence of D.El.Ed. Pupil-Teachers.

Sr. No.	Variables	Group	Degrees of freedom	r value	Significance
1.	Creativity, Self-confidence	Total Sample`	240	0.344	0.01 level
2.	Creativity, Self-confidence	Male pupil-teachers	123	0.410	
3.	Creativity, Self-confidence	Female pupil-teachers	123	0.275	
4.	Creativity, Self-confidence	Arts Stream	124	0.295	
5.	Creativity, Self-confidence	Science Stream	122	0.331	
6.	Creativity, Self-confidence	Arts-Male	60	0.426	
7.	Creativity, Self -confidence	Arts- Female	62	0.146	Not significant at 0.05
8.	Creativity, Self- confidence	Science- Male	61	0.344	
9.	Creativity, Self -confidence	Science- Female	59	0.344	

HYPOTHESIS-1

There is no correlation between Creativity and Self-confidence of D.El.Ed. Pupil-Teachers.

Pearson's product-moment r has been used to test the above null hypothesis, and the results have been provided in table 4.1

TABLE NO. 4.1

Correlation between Creativity and Self-confidence of D.El.Ed. Pupil-Teachers.

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1.	Creativity	250	248	0.344	Significant at 0.01 level
2.	Self-confidence	250			

N=250, df = 248 Table Value 0.181 at 0.01 level

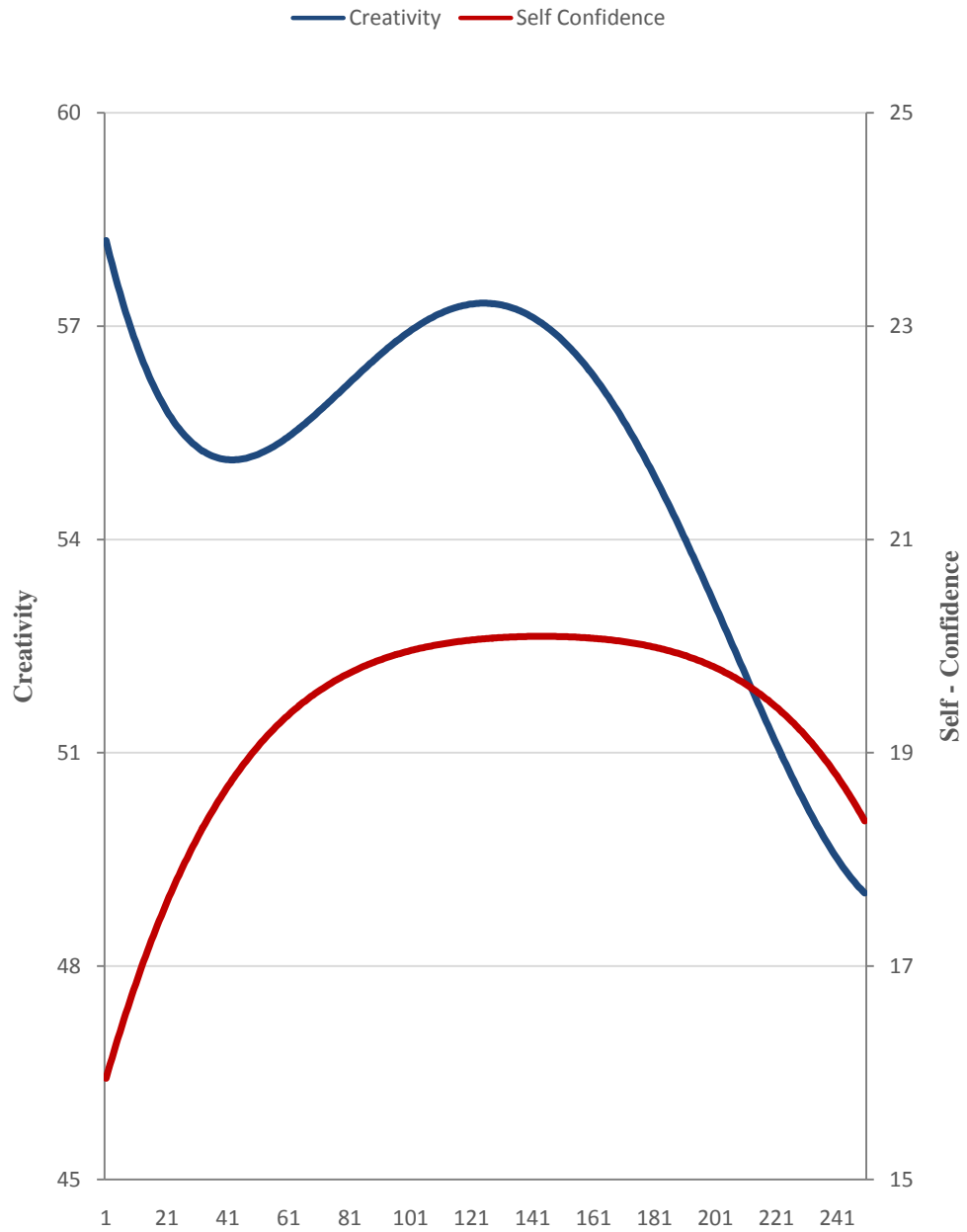
Observation: The above table revealed that the value of the coefficient of correlation (r) computed between creativity and self-confidence of pupil-teachers obtained is +0.344.

Analysis: From the above table, it is seen that the value of the coefficient of correlation (r) computed between creativity and self-confidence of pupil-teachers obtained is +0.344. To be significant at 0.01 level, the value of the coefficient of correlation(r) should be 0.181 or more. The obtained value of r is more than the table value. Therefore the null hypothesis stands rejected.

Conclusion: Thus, there is a significant and positive correlation between creativity and self-confidence of D.El.Ed. pupil-teachers. In other words, the pupil-teachers who are having a good level of creativity also possess a high level of confidence, and the pupil-teachers showing a low level of creativity also show a low level of confidence. It seems to be but natural that the person having good self-confidence does possess a high level of creativity.

CHART 4.1

**Correlation between Creativity and Self-confidence
of D.El.Ed. Pupil-Teachers.**



HYPOTHESIS-2

There is no correlation between Creativity and Self-confidence of D.El.Ed. male Pupil-Teachers.

TABLE NO. 4.2

Correlation between Creativity and Self-confidence of D.El.Ed. male Pupil-Teachers

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1.	Creativity	125	125-2=123	0.410	0.01
2.	Self-confidence	125			

N=125, df = 123, r = 0.410, Table Value 0.228 at 0.01

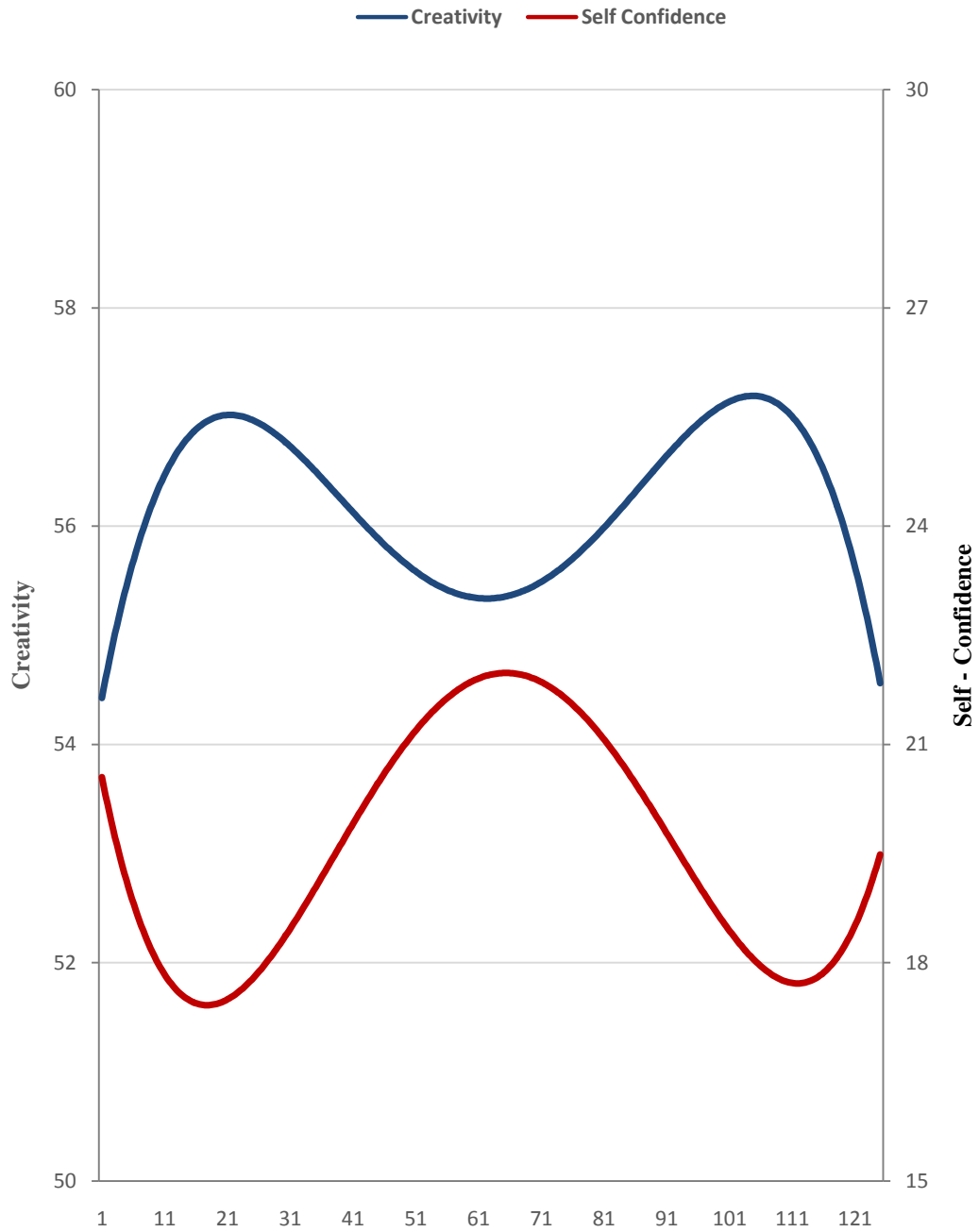
Observation: From the above table, it is seen that the coefficient of correlation between creativity and self-confidence of D.El.Ed. male pupil-teachers obtained is 0.410.

Analysis: The above table reveals the value of the coefficient of correlation(r) between creativity and self-confidence of D.El.Ed. male pupil-teachers obtained is 0.410. To be significant at the 0.01 level, the value should be 0.228 or more for df - 123. Since the value of r obtained is more than the table value, the null hypothesis is rejected.

Conclusion: There is a significant and positive correlation between creativity and self-confidence of D.El.Ed. male pupil-teachers, which means that the pupil-teachers who are more creative possess a good level of self-confidence, and the pupil-teachers who are comparatively lower in creative abilities are low in their self-confidence .

CHART 4.2

Correlation between Creativity and Self-confidence of D.El.Ed. male Pupil-teachers



HYPOTHESIS-3

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. female Pupil-Teachers.

TABLE NO.4.3

Correlation between Creativity and Self-confidence of D.El.Ed. female Pupil-Teachers

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1.	Creativity	125	125-2=123	0.275	0.01
2.	Self-confidence	125			

N=125, df = 123, r = 0.275, Table Value 0.228 at 0.01

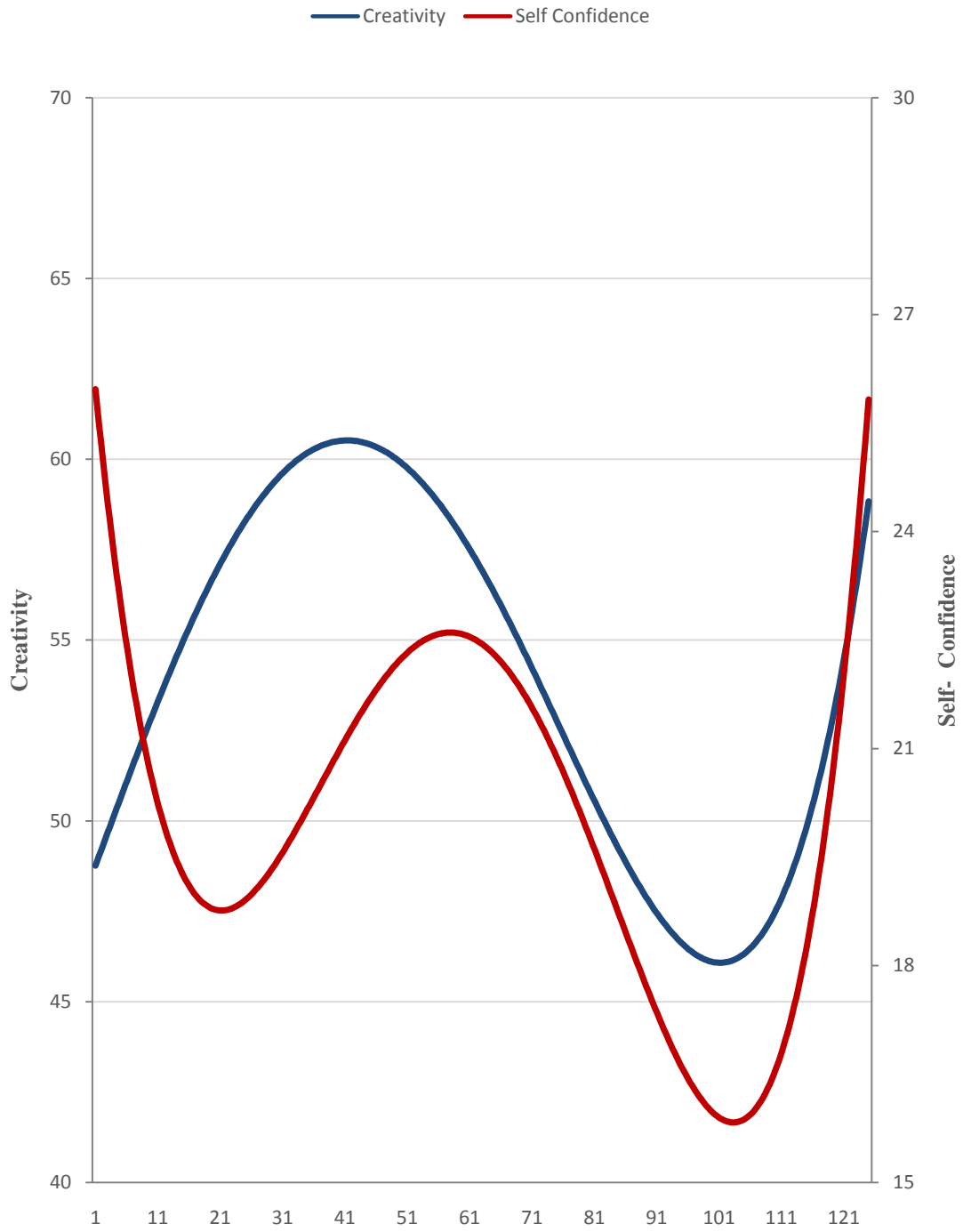
Observation: From the above table, it is seen that the coefficient of correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers obtained is 0.275

Analysis: The above table reveals the value of the coefficient of correlation(r) between creativity and self-confidence of D.El.Ed. female pupil-teachers obtained is 0.275. To be significant at the 0.01 level, the value should be 0.228 or more for df - 123. Since the value of r obtained is more than the table value, the null hypothesis is rejected.

Conclusion: Thus, there is a significant and positive correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers, which means that the female pupil-teachers who are more creative possess a better level of self-confidence, and the pupil-teachers who possess a low level of creative abilities are also low in their self-confidence.

CHART 4.3

**Correlation between Creativity and Self-confidence of
D.El.Ed. female Pupil -Teachers**



HYPOTHESIS-4

There is no significant Correlation between Creativity and Self-confidence of D.El.Ed. Arts stream Pupil-Teachers.

TABLE NO. 4.4

Correlation between Creativity and Self-confidence of D.El.Ed. Arts stream Pupil-Teachers

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1.	Creativity	126	126-2=124	0.295	0.01
2.	Self-confidence	126			

N=126, df = 124, r = 0.295, Table Value - 0.228 at 0.01

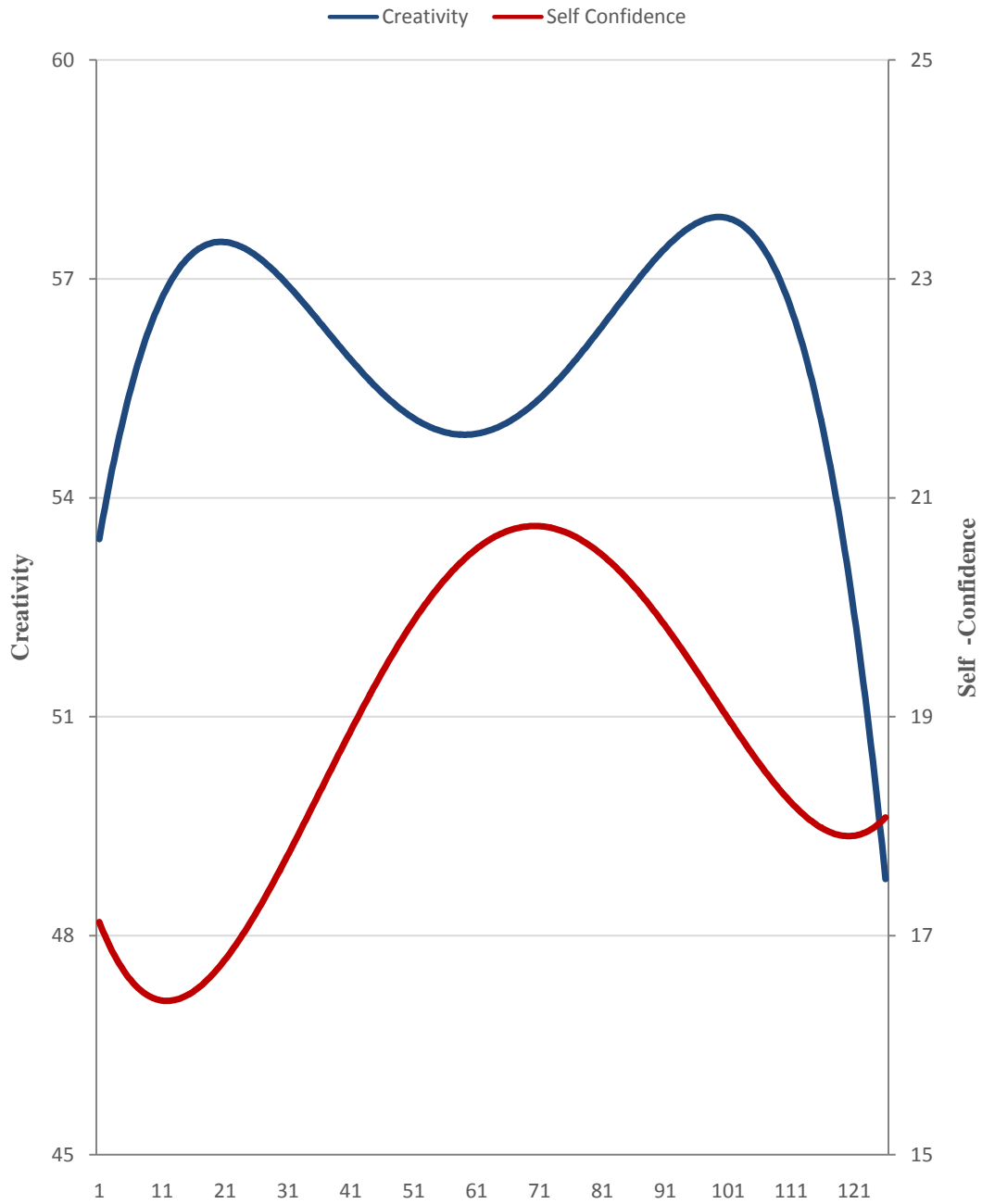
Observation: From the above table, it is seen that the coefficient of correlation between creativity and self-confidence of D.El.Ed. pupil-teachers of arts stream obtained is 0.295

Analysis: The above table reveals the coefficient of correlation between creativity and self-confidence of D.El.Ed. pupil-teachers of arts stream is 0.295. To be significant at 0.01 level of significance, the value of r should be 0.228 or more for df 124. Since the obtained value of r is greater than the table value, the null hypothesis stands rejected.

Conclusion: Thus, there is a positive and significant correlation between creativity and self-confidence of pupil-teachers of the arts stream. In other words, creativity and self-confidence correspond with each other in the case of D.El.Ed. pupil- teachers of arts stream.

CHART 4.4

**Correlation between Creativity and Self-confidence of
D.El.Ed. Arts Stream
Pupil -Teachers**



HYPOTHESIS-5

There is no significant Correlation between Creativity and Self-confidence of D.El.Ed. Science stream Pupil-Teachers.

TABLE NO. 4.5

Correlation between Creativity and Self-confidence of D.El.Ed. Science stream Pupil - Teachers

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1.	Creativity	124	124-2=122	0.331	0.01
2.	Self-confidence	124			

N-124, df -122 r -0.331, Table Value 0.228 at 0.01

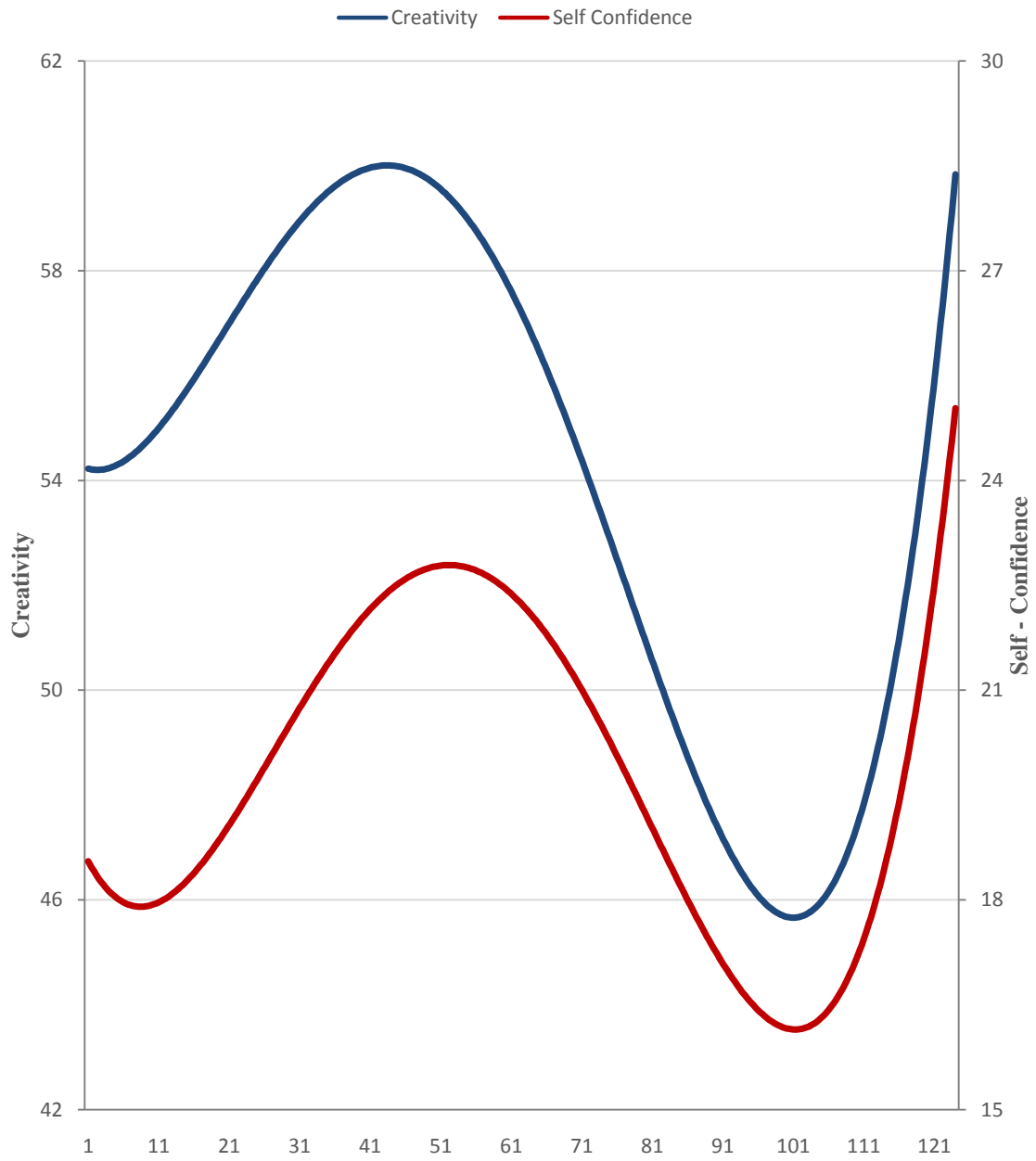
Observation: From the above table it is seen that the coefficient of correlation between creativity and self-confidence of D.El.Ed. pupil-teachers of science stream obtained is 0.331.

Analysis: The above table reveals the coefficient of correlation between creativity and self-confidence of D.El.Ed. pupil-teachers of science stream. The value of r obtained is 0.331. To be significant at 0.01 level of significance the value of r should be 0.228 or more for df 122. Since the obtained value of r is greater than table value the null hypothesis stands rejected.

Conclusion: Thus there is significant and positive correlation between creativity and self-confidence of D.El.Ed pupil-teachers of science stream. So it also follows that the pupil-teachers having good capability of creativity will also have self-confidence of higher order and the pupil-teachers with low level of creativity will also have comparatively low level of self-confidence.

CHART 4.5

**Correlation between Creativity and Self-confidence of
D.El.Ed. Science stream Pupil-Teachers**



HYPOTHESIS-6

There is no significant difference between Creativity and Self-confidence of D.El.Ed. Arts stream male Pupil-Teachers.

TABLE NO. 4.6

Correlation between Creativity and Self-confidence of D.El.Ed. Arts stream male Pupil-Teachers

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1.	Creativity	62	62-2=60	0.426	0.01
2.	Self-confidence	62			

N=62, df = 60 r = 0.426 Table Value 0.325 at 0.01

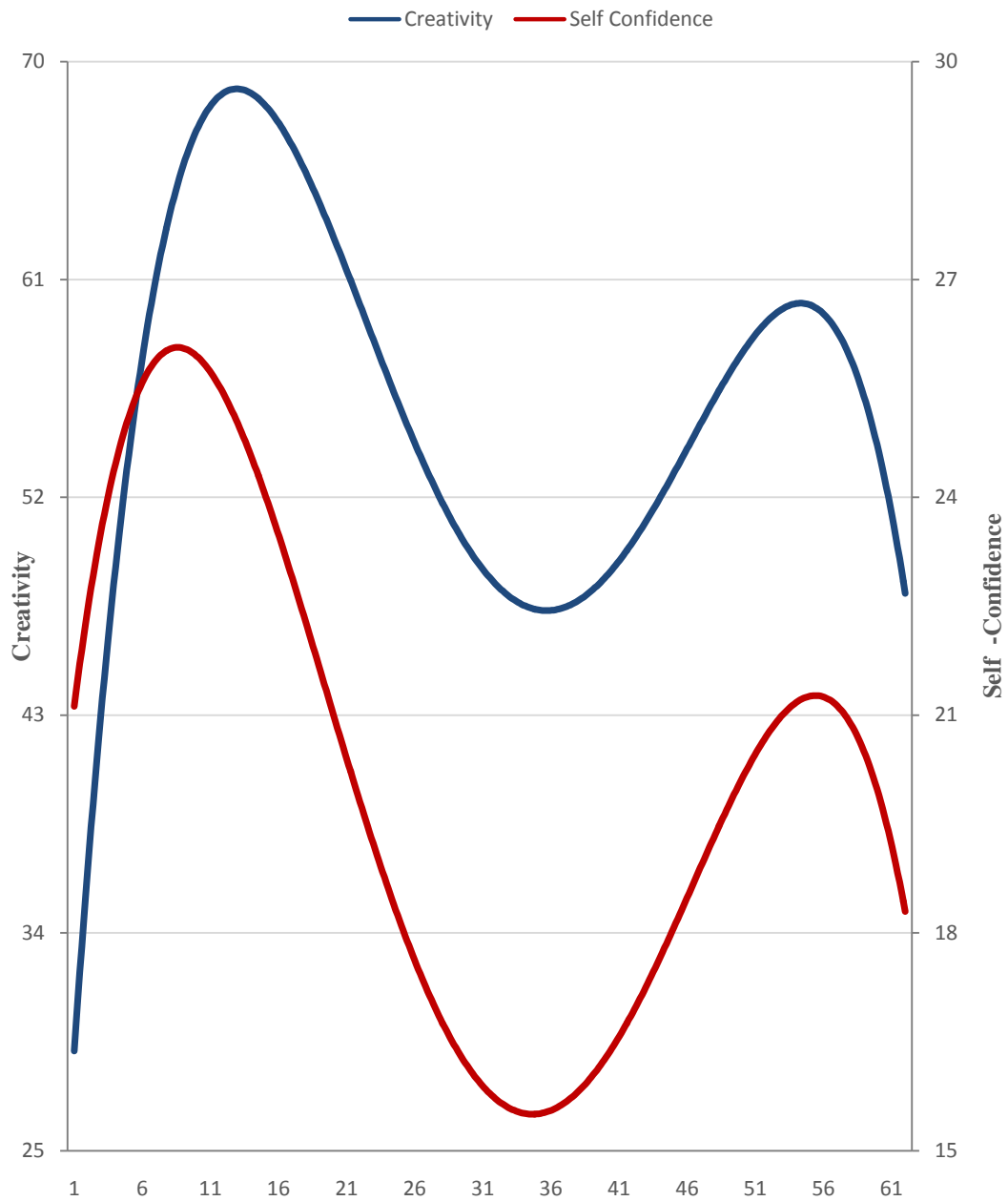
Observation: From the above table it is seen that coefficient of correlation computed between creativity and self-confidence of male pupil-teachers of arts stream. The value of r obtained is 0.426.

Analysis: For df 60 the table value at 0.01 level of significance is 0.325. The obtained value of r is more than table value. Therefore the null hypothesis is rejected.

Conclusion: Thus there exists positive and significant correlation between creativity and self-confidence of D.El.Ed. arts stream male pupil-teachers. So it also follows that the pupil-teachers with higher order creativity will also be having good level of self-confidence and the pupil-teachers who are comparatively less creative will be having lower level of self-confidence.

CHART 4.6

**Correlation between Creativity and Self-confidence of
D.El.Ed. Arts stream male Pupil-Teachers**



HYPOTHESIS-7

There is no significant difference between Creativity and Self-confidence of D.El.Ed. Arts stream female Pupil-Teachers.

TABLE NO.4.7

Correlation between Creativity and Self-confidence of D.El.Ed. Arts stream female Pupil-Teachers

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1	Creativity	64	64-2=62	0.146	0.01
2	Self-confidence	64			

N=64, df = 62, r = 0.146, Table Value 0.250 at 0.05

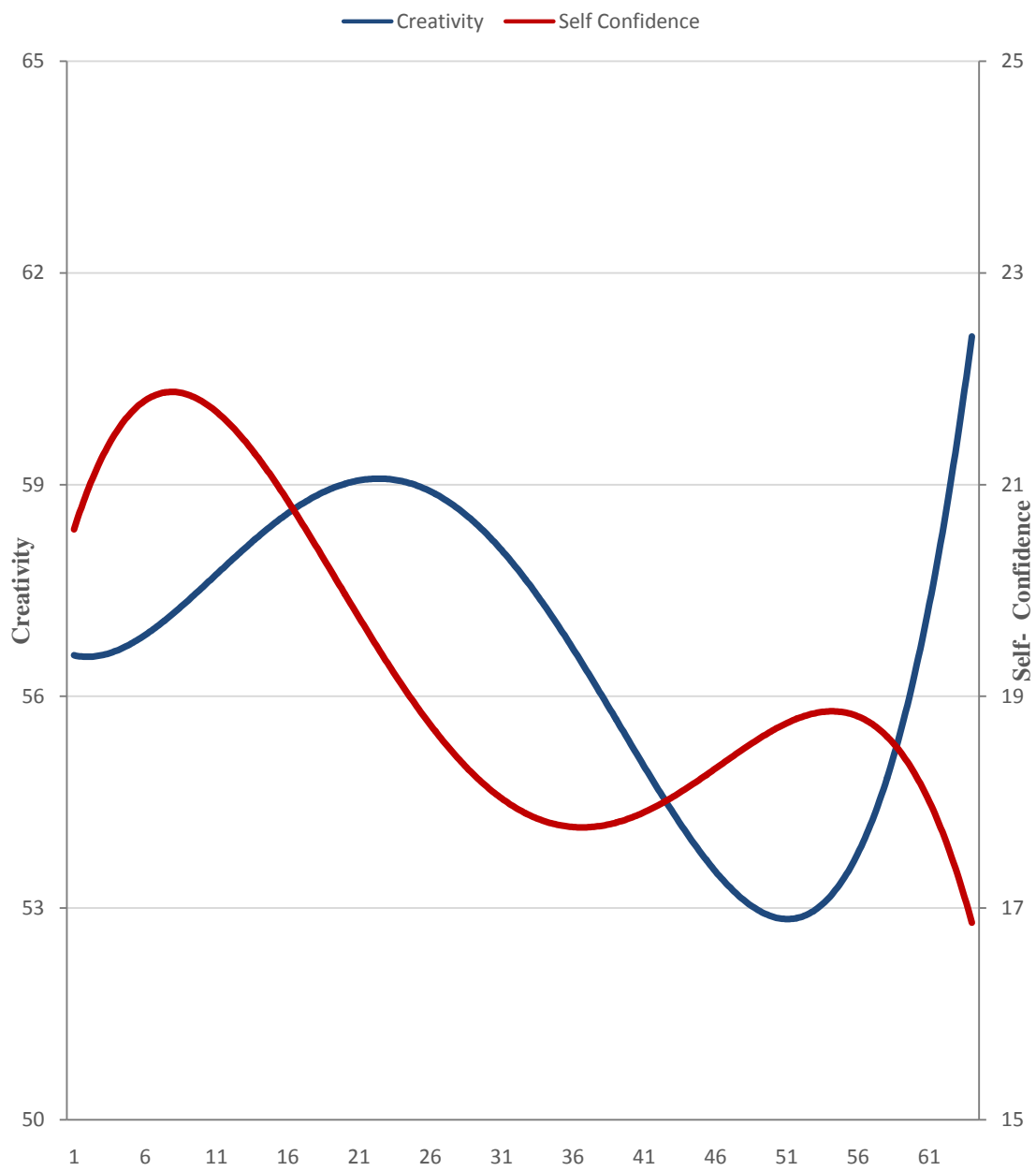
Observation: The above table reveals that coefficient of correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers of arts stream. The value of r obtained is 0.146.

Analysis: It is seen from the above table that the coefficient of correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers of arts stream. The value of r obtained is 0.146. To be significant at 0.05 level the value of r should be 0.250 or more for df 62. Since the value of r obtained is less than the table value the null hypothesis is accepted.

Conclusion: Thus in this case there is no significant relationship between creativity and self-confidence. In this case creative ability of female pupil-teachers had no bearing on their self-confidence.

CHART 4.7

**Correlation between Creativity and Self-confidence of
D.El.Ed. Arts stream female Pupil-Teachers**



HYPOTHESIS-8

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. male Pupil-Teachers of Science stream.

TABLE NO.4.8

Correlation between Creativity and Self-confidence of D.El.Ed. Science stream male Pupil-Teachers

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1.	Creativity	63	63-2=61	0.344	0.01
2.	Self-confidence	63			

N=63, df = 61 , Table Value 0.325 at 0.05 level.

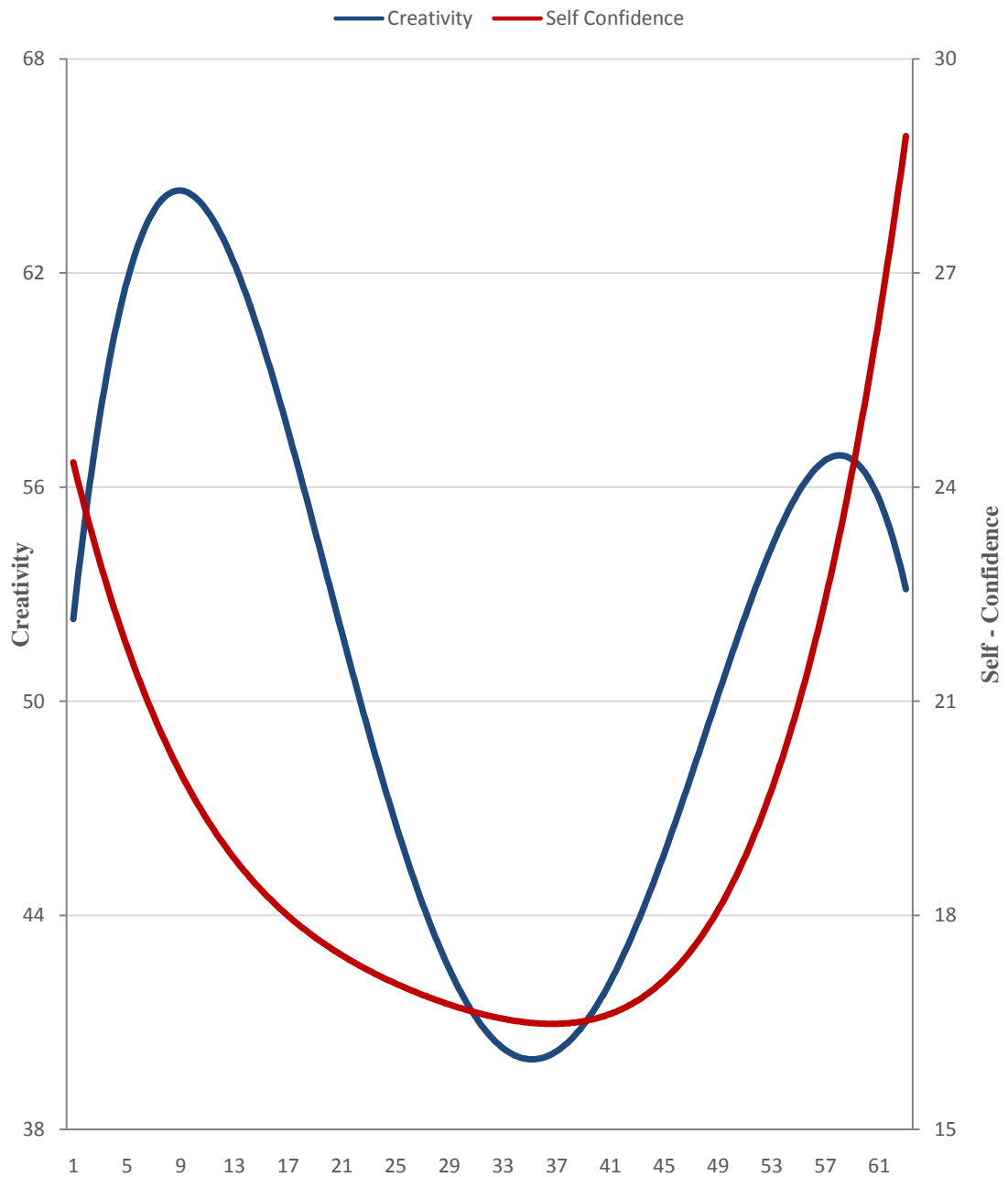
Observation: The above table shows the coefficient of correlation between creativity and self-confidence of D.El.Ed. science stream male pupil-teachers was computed, the value of r obtained is 0.344.

Analysis: The above table reveals that coefficient of correlation between creativity and self-confidence of D.El.Ed. science stream male pupil-teachers is 0.344. To be significant at 0.01 level the value of r should be 0.325 or more. The value of r obtained is 0.344 which is higher than table value hence, the null hypothesis stands rejected.

Conclusion: Thus it can be stated that there is significant correlation between creativity and self-confidence of male pupil-teachers. So it also follows that the pupil-teachers possessing better creativity will also possess good level of self-confidence and the pupil-teachers having low level of creativity are comparatively low in their self-confidence.

CHART 4.8

**Correlation between Creativity and Self-confidence of
D.El.Ed. Science stream male Pupil -Teachers**



HYPOTHESIS-9

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. female Pupil-Teachers of Science stream.

TABLE NO. 4.9

Correlation between Creativity and Self-confidence of D.El.Ed. female Pupil-Teachers of Science stream

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1	Creativity	61	61-2=59	0.344	0.01
2	Self-confidence	61			

N=61, df = 59 Table Value 0.325 at 0.01.

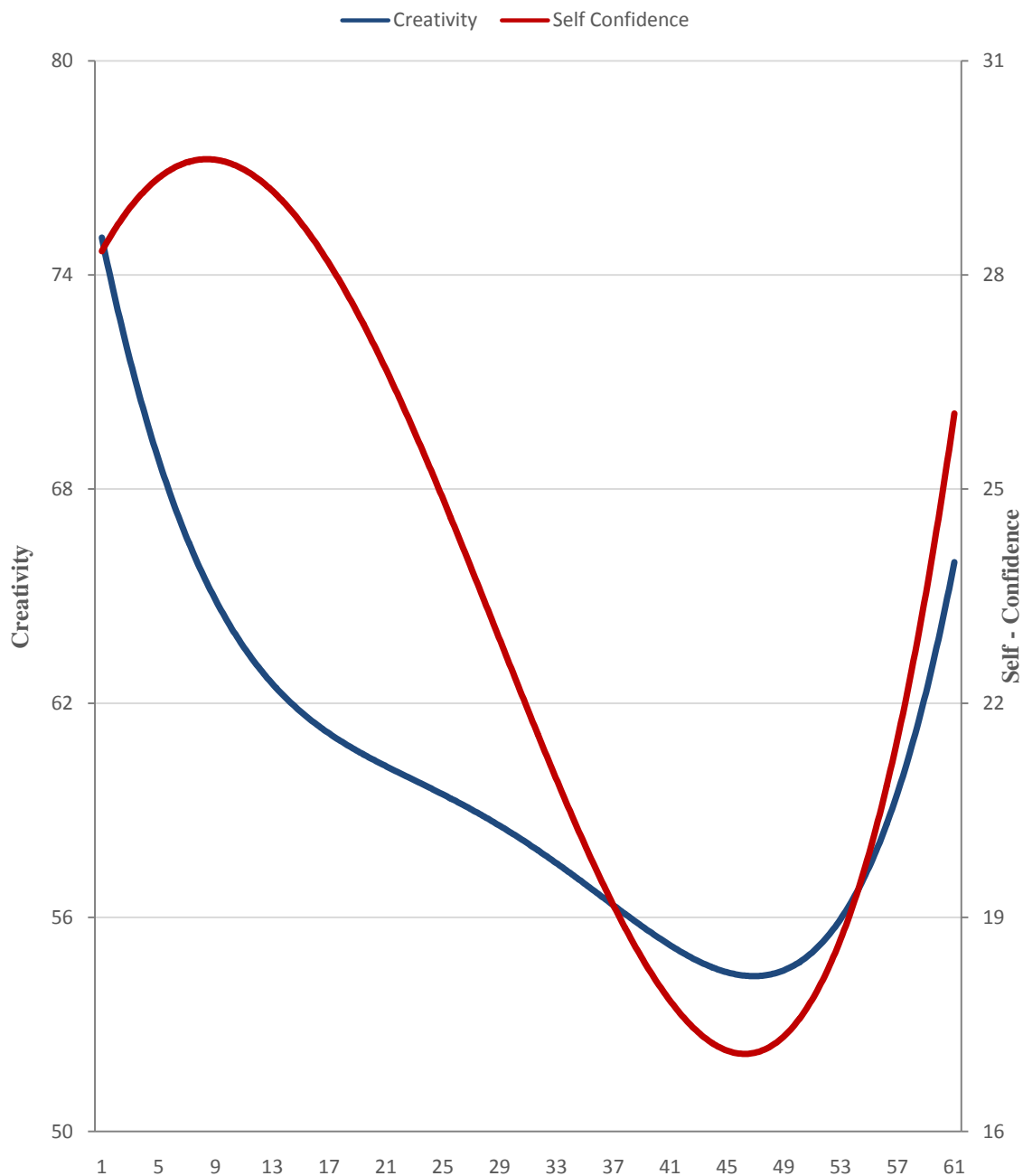
Observation: The above table reveals that coefficient of correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers, the value of r obtained is 0.344.

Analysis: The above table shows that coefficient of correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers, is 0.344. To be significant at 0.01 level the value of r should be 0.325 or more. The value of r obtained is higher than table value and significant at 0.01 level of significance, hence the null hypothesis is rejected.

Conclusion: So it can be said that there is significant and positive correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers of science stream. So it also follows that the creative abilities and self-confidence correspond with each other.

CHART 4.9

**Correlation between Creativity and Self-confidence of
D.El.Ed. Science stream female Pupil-Teachers**



CHAPTER- V

FINDINGS, CONCLUSION AND SUGGESTIONS

CHAPTER -V

FINDINGS, CONCLUSION AND SUGGESTIONS

5.1 FINDINGS

HYPOTHESIS-1

There is no correlation between Creativity and Self-confidence of D.El.Ed. Pupil-Teachers.

The value of the coefficient of correlation (r) computed between creativity and self-confidence of pupil-teachers obtained was 0.344. To be significant at 0.01 levels, the value of the coefficient of correlation(r) should be 0.181 or more. The obtained value of r was more than the table value. Therefore the null hypothesis stands rejected. Thus, it was found that the creativity and self-confidence of D.El.Ed. pupil-teachers were positively correlated.

HYPOTHESIS-2

There is no correlation between Creativity and Self-confidence of D.El.Ed. male Pupil-Teachers.

The value of the coefficient of correlation(r) between creativity and self-confidence of D.El.Ed. male pupil-teachers obtained was 0.410. To be significant at the 0.01 level, the value should be 0.228 or more for df - 123. Since the value of r obtained is more than the table value, the null hypothesis is rejected. It was found that creativity and self-confidence were positively correlated in the case of D.El.Ed. male pupil-teachers

HYPOTHESIS-3

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. female Pupil-Teachers.

The value of the coefficient of correlation(r) between creativity and self-confidence of D.El.Ed. female pupil-teachers obtained was 0.275. To be significant at the 0.01 level, the value should be 0.228 or more for df - 123. Since the value of r obtained is more than the

table value, the null hypothesis is rejected. It is concluded that creativity and self-confidence were positively correlated in the case of D.El.Ed. female pupil-teachers.

HYPOTHESIS-4

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. Arts stream Pupil-Teachers.

It was revealed that the coefficient of correlation between creativity and self-confidence of D.El.Ed. pupil-teachers of arts stream was 0.295. To be significant at 0.01 level of significance, the value of r should be 0.228 or more for df 124. Since the obtained value of r is greater than the table value, the null hypothesis stands rejected. Therefore, it is inferred that there exists a positive and significant correlation between creativity and self-confidence of arts stream pupil-teachers.

HYPOTHESIS-5

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. Science stream Pupil-Teachers.

It was seen that the coefficient of correlation between creativity and self-confidence of D.El.Ed. pupil-teachers of science stream. The value of r obtained was 0.331. To be significant at 0.01 level of significance, the value of r should be 0.228 or more for df 122. Since the obtained value of r is greater than the table value, the null hypothesis stands rejected. Thus it is concluded that there exists a significant and positive correlation between creativity and self-confidence of D.El.Ed. science stream pupil-teachers.

HYPOTHESIS-6

There is no significant difference between Creativity and Self-confidence of D.El.Ed. Arts stream male Pupil-Teachers.

For df 60 the table value at 0.01 level of significance was 0.325. The obtained value of r is more than the table value. Therefore the null hypothesis is rejected. It was found that there exists a significant and positive correlation between creativity and self-confidence of D.El.Ed. male pupil-teachers of arts stream ($df=60$, $r=0.426 > 0.01$).

HYPOTHESIS-7

There is no significant difference between Creativity and Self-confidence of D.El.Ed. Arts stream female Pupil-Teachers.

It was seen from the above table that the coefficient of correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers of arts stream. The value of r obtained was 0.146. To be significant at the 0.05 level, the value of r should be 0.250 or more for df 62. Since the value of r obtained is less than the table value, the null hypothesis is accepted. It is concluded that creativity and self-confidence were not correlated in the case of female pupil-teachers of the arts stream.

HYPOTHESIS-8

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. Science stream male Pupil-Teachers.

It was revealed that the coefficient of correlation between creativity and self-confidence of D.El.Ed. The science stream male was 0.344. To be significant at the 0.01 level, the value of r should be 0.325 or more. The value of r obtained is 0.344, which is higher than the table value; hence, the null hypothesis stands rejected. It is found that in the case of male pupil-teachers of science stream creativity and self-confidence were significantly and positively correlated.

HYPOTHESIS-9

There is no significant correlation between Creativity and Self-confidence of D.El.Ed. Science stream female Pupil-Teachers.

It was seen that the coefficient of correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers was 0.344. To be significant at the 0.01 level, the value of r should be 0.325 or more. The value of r obtained is higher than the table value and significant at 0.01 level of significance; hence the null hypothesis is rejected. It can be concluded that there exists a positive and significant correlation between creativity and self-confidence of female pupil-teachers of the science stream.

5.2 CONCLUSIONS

This study is focused on pre-services teachers who are taking the training. Creativity and self-confidence are the two most important variables for the pupil-teachers. The study aims to reveal the correlation between self-confidence and creativity variables as positive, negative or zero.

1. It was revealed that there was a significant and positive correlation between creativity and self-confidence of D.El.Ed. pupil-teachers. In other words, the pupil-teachers who have a good level of creativity also possess a high level of confidence, and the pupil-teachers showing a low level of creativity also show a low level of confidence. Therefore, it seems natural that a person with good self-confidence does possess a high level of creativity.
2. It was found that there was a significant and positive correlation between creativity and self-confidence of D.El.Ed. male pupil-teachers, which means that the more creative pupil-teachers possess a good level of self-confidence, and the pupil-teachers who are comparatively lower in creative abilities are low in their self-confidence.
3. A significant and positive correlation was seen between creativity and self-confidence of D.El.Ed. female pupil-teachers, which means that the female pupil-teachers who are more creative possess a better level of self-confidence, and the pupil-teachers who possess a low level of creative abilities are also low in their self-confidence.
4. A positive and significant correlation between creativity and self-confidence of pupil-teachers of arts stream was revealed. In other words, creativity and self-confidence correspond with each other in the case of D.El.Ed. pupil-teachers of arts stream.
5. There was a significant and positive correlation between creativity and self-confidence of D.El.Ed pupil-teachers of science stream. So it follows that the pupil-teachers with good capability of creativity will also have the self-confidence of higher order. On the other hand, the pupil-teachers with a low level of creativity will also have a comparatively low level of self-confidence.
6. It was found that there exists a positive and significant correlation between creativity and self-confidence of D.El.Ed. arts stream male pupil-teachers. So

it also follows that the students with higher-order creativity will also be having a good level of self-confidence, and the pupil-teachers who are comparatively less creative will be having a lower level of self-confidence.

7. There was no significant relationship between creativity and self-confidence. In this case of the creative ability of female pupils-teachers had no bearing on their self-confidence.
8. It was found that there was a significant correlation between creativity and self-confidence of male pupil-teachers. So it can be said that the pupil-teachers who possess better creativity will also possess a high level of self-confidence. On the other hand, the pupil-teachers who have low levels of creativity are comparatively low in their self-confidence.
9. It was seen that there was a significant and positive correlation between creativity and self-confidence of D.El.Ed. female pupil-teachers of science stream. So it also follows that creative abilities and self-confidence correspond with each other.

5.3 RECOMMENDATIONS

1. The present research clearly indicates that there exists a positive and significant correlation between creativity and self-confidence of D.El.Ed. pupil-teachers. Hence it is recommended that administrators and teachers should focus on the development of both creativity and self-confidence.
2. Every opportunity should be given to students to express their views/thoughts, enhancing their self-confidence. Organizing debate and elocution competitions can help a lot in this matter.
3. Students should be provided with every opportunity to express their creativity by organizing exhibitions and educational fairs.
4. Collaborative and co-operative methods, constructivist approach & project method can be well applied to enhance the creativity and self-confidence of students.
5. Provision should be made in teacher education programmes to encourage creativity and enhance the self-confidence of pupil-teachers.

5.4 EDUCATIONAL IMPLICATIONS

The present research study provides concrete evidence of the correlation between creativity and self-confidence. Therefore, in National Education Policy, 2020, the importance of the development of creativity and self-confidence of students is significantly highlighted.

The results of this study clearly indicate that creativity and self-confidence are complementary to each other. These are not to be seen in isolation. An integrated approach can be adopted for the developments of both of these are important factors. In view of this, the present research study can be of great help in developing an integrated curriculum for pre-service and in-service teacher training programmes.

The findings of the present study may have a practical contribution for policymakers, learning institutions, parents, teachers, administrators and students. That is, from the present findings, they can know and understand that there are several factors which can affect creativity and self-confidence.

Thus this study can provide a good contribution to the field of education in general and teacher education in particular.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

- An investigation should be designed to investigate the development trends of creativity from pre-primary to the collegiate level.
- An investigation should be designed to study other variables like academic achievement, reading abilities, co-curricular activities, etc.
- Studies should be designed to investigate their gender difference in the creativity of higher and secondary levels.
- An investigator should be done to explore the relationship between creativity and self-confidence at the secondary level.
- An investigation should be done to explore the creativity levels of urban and rural students at the university level.
- An investigation should be done to explore the creativity levels of urban and rural areas students at the secondary level.
- An investigation should be done to explore the relationship of creativity and self-confidence of science and art stream at the university level.

- An investigation should be done to explore the relationship of creativity and self-confidence of science and art stream at the secondary level.
- An investigation should investigate the relationship between creativity and other affective variables like values, level of adjustment, and social and economic status.
- An investigation should be done to studies the effect of ICT on the creativity of students.
- An investigator should be done to study the effect of ICT on the creativity of pre-service teachers at the primary level.
- An investigation should be done to study the effect of ICT on the creativity of pre-service teachers at the secondary level.
- An investigation should be done to study the effect of ICT on the creativity of pre-service teachers at the university level.
- An investigation should be done to study the effect of ICT on the creativity of post-service teachers at the primary level.
- An investigation should be done to study the effect of ICT on the creativity of post-service teachers at the secondary level.
- An investigation should be done to study the effect of ICT on the creativity of post-service teachers at a higher level.
- An investigation should be done to study the effect of library hours on creativity.
- An investigation should be done to investigate the effect of ICT on the self-confidence of post-service teachers.
- An investigation should be done to study the role of ICT in enhancing creativity levels.
- An investigation should be done to study the effect of ICT on the creativity of post-service teachers.
- An investigation to study the ICT on pupil-teacher's self -confidence.
- Studies should be designed to investigate the role of co-curriculum activities in enhancing creativity.
- Studies should be designed to investigate the role of co-curriculum activities in enhancing self-confidence.

- Studies should be designed to investigate Govt. school teachers and private school teachers in relation to creativity.
- Studies should be designed to investigate Govt. schools teachers and private schools teacher's self-confidence levels.

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APPENDICES

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CREATIVITY AND SELF-CONFIDENCE : A LITERATURE REVIEW

ANKITA SHUKLA* AND HARISHANKAR SINGH**

ABSTRACT

Creativity and self-confidence are two most important variables for the pupil teacher. By this study we can know the correlation between variables. The purpose of study is knowing the effect of gender on creativity and self-confidence. Many studies conclude it that males are much creative like Kelley's study (1965) Strauss and Strauss (1968) and other-hand some research finds that females are much creative like Yamamoto (1966) and Solomon (1968) before some days female's literacy and education is not equal to male so it can possible that is reason behind it. Present era is the era of equality so the study is must. Art and science stream can effect on relation between creativity and self-confidence. After knowing the deference between the Pupil-Teacher on the behalf of their gender and stream on creativity and self-confidence the trainer will be give him proper feedback. In the entrance exam where the aptitude test is conduct for knowing eligibility of the student in this aspect can also taken. Primary education is the root of our whole educational background so it is the must that a person who serve as primary teacher have creative and self-confident. So the study will be find some effective conclusions for helping the generate skilled and confident Pupil-Teacher in primary education.

INTRODUCTION

"All education proceeds by the participation of the individual in the social consciousness of the race."

Education is the most powerful weapon to change the society according to our needs, values, culture, social, political, economical, psychological, technical, ethical and spiritual situation. It brings revolutionary changes in society. For making our countries global recognition it is must that the education have more and more vision and broad aspects.

So it is challenge for the educations providers and increase their accountability for society that's why the teacher education is so important. The teacher education plays an important role to developing the skills in our becoming teachers.

Here, in India there are many teacher training programme going on. That programmes are known as different names like : NTT, B.T.C., D.El.Ed., B.El.Ed., B.Ed. and M.Ed. These all programmes are classified for three levels of education—memory level, understanding level and reflective level.

Demand of modern era to skilled and confident people in every field for compete on global perspective. So, in field of teaching this is also must that the pupil teacher or teacher trainees should be creative and self-confident

REVIEW OF THE RELATED LITRATURE

For any worthwhile investigation, a review of related literature in the field of investigation is of great help to the investigator. A brief review of studies on related areas has been given below :

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STUDIES CONDUCTED IN INDIA

Singh *et al* (1989) studied personality characteristics of high and low creative college students with the objective to study personality characteristics of high creative and low creative adolescents with the help of a projective test by taking a sample of 175 Hindi knowing college students of intermediate level within the age range of 17-20 years and found that high creative adolescents were more introversive than the low creative's who were more extroversive; intelligence was positively correlated with academic achievement; the creative's were more able to mobilize their resources for adjustment.

Kaur (1992) studied the interrelationship between creativity, intelligence and academic achievement of 11th grade boys and found that relationship between creativity and intelligence was low but positive; academic achievement commonly influenced the correlation between creativity and intelligence; relationship between creativity and Review of Related Literature 21 intelligence was non linear; low positive relationship existed between creativity and academic achievement; creativity commonly influenced the correlation between academic achievement and intelligence; the relationship between intelligence and academic achievement was linear.

Radha (1998) studied academic achievement and certain selected variables with the objective to build a discriminate function model for academic achievement in high school by taking creativity, medium of instruction, religion, socio-economic status, sex and type of school as an independent variable and found that the difference between academic achievement of boys and girls was marginal and not statistically significant; students from English medium school were high academic achievers than Malayam medium schools; Navodaya Vidyalayas appeared to promote academic achievement followed by unaided schools, and students of government schools did not represent any among the high academic achiever category; socio-economic status

appeared to be the best predictor of academic achievement.

Singh, Palta (2008) studied relationship among creativity, intelligence and achievement scores of secondary school students with the objective to study the correlation between creativity and intelligence; intelligence and science achievement; intelligence and scholastic achievement by taking a sample of 180 subjects of IX class from Oriya medium secondary school and found that there was significant positive correlation among creativity and science achievement, creativity and scholastic achievement, intelligence and science achievement as well as intelligence and scholastic achievement.

STUDIES CONDUCTED ABROAD

Maksic, Slavics, *et al* (2011) conducted the aim of this paper is to investigate implicit theories of educational researchers on creativity and the potential to support creativity in schools. We used qualitative thematic analysis of material produced by 27 educational experts from Serbia. Personal explicit theories about manifestations of creativity are mainly based on qualities and behaviour of a creative person, while there are notable differences in manifestations of creativity at different ages. There is a prevalent belief that the school can contribute to the development of creativity to a large extent. The paper broadens the field of investigation into implicit theories on creativity, from exploring the creative personality to a developmental dimension of creativity and to the possibilities of supporting creativity in the school setting.

Niu, Welhua, *et al* (2013) conducted the article integrates the seven papers of the two special issues with a special focus on discussing the differences in people's beliefs about creativity between the Chinese and American cultures: How it is conceived, evaluated, and nurtured. It uses three metaphors to capture major differences in these aspects, and highlights areas with profound cultural variations in conceptions and creative education for future research.

Ferrari, Anusca, *et al* (2015) found that creativity was a recurring element of curricula but its incidence varied widely. It was also found that creativity was represented in arts subjects more than other subjects and that it was relatively neglected in reading and writing as part of the language group of subjects. The countries of the UK in general had maintained their historic attention to creativity but there was evidence of a shift from emphasis in primary settings to secondary settings. It is concluded that there is a need for much greater coherence between general aims for education and the representation of creativity in curriculum texts.

Plucker, Jonathan A. *et al* (2015) conducted the relationship between intelligence and creativity is often discussed and debated, and it has significant implications for education, student development, and the workplace used they Sternberg's framework for understanding intelligence-creativity work to examine research on this important topic, with an emphasis on several recent studies that exemplify the diversity of approaches to the topic. The paper concludes with suggestions for future research in this area. Throughout the paper, they emphasized the importance of carefully defining constructs in social science research.

Rumanova, Luola, *et al* (2015) conducted in their paper focused on creativity needed for geometric tasks designing, visualization of geometric problems and use of ICT. We present some examples of various problems related to tessellations. Altogether students' pre-service teachers participated in our activity within a geometry course at CPU in Nitra, Slovakia. Our attempt was to familiarize pre-service teachers with different teaching methods and approaches since we consider it highly important to make

them aware of problems of educational process. Students became familiar with tessellation and within the described activity they solved application tasks using didactical software GeoGebra. Tessellation is considered an appropriate means of motivation and activation of students in mathematics. In the paper there are also students' solutions presented.

CONCLUSION

The findings of all above studies play a vital role for current study. Above studies have various dimensions for the help of new study. In the present era the demand of child centered education has creative and self-confident pupil teachers who have power to understand the individual differences in class room and according to that choose a proper tactics for teaching. Thus it is important to understand the creativity and self-confidence level of pupil teachers because in the class room they use various techniques for making active learning. Thus, above studies strongly evinced the importance of creativity and self-confidence for teaching learning process.

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A STUDY OF CREATIVITY AND SELF-CONFIDENCE OF D.EL.ED. PUPIL-TEACHERS



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A B S T R A C T

Teacher education is skill-based training and proficient use of knowledge. At every different level of education, there are some specific goals attached to it. To achieve these goals, we need a well-trained teacher-cum-facilitator, thereby making the dream come into reality and empowering society with a good education. For good education, it is obligatory to strengthen teacher education. This is only possible when our training institutions take it seriously and produce efficient, creative and self-confident pupil-teachers. These confident and creative teachers will serve our society. The present study aims to access the creativity and self-confidence of male and female pupil-teacher of D.El.ED. Since, in the present scenario, both males and females play equal roles in social progress. For the measurement, standardized tools were administrated on two hundred fifty D.El.ED. Pupil- Teachers who were randomly selected.

Keywords: Creativity, Self-Confidence and Pupil-Teacher.

Introduction

Education is a powerful weapon for moulding our society according to its needs and structure. If we focus on all the changes that occur in the world, then we find the fundamental reason for all the changes is education. Nature of education takes shape according to the world's perspective. The Indian schools are the agencies to make people only good academic scorer delimiting schools' function at every level; primary, secondary and higher. Often teachers undermine the influence of worldwide changes that occur

around us. These worldwide changes lead to several problems. It will be difficult for our upcoming generation to cop up with these problems without devising any new solution to the problem. Since our schools focus on making, good academic scores and developing adjustment powers, they often neglect the creative side, which is necessary to bring new changes and find newsolutions. Teachers are the classroom craftsmen; they shoulder a huge responsibility in the students' overall development. To enhance creativity and foster creative changes among students, a teacher must have a creative



bent of mind. Thus, teacher training institutes should train their pupil teachers to help develop their students' creative side. The present study is focused on creativity and self-confidence among pupil-teacher of D.El.Ed.

This study seems to be of value in gaining insight into improving the teaching and learning phenomenon. It may advance the knowledge about the factors associated with pupil-teacher's creativity and self-confidence. Only confident and creative teachers can do all the works of education; speculative, normative and analytical. Creativity and self-confidence are the two most important characteristics for the pupil- teachers and this study will illuminate its status among pupil teachers.

Definition Of The Terms Used

The important term used in this study are defined as follows:-

Creativity:

Individual's involvement in the unique development of something is known as creativity. Creativity is an attribute of creating new things. The term creativity refers to the ability to produce something new and valuable. Main dimension of creativity;

- (1) Fluency
- (2) Flexibility
- (3) Originality
- (4) Elaboration

Self-Confidence

The concept of self-confidence is commonly used as a self-assurance in one's personal judgment, ability, power, etc. For the exploration of personality, self-confidence is an essential factor.

D.El.Ed.

Diploma in elementary education or BTC (in U.P.). This teacher training programme is running for primary education.

Pupil-Teacher

A pupil in professional teacher education who is gaining required experience in supervised teaching is known as a Pupil-Teacher. For this investigation pupil –teachers stand for pursuing D.El.Ed. Course.

Review Of Related Literature:

Sedighe, S., Hossein, J.(2011) the present study aimed to compare creativity and self-confidence of gifted and normal high school students studying in district two in Zahedan. The casual-comparative method was adapted. The statistical population of the study included all male and female high school students studying in public schools, schools for exceptional talents, martyrs', non-profit and private schools in Zahedan, district two. According to the statistics, the number of male and female students studying in these schools was 8530 students, among which 368 students were selected.

To collect data, Abedi Creativity Test and Moradi's Inventory of the Level of Self-Confidence (2011) were used. The obtained data were analyzed using independent t-test and MANOVA. The results of multivariate covariance analysis indicated the difference between gifted and normal students considering their creativity.

Moreover, there was a significant difference between the level of self-confidence of gifted and normal high school students in Zahedan. Additionally, no significant difference was found between male and female students with regard to their creativity and self-confidence.

Alacapinar, F.G.(2013). suggested that the significant differences were found in average fluency, flexibility, originality, elaboration, and total scores of classes.

Fluency, flexibility, originality, elaboration, and total scores of the 5th graders were the highest compared to other classes. On the other hand, the 6th grade students' scores were the lowest. Fluency, flexibility, originality, elaboration and total scores increased from the 3rd to the 5th grade, but declined to their lowest levels in the 6th year. Scores increase



once more in the 7th grade, only to fall again in the 8th grade. Conclusions and Recommendations: Significant differences were found in average fluency, flexibility, originality, elaboration and total scores with respect to class levels and gender. These findings are also supported by the outcomes of some other studies.

It is stressed that there is a significant relation between class level, gender, and creativity. The significant difference exhibited by the 5th grade students in terms of four areas and total creativity scores can be explained by the fact that their ideas and products related to creativity enjoyed the support of their friends, families, and teachers. To improve children's creative thinking, teachers and parents should be supported by further training programs.

Niu, Weihua, et al. (2013) focuses on discussing the differences in people's beliefs about creativity between the Chinese and American cultures: How it is conceived, evaluated, and nurtured. It uses three metaphors to capture major differences in these aspects, and highlights areas with profound cultural variations in conceptions and creative education for future research.

Datta (1989) studied the differences in scientific creativity among high school students and reported that sex difference exist in scientific creativity. Scientific Creativity depends on intelligence, academic achievement and socio-economic status. Dominant factors of scientific creativity selected for the study were fluency, flexibility and originality.

D. Little Flower (2012) conducted a study on the creativity of higher secondary school students concerning certain selected variables result showed that self-confidence of the entire sample of the higher secondary school students is average. There no significant difference between male and female, Hindu, Christian and Muslim, self fiancé, government-aided and government, rural and urban higher secondary school students with respect to their self-confidence.

Rezaei, Ali (2012) found that female students scored higher on collective, gender-based self-confidence. However, their personal feeling about their gender was more negative, and their

general self-efficacy was not different from male students' self-efficacy.

Objectives:

The present study was carried out with the following objectives:

1. To Study the relation in Creativity and Self-Confidence of D.El.Ed. Male Pupil-Teachers.
2. To Study the relation in Creativity and Self-Confidence of D.El.Ed. Female Pupil-Teachers.

Hypothesis:

The following hypotheses were formulated for the present study:

1. There will be no significant relationship between Creativity and Self-Confidence of D.El.Ed. Male Pupil-Teachers.
2. There will be no significant relationship between Creativity and Self-Confidence of D.El.Ed. Female Pupil-Teachers.

Methodology

In the present study, the researcher used the descriptive survey method according to the nature of the problem.

Population And sample

The population of the present study included the pupil teachers of D.El.Ed. of five colleges of Sitapur district, Uttar Pradesh. Simple random sampling technique was used to collect a sample of 250 pupil-teachers (125 males and 125 females) of D.EL.ED Pupil teachers.

Tools Used

To achieve the objectives of the study, the following tools were used:

Variable of the study	Tool used for its measurement
Creativity	Dr. K. N. Sharma's Divergent Production Abilities-s (DPA-s)
Self-Confidence	Dr.Rekha Gupta's Self-Confidence Inventory (SCI)

3 Analysis and Discussion:

The collected data have been analyzed using the Pearson's product moment (r) test to determine the relationship between creativity and self-confidence of male and female pupil teachers of D.El.Ed. The results are discussed as below:

Hypothesis-1

There is no correlation between creativity and self confidence of D.El.Ed. male pupil teachers

Table No.1

Table showing correlation between creativity and self confidence of male pupil teachers.

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1	Creativity	125	125-2=123	0.410	0.01
2	Self confidence	125			

N=125,df =123 r = 0.410 Table Value 0.228 at 0.01

Explanation – When coefficient of correlation was computed between creativity and self confidence of D.El.Ed. male pupil teachers. The value of r obtained was 0.410.

To be significant at 0.01 level the value of r should be 0.228 or more for df – 123. Since the value of r obtained, is more than table value, the null hypothesis is rejected.

Thus there is significant and positive correlation between creativity and self confidence at D.El.Ed. male pupil teachers, which means that the pupil teachers who are more creative, possess good level of self confidence and the students who are comparatively lower in creative abilities are low in their self confidence.

Hypothesis-2

There is no significant correlation between creativity and self confidence of D.El.Ed. female pupil teachers.

Table No.2

Table showing correlation between creativity and self confidence of female pupil teachers.

Sr. No.	Variables	No. of Students	Degrees of Freedom (df=N-2)	Coefficient of correlation (r)	Significance
1	Creativity	125	125-2=123	0.275	0.01
2	Self confidence	125			

N=125, df= 123 r=0.275 Table Value 0.228 at 0.01

Explanation – Coefficient of correlation was compared between creativity and self confidence of D.El.Ed. Female pupil teachers. The value of r obtained is 0.275.

To be significant at 0.01 level the value of r should be 0.228 or more for df=123. Since the value of r obtained is greater than table value, the null hypothesis is rejected.

Thus there is significant and positive correlation between creativity and self confidence of D.El.Ed. Female pupil teachers, which means that the female pupil teachers who are more creative, possess better level of self confidence and the pupil teachers who possess low level of



creative abilities are also low in their self confidence.

Conclusions

From the results obtained in the above study, the following conclusions appear warranted:

To verify the hypothesis that there is no correlation between creativity and self confidence of D.El.Ed. male pupil teachers. The computed r value is less than the table value of r on 0.01 level of significance, so the null hypothesis

is rejected. That shows the creativity and self-confidence of male pupil-teacher are related.

To verify the hypothesis that there is no significant correlation between creativity and self confidence of D.El.Ed. female pupil teachers. The computed r value is less than the table value of r on 0.01 level of significance, so the null hypothesis is rejected.

That shows the creativity and self-confidence of female pupil-teacher are related. Thus the findings from the above study clearly point out the relationship between creativity and self-confidence

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DPA-s

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कृपया निम्न विवरण दीजिए-

दिनांक

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नाम _____

आयु _____

लिंग : पुरुष स्त्री

जाति _____

धर्म _____

कक्षा _____

निर्देश

आगे के पृष्ठों पर, अलग-अलग प्रकार की समस्याएँ दी गई हैं जिन्हें उनके निर्देशों के अनुसार हल करने का प्रयास करें।

समय कम है इसलिए शीघ्रता करें।

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भाग - 1

निर्देश- समय कम है, अतः उत्तर जल्दी-जल्दी लिखिए। एक प्रश्न पर ही न अटकों। एक प्रश्न का हल समाप्त करने के बाद तुरन्त दूसरा प्रश्न हल करें।

1. 'श' अक्षर से प्रारम्भ होने वाले अधिक से अधिक शब्द लिखिये-
2. ऐसे अधिक से अधिक शब्द लिखिए जो 'त' अक्षर से ही प्रारम्भ हों तथा 'त' पर ही समाप्त हों-
3. 'र' अक्षर पर समाप्त होने वाले अधिक से अधिक शब्द लिखिए-
4. 'त्र' अक्षर से प्रारम्भ होने वाले अधिक से अधिक शब्द लिखिए-
5. ऐसे अधिक से अधिक शब्द लिखिए जिनमें 'ज्ञ' अक्षर का प्रयोग किया जाए-

भाग - 2

निर्देश-

नीचे कुछ वस्तुओं के नाम दिए गए हैं। प्रत्येक वस्तु के लिए आपको उसके सामने अधिक से अधिक व भिन्न-भिन्न उपयोग संक्षेप में लिखने हैं। कोई प्रयोग आपको कितना ही अद्भुत लगे व जैसे ही वह आपके मन में आए, आप उसे भी तुरन्त लिखिए।

उदाहरण-लकड़ी : जलाने के लिए, मारने के लिए, मेज-कुर्सी बनाने के लिए।

समय कम है इसलिए जितनी जल्दी हो सके उतनी जल्दी-जल्दी लिखिए।

1. ईट	
2. पेन्सिल	
3. बुश	
4. पानी	
5. पुस्तक	

भाग - 3

निर्देश-

नीचे कुछ शब्द दिए हुए हैं जो विभिन्न अर्थों में प्रयोग किए जा सकते हैं। प्रत्येक शब्द के समाने रिक्त स्थान छोड़ दिया गया है। दिए हुए शब्द के जितने अधिक से अधिक अर्थ या सम्बन्ध वाले शब्द आप सोच सकते हैं रिक्त स्थान पर संक्षिप्त में लिखिए। अर्थ केवल शब्दों में लिखिए। पूरा वाक्य लिखने की आवश्यकता नहीं है। नीचे लिखे उदाहरण से आपको स्पष्ट हो जाएगा कि आपको क्या करना है।

उदाहरण- **काला** : अंधेरा, रात, कम्बल, कोट, रंग, बाल।

कार्य प्रारम्भ कीजिए तथा जल्दी-जल्दी लिखिए।

1. पानी	
2. हस्त	
3. तेज	
4. पत्र	
5. धरती	
6. चतुराई	

भाग - 4

निर्देश-

नीचे कुछ शब्दों के प्रथम अक्षर दिए गए हैं। जिनसे कई वाक्य तैयार किए जा सकते हैं,

जैसे : र _____ घ _____ ज _____ ह _____।

उत्तर- राम घर जाता है, रोशन घोड़ा जोतता है, राधा घर आती है, रेतीला घड़ा जलहीन है।

इसी प्रकार नीचे दिए गए शब्दों द्वारा अधिक से अधिक वाक्यों की रचना कीजिए।

समय कम है, जल्दी कीजिए।

1. स _____ ब _____ ज _____ ह _____

2. म _____ म _____ प _____ र _____

3. ज _____ ख _____ ब _____ ज _____

4. त _____ क _____ क _____ ह _____

5. क _____ अ _____ म _____ भ _____ ह _____

भाग - 5

निर्देश-

नीचे तीन छोटी कहानियाँ लिखी हैं। उनके अच्छे से अच्छे अद्भुत व रोचक विभिन्न शीर्षक सोचकर लिखिए। एक कहानी के कई शीर्षक हो सकते हैं तथा आप उन सबको जल्दी से जल्दी लिखें।

<p>1. कहानी</p> <p>एक दुष्ट कुत्ता चुपचाप दबे पाँव प्रत्येक राहगीर के पास पहुँचकर काट लेता था। इसलिए उसके मालिक ने उसके गले में एक घंटी बाँध दी जिससे पहले ही मालूम हो जाए कि कुत्ता आ रहा है। इससे कुत्ते को अच्छा लगा और वह घंटी बजाता पूरी बस्ती में खुशी-खुशी घूमने लगा।</p>
<p>शीर्षक</p>
<p>2. कहानी</p> <p>मोर अपने दुम के पंख फैलाकर ऊपर-नीचे चील की तरह दौड़ने लगा व हँसी उड़ाने लगा कि चील के पंख तो सादा हैं। वह बोला, 'मेरे पंख राजाओं के चोगों की तरह सुनहरे, पीले व इन्द्र-धनुष के रंग से सजे हैं और तेरे सादा।'</p>
<p>शीर्षक</p>
<p>3. कहानी</p> <p>एक मूर्ख कुत्ते ने एक रोटी का टुकड़ा चुराया और अपने घर की ओर भागा। मार्ग में उसने एक नदी पार की। नदी के पानी में उसने अपनी परछाई देखी। उसने उसे दूसरा कुत्ता समझा और उसकी रोटी लेनी चाही। कुत्ते ने अपना मुँह खोला। परिणाम यह हुआ कि उसका रोटी का टुकड़ा पानी में गिर गया और डूब गया।</p>
<p>शीर्षक</p>

भाग - 6

निर्देश-

नीचे कुछ समस्याएँ दी हुई हैं। प्रत्येक समस्या को पढ़कर उनके लिए समाधान विधियाँ सुझाइये। अधिक से अधिक व अच्छी से अच्छी विधियाँ संक्षेप में सुझाइये।

1. किसी के घर चोरी होने पर व्यक्ति को क्या-क्या करना चाहिए ?
2. किसी खुशी के उत्सव को मनाने के लिए आप क्या-क्या करेंगे ?

3. नीचे एक अधूरी कहानी दी गई है। उसे जितना अधिक हो सके, पूरा करिए।
एक बार वर्षा कम होने से जंगल में घास कम उगी व पेड़-पौधे भी हरे-भरे कम ही हुए।



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दिनांक

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नाम _____ पिता का नाम _____

जन्म तिथि _____ लिंग : पुरुष स्त्री

शिक्षा _____ कक्षा _____

विद्यालय/महाविद्यालय _____

क्षेत्र : जहरी ग्रामीण

निर्देश

आगे के पृष्ठों पर आपकी सोच विचार आदि में सम्बन्धित 56 कथन दिये गये हैं जो विभिन्न स्थितियों में सम्बन्धित हैं। आप प्रत्येक कथन को ध्यानपूर्वक पढ़ें तथा आपका स्वयं का उमर के बारे में क्या विचार है, का उत्तर निर्धारित करें कि वह कथन सही है अथवा गलत। आप उसी आधार पर प्रत्येक कथन के सामने सही/गलत के दो में से आपके विचार से जो सही गलत हो, उस विकल्प के में का चिह्न बना दें। कृपया सभी 56 कथनों के उत्तर दें। कोई भी उत्तर सही या गलत नहीं है। आपके उत्तर गोपनीय रखे जायेंगे।

फलान्कन तालिका

Page	Raw Score			z-Score	Grade	Level of Self Confidence
	2	3	4			
Score						
Total Score						

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क्र.सं.	कथन	सही	गलत	प्राप्तांक
1.	आपके साथ प्रायः ऐसा होता है कि काम करने का समय आने तक आप अपना निर्णय नहीं ले पाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
2.	आप पर कोई बात कही जाय तो प्रायः आप उसका जवाब देने में नहीं चूकते।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
3.	लोगों से बातचीत करने में प्रायः कठिनाई अनुभव होती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
4.	आपकी भावनाओं को बहुत जल्दी टेम पहुँच जाती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
5.	कुछ लोगों से न मिलने के विचार से आप प्रायः सड़क पार करके दूसरी तरफ चले जाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
6.	आपको इस बात का भय लगा रहता है कि दूसरे लोग आपको नापसन्द करेंगे।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
7.	आप बिना परेशान हुए किसी कठिन परिस्थिति का सामना कर सकते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
8.	कुछ चीजों के लिए लोग आपको प्रायः अनुचित रूप से (unjustly) दोषी ठहरा देते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
9.	आप कुछ खेल खेलने से इसलिए मना कर देते हैं क्योंकि आप उनमें अच्छे नहीं हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
10.	आप हर बात को बहुत ज्यादा सोचते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
11.	आप अपनी भावनाओं को खुलकर प्रदर्शित नहीं कर पाते।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
12.	लोग प्रायः आपमें फायदा उठा ले जाने में सफल हो जाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
13.	आप जब किसी काम को करने की भावना में होते हैं तब उसमें असफल हो जाने का डर (fear) आपको लगा रहता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
14.	आपको माँके पर सही बात कह पाना कठिन लगता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
15.	आपके लिए जीवन माधारणः एक तनाव (stress) की बीज है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
16.	आप कठिनाई या खतरे (crisis) का सामना करने में पीछे हटते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
17.	किसी एक ही काम पर अपना ध्यान लगाए रखना आपको कठिन लगता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
18.	कई बार आपने किसी काम को करने का विचार इसलिए छोड़ दिया क्योंकि उनके लिए आपको अपनी योग्यता (ability) कम लगती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

कुल प्राप्तांक पृष्ठ 2

क्र.सं.	कथन	सही	गलत	प्राप्तांक
19.	आपको ये लगता है कि आप चीजों का ठीक से सामना नहीं कर पा रहे हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
20.	आप अपना काफी समय भविष्य की चिन्ता में बिता देते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
21.	आपने कई अच्छे अवसर गँवा दिए क्योंकि आप जल्दी कोई निर्णय नहीं ले पाते।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
22.	आप प्रायः दुखी-दुखी से रहते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
23.	आप उतनी ही जल्दी दोस्त बना लेते हैं जितनी जल्दी दूसरे लोग बनाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
24.	जब दूसरे लोगों की राय आपकी अपनी राय से मेल नहीं खाती तो आप हतोत्साहित (discouraged) हो जाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
25.	आप प्रायः अपनी अपूर्ण इच्छाओं को कल्पना में पूरा करके सन्तुष्टि कर लेते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
26.	किसी काम में पहल करने की प्रवृत्ति (to take initiative) की आप में कमी है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
27.	आप प्रायः जल्दी ही हतोत्साहित (discouraged) हो जाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
28.	भावनात्मक रूप से अव्यवस्थित (upset) हो जाने पर उमसे ठीक होने में आपको समय लगता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
29.	आपको प्रायः ऐसा लगता है कि आपको कोई नहीं समझता।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
30.	कभी-कभी आपको इतनी बेचैनी होती है कि आप एक जगह टिक कर नहीं बैठ पाते।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
31.	आप सामान्यतः स्वयं को तन्दुरुस्त व शक्तिशाली अनुभव करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
32.	आप साधारणतः स्वयं को असहाय सा अनुभव करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
33.	अपने बड़े अफसर के साथ बातचीत शुरू करने में आपको कठिनाई होती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
34.	आपको नये दोस्त बनाना जरा मुश्किल सा लगता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
35.	किसी सामाजिक वार्तालाप में आप प्रायः श्रोता ही रहते हैं बजाय वक्ता के।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
36.	आप स्वयं को प्रायः असुरक्षित (insecure) सा अनुभव करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
37.	आपको बहुत सारे लोगों के सामने बोलना मुश्किल लगता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
38.	जब दूसरे लोग आपकी ओर देख रहे हों तो आप किसी काम को उतना अच्छा नहीं कर पाते जितना अच्छा कर सकते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

कुल प्राप्तांक पृष्ठ 3

4 : Consumable Booklet of SCI-6R

क्र.सं.	कथन	सही	गलत	प्राप्तांक
39.	दूसरे व्यक्ति द्वारा की गई प्रशंसा या निन्दा का आप पर बहुत असर पड़ता है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
40.	आप स्वयं को एक सफल व्यक्ति मानते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
41.	आपको हमेशा ऐसा लगता है कि आप जो पाना चाहते हैं वो पा सकते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
42.	अपने निर्णयों पर पहुँचने में आपको कठिनाई होती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
43.	किसी खेल या प्रतियोगिता में एक ऐसे विरोधी के सम्मुख जो आप से बहुत अधिक श्रेष्ठ है आप ठीक प्रकार से खेल लेते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
44.	आप यह निर्णय हमेशा पहले कर लेते हैं कि अगला कदम क्या होना चाहिये।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
45.	आप बहुत आसानी से दिमाग की परेशानों दूर करके विश्राम की अनुभूति (relaxed) कर लेते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
46.	नीचा दिखाने वाला (humiliating) परिस्थितियों में अन्य व्यक्तियों की अपेक्षाकृत आप ज्यादा परेशान हो जाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
47.	आप साधारणतः स्वयं को अयोग्य (unworthy) अनुभव करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
48.	आप जल्दी हो रो पड़ते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
49.	मीटिंग शुरू हो जाने पर अन्दर जाने में आपको ब्रिजक महसूस होती है।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
50.	आप प्रायः निराशा (frustrated) अनुभव करते हैं क्योंकि जो चाहते हैं वो कर नहीं पाते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
51.	आपको लगता है कि आपके दोस्तों में आपसे ज्यादा अच्छी तरह से जीवन के साथ समायोजन किये हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
52.	आप अक्सर अनिश्चित (confused) महसूस करते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
53.	यदि आपको अक्सर मिले तो आप एक अच्छे नेता मानित हो सकते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
54.	आपको ये लगता है कि कोई भी बाधा आपको अपना इच्छित लक्ष्य प्राप्त करने से नहीं रोक सकती।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
55.	आप किसी पार्टी वर्ग/हल में अपने स्वाभाविक लगेके से व्यवहार कर लेते हैं।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
56.	प्रायः जब कोई गम्भीर परिस्थिति गूँज जाती है तब आप ये सोचते हैं कि आपको ये करना चाहिये था परन्तु नहीं कर पाये।	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>

कुल प्राप्तांक पृष्ठ 4

LIST OF COLLEGES

S. No.	Name of the institution
1.	District Teaching And Training institution, Khairabad, Sitapur.
2.	Buniyad Mahavidyalaya, Kanayatpur, Sitapur.
3.	Sai Baba Shivraj Singh Chauhan Mahavidyalaya, Uljapur, Sitapur
4.	Shivam Agrawal Memorial Degree College, Sitapur.
5.	Regency Institute of Management And Technology, Rasyaura, Sitapur.



Babasaheb Bhimrao Ambedkar University

(A Central University)

Vidya Vihar, Rae Bareli Road, Lucknow – 226025

To,

The principal
Buniyad Mahavidhya
Khairabad, Sitapur.

Mr./Ms. Ankita Shukla Enrollment No. 920/17

Research Scholar (Ph.D.) of our Department is visiting your Institution/School for the Collection of data.

Kindly, allow him/her and oblige.

Thanking you,

Ram
23/07/2019
प्रो. चार्य
बुनियाद महाविद्यालय
खैराबाद - सीतापुर

07/06/2019

Dr. Harishankar Singh

Head

Department of Education

HEAD

विभागाध्यक्ष
Department of Education
शिक्षाशास्त्र विभाग

Babasaheb Bhimrao Ambedkar University

(A Central University) Lucknow

बाबासाहेब भोमराव अम्बेडकर विश्वविद्यालय

(केन्द्रीय विश्वविद्यालय) लखनऊ



Babasaheb Bhimrao Ambedkar University

(A Central University)

Vidya Vihar, Rae Bareli Road, Lucknow – 226025

To,

The principal
Shivam Agrawal Memorial
degree college, Sitapur

Mr./Ms. ANKITA SHUKLA Enrollment No. 920/17

Research Scholar (Ph.D.) of our Department is visiting your Institution/School for the
Collection of data.

Kindly, allow him/her and oblige.

Thanking you,

Sivam
Principal
Shivam Agrawal Memorial Degree College
Mankari-Sitapur

07/06/2019
Dr. Harishankar Singh
Head
Department of Education

HEAD
विभागाध्यक्ष
Department of Education
शिक्षाशास्त्र विभाग
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(A Central University) Lucknow
बाबासाहेब भीमराव अम्बेडकर विश्वविद्यालय
(केन्द्रीय विश्वविद्यालय) लखनऊ



Babasaheb Bhimrao Ambedkar University

(A Central University)

Vidya Vihar, Rae Bareli Road, Lucknow – 226025

To,

The principal
Sai Baba Shivraj Singh
Charan Mahavidyalaya, Ujjain,
Sitapur

Mr./Ms. ANKITA SHUKLA Enrollment No. 920/17

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Collection of data.

Kindly, allow him/her and oblige.

Thanking you,

Permission granted.

Skaur

प्राचार्य
साई बाबा शिवराज सिंह चौहान महाविद्यालय
सलजापुर इंदौरापुर-सीतापुर

07/06/2019

Dr. Harishankar Singh

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(केन्द्रीय विश्वविद्यालय) लखनऊ



Babasaheb Bhimrao Ambedkar University

(A Central University)

Vidya Vihar, Rae Bareli Road, Lucknow – 226025

To,

REGENCY INSTITUTE
OF MANAGEMENT &
TECHNOLOGY, RASVAURA, SITAPUR

Mr./Ms. ANKITA SHUKLA Enrollment No. 917/20

Research Scholar (Ph.D.) of our Department is visiting your Institution/School for the Collection of data.

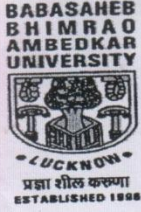
Kindly, allow him/her and oblige.

Thanking you,

Satish Kumar
प्राचार्य
रीजेन्सी इंस्टीट्यूट ऑफ
मैनेजमेंट एंड टेक्नोलॉजी

07/06/2019
Dr. Harishankar Singh
Head
Department of Education

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विभागाध्यक्ष
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(केन्द्रीय विश्वविद्यालय) लखनऊ



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To,

The principal
D.I.E.T.
Sitapur

Mr./Ms. ANKITA SHUKLA Enrollment No. 920/17

Research Scholar (Ph.D.) of our Department is visiting your Institution/School for the Collection of data.

Kindly, allow him/her and oblige.

Thanking you,

Permission granted to
Mrs. Ankita Shukla for
collecting data regarding
her Ph.D. work

16.7.2019
प्राचार्य

जिला शिक्षा एवं प्रशिक्षण संस्थान
औरंगाबाद-सीतापुर

07/06/2019

Dr. Harishankar Singh

Head

Department of Education

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बाबासाहेब भोमराव अम्बेडकर विश्वविद्यालय

(केन्द्रीय विश्वविद्यालय) लखनऊ