



# Mental Health And Stress In Relation To Creativity Of Prospective Teachers

PRATIMA SINGH

Allahabad School of Education

Sam Higginbottom University of Agriculture, Technology and Sciences

Allahabad – 211007

## Abstract

Present study titled “**Mental Health and Stress in relation to Creativity of Prospective teachers**” conducted on B.Ed. and BTC degree colleges prospective teachers taking training in Faizabad District. Descriptive survey method was implied to collect the data of the study. 500 prospective teachers have been selected by using multi stage stratified random sampling technique as a sample of the study. These prospective teachers are selected on the basis of gender, area and type of colleges from the B.Ed. and BTC colleges of Faizabad District. Mental Health prepared by Pramodkumar's Teacher's Stress by VijayaLaxmi and ShrutiNarayan and Creativity constructed by BaqerMehndi scale have been used to collect the data. Descriptive and inferential statistics (mean, standards derivation, t-value and ANOVA) have been used for analyzing and interpreting the data and its finding are conducted as: - **1.** There is significant difference in all dimensions of Mental Health of prospective teachers like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence in the context to gender and locale. **2.** There is significant difference in the Stress of prospective teachers in the context to gender and locale. **3.** There is significant difference in all dimensions of Creativity of prospective teachers like Fluency, Flexibility and Originality in the context to gender and locale. **4.** There is significant difference among Mental Health of low, medium and high Creativity of Prospective teachers. So the Prospective Teacher of low, medium and high Mental Health is different in their Creativity. So the low creative Prospective teachers having low Mental Health than medium creative Prospective Teachers and the medium creative Prospective teachers having low Mental Health than high and finally find out that high creative Prospective Teachers having high Mental Health than low creative Prospective teachers in the context to gender and locale. **5.** There is significant difference among Stress of low, medium and high Creativity of Prospective teachers. So the Prospective Teacher having low, medium and high Stress is different in their Creativity. So the low

creative Prospective teachers having high Stress than medium creative Prospective Teachers and the medium creative Prospective teachers having high Stress than high creative Prospective teachers and finally find out that low creative Prospective Teachers having low Stress management than high creative Prospective teachers in the context to gender and locale.

## **CHAPTER - I**

### **INTRODUCTION**

The process of education of man begins when he is in the womb of his mother. At that time he has a kind of environment and he has to adapt himself to other environment as soon as he is born. If the infant fails to adapt it to the environment of the womb, its development is retorted and it becomes weak or sick. Such as infant does not succeed well in adaptation the outside environment after birth. The outside environment is very much extensive than the womb of the mother and as such it needs more adaptation after birth. As the child grows up, his environments become more and more complex and accordingly the need of adaptation also increase. This activity of adaptation is a part of his education process. To prepare himself for adaptation or develop himself for environmental needs, man requires a systematic education which may continue from womb to the grave .After birth, the infant begins to learn from his mother then gradually it learns from the family, community and the other members of the society. Learning is synonymous to education that is learning process is a part of educational process. Mostly it is seen that two children are not same or they do not have identical abilities or experiences. A child's mental development is seen only from his behavior which is manifest in his actions and reactions. In human beings responses, sensation, perception, memory, imagination and reasoning manifest its mental behavior. As man's behavioral patterns progress, the mental development makes itself With age the power of thinking, begins to exhibit a certain flexibility and the formation of concepts develop through contact with society, and these develop the child's mind and make him a social being.

In wider sense, mental development means to understand, remembering, attention, observation, thinking, reasoning and problem solving. Sorenson has rightly said- "psychologically and educationally, a knowledge of the order of mental growth can be used to advantage by the teacher. The curriculum and teaching can be adjusted to the learning ability or mental capacity of the pupil."

Mental Health implies that the individual behavior should be balanced and also that this balance should be maintained in every situation. From this view point, any person possessing the following qualities should be considered to be mentally healthy if person free from anxiety and conflict, fully adjusted, self-confident, self-controlled, emotionally stable. An individual who enjoys a meaning full and satisfactory life and also possesses the highest morality can be regarded as a mentally healthy individual. Such a person can adjust himself to any situation, since he possesses seemingly inexhaustible capacity to bear mental tension, despite, failure, frustration etc. In the opinion of R.C. Kullhan, "An adjustment is relatively good enough if it both reduces tension created by the conflict of frustration and makes constructive changes in the conditions causing the frustration."

## Mental Health and Education

The history of education reveals that there was a time when, in the school, no attention whatever was paid to the child's intelligence, interests and mental condition. Education was purely teacher- centered and its sole aim was to instill the three R's somehow in the child. Now, however, education has become child – centered; the curriculum is framed, keeping in mind the child's mental condition, mental level interests and other abilities and qualities education aims at the complete development of the child. Children who are not mentally healthy cannot take full interest in studies; nor can they focus their attention upon books and this cant exploit teaching to their own full advantage. It is essential for every teacher to have Knowledge of mental health so that he may help in maintaining the mental health of his students, diagnose or identify students, suffering from mental ill health and also help in the treatment of students suffering from this problem or any problem of adjustment. It is, thus, almost self- evident that education and mental hygiene cannot be separated from each other. In any democratic country, the aims of self realization, good human relations, economic self – sufficiently and civic responsibility cannot be fulfilled if its children do not enjoy the best mental health.

Maintaining the mental health of the student can be considered one of the primary aims of education because, without satisfactory mental health, it is impossible to develop the child's innate abilities. Students who become the victims of fear, anxiety, despair and frustration and problems of adjustment cannot concentrate upon reading and hence they do not make progress in learning. Besides, children suffering from problems of adjustment create many other problems in the school, the understanding and solution of which necessitates knowledge of mental understanding and solution of which necessitates knowledge of mental hygiene in the teacher.

It affects how we think, look and act. It also assistance determines how we grip stress, relate to others, and make choices. Mental health is a circumstance of psychological welfare in which a person understands his capabilities and possesses adequate coping mechanism for everyday stress. Mental health also means working in a productive manner and contributing to one's community.

### Elements of Mental Health:

**1. Physical Health:** It is an admitted fact that a sound mind lives in a sound body. So, sound physique is essential to keep good mental health. Persons who have some physical defects or deformities may develop various types of complexes and frustrations which results in ill mental health.

**2. Intellectual Health:** Intellectual health is another important element of mental health. Intellectual persons can adjust well to the changing and frustrating place. Thus good intelligence information keeps the mental health of the child.

**3. Emotional Health:** Under mental health, emotional health is very important. An emotionally stable child enjoys a good mental health and emotionally unstable conditions cause maladjustments and mental disorders. So, parents and teachers should try to keep the children away from unhealthy emotions and feelings of anger, fear, hatred, disgust, jealousy etc. On the other hand they should provide healthy atmosphere where emotions can be sublimated for useful purpose.

**4. Interests and Aptitudes:** It is essential that the children should be healthy in their interests and inclinations. The work assigned to children should be according to their interests and aptitudes so that they may get success and the wholesome and balanced personality may be developed. If the work assigned to students is above their heads or not according to their interests and aptitudes then they will lack confidence and hence suffer from frustration, which leads to ill mental health.

**5. Environment:** For good mental health it is essential to have good environment. Inadequate environment in the home, school and society leads to ill mental health and good environment leads to good mental health.

### **Characteristics of a Mentally Healthy Person**

A mentally healthy person has three main characteristics:

1. He feels comfortable about himself, i.e., he feels reasonably safe and sound. He neither underestimates nor overestimates his own ability. He accepts his short comings. He has self-respect.
2. The mentally healthy somebody feels right towards others. This means that he is able to be concerned about others and to love them. He has friendship that is gratifying and lasting. He is able to like and trust others. He takes responsibility for his neighbor and his fellow men.
3. The mentally healthy individual is able to meet the demand of lifespan. He does something about the job as they arise. He is able to think for himself and to take his own decisiveness .He sets a reasonable goal for him. Good mental health is characterized by a person 's power to fulfill a number of key functions and activities including:

- The ability to learn
- The ability to feel, express and manage a range of mountains of positive and negative emotions

The chief characteristic of mental health is adjustment. The greater the degree of successful adjustment, the greater will be the mental health of the individual, lesser mental health will lead to lesser adjustment and greater conflict. The healthy individual can interpret any new situation and adapt it to suit himself, or adapt

himself to suit it. He/she maintains a healthy and benevolent attitude towards life. He/she is aware that difficulties come to everyone in life, so that running away from them is cowardice. They can be solved only by squarely up to them with courage. Mental health is influenced by age, sex, locality of residence, teaching attitude, teaching competency, social competence, intelligence, personality, cognitive styles of the pupils, spiritual orientation and religion, academic stress, self-concept, level of aspiration, achievement motivation, socio-economic status of the pupils, home environment, number of siblings, father's education, father's occupation, family income, academic success etc.

## **MENTAL HEALTH PROBLEMS**

Mental health troubles are defined and classified to enable professionals to pass on people for proper care and cure. Most mental health symptom has traditionally been divided into two groups called either 'mental case' or 'psychotic person' symptoms. Less common are 'psychotic' symptom, which interfere with a mortal's sensing of reality, and may include hallucinations such as considering, hearing, smelling and sensation things that no one else can. Mental health jobs affect the one's thinking; feeling and behaving are very common. Anxiety and clinical depression are the most common trouble; with around 1 in 10 citizenry is affected at any one time. Anxiety and depression can be severe and long-lasting and have a big impact on masses' ability to get on with life story.

## **MENTAL ILLNESS**

A mental illness is a wellness problem that significantly affects how a person think , behaves and interacts with other people. A mental health problem is slightly different from mental illness as it affects how a person thinks, feels, and behaves, but to a lesser extent than mental illness.

Some of the major types are:

- Anxiety
- Schizophrenia
- Bipolar mood disorder
- Personality disorders
- Eating disorders
- Depression
- In brief, mental illness is interactions between the mind, body and environment. The following factors contribute to the mental illness that are:
  - long-term and acute stress
  - Biological factors such as genetics.
  - use of more alcohol, drugs and other substances
  - constant negative thoughts and low self esteem

## CAUSES OF MENTAL ILLNESS

Most mental health professionals believe that there are variety shows of contributing divisor to the onslaught of a mental illness .Many studies have found that there are physical, social, environmental, psychological and family history causes for mental illness.

### Physical Causes

Each individual's own genetic make-up can contribute to being at risk of developing a mental illness and traumas to the brain (via a form of head-injury) can also sometimes enhances to changes in personality.

### Mixer and Environmental Causes

Where someone lives and their living conditions along with family and community of interests support network places can play a part along with exercise status and work stresses. Living in poverty or social isolation, being unemployed or highly stressed in your work can all put air pressure on an individual's mental health.

### Family History

There is evidence to suggest that heredity can play some piece in the ontogenesis of some forms of mental malady. However like with many physical health status s (such as Eye Disease or Diabetes) that fact that a house extremity has experience d a mental illness. As with physical health shape, the other ingredient shown above will play a significant part too.

## MYTHS OF MENTAL HEALTH

It is human nature that most of us know little about something until we come face-to-face with it. Until then, it's easier to believe myths than to seek out accurate information.

Some of the common myths and realities:

### 1. People with mental illness are poor and/or less intelligent.

**Reality:** Many studies have revealed that most people with a mental illness have average or above-average intelligence. Mental sickness, like physical illness, can affect anyone regardless of intelligence, social class, or income grade.

### 2. Mental illness is caused by a personal weakness.

**Reality:** Mental illness is not a character flaw. It is an illness, and it has nothing to do with being weak or lacking willpower. Although people with mental sickness can gambol a big component in their own

convalescence, they did not choose to become ill and they are not lazy because they cannot just "snap out of it."

### **3. If I seek help for a mental health issue, others might think I'm a wimp or even crazy.**

**Realness:** Seeking appropriate help is a sign of strength, not impuissance. No one should delay getting discussion for a mental health problem that is not getting better, just as no one should wait to take care of a physical condition that needs treatment. The wisest, most courageous way to cope is to seek help because early treatment can produce more positive results.

### **4. Mental illness is a single, rare disorder.**

**Reality:** Mental illness is not a single disease but a broad classification for many disorders. Anxiety, depression, schizophrenia, personality disorders, eating disorders, and attention deficit disorders have been connected with millions of people.

### **6. People with mental illness are violent and dangerous.**

**Reality:** As a group, people with a mental illness are no more violent than any other group. In fact, they are far more likely to be the dupe of violence than to be violent themselves.

### **7. People with mental illness never get better.**

**Reality:** With the right kind of help, people with mental illnesses do recover and go on to lead healthy, productive lives.

## **Physical Causes**

Each person's own genetic make-up can contribute to being at risk of developing a mental illness and injury to the genius (via a physique of head-wound) can also sometimes lead to changes in personality and in some guinea pig 'trigger' symptoms of an illness. Abuse of substances (such as intoxicant or drug) and deficiencies of certain vitamins and minerals in a mortal's diet can also play a region.

## **COMMON SYMPTOMS OF MENTAL ILLNESS**

Some symptoms can vary with each type of mental illness and each individual. The following are some common symptoms:

- Confused thoughts and delusions.
- Extreme fears or anxiety
- Persistent feelings of helplessness.
- Loss of interest in activities previously enjoyed;
- Unexplained physical symptoms such as nausea, trembling, fatigue, or headache.
- Difficulty concentrating and sudden irritability.
- Disruption to usual sleep patterns.

## MENTAL HEALTH ISSUES

Anxiety and stress are a normal part of life sentence story and are even adaptive in much atmospheric condition. Normal anxiousness keeps us alert by making us attend to our surroundings in order to proceed with caution when appropriate and therefore is not usually a source for concern. At 10 senses of time, however, anxiousness and stress can get out of hand, inexplicably reaching overwhelming levels. This can solution in a dramatic reduction of productivity and can significantly intrude on one's character of life.

Some common symptoms of anxiety include the following:

- tense, uptight feeling
  - inability to relax
  - feels restless, keyed up, or on edge
  - muscle tension, aches, or soreness
  - trouble falling or staying asleep (insomnia issues)
  - difficulties to concentrate
  - impatience
  - physical symptoms such as sweaty palms, nerve palpitations, shortness of breath, nausea or diarrhea, and trouble swallowing
- Common sources of anxiety and stress for college pupil include concerns about managing their academic workload, interpersonal result such as meeting new people and elbow room -Ilex paraguariensis difficulties, and issues related to desolation .Some useful coping strategies for coping with college stress are managing their time effectively, setting priorities, learning to say "no" when necessary, and developing an academic routine.

## MENTAL HEALTH IS IMPORTANT

The social and economic activities are associated with growing burden of mental ill health, and these are closely connected for promoting mental health as well as preventing and treating mental illness. Thus the Mental Health is linked to behavior and seen as fundamental to physical health and quality of life. Physical wellness and mental health are closely associated and it is proved beyond question that depression tip to heart and vascular disease. Mental ill wellness also spark advance to mixer problems like unemployment, broken families, poverty, drug abuse and related crime.

- Poor mental health bid a significant role in diminished immune performance.
- Medically ill patient with depression have worse outcome than those without.

## **CHARACTERISTICS OF POSITIVE MENTAL HEALTH**

### **They feel good about themselves:**

1. They are not overwhelmed by their own emotions - fears, anger, love, jealousy, guilt and worries.
2. They can manage life's disappointments without difficulty.
3. They neither underestimate nor overestimate their abilities.
4. They can accept their own shortcomings.
5. They have self-respect.
6. They feel delight to deal with most situations.

### **They feel comfortable with other people:**

1. They are able to give love and consider the interests of others.
2. They have personal relationships that are satisfying and lasting.
3. They like and trust others.
4. They respect the many differences they find in people.
5. They do not take advantage of others nor allow others to take advantage of them.
6. They feel they can be part of a group.

### **They are able to meet the need of life story:**

1. They do something about their problems as they arise.
2. They accept their responsibilities.
3. They shape their environment whenever possible; they adjust to it whenever necessary.
4. They try to plan ahead and do not fear the future.
5. They welcome new experiences and new ideas.
6. They use their talents.
7. They set realistic goals for themselves.
8. They put their best effort into what they do, and get satisfaction from doing it.

Mentally healthy multitudes are known to lot with stress effectively by being able to bounce back from adversity. They are basically content people whose activeness and relationships are meaningful.

## **CHARACTERISTICS OF MENTALLY HEALTHY PROSPECTIVE TEACHERS**

1. Mentally healthy prospective teachers are focused, flexible, and creative during good and bad times because they are resilient and can recognize and appropriately express their emotions.

2. During the problems, they have the characteristic ability to step forward and take action as well as step back and reenergize themselves.

## **INDICATIONS FOR IMPROVING MENTAL HEALTH**

Learn the facts about mental health and spread accurate information that helps to decrease stigma and promote understanding. This is especially important because, at its worst, stigma can stop the great unwashed with mental malady from getting the help they need.

Learn about the many community resources available, such as help lines that you can call if you or a loved one is experiencing mental health concerns or substance abuse and dependency problems. Do call before a crisis develops.

Learn to take control of your own life and health. Try not to let your environment control you. If you feel like a hostage in a bad relationship or workplace, seek help in developing a plan to change your situation for the better. Learn to say “no” to outside demands when you are feeling overextended or overly stressed.

Learn to trust your ability to make decisions and choices that are best for your health, like seeing a health professional early if you have concerns.

Learn to eat the best foods for optimal physical and mental health.

Learn to accept yourself. It’s not always easy, but try not to compare yourself with other people. If you have suffered or do suffer from a mental illness, be careful about basing your self-acceptance or improvement on what others say about your condition.

Learn to be cautious with whom you share information about your health concerns. When you share your medical history with others, you are empowering the recipients to use the information in a detrimental fashion.

Learn to take regular breaks from work, family, and other stressors to allow you time to refocus. Ultimately, plan a vacation without the cell phone and laptop and enjoy doing something you really love. At the minimum, take daily mental health breaks where you are totally removed from your responsibilities, if only for a few minutes. Take a walk around the block, for instance, or soak in the tub or spend a few minutes immersed in a good book.

Learn to talk about your concerns. It can be difficult, but talking about problem before it reaches a crisis can often avert a crisis altogether. If you are concerned about your mental health, don’t think you can

“will” yourself better (chances are, you have already tried that). Talk to a trusted professional or family member, and get the help you need.

In addition to these, the person who wants to improve mental health may undergo the following programmes, courses, training etc.

Stress management

Anger management

Positive psychology

Overcoming grief and bereavement

## **MENTAL HEALTH OF PROSPECTIVE TEACHERS**

Teachers’ mental health plays an important role in the teaching learning physical process . If the teacher is not sound in mentally healthy he can do incalculable harm to the nation in terms of poor guidance to the students. He cannot do justice to the job. His maladjustment will not only adversely affect his personality but produce maladjustments in students put under in charged. Well-adjusted teachers freely help the needed students. He serves as a model of good mental health by communicating his own enthusiasm for learning, by accepting the challenges of his job and inspiring confidence. The following activities are important to develop mental health to the students as well as teachers: In-service / Training programme Seminar, workshop and conferences Close relationship should be established between teachers and the community.

### **Stress**

The origin of the word stress we find in the Latin word ‘stringy’, which means ‘to be drawn tight’. Stress is not caused by single variables in our society but it can be caused by complex interaction between large systems of interrelated variables. Tension is a green lineament in our lives, especially as the pace of development increases Work is a common term which is applied for all sorts of occupation. It is natural to experience work related stress on tension or strain in the body or the mind if there is no release or outlet for the bent-up feelings. Everyone feels stressed from time to time. Some people may cope with accent more effectively or recover from strain full events quicker than others. It's important to know your limits when it comes to stress to avoid more serious health result.

Stress can be defined as the brain's answer to any need. Many Synonyms/Hypernyms (Ordered by Estimated Frequency) of noun thing can trigger this response, including change. Changes can be positive or negative, as well as real number or perceived. They may be recurring, short-term, or long-term and may include things like commuting to and from school or work every day, traveling for a yearly vacation, or moving to another home. Changes can be mild and relatively harmless, such as winning an air stream,

watching a scary movie, or horseback riding a rollercoaster. Some changes are Major, such as matrimony or divorcement, serious un wellness, or a car accident.

### **Nature of stress**

We can immediately spell out- stress means unhappiness caused when things go wrong. We generally perceive stress as something external. Variety of external stimuli can produce stress. When somebody insults we feel stress. Stress means tension. Stress means worry, grief, anxiety, depression, restlessness, headache, irritation, threat etc. The reaction to stress, however, we do recognize involve arousal of emotions, chemical changes, immunological changes, and psychological – behavioural changes in the person. In this sense stress is internal we are puzzled whether to recognize stress as internal or external. Ultimately we grope at its multifarious nature and realize it is difficult to conceive or define stress in definite terms. Perhaps it is a combination of both. Outside stressor is acting on the individual is responding to the stressor and or vice versa. Anything that causes stress to the individual is called stressor. When we say I am stressed or I am under stress we mean, by this, the way stress is felt, experienced, and affected our body and mind and life and spirit. Stress reaction may occur either to internal and external stimulus. Stress may be understood at both levels physiological and psychological.

### **Types of Stress**

Following are descriptions of the three case of stress that The National Scientific Council on the Developing Child has identified based on service -able inquiry:

**Positive focus solution from adverse experiences that is short-lived.** Children may confrontation positive stress when they attend a new day care, get a barb, meet new people, or have a toy taken away from them. With the support of lovingness, grownup, children can learn how to manage and overcome positive strain. Positive stress is considered normal and coping with it is an important constituent of the maturation process.

**Tolerable emphasis refers to adverse experiences that are more intense but still relatively short-lived.** Good example includes the death of a loved one, a natural disaster, a frightening accident, and family disruptions such as separation or divorcement. If a nestling has the livelihood of a caring adult, tolerable tension can usually be overcome. In many cases, tolerable tenseness can become positive degree accent and benefit the nipper developmentally. Focus is internal or external influence that disrupts an soul's normal province of well-being. These influences are capable of affecting health by causing emotional hurt and jumper cable in to a variety of physiological changes. These changes include increased heart rate, elevated railway blood line pressure, and a dramatic rise in hormone horizontal surface. The Effects of Childhood Stress on Health Across the positive stress and benefit the child developmentally.

**Toxic tenseness results from intense adverse experiences that may be sustained over a long period of prison term —calendar week , calendar month or even years.** An example of toxic tension is child ill-treatment,

which includes contumely and nonperformance. Children are unable to effectively manage this type of accent by themselves. As a result, the tension answer system gets activated for a prolonged amount of time. This can lead to permanent changes in the growing of the mastermind. The negative effects of toxic stress can be lessened with the support of caring adult. Appropriate support and intercession can help in returning the stress response system back to its rule baseline. The Effects of Toxic Emphasis on Adult Health and Well-Being Inquiry 3 senses of finding demonstrate that childhood stress can impact adult health.

### **Impact of stress on health**

Your traffic light just turned green, and you're about to pull out into an intersection when you notice another car is barreling through and will hit you. Quick, hit the brakes! The car passes in front of you; the crash is averted. Your heart is racing. You're holding your breath. Exhale. Your hands are gripping the steering wheel tightly, and your entire body has tensed in anticipation of the collision. Relax, you're safe. One of those is a part of your brain called the hypothalamic-pituitary-adrenal (HPA) system, which released a cascade of chemicals—such as adrenaline, steroid hormones, and cortisol—that kicked up your heart rate, helped your brain with that split-second decision, and increased glucose in the bloodstream to give you a burst of energy to react. This is your body's natural reaction to stress. Forty-three percent of adults say they suffer adverse health effects from stress, and three-quarters of all doctor's visits are the result of stress-related ailments and complaints. Stress is also linked to several serious diseases and unhealthy situations, such as heart disease, cancer, lung disease, accidents, cirrhosis of the liver, and suicide. It's essential to know how stress can impact your everyday life as well as your long-term fitness.

### **Brain**

Stress can impede your thought processes and hamper your thinking.

### **Emotions**

Multitude transaction with chronic stress may be easily frustrated and quick to lose their temper. They may cry more often and spend considerably more fourth dimension worrying about things than they would without being stressed.

### **Lungs**

People with asthma and chronic obstructive pulmonary disease (COPD) often have worsening symptoms during times of chronic stress.

### **Stomach**

In people with gastrointestinal disorders and diseases like gastro esophageal reflux disease (GERD), irritable bowel syndrome (IBS), ulcerative colitis, and peptic ulcer disease, symptoms may be worsened by stress.

**Skin**

Stress may make skin problems such as psoriasis, eczema, acne, and rosacea worse. It is also known to bring on cold sores and fever blisters.

**Hair**

Your hair may fall victim to your stress.

**Immune System**

Stress can worsen symptoms of chronic illness such as rheumatoid arthritis and diabetes.

**Impact of stress on the body**

Not all stress is bad. All animals have a accent response, which can be biography -saving in some situations. The boldness chemicals and hormone released during such stressful times, prepares the animal to font a menace or flee to safety. When you fount a dangerous situation, your pulse quickens, you breathe faster, your muscles tense , your brain uses more oxygen and increases activity—all single-valued function aimed at survival. In the short circuit terminus, it can even boost the immune system. Your immunity is lowered and your digestive, excretory, and reproductive scheme stop workings normally. Once the terror has passed other body system of rules act to restore normal functioning. Job occurs if the stress response goes on too long, such as when the source of tenseness is constant, or if the response continues after the danger has subsided.

**Impact of Stress on overall health**

There are at least three different character of emphasis, all of which carry physical and mental wellness risk of infection:

- Routine stress related to the pressures of work, family and other daily responsibility.
- Stress brought about by a sudden negative modification, such as losing a job, divorce, or illness.
- Traumatic stress, experienced in an consequence like a major accident, war, assault, or a cancel cataclysm where one may be seriously distress or in risk of being killed.

Different people may feel it in different ways. People under chronic stress are prone to more frequent and severe viral infections, such as the flu or common cold, and vaccines, such as the flu jibe, are less effective for them.

Of all the eccentric of tenseness, changes in health from number tenseness may be hardest to notice at first. Because the source of tension tends to be more constant quantity than in cases of acute or traumatic stress, the trunk gets no clear signal to take to normal work.

Tenseness can be external (from the environment, psychological, or social place) or internal (unwellness, or from a medical routine). Stress can prompt the "scrap or trajectory" response, a complex chemical reaction of neurologic and endocrinology systems.

### **The Negative Consequences of Stress**

Focus is neutral – it is a person's perception of the effect that determines their reception. Stress is positive degree when the person feels stimulated and able to manage the state of affairs. This positive reception prepares the body for action and activates the higher thinking plaza of the brain. A positive response to stress can provide the energy to handle emergencies, meet challenges, and excel

Accent is negative when a person feels threatened and not in ascendancy of the situation. These feelings instigate a powerful reaction – affecting both the brain and torso in ways that can be destructive to physical and mental health.

### **Relaxation from stress**

Regardless of the cause – our perception of threat trigger the scrap -or-flight of steps reaction, a potent thinker -body phenomenon designed to save our lives. The engagement -or-flight reaction was first proposed by Walter Carom in 1914. The sympathetic nervous system passing general stimulants such as norepinephrine (also known as norepinephrine) into the brain and adrenalin (also known as epinephrine) into the trunk. This release of chemicals does the following:

- Increases muscle tension, blood pressure, heart rate, breathing rate and blood flow to our muscles.
- Raises our metabolism so our body works at the highest levels of efficiency.
- Slows our digestive process to direct our energy to the emergency at hand.
- Dilates the pupils of the eyes for maximum light; directs the eyes peripherally to see danger or locks eyes into tunnel vision.
- Turns up our hormonal temperature.

That is why long after a stressful phenomenon has ended your heart is still enclosed and you still feel disconcert. Cortisol, a stress hormone, is secreted to do the following:

- Releases glucose (from liver) and breaks down tissues to release fat into the blood stream to supply muscles with nutrients
- Inhibits protein uptake by 70% while breaking down protein (reduced muscle mass) to supply energy to muscles.

### **Consequences of stress on health**

Although these responses can save our lives when we're jumping out of the way of an on-coming car, most stresses are not life-threatening.

Stress isn't always destructive. If stress is constant and unrelieved, the body has little time to relax and recover. Stress disorders can result such as: high blood pressure, headaches, reduced eyesight, stomachaches and other digestive problems, facial, neck and back pain. "

### **Many Behavior Problems are the Result of Stress**

Frequent symptoms of stress such as low impulse control, difficulty concentrating and irritating behaviors often match the definition of A.D.D./A.D.H.D (Armstrong, *The Myth of the A.D.D. Child*, 1997, p.28). Understanding a child's behavior in the context of the brain's reaction to stress can provide an adult with insight, empathy and expand their behavior management repertoire to include calming strategies.

### **Behavior is regulated by the prefrontal cortex**

When we are emotionally disorder we say we "just can't think straight". This is because unmanaged stress shuts much of the thought brain down. Accompanying this is heart and brain shape that create chaos in our brain's ability to process information.

The degree to which the tenderness rate changes over prison term is referred to as pump -rate variability or HRV. Rather than trouncing at a fixed rate all the time, our heart hurrying up and slows down as it responds to different emotions, usually in small , imperceptible direction .Researchers at the Heart Math Institute have measured the impact emotions have on HRV. Their studies have shown that when we are stressed, our heart rate patterns are chaotic, disorganized and non-coherent (Children& Martin, *The Heart Math Solution*, 1999, p.37). A non-coherent heart pattern produces non-coherent patterns in the brain. His decreases the brain's ability to process information and recognize patterns – affair doesn't make common sense.

Many fields have confirmed that both workings computer memory board and long-term memory are inhibited by emphasis. Working memory is a term for the "capacity of aid that holds in thinker the facts essential for completing a given task or problem. That's why a stressed adult may have difficultness remembering her address and a stressed child may have difficulty remembering the words on her spelling test. Inquiry has shown that chronically high cortisol stratum released during stress can lead to the death of brain cells in the genus Hippocampus (located in the limbic system), which is critical to forming long term storage (Allen & Klein, p.20)

### **The Benefit of a Calm Mind and Body:**

The Relaxation Response Multitude has cancel ways to regulate their response to tenseness. Fortunately, each of us possesses a natural and innate protective mechanism against over-stress, which allows us to counter the 6 senses of effect of the fight-flight of stairs reaction. We do this naturally when we relax – we looseness, laughter, go for a walk, get a massage or take a soothing bath. By using simple stress-reducing technique, such as oceanic abyss breathing or muscle relaxation, we can purposefully activate the relaxation response. When we are relaxed, our body's parasympathetic nervous system nervous system counteracts the harmful effects of stress in the following ways:

- releases tension in tight muscles;
- lowers blood pressure, decreases heart rate and breathing rate;
- stabilizes blood flow to muscles;
- slows metabolism;
- Possibly liberates nitric oxide.

A calm nitty-gritty tone ending tranquilizing hormones that promote feelings of harmony toward others. One of these hormones is ANF (atrial natriuretic factor). This is called the 'balance endocrine ' – it plays a John Roy Major role in balancing the sympathetic and parasympathetic nervous systems. In a balanced state the SNS speeds us up for military action and the PNS slows us down for contemplation. In addition, ANF inhibits the release of stress hormones such as cortisol (Children & Martin, *TheHeartMath Solution*, 1999, p.15).

### **Calmness is the equipment to behave in positive way**

Being calm turns on more circuits between the feeling and thinking brain, and integrates the right prefrontal lobe's direct responses to emotions with the left prefrontal lobe's ability to regulate these emotions. When the Chief executive officer is "on-telephone line " it makes it possible for a individual to:

- reflect on their emotion and better dominance their impulses;
- manage negative emotions such as awe , frustration, and anger
- soothe oneself;
- consider consequences, make thoughtful decisions and plans;
- move out of defensive survival behaviors;

With the wit's CEO at the helm, even in an upsetting situation a calm somebody is in mastery of himself.(Amen, *Healing the Hardware of the Soul*, 2002, 31-33).

The above skills develop over time. However, each time a child goes from stressed to calmness, neural pathways between the impulsive, reactive brain expanse and the self-regulation areas are reinforced.

Gottman says this self-regulation acquisition "service a child get along with others – to control his negative responses in a conflict , share, enter new playgroups, make new friends and grip rejection when equal turn away.

### **A student Learns and Remembers Best when Calm and Positive**

When one is calm and alert, the prefrontal lobes are free to engage in higher level intellection tasks.

Investigator at the Heart Math Institute found that positive emotions such as feelings of love, appreciation, peacefulness, and playfulness produce an even core beat musical rhythm . This forms a harmonious, coherent heart shape that looks like a mathematically regular wave. Coherent heart cycle create coherent brain waves. These harmonious rhythms allow the thinking brain to optimally receive and create patterns from entrance selective information (Childre& Martin, p.37). Recognizing and creating patterns enable us to shuffling sense of the earth, learn from our experiences and solve problems (Hannaford, p.3).

labor relaxed, qui vive and positive degree residuum the Do past at organization so we can pay attention, recognize radiation diagram and think clearly (Bailey, pp. 45-47). Dopamine stimulates the brainpower's reward pathways. 5-hydroxytryptamine is associated with feelings of well-being. "Serotonin works script in hired hand with dopamine. The dopamine system helps us focus, while the 5-hydroxytryptamine system keeps us from being overwhelmed with too much incoming stimuli. Serotonin is like calming music in the doctor's business office "(Bailey, p.47).

### **A Child's Experiences in Appeasement Himself may Help his Brain Develop the Power to Self-Regulate his Response to Stress throughout Life**

Vagal tone is a term that comes from the vague nerve, which is a large nerve originating in the brainstem responsible for many functions of the parasympathetic nervous system (relaxation).The vagus nerve carry information from and to the brain, gist and other areas of the physical structure . Just as Thomas Kid with goodness muscle tone excel at sports, kids with senior high school vagal tone excel at responding to and recovering from emotional strain . . . These children are good at soothing themselves, focalization their attention and inhibiting activeness when that's what's called for . . . Encyclopedism to be calm helps the child to concentrate in learning situations and to nidus on the achievement of specific labor . . . The experience children have with emotion while their parasympathetic nervous system of rules are still under construction may period of play a big part in the development of their vagal tone – and consequently their emotional well-being – later in animation (Gottman, pp.38, 39)

## Calming Strategies for the Classroom

It is necessary that pedagogues minimize stressful events in the classroom as much as possible. Students need to be supported by providing a safe environment, a clear structure, consistency and positive relationships. In addition to creating a safe, caring environment, educators can help students manage the stressors that inevitably come up in the school circle.

There is a number of well-researched techniques that break the focus rhythm and activate the relaxation response to bring the body/mind system back into a healthier residual. These appeasement techniques may seem very simple, yet they can have immediate profound effects. Any calming technique, applied in a here and now of emphasis, can be powerful. The final exam section includes specific calming techniques – deep breathing, progressive relaxation, positive affirmations, positive self-talk, and integrated movements.

**Step 1: I notice how I feel.**

**Step 2: I accept myself.**

**Step 3: I calm myself.**

**Step 4: I notice how I feel now.**

**Step 5: I tell myself something positive.**

**Step 1:** I notice how I feel. Emotions might be: nervous, anxious, scared, upset, frustrated, mad.

**Step 2:** I accept myself. Say out loud:

**Step 3:** I calm myself. Tense and relax your muscles. Imagine something positive. Do a Brain Gym movement.

**Step 4:** I notice how I feel now. Body signals might be: loose muscles, slower & deeper breathing, cool face, quiet heart, dry hands, no more stomach/head ache, clear brain. Emotions might be: relaxed, calm, peaceful, quiet, happy.

**Step 5:** I tell myself something positive.

**Teach students the calming steps of "Take 5" separately before putting it all together**

**Steps 1 and 4:** *Noticing*

Self-calming is a skill that is built on noticing. Noticing creates connections between the body, feeling brain and prefrontal lobes (CEO).

- stress signals,
- what calming activity would be best to break the cycle,
- A shift to a relaxed, calm state.

Noticing is built into the calming techniques offered in the last section.

### **Step 2: Acceptance**

This step helps to overcome resistance to change. "When you are upset, you always focus on what you don't want" (Bailey, p. 95). Gary Craig, creator of Emotional Freedom Techniques® (EFT), calls this resistance factor psychological reversal. "Psychological reversal is caused by self-defeating, negative thinking which often occurs subconsciously and thus outside of your awareness (Craig, EFT Manual, 2004, p.21)." To correct this, Craig proposes a neutralizing statement. The first part of this statement acknowledges the problem (Even though I feel mad); the second part affirms self-acceptance (I am a good kid).

### **Step 3: Calming Techniques**

The Calming Techniques provide a menu from which to choose – you do not need to do them all. Add your own favorites. Transition times, or whenever your students need a quick break, provide opportunities to teach and practice these techniques.

### **Step 5: Positive Self-Talk**

This is addressed in the section on Calming Techniques and includes other examples of positive statements.

### **Putting it all together: The "Take 5" Calming Steps**

Once we and our students are familiar with each of the five steps, introduce the Take 5 framework. Ask students to use the fingers on their hand to remember five calming steps. Release a finger each time you say a step – thumb: "I notice how I feel"; pointer finger: "I accept myself"; third finger: "I calm myself", ring finger: "I observe how I think now", little finger: "I tell myself something encouraging." Say "we now have an open hand to represent emotion and calm."

**Stress** is not caused by single variables in our society but it can be caused by complex interaction between large systems of interrelated variables. Stress can be mental, physical or emotional.

Stress was popularly used in 17th century to mean hardship, strain, adversity or affliction. The term was used in the 18th and 19th centuries to denote force, pressure and strain strong effort with reference to an object or a person. Stress spans the whole of human life and found that begins even before birth. Stress has been defined by Seyle (1974) as in the state manifested by the specific syndrome, which consists of all the nonspecific induced changes within a biological system. Stress is usually thought of negative term like causing something bad or distress to the individual. It can be stated as an adaptive response to a situation resulting in physical, psychological and behavior deviations. Stress is inevitable at some time or other. Stress is an agitated physiological state in which the electrical transmission of information along neurons is heightened to the point that the nervous system may collapse or bodily functions may perform poorly. It results from an imbalance between environmental demands and personal adequacies to meet these demands. For some individuals 'stress' refers only to a crises or calamity while others perceive the day-to-day life problems and mild irritations as 'stresses'. The situations causing stress and the experience of stress itself are highly subjective. Stress is a contributing factor in causing numerous emotional and behavioral difficulties including depression, anxiety, temper, tantrums, suicide attempts, child abuse, physical assault, destructive expression of anger, feelings of bitterness and resentment, irritability, impatience and stuttering.

**Stress** is a state of disequilibrium (physical, physiological, psycho emotional states of mind) in humans which results as the individual's inability to handle the demands (physical, mental, psycho-social, work and academic) of life arises (Adeoye, 2010). The 20th century has been branded as the age of 'stress and anxiety'. Stressful circumstances are encountered every day and at every stage of human development. Stress is involved in every day's life. Even the primitive people lived with great stress as they had lived with animals in dense forests. There was no security of safety for life, shelter, medicine, or treatment; their survival was not definite, it was uncertain. Now-a-days advancement in science and technology, these threatening stressful situations might have probably changed now. But even with the present level of progress and advancement, the present day individual is a victim of stress for different reasons. Thus stress cannot be avoided totally in any society. One has to learn to live with it and manage it cope with and if possible to overcome it.

Stress influences everyone including teachers, prospective teachers, if even students at one time or the other. The physical, psychological, educational, intellectual and social factors not only cause to stress but also influence the attitudes of the prospective teachers. It is acknowledged that a students' academic achievement and academic ability depend on both internal and external factors such as improper study habits, lack of time, type of institute, type of course, stream, medium of instruction, gender, locality of residence, financial difficulties, social intelligence, academic context, interpersonal relationships, educational aspirations of self and parents, and so on. If these situations are not conducive for learning,

they may lead to stress. To adjust everyday situations brings about maladjustment, rating from minor to severe conditions. Some adjustments are physical; some adjustments are social, such as responding to the social life of the college and participation in social activities. When one fails to make satisfactory social adjustments, he/she loses his friends and his status in society. Some adjustments are personal, in which one needs to take care of one's interests. College life is a test of mental health of a student, undergoing a transition from dependency to independency. An adolescent personality continues to develop during the college years. He/she still have a chance to learn how to love and to be loved, how to tolerate frustration, how to integrate conflicting points of view, how to face reality realistically, without feeling from it to channel hostile impulses into socially approved activities. By helping the individual to acquire knowledge and the tools of learning, the educational institute increases its capacity to make desirable adjustments and to find security and satisfaction. Success of college education depends upon large measures on how each young man or woman feels about his/her college experiences and home experiences. It makes an immense difference whether he/she acquired attitudes and habits favorable to his/her own better intellectual, social and emotional developments as a result of college experience, or develops anti-social tendencies accompanied by bitterness and frustration. Social and emotional maturity is desirable in the development of intellectual power an end product of formal education. A growing number of individuals inside and outside the teaching profession are raising questions about the very nature of student teaching. Hence, the present study is intended to identify the mental health of prospective teachers in relation to their academic stress, attitude towards teaching and study habits. Extreme stress conditions are detrimental to human health.

From the perspectives of the health, Mental health can notes those behaviors, perceptions and feelings that determine a persons' overall level of personal effectiveness, success, happiness and excellence of functioning as a person. Mental health depends on the development and retention of goals i.e., *neither too high nor too low to permit realistic successful maintenance of belief in ones' self as a worthy and* ineffective human being. Mentally healthy person is firm in his/her intentions and is least disturbed by strains and stresses of day to day life. It may also be understood as the behavioral characteristic of the person. The declaration of the International Conference on Primary Health Care of Alma Ata, USSR,1979, defines 'health' as a state of complete physical, mental and social well-being, and 'mental health' as the capacity of an individual to form harmonious adjustment to his social and physical environment. Mental health is a term used to describe either a level of cognitive or emotional well-being or an absence of mental disorder. From the perspectives of the discipline of Positive Psychology, mental health may include an individual's ability to enjoy life and procure a balance between life activities and efforts to achieve psychological resilience. Mental health is the balanced development of the individual personality with his fellowmen. Mental health is not exclusively a matter of relation between persons, it is also a matter of relation of the individual towards the community he lives in, towards the society of which the community is a part and towards the social institutions which for a large part guide to his/her life, determine his way of living, working, leisure, the way he earns and spends his money and the way he views happiness, stability

and security. It plays its role not only in the lives of individuals, but also in the life of society. The term mental health does not refer to any one aspect of mental life or to any one dimension of human personality. It encompasses all the aspects of the individual's adjustment with himself and others. If this adjustment is characterized by wholesome, personal, social, intellectual, emotional or philosophical orientations, the individual is deemed to have good mental health. If a person is well adjusted, he has good physical health, desirable social and moral nature and has harmonious personality.

## **CREATIVITY**

Creativity is an essential aspect of human activity and attainments. Creativity does not concern only with scientific or artistic creation. It is found almost in every individuals exhibits work. Creativity is originality which actually can occur in any kind of activity.

Davis and Rimm (2004) proposed that creative students out performed high IQ students in lifetime achievement. However, Gagne (2003) suggested that many factors are responsible in the development of eminent people in a society. Those factors include both the physical environment and the psychological environment which are being referred to as developmental catalysts.

Torrance views creativity as a whole as a process of identifying problems, finding possible solutions, making hypotheses, evaluating and communicating the results.

### **High Creativity**

A few influential schools of thought regarding the definition of high creativity include: 'capacity which is out of expectation for a person in his thinking and creation' (Ryhammar&Brolin, 1999)'capacity for someone to produce a new and original idea, thought, re organization, creation or objects of art, that is accepted by experts as having scientific, aesthetic, social or technological values' the ability to create new knowledge 'High creativity also covers a wider definition in terms of production of new ideas. However, these definitions only gives exclusive meaning that creativity is only owned by a certain talented individuals, but might be less relevant when discussing student creativity.

### **Normal Creativity or 'Democratic' Creativity**

In the field of education, the definition of normal creativity or 'democratic' creativity might be more suitable. In the report by the National Advisory Committee on Creative and Cultural Education NACCCE (1999) this phrase emerges and brings about the meaning of creativity for normal individuals, with consideration that all students can be creative.

This definition of creativity assumes that creativity can be owned by all students. Among the creativity definitions under this thought are: 'Imaginative creativity that is moulded to produced something that is valuable and original' (NACCE,1999)

- ‘Creativity is the application of knowledge and skills to produce a new method to achieve a certain outcome.
- Therefore a student has to have four quality criteria which are: ability to identify new problems, and not depend on others, ability to transfer knowledge that they obtained from a certain context to another in solving problems, belief that learning is a multilevel process, where repetition will produce success, capacity to focus in achieving an outcome.’ (Seltzer & Bentley, 1999) However, these definitions would create problems, since there is the deterioration between the normal creativity and others having the same but different adjustment.

## **2. Distinction between Creative Teaching and Teaching for Creativity**

It is quite difficult to give distinction between creative teaching and teaching for creativity. According to Cremin (2009), distinction between the two is teacher oriented for the former, and learner orientation for the latter. Creative teaching involves teachers to make learning in class more interesting and informative using imaginative approaches. Teaching for creativity involves teachers identifying and fostering children’s creativity.

The National Advisory Committee on Creative and Cultural Education (NACCE, 1999) defines creative teaching as ‘teachers using imaginative approaches to make learning more interesting, exciting and effective’ and teaching for creativity as ‘forms of teaching that are intended to develop young people’s own creative thinking or behavior’.

## **3. Creative Teaching**

A teaching is said to be creative when an instructor combines the existing knowledge with a new way that is new or unique or introduces a new process to nourish cognition to obtain a useful outcome (learning). This could be planned before teaching or is adopted as a response towards the needs of a certain learning context. Creative teaching is an art (Craft, 2001) and therefore instructors cannot be taught didactically on how to be creative. However, instructors need to develop a range of skills themselves which they can adapt and apply to different situations. Davis and Rimm (2004) acknowledged that personal creativity can be enhanced, and they proposed that creativity could be taught. Thus, teachers’ creativity in teaching can be trained. Although they are involved with creativity every day (Rejskind, 2000). Jeffrey & Craft (2006) and Woods (1995) found that creative instructors are: innovative (goes beyond the traditional border through a new combination whether planned or in connection to any benefit); have ownership of the knowledge (to modify or customize the curriculum to address the special needs of students and/or educational goals); control the teaching processes involved (have the need for choice and the power to make it happen through practical involvement); and operates in various social values that are acceptable and at the same time adapted to the culture of the students.

In general, creative instructors are more inclined to (Woods & Jeffrey, 1996): be independent (having own thoughts but capable of working together with others); have a humanistic approach (focusing on student

self-development); guided by a strong moral purpose indicate indecision for equities be learner-center (creating an atmosphere that ensures student learning and involvement);use full control but with full care; be very enthusiastic about work.

Other than that, they are involved with and encouraged: reasoning based of possibilities, raising questions that help in exploring problems (Jefferey& Craft, 2006); One of the criteria is creative instructors constantly reinvent themselves and adapt their teaching styles and strategies to different situations as required. To achieve this instructors have to have a firm rooting in their identity and principles, and then based on this, be flexible in what they do.

Creative instructors are also risk takers who may have to leave the structured lessons behind and adjust them accordingly (Ireson et al, 1999). These instructors are ready to learn from their students and not be afraid of looking foolish. To promote creativity in the students, creative instructors often explore their own creative talents both in teaching and in other area of interests. NACCE (1999) also said that if creativity of instructors is suppressed, they cannot promote creativity in their students. In general, personality traits, values and teaching positions is synthesized in the form of creative teaching that includes the provisions of curriculum, teaching methods, relationships with students, the creation of the environment and reflection on practice.

### **Components of Creativity-**

There are 6 main factors of creativity.

**1. Sensitivity-** It is an ability which reflected in a person's detecting something which is missing or lacking in a given situation or needs. It is a observation of imperfection which give a start to accretive person towards a creative production.

**2. Fluency-** This is considered as a quantitative aspect of creativity i.e. coming up a large quantity of ideas word and ways of expressing them. There are factors associated with fluency of thinking such as.

- Word fluency
- Associational fluency
- Expressional fluency
- Ideational fluency

**3. Flexibility-** It is referred as thinking up a variety of ideas and new ways of dealing with situation. It indicates how an individual can respond in different distance way to a stimulus. It can be termed as measure of variety.

**4. Originality-** The originality has been approached differently. It has been viewed through perspectives. There are various terms are used originality such as uncommon, unusual cleaver, novel, unique, infrequent.

**5. Redefinition-** It is an ability which calls for to give up old interpretation of familiar objects in order to use them or their parts in some new way.

**6. Elaboration-** This ability is indicated by production of detailed steps variety of implications and consequences that can be measured quantitatively.

These are the main factors of creativity.

### Levels of Creativity-

**Taylor (1995)** differentiates between various levels at which the individual may be creative. He suggested following five level.

1. **Expressive Creativity-** This is the first level of creativity. It involves independent expressive where skills, quality and originality with respect to the object produced are not very important.

2. **Productive Creativity-** This level of creativity calls for some production but the object produced need to distinguishable from the products where there are restrictions and controlled full play.

3. **Inventive Creativity-** This level of creativity, ingenuity is displayed with materials methods and techniques. The inventor explores and discovers who employ used of old things are the example using inventive creativity in their production.

4. **Emergent Creativity-** It is believed to be highest level of creativity. It requires ability to absorb commonly provided experiences and produce something unique.

5. **Innovative creativity-** This creativity is based upon highly developed abstract conceptualizing skills. Those who make significant modification in the basic foundations are said to be using innovative creativity.

**Trowbridge (1962)** “What a creative person give intellectual person cants. In same way the whole achievement of less creative person cannot be compared with the achievement of high creative person Creativity is found almost in all the person however its level may vary person to person. In general it scientists believe that creativity is found only in writers, poets, scientist, actors etc. But in present era it in not true as creativity may impart good effect in any field will have the same level creativity. There is need of creative person in almost in all fields. Educational point of view psychologist cannot deny it’s important. Creative teachers and the students both are the need of society.

**Lower field and Britain (1966):-** “To teach towards creativity is to teach towards the future of society. “It is essential for develop and or progress. It helps individual in his mental activity. Creativity is essential for

development of nation society and individual. It is also important for mental health if individual express his new idea he will be satisfy and easily adjust with environment. Creative thinking increases person solving behaviour. It is important for educational point of view creative teachers can help students in creative thinking. Teachers can also guide students in right directions.

### **Nature of Creativity**

The following are the nature of creativity:-

**Creativity is universal:** Creativity is not confined to any individual, groups of individuals, caste, color, sex or creed. It has no boundary of age, location or culture. It is applicable to all stages of education and universal in nature.

**Creativity abilities are natural:** It is not surrounded and developed with artificial and forceful situation. It can be nourished and nurtured by training and proper education. It is both innate and acquired.

**Creativity expressions are new or novel:** All individuals are creative in diverse ways and in different degrees. It is not restricted to a chosen few. It brings newness of novelty in the system or something new into being. The emphasis is on the newness and lack of previous existence of the idea or product.

**Creative expressions are wider in scope:** It has no limit or boundaries. It is a kind of adventurous and open thinking. It covers multifarious human accomplishments and all field of human life.

**Creative expressions carries ego involvement:** No one other than the creator can experience the warmth, happiness and satisfaction which he receives through his creation. The creator takes pride in his creation and hence makes ego involved statements like 'It is my idea' and I have solved this problem, etc.

Creative abilities are not completely spontaneous rather it requires constant understanding, discipline, hard work and patience to produce something new and unique. It is a kind of adventurous thinking and a departure from the closed thinking.

Creativity is the ability to go beyond the immediate solution, redefine the problem or some part of it and unusual ideas and new approach to the problem. It involves many abilities like fluency, flexibility, originality and elaboration.

### **Characteristics of a Creative Person**

**According to Tylor,** the characteristics of a creative person are the following: Strong memory powers and full of new ideas about things; Tendency to evaluate the ideas and actions of self and others; Flexible and open minded; All the four qualities like originality, fluency, flexibility and power of elaboration; Sensitivity to problems, openness to new ideas and experiences; Curiosity and having intellectual persistence; Tendency to seek challenges and manipulative ideas; Preferring complex ideas and tolerance

for ambiguity; Commitment to work and inclination to take risk; Resourceful, adventures and extrovert; and More perseverance and less traditional-bound.

**Torrance** indicated that a creative person is a divergent thinker; forming ideas or hypothesis – concerning problem; testing these hypothesis and communicating the results; capable of modifying and retesting the hypothesis; original, useful and socially accepted abilities and development of novel approach to solve problems.

The researchers in their findings concluded the following behavioral characteristics of a creative person:

Flexible and open minded, Suggested better ways of doing a job, Originality of ideas and expression, Ability to use material, words or ideas in new ways, Bold and emotionally sensitive, resourceful, radical or a sense of adventure and curious nature, A high degree of awareness, enthusiasm and concentration, Self-discipline and capacity to integrate things, Respect for the opinions of others, Humorous, playful, dominant and self-assertive, Lack of rigidity, high values, intolerant for injustice, enjoy strange ideas, rich imagination and expressive, Need for autonomy and have high aspirations, Sense of self-confidence and reserve and Venturesome and pursuit of self-chosen interests.

### **Steps or Stages of Creative Thinking Process**

Unlike many psychometrics and educators, those who theorize about the thoughts and emotions involved in creativity are generally not bound by the creativity – equals – divergent – thinking assumption. Instead, they look at broader aspects of human functioning. Wallas (1926) described the process as consisting of four stages, i.e., preparation, incubation, inspiration or illumination and verification or revision.

**Preparation:-**It is the first step in which a problem is investigated in every possible way. It means the conscious work on the problem is initiated and continued till the problem solver familiar with the various features of the problem. Here the problem is analysed and the stage or plan of action is set for its solution. The facts and materials relevant to the problems are collected or gathered for solving the problem in hand. But sometime it so happens that without solving the problem the thinkers keep aside the problem for the time being and do some other activities.

**Incubation:-**In the second stage no conscious thought is given to the problem but the ideas and materials collected in the period of preparation are somehow stored below the conscious level of the psyche. This is the stage of no work or rest period. But somehow the mind continues to search or experience clue to the solution of the problem.

**Illumination:-**During this stage the “Aha” feeling is suddenly experienced, often unexpectedly. This means a sudden appearance of the solution of his problem comes to the mind.

**Verification:-** The final stage is verification. When the new idea is evaluated on the basis of its creator’s own standards which may be sharply different from the public and criticism starts. Here the idea which appeared through insight may be considered as the correct answer. In case it does not work out, fresh attempts are made to solve the problem.

In addition to that parents and teachers can do a number of things to foster creativity among children. These are as follows:-

Creative reading should be encouraged. Students should be given direction and encouragement to use unusual ideas and solutions with confidence. Self-initiative learning should be initiated. Emphasis should be on more individual assignments and bring the students into contact with the best talent and knowledge available within the existing setup. Both home and school must stimulate creativity by providing guidance and encouragement to use the materials that will encourage creativity. It means materials that will encourage creativity. It means democratic and permissive child training in the home and school should be employed. The teacher should not give everything readymade to the pupils. Dynamic methods with scientific temper and participatory approach should be adopted so that the child can take active part in discussion. In this way thought processes and imagination of the students can be enhanced which in turn can foster creative talents. Students should be made self-reliant and self-confident and the instinct of the child should be effectively dealt with. They should be made to feel that whatever they create is unique and expresses what they desire to express. The teacher should see that students develop positive attitude towards every work. They should be well aware that no work is big or small, prestigious or insulting or white collared. Equality in treating the students will develop confidence and foster creativity. Encouraging originality and flexibility as far as possible. Children should be given enough opportunities and chance to apply their thinking and ideas into their day to day life so that they can develop creative potential. As far as possible the teacher should show examples of critical and creative behavior before the students. In addition to that the school should be well equipped with books, materials, and facilities like co-curricular activities so that creative children can exhibit their special talents. Sense of humor, constant persuasion/motivation, encouragement of independent thinking, enriched experiences and removal of hesitation and rear help in promoting creativity among the children. So the teachers in the school and parents at home should try to develop the above habits for the promotion of creativity. Developing healthy habits, avoidance of blocks to creative thinking like unsympathetic treatment and authoritarian outlook, frequent brain storming to explore ideas and word game in early stages, etc., enhance the scope of knowledge of children and kindle the spark of creativity in them.

## NEED AND JUSTIFICATION

In today's modern and fast moving technological society it has been seen that the prospective teachers are very much stressed. Their life get affected with the daily demands of the life. In a study it was found that 70% of students reported that they often and always feel stressed by their academic work and 56% always worrying about grades, tests, college acceptance. There are several reasons such as exams, assignments, papers, projects, competitive nature in the field of study, financial problems, worried about future job prospects which disturb mental as well as physical health of the students. When it becomes too much then mental health issues may develop.

In the field of psychology, education and allied sciences; a number of studies have shown that mental health is not only influenced by social, psychological and academic aspects of pupils but by creativity, teaching attitude and academic stress of the prospective teachers.

Mental health is defined by the World Health Organization as a state of well-being in which every individual realizes his or her own potential, and can cope with the normal stresses of life, work productively and is able to make tangible contributions to her or his daily functions as well as the community. Therefore, having a healthy mental state facilitates our life to the fullest extent. It is a psychological well-being and satisfactory adjustment to the society and to the ordinary demands of life.

Mental health is related to the promotion and prevention of mental disorders, and the treatment and rehabilitation of people affected by mental disorders. This is a positive state of mind engendering a sense of well-being that enables a person to function effectively within the society. Education plays a predominant role to aim at all round development of the learners focusing on their physical, intellectual, moral and spiritual aspects.

UNESCO publication (1955) on "Education and Mental Health" stated: the school is society's formal instrument for molding the young, for transmitting the culture, heritage, for incubating the values, ideals and modes of behaviour on which both the continuity and the evolution of humanity are defended. The teachers are more responsible and duty bound to shape the learners to develop mentally healthy. Mentally healthy teachers alone can be able to nurture mental health of their learners. Hence the budding teachers need sound mental health in order to become effective teacher in future.

No study has been undertaken so far with the prospective teachers on their mental health and stress in relation to creativity. The researcher being a teacher educator and having passed **M.Sc.in Microbiology** and **M.Ed.** gone through moreover two years of experiences in teacher education institutions and is interested to know how mental health and stress influences the creativity of prospective teacher.

### Statement of the problem

The research problem is the first and most important step of the research process. It is like the discovery of a goal before undertaking a journey. As in the absence of a destination, it is impossible to identify the shortest route in the absence of clear research problem. A research problem is like a foundation of building.

Defining a research job is the fuel that drives the scientific process, and is the foundation of any research method and experimental design, from true experiment to subject work .It is one of the first statements made in any research paper and, as well as defining the research area, should include a quick synopsis of how the hypothesis was arrived at.

Operationalization is then used to give some indication of the exact definitions of the variables, and the type of scientific measurements used. This will lead to the proposal of a viable hypothesis. As an aside, when scientists are putting forward proposals for research funds, the quality of their research problem often makes the difference between success and failure.

**“Mental health and stress in relation to creativity of prospective teachers.”**

### **Research Question**

1. What is the level of Mental Health, Stress and Creativity of prospective teachers?
2. What is the relation between mental health and creativity?
3. What is the relation between stress and creativity?

### **Objectives of the study**

The study was conducted with following main objectives;

1. To study the mental health of prospective teachers in the context to gender and locale.
2. To explored to find out the stress level of prospective teachers on the basis of gender and locale.
3. To find out the Creativity of prospective teachers in the context to gender and locale.
4. To investigate the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.
5. To assess the relationship between stress and creativity of prospective teachers on the basis of gender and locale.

### **Hypothesis of the study**

Following Hypothesis was prepared to achieve the objectives of the study:

1. There is significant difference in the mental health of prospective teachers in the context to gender and locale.
2. There is significant difference in the stress level of prospective teachers on the basis of gender and locale.
3. There is significant difference in the Creativity of prospective teachers in the context to gender and locale.
4. There is significant difference in the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.
5. There is significant difference in the relationship between stress and creativity of prospective teachers on the basis of gender and locale.

### **Operational definition of the terms**

1. **Mental Health:** Mental Health connotes those behaviors, perception and feelings that determine a person's overall level of personal effectiveness, success, happiness and excellence of functioning as a person. In the following study six popular indices of mental health is taken in to consideration.
  1. Emotional stability
  2. Over-all adjustment
  3. Autonomy
  4. Security-Insecurity
  5. Self concept
  6. Intelligence
2. **Stress:** Stress is the body's reaction to any change that requires an adjustment or response. Stress is a normal part of life. We can experience stress from our environment, our body and our thoughts.
3. **Creativity:** Creativity is thinking abilities, namely convergent thinking and divergent thinking. Verbal and non-verbal tests of creativity, tasks pertaining to 3 traits, viz. fluency, flexibility and originality have been used.
4. **Faizabad District:** By Faizabad District Researcher means area determined by Municipality.
5. **Prospective Teachers:** By prospective teachers it is meant all the pupil teachers of government and self-financed B.Ed. and BTC colleges.

6. **Locale:** This discusses the place or setting of the study. It describes in brief the place where study is conducted.

### Delimitation of the study

- Due to the lack of time, money and energy the present study will be limited on the basis of the following factors:
- The study has been limited to the student of Faizabad District.
- The study has been delimited to 500 sample including 250 male and 250 female prospective teachers of B. Ed. and BTC Colleges.

## CHAPTER-II

### REVIEW OF RELATED LITERATURE

#### 2.1.0 Introduction

#### REVIEW OF LITERATURE

A **literature review** is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews are secondary sources, and do not report new or original experimental work. Most often associated with academic-oriented literature, such reviews are found in academic journals, and are not to be confused with book reviews that may also appear in the same publication. Literature reviews are a basis for research in nearly every academic field. A narrow-scope literature review may be included as part of a peer-reviewed journal article presenting new research, serving to situate the current study within the body of the relevant literature and to provide context for the reader. In such a case, the review usually precedes the methodology and results sections of the work.

Producing a literature review may also be part of graduate and post-graduate student work, including in the preparation of a thesis, dissertation, or a journal article. Literature reviews are also common in a research proposal or prospectus (the document that is approved before a student formally begins a dissertation or thesis).

#### Types

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The main types of literature reviews are: **evaluative, exploratory, and instrumental.**

A fourth type, the systematic review, is often classified separately, but is essentially a literature review focused on a research question, trying to identify, appraise, select and synthesize all high-quality research evidence and arguments relevant to that question. A meta-analysis is typically a systematic review using statistical methods to effectively combine the data used on all selected studies to produce a more reliable result.

## Process and product

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Shields and Rangarajan (2013) distinguish between the *process* of reviewing the literature and a finished work or *product* known as a literature review. The *process* of reviewing the literature is often on going and informs many aspects of the [empirical research project](#). All of the latest literature should inform a [research project](#). Scholars need to be scanning the literature long after a formal literature review *product* appears to be completed.

A careful literature review is usually 15 to 30 pages and could be longer. The process of reviewing the literature requires different kinds of activities and ways of thinking. Shields and Rangarajan (2013) and Granello (2001) link the activities of doing a literature review with [Benjamin Bloom](#)'s revised taxonomy of the cognitive domain (ways of thinking: remembering, understanding, applying, analyzing, evaluating, and creating).

The first category in [Bloom's taxonomy](#) is remembering. For a person doing a literature review this would include tasks such as recognition, retrieval and recollection of the relevant literature. During these stage relevant books, articles, [monographs](#), [dissertations](#), etc. are identified and read. Bloom's second category *understanding* occurs as the scholar comprehends the material they have collected and read. This step is critical because no one can write clearly about something they do not understand. Understanding may be challenging because the literature could introduce the scholar to new terminology, [conceptual framework](#) and [methodology](#). Comprehension (particularly for new scholars) is often improved by taking careful notes. In Bloom's third category *applying* the scholar is able to make connections between the literature and his or her larger research project. This is particularly true if the literature review is to be a chapter in a future empirical study. The literature review begins to inform the research question, and methodological approaches. When scholars analyse (fourth category in Bloom's taxonomy) they are able to separate material into parts and figure out how the parts fit together. Analysis of the literature allows the scholar to develop frameworks for analysis and the ability to see the big picture and know how details from the literature fit within the big picture. Analysis facilitates the development of an [outline \(list\)](#). The books, articles and monographs read will be of different quality and value. When scholars use Bloom's fifth category *evaluating* they are able to see the strengths and weaknesses of the theories, arguments, methodology and findings of the literature they have collected and read. When scholars engage in *creating* the final category in Bloom's taxonomy, they bring creativity to the process of doing a literature review. In other words, they draw new and original insights from the literature. They may be able to find a fresh and original research question, identify a heretofore, unknown gap in the literature or make surprising connections. By understanding how ways of thinking connect to tasks of a literature review, a scholar is able to be self-reflective and bring [metacognition](#) to the process of reviewing the literature.

Most of these tasks occur before the writing even begins. The process of reviewing the literature and writing a literature review can be complicated and lengthy. It is helpful to bring a system of organization and planning to the task. When an orderly system can be designed, it is easier to keep track of the articles, books, materials read, notes, outlines and drafts.

## Studies related to creativity

**Singh,A.and Singh, R. (2014)** study on effect of average marks and status of family on the relationships between anxiety and creativity among intermediate students and he found that there is a positive and significant relationship between anxiety and creativity.

**Nautyal, A. and Negi, P.(2011)** study of a comparative assessment of the creativity in adolescents and found there is a considerable difference in the functioning of creativity of the adolescents, enrolled in private run and government run schools.

**Lall, A. (2009)** studied the scientific creativity of boys and girls of senior secondary schools of Bareilly she found there is no significance difference in scientific creativity of boys and girls at senior secondary schools.

**Rothenberg, A. (2009)** studied of creativity, mental health and alcoholism in this study he described about two specific functions homo spatial and janusian and find out that mental illness does not allow creativity but interlope it.

**Raj, A. (2008)**, the study of creativity among high school students in relation to their attitude towards science and the study revealed that creativity and attitude among high school students of science are moderate. There is significant correlation between creativity and attitude.

**Chaturvedi (2008)**,compared creativity of male and female students of B.Ed. and the study revealed there is no significant difference in creativity of boys and girls.

**Bertiz, H. (2005).** In this study, the attitudes of prospective science teachers towards creative drama and their opinions about narratives were investigated. To better understand the attitudes of prospective science teachers towards creative drama and also to determine whether their attitudes change in accordance with gender variable as well as to capture their opinions about the use of narrative, which is a sub-technique of creative drama, in science education, and he found that creative drama and narratives were very effective when learners attempt to acquire abstract concepts.

**Yadav (2004)** An international study of scientific creativity and some of its related factors and the results revealed that only personality typology seems to have main effect on scientific creativity. Variables like locate and sex do not have any significant effect on scientific creativity. Among the international efforts it is seem that the interaction of variables personality type and locate has the greatest and most significant effort on scientific creativity. Interaction of variables like, locate and sex has no significant effort on scientific creativity while that of personality type and sex is quilt significant. The interactional effort of all the three variables i.e. personality typology locate and sex is considerably significant.

**Özdemir,L. (2003).** In the study in which he examined the effect of creative drama course on emotional intelligence of the third grade university students at the Department of Classroom Teacher Education Program, and he found out that there was a meaningful difference between pre-test scores and post-test

scores of the students in the experimental group and that there was a remarkable increase in (2000) examined the effect of creative drama education on empathic skill and empathic tendency. In the study conducted on the students, who took creative drama education at Educational Sciences Faculty in Ankara University, Empathic Skill and Empathic Tendency Scales, which were developed by Dökmen (1988) were used. At the end of the study it was found out that drama had a remarkable effect on the students' level of empathic skills and empathic tendency.

**Akoğuz (2002).** In his study Akoğuz examined the effect of drama on developing communication skills. This study was carried out with voluntary students, who participated in the creative drama workshop in educational parks of Turkey Association of Education Volunteers. The sample of the study involved the first group of 22 students, who were aged 9-10-11 and the second group, who were aged 11-12-13. Throughout the creative drama workshop of 12 weeks, the development in the students' communication skills was observed, and these observations were registered regularly on the observation forms, and the video records were checked to prove their accuracy. The research results showed that compared to the observations made about each subject at the beginning of the experiment, creative drama caused a remarkable difference in development of communication skills at the end of the experiment. It was found out that especially the female students aged 9-10-11 used exaggerated sentences at "frequently" level much more than the boys did in the following weeks; that they were more interested in their environment than the boys were at "usually" level and that they listened to the others silently and by demonstrating that they were listening. As mentioned in the studies above, it is noticeable that the studies about the prospective teachers' creativity are limited while there are lots of studies in literature about creativity of the students at different grades.

**Devi (2002)** the influence of intelligence and creativity on the achievement in Mathematics among X class of Veshakhapatnam. To identify the level of intelligence among X class students in the selected secondary schools of Veshakhapatnam District. To identify the level of creativity among X class students in the selected secondary schools of Vishakhapatnam District. He found the difference, if any, between the measures of creativity of the subgroups boys and girls and found the relationship between creativity and intelligence among class X students and found that there is a significant to relationship between creativity and achievement. There is a significant positive relationship between boys and girls with regard to creativity. There exists a significant positive relationship between creativity and intelligence.

**Naseri (2002)** Computer Application teaching physics and effect on General and scientific creativity in relation to intelligence, S.H.S and attitude towards Media. To study the effectiveness of computer application as compared to conventional teaching regarding general creativity. To study the effect of intelligence attitude and SES, on general creativity its, components and scientific creativity. He found there is significant difference among attitude. Experiential SES and creativity. For high intelligence group lower SES strata with increasing positive attitude, the experimental group showed. A very high order of increase in their figural creativity scores a compare to control group.

**Bohra (2002)** Study of art and Appreciation, creativity, cognitive style of secondary students of Rajasthan. To find out the level of art appreciation, creativity, cognitive, creativity, Creativity cognitive styles of boys and girls (the rural urban pupil) To investigate the relationship among the three variables of study that is

art appreciation, creativity Cognitive style and found that the male and female students of secondary classes of Rajasthan do not differ significantly in terms of verbal creativity.

**Prakash(2002):** A study of Mathematical creativity and achievement of elementary school students in relation to problem- solving ability, Anxiety and socio Demographic variables. To study the relationship between each of the independent variable problem solving ability, anxiety environment; socio economic. Environment variable i. e. Mathematical creativity and achievement creativity. To study the influence of type of family, early schooling sex rural, urban differences on the Mathematical creativity and achievement. Problem solving ability was found to be positively and significantly related with mathematical creativity environment al factor (total) was found to be significantly correlated with anxiety and creativity.

**Prasad (2002)** Intellective and non-intellective factor associated with Mathematical creativity at elementary school stage. To find the relationship of intellects variables intelligence, creativity and Mathematical creativity of children .To study the difference in Mathematical creativity of children due to high and low socio economic status, sex differences urban rural differences. Status environment (homes and institutional) with mathematical creativity of children. He found that Intelligence is positively correlated with mathematical creativity. Socio economic status, Home institutional environment are positively correlated with mathematical creativity.

**Bose (2000)** A study of the effect of stoker in the enhancement of creativity in students in school. To find out the effect of stoker on general creative abilities of student of class VII, IX and class X of urban and rural children. To study of relationship between general creativity with respect fluency, flexibility, originality and students class VII, class IX, class X. He found that In comparing pre-test and post-test scores in case of both creativity and stroke during the workshop session and after treatment. The sample showed increase in score.

**Cornelious (2000)** investigated the factors affecting teacher competence of teacher trainees at the secondary level, revealed that intelligence, attitude towards teaching profession, and academic achievement of teacher trainees are the discriminating factors of the different groups of subjects.

**Kumar (1998):** A study of creativity among higher school secondary school students in relation to sex, types of school and ethnicity. To study the nature of creativity score. To find out sex different dimensions of creativity. To investigate the difference between high creative male students and high creative female student and he found that Sex, type of school ethnicity have their bearing on creativity. High creative females are significantly higher than high creative male.

**Nigam (1996)**A relational study find out relation among creativity, adjustment, and academic achievement of student of higher secondary level of urban rural area. He found the adjustment level, creativity and academic achievement of urban and area student were better than students of rural area.

**Singh (1996):** Study of creativity and personality and social maturity and found Creative person are more intelligent smart and self-controlled.

**Belquies (1994)**The study of creativity among boys and girls in selection to 5000 economic status To find out the relations between the creativity and socio economic status at difference levels. He found the difference in creativity with respect to sex. He found that there were positive relation between creativity and socio economic status. There is no difference in creativity with respect to sex.

**Nathen (1994)** - A comparative study of creativity with the respect of sex difference. He found there is no significant difference is creative ability, with the respect of sex difference.

**Skariah (1994)** studied creativity of teacher trainees' in relation to their self-concept, attitude towards teaching profession and success in teaching and found that high teaching success group and high attitude towards teaching group are more creative than the other groups.

**MulkRaj (1989)** - Designed a study to explore the relation between personality traits and creativity. He found that there is positive relationship between creativity and personality.

**Datta (1989)**- Difference in scientific creativity among high school students. Above the 90th percentile in originality and 99 percentile in elaboration. Creative students did not have good habits of readings and they were confident about their future aspiration. They have positive and high self-concept and were optimist about future aspiration. Parents of creative children had democratic style.

**Gupta (1989)** –“The creative deployment of secondary school children in relation to sex intelligence and urban and rural background. Intelligence and creative are passively correlated. Boys and girls are equally creative.

**Shayam (1989)**- Designed a study to explore the relation between sex and mathematical creativity. He found that boys were significantly more creative than girls.

**Shukla (1985)** - A relational study of creativity. To find out the relationship among creativity and psychological, sociological and economical factor. There is positive co-relationship among creativity and sociological, economical and psychological factors.

**Chanda (1985)**- Comparative study of creativity between girls and boy on components of creativity. Females of scored higher than males on all components of creativity. Found a statistically difference between male and females on all the components of creativity.

## Studies Related to Mental health

**Kumari R.(2018)** studied on stress in relation to mental health, adjustment and academic achievement of college students of Allahabad and findings revealed that mental health and adjustment affect the stress.

**Singh,P.(2014)**worked on mental health of primary school teachers in relation to their sex and job satisfaction and found that the no significant effect of sex on mental health of the government and private primary school teachers and also find the minor mean difference between the mental health of male and female teachers.

**Jadeja P.(2014)** worked on comparative study of mental health and women status and analysed the data revealed significant difference between the mental health of two groups married and unmarried women and find out that the mental health is high in the unmarried women's than married women's.

**William S. (2014)** studied on mental health of higher secondary school students in relation to their organizational climate and findings revealed that there is no co relation between mental health and organizational climate of class eleventh students studying in UP board schools. There is a significant relation between the mental health and organizational climate if class eleventh students studying in ISC schools.

**Archana (2013)** made an attempt to study the mental health in relation to moral judgement, intelligence and personality among B.Ed. prospective teachers. The sample consists of 820 prospective teachers. Mental Health Battery by Singh and Gupta, General Mental Ability Test by Jalota, Moral Judgement Test by Archana and Personality Questionnaire by Eysenck were used in the study. Research findings indicated that there is positive and significant relationship of moral judgement, intelligence and extroversion dimension of personality with mental health of prospective teachers, but mental health has no significant relationship with psychoticism and neuroticism dimensions of personality, There is a positive and significant relationship of mental health of prospective teachers with moral judgement, intelligence and extroversion dimension of personality for the groups of prospective teachers having high mental health, but mental health has no significant relationship with psychoticism and neuroticism dimensions of personality for the groups of prospective teachers having high mental health. There is no significant relationship of mental health with moral judgement, intelligence and different dimensions of personality for the groups of prospective teachers having low mental health. The relationship of mental health with moral judgement, intelligence and extroversion dimension of personality is stronger for the groups of prospective teachers having high mental health, but there is no variation in the relationship of mental health with psychoticism and neuroticism dimensions of personality for thegroups of prospective teachers having high and low mental health.

**Golgotra(2013) Journal** Golden research thoughts the study is aimed at the findings the mental health of government teacher and private teachers in relation to their locality and job satisfaction on bases of organizational climate.

**Dheventhiran, G. and Babu, R. (2013)** carried out a study on “The Mental Health and its relationship with Achievement in Mathematics of Higher Secondary students” 450 Higher secondary first year students in 8 schools from Ariyalur and Cuddalore districts were the sample. The study reveals that the mental health of the higher secondary students have high level of mental health and achievement in mathematics. There is a significant positive relationship between mental health and achievement.

**Vimala (2012)** examined the relationship between mental health and academic achievement of B.Ed. student teachers. The sample consists of 400 student teachers. Mental Health Questionnaire by Singh and Sharma and marks obtained by the previous academic year were considered as academic achievement. Findings suggested that there was no significant relationship between mental health and academic achievement of student teachers.

**Tiwari, P.S.etal. (2012)** carried out a study on “Mental Health and Quality of Life in, Rural Setting”. Eighty subjects varying along the dimensions of educational level (10th, graduate and post graduate) and gender (male and female) drawn from Eastern Uttar Pradesh formed the sample subjects were subjected to Measure of Mental Health by Jagdish and Srivastava (1983) and quality of life by Moudgil, Verma and Kaur (1986) as well as some background variables were also measured. Analysis revealed that mental health was positively correlated with quality of life of villagers. Findings revealed that quality of life correlated with education and predicted by background variables such as awareness, education, walking, age, trees and cleaning. Mental health and quality of life is a very important factor for everyone.

**Subramanyam,K. and ViswanathaReddy,S. (2012)** carried out a study on “Mental Health Status Among Professional and Non Professional Students”. 120 professional and non-professional college students were selected in Tirupati town, Chittoor District of Andhra Pradesh were the samples. Mental health status inventory was developed and restandardized by Reddy (1994) were administered the sample to assess their mental health status. Results revealed that professional students have better mental health status than non-professional students, women students have better mental healthier than men students and no significant interaction were found between type of course and gender with regard to their mental health status.

**Viswanatha Reddy, S. et al. (2012)** Carried out a study on “Impact of Mental Health Status on Intelligence and Academic Achievement Among High School Students”. 260 8th and 10th Class students from Chittoor district of Andhra Pradesh were the sample of the study. Mental health status inventory developed and standardized by Reddy (1992) was used to assess the mental health status of the subjects. Intelligence was assessed by using RPM. Results revealed that there was a significant difference between 8th and 10th class students. 10th Class students were better mentally healthier than 8th students. Gender, locality, caste, parents. Occupation, intelligence and academic achievement of the subjects were shown

significant on their mental health status. Order of birth, income of the family etc., were not shown any impact on their mental health status.

**Panda, P. K. (2012)** carried out a study on “Job satisfaction in Relation to Mental Health Among Elementary School Teachers in Odisha”. Data analysis for the study involved frequency distributions of Job Satisfaction scores and mental health scores, computation of mean and SD, Pearson’s product moment correlation, independent samples ‘t’ test, and two way ANOVA. Job-satisfaction and Mental Health scale were used. The interaction effect of job satisfaction on the teacher mental health among elementary school teachers is significant.

**Farzana (2012)** carried out a study on “Impact of Mental Health on Academic Achievement of High school students”. 600 students of 10<sup>th</sup> class selected randomly from various schools of Chittoor district were the samples. Mean, S.D, t-test and analysis of variance were used as the statistical techniques. The study revealed that significant impact on the performance of the students.

**Sonnak, C. and Towell, T. (2011)** studied the imposter phenomenon in British university students: relationships between self-esteem, mental health, parental rearing style and socio economic status. The role of perceived parental rearing style, parental background, self-esteem, mental health and demographic variables upon impostor phenomenon Psychotherapy: Theory Research and Practice intensity was investigated using a cross-sectional survey design, with 107 subjects (78 females, 29 males). A regression analysis revealed that both greater degree of perceived parental control and lower levels of self-esteem emerged as significant predictors of impostor fears, together accounting for 50% of the variation in impostor scores. Parental care score, parental educational and occupational level and subject's mental health and demographic information did not show a significant relationship to impostor scores. A post-hoc regression analysis indicated, however, that in addition to parental protection, lower care and poorer mental health was significantly related to increasing levels of impostor scores and with subjects having attended private school reporting lower levels of impostor feelings. In addition, subjects classified as impostors were found to report significantly higher GHQ scores (poorer mental health) than non-impostors. These findings, which are interpreted in terms of parenting styles, indicate that the role of parental overprotection may be especially implicated in impostor fears.

**Royal College of Surgeons in Ireland (2011)** “Measuring population Mental Health and social well-being”. The paper examines the relationship between indicators of positive and negative dimensions of mental health, social well-being and physical health. Cross sectional survey conducted with a representative sample of 10,364 Irish adults. Positive mental health is predicted by lower level of loneliness and higher level of social support. Lower level of social well-being was found to be the strongest predictors of negative mental health.

**Aksar, J.(2011)** investigated the relationship between study skills, mental health and academic performance of 179 male and female student teachers using Study Skills Assessment Questionnaire by

Patel and Mental Health Questionnaire by Anand. Findings suggested that study skills and mental health scores of male student teachers were higher than female student teachers.

**Maria (2011)** studied the mental health and academic achievement of B.Ed. student teachers. The sample consists of 376 student teachers. Mental Health Questionnaire by Singh and Singh and Academic Achievement (GPA Grade) marks obtained by the previous year were taken into consideration. It was found that there is a significant negative relationship between mental health of student teachers and their academic achievement.

**Mary, S. and Samuel, M. (2011)** conducted a study to find out the relationship between mental health and academic achievement of 360 male and female student teachers selected from five colleges of education in Chennai city. Mental health questionnaire by Singh and academic achievement marks obtained by the previous year were considered. Results indicated that there is a significant difference between male and female student teachers. Male student teachers were better in their mental health and academic achievement than female student teachers.

**Royal College of Surgeons in Ireland (2011)** “Measuring population Mental Health and social well-being”. The paper examines the relationship between indicators of positive and negative dimensions of mental health, social well-being and physical health. Cross sectional survey conducted with a representative sample of 10,364 Irish adults. Positive mental health is predicted by lower level of loneliness and higher level of social support. Lower level of social well-being was found to be the strongest predictors of negative mental health.

**Ghobary, B. and Hakimrad (2010)** studied the relationship between mental health and spirituality of 250 B.Ed. student teachers. Mental Health Questionnaire by Gupta and Spirituality Questionnaire by Singh were employed to subjects. Results revealed that there was a significant negative correlation between mental health and spiritual dimensions of student teachers.

**Hameed and Tharia (2010)** carried out a study to find out the relationship between mental health and emotional maturity among B.Ed. student teachers. The sample consists of 600 (300 male and 300 female student teachers) selected from different teacher training institutes of Malapuram district of Kerala. Mental health questionnaire by Singh and Emotional Maturity scale by Singhal were used to assess the subjects mental health and emotional intelligence. Findings suggested that male student teachers were secured better mental health scores than female student teachers and in case of emotionally maturity, female student teachers was better than male student teachers. There is a positive relationship between mental health and emotional maturity of student teachers.

**Bonab B. G.et al., (2010)** studied the relation between mental health and spirituality in Tehran university student. The aim of the current study was to investigate the relationship between mental health and spirituality in college students. To accomplish this goal, 304 college students were selected from different colleges of university of Tehran, and the following measures were administered on them: Symptom

checklist 90-R (SCL-90) and spiritual Experiences scale. Analysis of data revealed that there was a significant negative correlation between spiritual dimensions including: relation with God, finding meaning in life, spiritual actualization and activities.

**Kothari (2010)** studied the spiritual orientation and mental health of 100 student teachers selected randomly from Indore city. Spiritual Orientation Scale by Mithila and Mental Health Status Inventory by Kumar were administered to subjects. Results revealed that the high spiritual orientation group had significantly better mental health than the low spiritual orientation group. Spiritual orientation has significant effect on mental health of student teachers.

**Gupta, G. and Kumar, S. (2010)** examined the relationship between mental health, emotional intelligence and self-efficacy among B.Ed. student teachers. The sample consists of 200 (100 male and 100 female) student teachers from Kurukshetra University. Results show that emotional intelligence and self-efficacy are positively related with mental health. Male student teachers were better mental health, emotional intelligence and self-efficacy than female student teachers.

**Shabani and Hassan (2010)** conducted a study to find out the effect of intelligence on mental health of 247 (124 male and 123 female) student teachers. Mental Health Scale by Anand Kumar and Intelligence test of RPM by Raven were used in the study. It was found that there is significant relationship between intelligence and mental health of student teachers.

**Maula(2010)** Initiated a study on the relationship between motivation and mental health the findings of the study revealed that there was a low but positive relationship between academic achievement and mental health.

**Tajalli, P. et.al.(2010)** studied the relationship between daily hassles and social support on mental health of university students. The main purpose of this research was identifying relationship between daily hassles, social supports and mental health. In this regard, among the Islamic Azad University (IAU) students, 262 students have been selected randomly as sample group. Sarafino and Ewing Daily hassles Test (1999), Fleming social support Test (1982) and Goldberg General Health Questionnaire (1972) have been administered them. In analysis data, Person correlation coefficient, multiple regressions has been used. Results showed that between daily hassles and men hassles and mental health of university students was significant relation, also between social supports and mental health. Generally, between daily hassles, social supports and mental health of university students had significant relation.

**Sobhi, N.et al, (2010)** studied the efficacy of life skills training on increase of mental health and self-esteem of the students. The aim of this study is to achieve to effects of life skills training on providing mental health and self-esteem of university students. The study method was experimental research method. The type of design was before - after test design with control group. Statistical society of the present study comprised all boys 'students studying at University of MohagheghArdabili in 2009. Also, this study was conducted only on the individuals who gained 28 more in DASS questionnaire (which evaluates three

subscales of anxiety, depression, and stress), (n = 210). At the next stage the needed sample (i.e. 40 boy students {20 individuals in control group and 20 individuals in experimental group}) was selected randomly and distributed in two mentioned groups, randomly. Then, life skills were taught to experimental group for 8 sessions in four week) and no variable was exposed to control group during this period. At the end, 3 individuals from experimental group were omitted; finally the achieved data from 37 individuals was analyzed by descriptive statistics methods (frequently and percentage) as well as inferential statistics methods and (independent t test, MANOVA). The results showed that life skills training affects on decreasing mental disorders symptoms especially anxiety, depression and stress of students suspected to the mental disorder. This study showed that life skills training is a good method in decreasing mental disorders symptoms among the students suspected to the mental disorder.

**Gupta, G. and Kumar, S. (2010)** studied the mental health in relation to emotional intelligence and self-efficacy among college students. The paper studies the relationship of mental health with emotional intelligence and self-efficacy among college students 200 participants (Male=100 and female=100) were drawn from science and arts streams of Kurukshetra University, Kurukshetra. Data analysis involved the use of product moment method of correlation and t-test. The results indicate that emotional intelligence and self-efficacy are positively correlated with mental health. It also revealed that male students were better than female students in terms of mental health. Emotional intelligence, self-efficacy and mental health for female college students

**Mahendran, P. (2010)** carried out a study on “The Investigation of Mental Health Status of the DIET Teacher Trainees” by using the personal information schedule and Attor Mental Health Scale. Mean, Standard deviation, ‘t’ test correlation and analysis of variables were used as statistical techniques. 25 female and 25 males of Diploma teacher trainees in Salem District were the sample. The study revealed that there is no significant difference in the mental health variables of different groups of students.

**Cerin, E. et al., (2009)** studied the associations of multiple physical activity domains with mental well-being. In 2003–2004, two surveys collected data on Physical Activity, socio-demographics, height and weight, perceived neighborhood attributes barriers to Physical Activity, and physical and mental well-being from 2194 Australian adults. Leisure-time Physical Activity was independently linearly related to mental well-being in most demographic groups. Stronger effects were observed for vigorous-intensity leisure-time Physical Activity. Poor health as a barrier to Physical Activity explained only a small portion of the relationships of Physical Activity with mental well-being. The magnitude and direction of the effects of household, occupational and transport Physical Activity depended on age, gender, weight status and/or participation in other Physical Activity domains.

**Usha and Rekha studied,(2009)**, studied the Emotional Competence and Mental Health as predictors of Academic Achievement. Method: The survey was carried on a random sample of 530 secondary school students from the schools of Thrissur, Ernakulam of Kerala. The Tools used were Mental Health Status Scale (1999) by Usha, Anil and Remmya, Scale of Emotional Competency 2006 by Usha and Rekha, and Achievement Test in Physics 2004 by Usha and Suchitra. Results: Emotional Competency is the best predictor of Achievement in Physics of secondary school pupils. Mentally Healthy children accept

responsibilities, make their own decisions, plan ahead and set realistic goals. Significant gender difference doesn't exist in Emotional Competency, Mental Health and Achievement in Physics but high means associated with girls show that they are superior in Emotional Competency, Mental Health and Achievement. There is no significant difference between rural and urban pupils in Emotional Competence, Mental Health and Achievement in Physics.

**Srivastava, S.K. (2009)** carried out a study on "An Assessment of Personality and Mental Health among Primary and Secondary Teachers" by using Mental Health Inventory and Extroversion and Introversion test. Sample consists of 150 primary and secondary school teachers in Haridwar city. Mean, standard deviation, Chi-square and 't' test were used as statistical analysis. The study revealed that personality type/traits influence the Mental Health of primary and secondary teachers and extrovert teachers enjoy better Mental Health as compared to introvert teachers in educational institutions.

**Niladhardey (2009)** carried out a study on "Teacher Adjustment and Mental Health" by using the Mangal Teacher Adjustment Inventory, and RCE Mental Health Scale of teachers. Measures of central tendency, Measures of variability, 't' test and chi square has been used as a statistical techniques. 120 secondary teachers from Raipur city of the state of Chhattisgarh were selected for the samples. The study revealed that mental Health and Teachers' adjustment is associated with each other. A mentally healthy teacher expected highly and vice versa. The female teachers were more mentally healthy and highly adjustable.

**Dewan, P. (2009)** examined the effect of gender and religion on mental health of tribal B.Ed. student teachers in Jharkhand. The sample consists of 400 male and female student teachers by using Anand Kumar and Thakur's Mental Health Inventory. Findings suggested that gender produces significant effects on mental health. Female student teachers were possessed good mental health than male student teachers. The main effects of religion on mental health were found to be significant. Student teachers belonging to Christian community were better in their mental health than the tribal student teachers.

**Pandey (2009)** carried out a study to find out the effect of mental health and intelligence on academic performance of prospective teachers. The sample consists of 520 male and female prospective teachers. Mental Health Questionnaire by Sharma, Intelligence Scale by Raven and Academic Performance scale by Singh were employed to subject sand reported that there was no significant difference between male and female prospective teachers on the measures of mental health, academic performance and intelligence.

**Gelat (2009)** studied the effect of mental health on educational achievement of 100 male and female prospective teachers. Mental Health Questionnaire by Gupta and Academic Achievement (marks obtained by the students on their previous academic year were taken into consideration). Results indicated that there was significant effect of mental health on educational achievement. There was no significant effect of sex on educational achievement and there was no interactional significant effect of mental health and sex on educational achievement.

**Huijun, Li. et al.(2008).** Studied the variables predicting the mental health status of Chinese college students. The purpose of this study was to examine variables that affected the mental health of Chinese college students. The variables were ethnicity, gender, age, place of origin, and level of satisfaction with major. Mental health status was classified into Groups A, B, and C, as measured by the University Personality Inventory. Group A referred to students with severe mental health problems, and Group C students had no symptoms of mental health problems. The results indicated that ethnicity, gender, age, and level of satisfaction with one's major could significantly differentiate Group A and Group C students. The strongest predictor of Group A and Group B relative to the Group C membership was the level of satisfaction with one's major. Implications and directions for future studies were presented.

**Perumal,R. (2008)** studied about mental health status and locus of control related to the achievement of eighth standard English medium students. Method : The sample of the study constituted of a representative group of 450 8th standard students of Kerala State. The Mental Health Scale developed by Abraham & Prasanna (1981) and Malayalam version of Rotter's Internal, External Locus of Control Scale were used. Results : There was a significant difference in the correlation between Mental Health status and Locus of Control in the sample based on locale and gender. There was a significant difference in the correlation between Mental Health status, Locus of Control and Achievement in English in the total sample and sub sample based on gender and locale.

**Khan, S. and Srivastava, B. (2008)** studied Teacher-Burnout in Relation to Mental Health. Method : The sample of the study comprised of 640 school and college teachers of four districts of Eastern U.P. The investigators used – Burnout Scale by Dr. Tripte Hatwal, Mithila Mental Health Status Inventory (MMHSI) Hindi adaptation by Anand Kumar and GiridharP.Thakur. Results : The findings of the study revealed that teachers with poor Mental Health were prone to more Burn-out than the average and good mental health groups. The persons scoring high on mental health scale were likely to possess those negative personality factors. Persons with poor mental health were egocentric, concerned more about their needs, feelings, ideas and opinions.

**Basu, S. (2008)** studied the gender and mental health – a comparative study of teachers in primary schools and colleges. A sample of 225 primary school teachers and 150 college teachers from Rohilkhand region was selected using multi-stage random sampling technique. The mental health inventory (MHI) developed by Jagdish and Srivastava was the tool used. Major findings of the study were: 1. College teachers have significantly better mental health than primary school teachers. 2. Male teachers working in primary schools as well as colleges have significantly higher level of mental health than their female counterparts.

**Perumal,R. (2008)** studied about mental health status and locus of control related to the achievement of eighth standard English medium students. Method : The sample of the study constituted of a representative group of 450 8th standard students of Kerala State. The Mental Health Scale developed by Abraham & Prasanna (1981) and Malayalam version of Rotter's Internal, External Locus of Control Scale were used. Results: There was a significant difference in the correlation between Mental Health status and Locus of Control in the sample based on locale and gender. There was a significant difference in the correlation

between Mental Health status, Locus of Control and Achievement in English in the total sample and sub sample based on gender and locale.

**Perumal, R. (2008)** investigated the mental health, locus of control and academic achievement of B.Ed. English medium student teachers. The sample consists of 450 male and female student teachers of Kerala state. Mental Health Scale by Abraham and Prasanna and Internal-External Locus of Control Scale by Rotter were used in the study. Findings suggested that male and urban student teachers scored better in their mental health and locus of control than female and rural student teachers. There was a significant difference between mental health, locus of control and academic achievement in English medium student teachers.

**Hafeez (2008)** studied the mental health of 80 male and female Hindu and Muslim B.Ed. student teachers. Mental Health Questionnaire developed by Anand Kumar was administered to sample and concluded that Hindu student teachers were possess good in their mental health than Muslim student teachers.

**Krishnan, R. S. (2008)** conducted a study on mental health of B.Ed. student teachers. The sample consists of 420 student teachers from University IASE, Gulam Ahmed and Navabharathi colleges of Tamil Nadu. Mental Health Battery by Singh and Sharma was used in the study. Findings revealed that female student teachers possess better mental health than male student teachers.

**Kumar, S. R. (2008)** conducted a study on academic achievement in relation to their mental health and home environment of B.Ed. student teachers. The sample consists of 892 male and female student teachers. Home Environment Questionnaire by Hurugeswari, Mental Health Questionnaire by Shen and Gupta and Academic Achievement marks obtained by the previous year were taken into consideration. Results indicated that male and female student teachers differed significantly in their mental health and home environment.

**Singh (2007)** assessed the mental health status of high and low emotional intelligence B.Ed. student teachers (N=400; 200 male and 200 female) from various colleges of Varanasi. Emotional Intelligence Scale by Singh and Mental Health Status Inventory by Kumar were administered to assess the subjects' emotional intelligence and mental health status. Results suggested that there was significant difference between mental health of the aforesaid two groups; high emotional intelligence group have better mental health than low emotional intelligence group.

**Suresh (2007)** studied the effect of the emotional intelligence as a correlate of mental health of student teachers. The sample consists of 602 male and female, arts and science group student teachers. Mental Health Questionnaire by Anand and Emotional Intelligence by Sharma were used in the study. Results revealed that male and female student teachers differed significantly in their mental health and science and arts student teachers did not differed significantly in their mental health.

**Sanwal, S. et al. (2006)** studied about the mental health of adolescents with specific reference to integration of personality. Method : The sample of the study comprised of 120 adolescents between the age group of 13 to 15 years, 60 girls and 60 boys. The sample was selected from Jaipur city. Mental Health Inventory by Jagadish and Srivastava, A.K was used for collecting the data. Results : The major findings of the study revealed that the percentage of integration of personality (IP) which means balance of psychic forces in the individual that includes the ability to understand and share other people's emotions, the ability to concentrate at work and have interest in several activities. The girls were leading in this category as they have more patience, tolerance, emotional stability and were more well-adjusted than boys.

**Jayaswal,C. (2006)** studied the effect of mental health, adjustment on academic achievement of 200 (100 male and 100 female) student teachers. Mental Health Inventory by Sen Gupta, Academic Achievement (marks obtained by the previous academic year) and Adjustment Inventory by Sharma were taken into consideration. Results show that mental health had significant determinant effect on academic achievement; student teachers having better social and emotional adjustment and attained good academic scores.

**Saxena(2006)** A study was conducted on the mental health of secondary school students in relation to their academic achievement was done. It was done on 600 students who were both boys and girls. The findings revealed were the interaction between teacher and students, positive reinforcement let them work hard and get good achievement in their exams.

**Adelman and Taylor (2006)** A study was conducted on children's mental health and recommended that mental health is strongly related to their academic achievement. Collaboration among agencies is essential to support the academic achievement and health social emotional development of children.

**Dholakiya, K. and Jansari, A. (2005)** made a study of mental health of the students residing in affected & non-affected earth quake area and gender. The sample comprised of 120 students of Kutch district of Gujarat state. Tools were used Kumar's mental health check List. The major findings of the study revealed that the students residing in earth quake area had more frustration. Boys showed more uneasiness and sleeplessness compared to girls. But girls showed more nervousness than boys.

**Prabha, E. (2005)** conducted a study to find out the influence of different variables on mental health of 120 (60 male and 60 female) prospective teachers. Mental Health Inventory by Gupta was administered to sample. Results supported that the number of siblings, father's education, father's occupation and family income had significant and positive influences on their mental health.

**Ravindran, A. and George, N. (2005)** examined the relationship between academic achievement in relation to mental health and coping styles of B.Ed. student teachers. The sample consists of 120 (70 male and 50 female) student teachers. Coping Style Questionnaire, Mental Health Inventory by Srivastava and Academic Achievement (previous academic year final marks obtained by the subjects) were considered in

the study. Findings concluded that high academic achievers are lower on coping styles; male student teachers were good in their mental health than female student teachers. Mental health is correlated to coping style.

**Gakhar, K. (2004)** conducted a study on locality and gender as the factors affecting mental health of B.Ed. student teachers. The sample consists of 569 student teachers. Singh's Mental Health Scale was administered to sample. It is noted that urban male student teachers were better in their mental health than rural male and female student teachers.

**Manhas, H. (2004)** conducted a study to find out the relationship between emotional intelligence with cognitive and non-cognitive variables of 400 prospective teachers in Jammu and Kashmir State. Results indicated that the cognitive variables such as general intelligence, creativity, academic achievement and non-cognitive variables such as self-concept, mental health, academic stress and family stress are positively and significantly related to emotional intelligence.

**World Health Organization (2004)** viewed that mental health is a state of well-being in which the individual realizes his or her own abilities and can cope with the normal stresses of life can work productively and fruitfully and is able to make a contribution to his or her community. Mental health is a state of complete physical, mental and social well-being and not merely the absence of disease or uniformity.

**Colarossi, D. and Eccles, R. (2003)** conducted a study on mental health and social support of B.Ed. prospective teachers. The sample consists of 217 prospective teachers. Mental Health Questionnaire by Anand Kumar and Social Support Scale by Sharma were used in the study. Results revealed that female prospective teachers secured higher mental health and social support scores than male prospective teachers.

**Saroj, V. (2003)** examined the emotional intelligence and mental health among B.Ed. student teachers. The sample consists of 120 male and female student teachers. Emotional Intelligence Scale by Schuttle and Mental Health Questionnaire by Verma and Verma were used in the study. Findings suggested that male student teachers scored significantly higher on emotional intelligence and mental health than female student teachers.

**Sindhu, P. (2003)** studied the relationship between emotional maturity, self-concept and mental health of 200 male and female prospective teachers. Emotional Maturity Scale by Sharma, Self Concept Questionnaire by Singh and Mental Health Questionnaire by Anand were used. Results revealed that there was negative correlation between self-concept and emotional maturity; a significant correlation was observed between emotional maturity and mental health of male and female prospective teachers.

**Shakunthala, R. (2001)** studied the adjustment of B.Ed. student teachers in relation to their teaching competency, emotional maturity and mental health of 160 male and female student teachers. Findings

suggested that high, positive and significant correlation between student teachers' adjustment and mental health. There was a high, positive and significant correlation was found between gender, adjustment, teaching competency, emotional maturity and mental health among student teachers. There was no significant difference in emotional maturity of male and female student teachers; there was a significant difference in age and adjustment and mental health of male and female student teachers.

**Hall Evelyn, N. (1999)** assessed the mental health of 60 male and female student teachers. Mental Health Inventory by Srivastava was administered to subjects and concluded that mental health scores of female student teachers are better than male student teachers.

**Pareek and Rao (1998)** studied the effect of mental health on intelligence of B.Ed. student teachers. The sample consists of 170 male and female student teachers drawn from ten B.Ed. Colleges of Delhi city. Intelligence Test by Prayag Mehta and Mental Health Questionnaire by Pareek were used. Results suggested that male student teachers scored higher mental health scores than female student teachers and female student teachers secured high intelligence scores than male student teachers.

**Grisay, N. (1998)** conducted a study to find out the influence of gender on mental health status of 250 (125 male and 125 female) student teachers from Karnataka. Mental Health Inventory by Srivastava was used to assess the subjects' mental health. Findings show that there was no significant difference between male and female student teachers on mental health.

**Fuligni, K. (1998)** examined the relationship between the mental health and academic achievement among 309 male and female student teachers. Mental Health Questionnaire by Srivastava and marks obtained by the previous academic year were considered as academic achievement. Results indicated that mental health and academic achievement was significantly correlated between male and female student teachers.

**Darlene, T. (1998)** studied the effect of intelligence, achievement motivation and mental health as correlates on academic achievement of 100 B.Ed. student teachers. Intelligence Scale by Raven, Achievement Motivation by Sharma, Mental Health Questionnaire by Anand and Academic Achievement (marks obtained by the previous year were taken into consideration). It is observed that intelligence; achievement motivation and mental health were positively and significantly correlated with academic achievement.

**Sharma (1997)** examined the self-concept, level of aspiration and mental health as factors in academic achievement of B.Ed. student teachers. The sample consists of 1020 student teachers and they were administered the Self Concept scale by Piers Harris, Level of Aspiration scale by Ansari and Ansari and Mental Health Questionnaire by Asthana. Findings suggested that mental health did not affect scholastic achievement, but influenced certain measures of self-concept of student teachers. The level of self-concept affected academic achievement positively and significantly and the level of aspiration had favorable influence on mental health of student teachers.

**Mizell, K. (1997)** conducted a study on the self-concept and mental health of 100 male and female student teachers. Mental Health Inventory by Srivastava was administered to sample and reported that male and female student teachers were not shown any significant difference on their self-concept and mental health scores

**Carol, S.et.al. (1996)** conducted a study on Neighborhood context of Adolescents Mental Health. This study examined how structural aspects of neighborhood context, specifically socioeconomic stratification and racial/ethnic segregation, affect adolescent emotional well-being, by shaping subjective perceptions of their neighborhoods'. Using a community based sample of 877 adolescents in Los Angeles country they found that youth in low specifically socioeconomic stratification neighborhoods perceive greater ambient hazards such as crime, violence, drug use, and graffitiing than those in high socioeconomic stratification neighborhoods. The perception of neighborhood as dangerous, in turn influences the Mental Health of Adolescents: The more threatening the neighborhood, the more common the symptoms of depression, anxiety, and conduct disorder. This investigation demonstrates that research into the Mental Health of young people should consider the socioeconomic and demographic environments in which they live.

**Srivastava (1995)** assessed the mental health of 50 male and female student teachers. Mental Health Questionnaire by Srivastava was administered to subjects. Results indicated that there was no significant difference between male and female student teachers on their mental health.

**Sharma (1995)** examined to find out the relationship between mental health and academic achievement of 504 student teachers from Allahabad city. Mental Health Questionnaire by Gupta and Academic Achievement (marks obtained by previous academic year were taken into consideration). Results suggested that the influences of mental health on academic achievement are positive and significant and socioeconomic conditions of the student teachers have not shown any relationship between mental health and academic achievement.

**Jegde,H. (1994)** examined the relationship between personality and mental health characteristics of Nigerian University B.Ed. student teachers. The sample consists of 870 (145 female and 725 male) student teachers. Results show that there was no significant relationship between self-assessed mental health and neuroticism of student teachers.

**Pathak, R.P and Rai, V.K (1993)** studied about mental health of higher secondary students in relation to Socio Economic Status. Method: The sample comprised to 501 students of Class IX – XII drawn from two urban and two rural higher secondary schools of Azamgarh. Mental Health Scale by Anand and Socio Economic Status Index by Bhattacharya were administered to the subjects. Results: The study revealed that the Mental Health of low socio economic status students was lower than that of the students with higher socio economic status. Female students were mentally healthier than the male students when socio economic status was controlled. Urban and Rural students did not differ significantly in mental health when socio economic status was controlled. Science students were mentally healthier than the Arts students when socio economic status was controlled.

**Kamau, and Catherine, W. (1992)** Burn-out, Locus of Control and Mental Health of Teachers in the Eastern Province of Kenya. Method : A sample of 385 teachers of both sexes participated in the study. The tools included Meslach Burn-out Inventory, Rotter's Locus of Control Scale and Teacher's Mental Health Scale developed by the researcher. Results : 1) Male teachers were emotionally over extended, exhausted, controlled, anxious, they were more capable of coping with stresses than female teachers. 2) Urban teachers were less emotionally exhausted, more internally controlled and anxious and had a low level of mental health.

**Verma, S.K. (1991)** examined the relationship between the mental health and academic achievement of 515 student teachers. Mental Health Questionnaire by Singh and Academic Achievement (marks obtained by the previous year) were taken into consideration and found that student teachers academic achievement and mental health scores were positively correlated with each other.

**Manjulavani, E. (1990)** studied about the Influence of School and Home Environment on the Mental Health of children. Method: A sample of 514 students from classes VIII to X 271 Boys, 243 girls from Tirupathi high school participated in the study. The tools used included 3 inventories dealing with home environment and school environment and mental health. Results : The home environment was a major, significant contributor to all the 3 components of mental health. The school environment contributed to liabilities and the mental health index.

**Mohapatra J, D. (1989)** A Study of Mental Health of Teachers serving in the primary schools of Puri Town. Method : 50 primary school teachers were drawn from the primary schools of Puri. Pertinent data were obtained through a questionnaire. Results : 1) Teachers felt that Mental Health depended on Physical health. 2) They expressed a view that a good social environment was necessary for good mental health.

**Kashyap and Veena (1989)** studied about Psychological determinants of adolescents problems. Method : The sample comprised of 1000 adolescent students studying class XI & XII of different institutions of Aligarh District. The tools used included Youth Problem Inventory of M. Verma, Anxiety Scale of Sinha and Sinha, and Frustration Scale of Chanhan and Tiwari. Results : Adolescent problems were found highly and positively related to anxiety, frustration and emotional immaturity. Rural girls felt significantly less secure than rural boys and urban girls.

**Bhattacharjee, M. (1988)** studied about the needs, frustration, and frustration intolerance and mental health of adolescent girls studying in certain urban secondary schools in West Bengal. Method : Five schools of 3 urban areas of Nadia and 25 parganas were selected and 804 Class VIII, IX and X girls were drawn. An adolescents girls Needs, Frustration and Frustration Intolerance Picture Projection Test, Series Neurotic Questionnaire (F – test), Rays Social Intelligence Test & Kuppaswamy Socio Economic Status Scale were used. Results : Materialistic sexual relationship, security and independence needs were high. Incidence of mental ill-health was high. There was a high positive correlation between Frustration –

intolerance and mental ill-health. There was a negative relationship between mental ill-health and frustration intolerance of the idealistic and altruistic need.

**Panda, B.N.(1987)** studied personality adjustment, mental health and acculturation among saoratribals. A sample of 23 schools was randomly selected comprising 10 schools from least accultured areas. 55 boys and 25 girls from most accultured areas. 80 boys and 40 girls of Oriya origin were selected. In total, there were 290 students (195 boys and 95 girls) from least accultured most accultured and Oriya culture selected as the sample for the study. The sample subjects were administered the following tools:

1. The Reddy personality adjustment inventory (1964)
2. The Eysenck psychoticism scale
3. The Moudsley personality inventory (1964)
4. The Spiel Berger State Trait anxiety inventory.
5. The Paltiinferiority/insecurity scale (1972)
6. The Chauhan and Tiwari frustration test scale (1974).
7. The Mahanta attitude scale towards cultural change(1979).

Major findings of the study were: 1. there was no significant difference between all the group combinations in relation to the trait anxiety. 2. Similarly Oriya Students (OS), Oriya Boys (OB) and Oriya Girls (OG) possessed a more favorable attitude towards culture change than Least Accultured Saora students (LAS), Most Accultured Saora Students(MAS), Least Accultured Saora Boys (LAB), Least Accultured Saora Girls (LAG) and Most Accultured Saora Girls (MAG).

**Abraham, C. (1985)** studied certain psycho-social correlates of mental health status of university entrants of Kerala. Method : The sample of the study comprised 880 pre degree students (454 males and 426 females). The tools used were: Psychological Needs Inventory (M.Abraham and F.Fernandez) Introversion Extroversion Scale (A.S.Nair) Students Adjustment Inventory (M.Abraham&R.Jacob) and Mental Health Status Scale (M.Abraham and B.Prasanna). The objective of the study were to explore the association between mental health status and certain psychosocial variables for the total sample and sub samples. Results : The main findings of the study were 1) Twenty two psycho-social variables discriminated between high and low mental health status groups (control group) and 18 psycho-social variables discriminated between high and low mental health status groups equated for intelligence, age and sex. 2) Twenty three of 25 psychosocial variables, except need for knowledge and new experience and involvement in politics showed significant correlation with mental health status but none of the values obtained were very high, showing that the influence was not considerable. 3) The factor structure for three groups-total sample, high mental health status group, and low mental health status group, differed significantly from one another in terms of number of structure factors, the loadings and in terms of factors present in each.

**Gupta (1980)** studied the personality and mental health concomitant with religiousness among the Tibetan students in the adolescent age group. The sample consisted of 313 adolescents (251 boys and 62 girls) studying in high/higher secondary Tibetan schools in different parts of the Himalayas, namely. Dharamsala, Dalhousie, Kulu, Mandi, Mussoorie and Darjeeling. The tools employed for the collection of data were sixteen personality factor questionnaire (form-A) by cattell, the cornell medical index and religiosity questionnaire, constructed by the investigator. Major findings of the study were: 1. Boys were more religious than girls. 2. Girls were more self-opinionated and imaginative than boys.

### **Studies Related to Stress**

**Singh and Singh (2014)** work on a comparative study the stress level of student PAC and police personal studying in secondary school of Allahabad and find out the stress level of PAC and police personnel student of secondary school of Allahabad indicate no significance difference and also find the stress level of male and female student indicate significant difference.

**J.C(2014)** stress resilience as the function of spiritual Intelligence Training and find out the stress resilience can be enhanced through spiritual intelligence training.

**Joshith,R.and Prakash,J.(2014)**studied stress as a correlate of mental health and teaching performance of B.Ed. teacher trainees in university practical exams. The sample consists of 100 male and female teacher trainees of arts and science groups. Stress Inventory for Teacher Trainees, Teaching Performance Rating Scale and Mental Health Inventory were administered to subjects. It was found that the scores of male teacher trainees in teaching performance; mental health and stress were higher in male teacher trainees than female teacher trainee.

**Fatma, W. (2014)**work on effect of stress on adjustment on elderly and find out the co relation analysis in case of stress adjustment relationship has shown there is significant negative co relation between total stress score and total adjustment score.

**Kaushik, P. (2014)** studied on stress among senior secondary students in relation to their aggressive behaviour and she found that

- There is significant difference between the stress level of male and female students studying in senior secondary students .Female experience more stress in comparison to the male students.
- There is significant difference between the aggressive behaviour of male and female students studying in senior secondary students. Male adolescent have higher level of aggression than female.
- There is significant relationship between the stress and aggressive behaviour of the male and female students.

**Kayastha(2011)** Studied on occupational stress among higher secondary level school teachers of Nepal and found that reveals that there is no significant difference in occupational stress among higher secondary level school teachers of Nepal in three different type of school.

**Sudharma and V (2011)**studied on teaching through stress management and stress proofing and found that the physical and psychological status of teacher influence and facilitate active construction and decontextualisation of knowledge and the long term effects of stress not affect the physical health but also affect the mental abilities.

**Devi,A. (2006-7)** in her study on occupational stress: A comparative Study of Worker in different Occupations” describes identifying the degree of life stress and role stress (LS & RS) experienced by professional women. It also studies the effect of life stress and role stress on various demographic variables like age, experience and income. For the purpose of study, 180 women professionals (six different occupations) were chose. It was found that science and technology professionals and doctors experienced significantly greater life stress and role stress.

**Dhanalakhsmi,R. (2008)** in her study on “Actors Predicting Stress of Employees in a Public Transport Corporation” measures the level of stress of the transport corporation employees and also studies the factors that could predict stress. It is found that the employees experience moderate level of stress.

**David W. Chan (2000)** conducted a study on Dimensionality of Hardiness and Its Role in the Stress – Distress Relationship among Chinese Adolescents in Hong Kong. In this study the three components of hardiness, life events, coping strategies, and psychological distress, were assessed in a sample of 245 Chinese secondary school students in Hong Kong. While commitment, control, and challenge were not clearly differentiable as distinct constructs, three dimensions interpretable as resigned acceptance, cynical concession, and pragmatic orientation emerged as district constricts. In the stress-distress relationship, hardiness did not interact with stress to moderate its influence on distress; however, both hardiness and stress had independent main effects on distress. Although high hardy students, compared with low hardy students, did not appraise positive events as having greater impact, they perceived that negative events had significantly lesser impact. In addition, low hardy students reported using passive and avoidant coping strategies significantly more frequently than high hardy students.

### **Studied Related to Prospective Teachers**

**Moshahid, M.( 2014).** The present study is an attempt to find out the impact of study habits, teaching attitude and academic stress on mental health of prospective teachers.

**Deepa, K. (2013)** explored to find out the relationship between mental health and academic achievement of prospective teachers. The sample consists of 110 (55male and 55female) prospective teachers. Mental Health Questionnaire by Shen and Gupta and Academic Achievement marks obtained by the previous year

was taken into consideration. Findings suggested that there is no significant difference between mental health and academic achievement of male and female prospective teachers.

**Mohaideen, S.R. and Maheswari, H. (2009)** studied on attitude of prospective teachers towards students evaluation of teachers and he found that only 16.5 percentage of the prospective teachers are having more positive attitude towards the students evaluation of teachers 19.5% of the prospective teachers studying in government aided institutions have more negative attitude than those in the self-financing institution.

**Khan, S. and Bina (2008)** examined the teacher burnout in relation to mental health of 640 prospective teachers of four districts of Eastern Uttar Pradesh. Burnout Scale by TripteHatwal, Mental Health Status Inventory by Anand Kumar and Giridhar Thakur was used in the study. Findings show that prospective teachers with poor mental health were prone to more burnout than the average and good mental health groups. Prospective teachers who scored high on mental health were likely to possess negative personality factors and prospective teachers with poor mental health were egocentric, concerned more about their needs, feelings, ideas and opinions.

**Schembri, K. (2006)** designed a study to find out the relationship between intelligence and mental health of B.Ed. prospective teachers. The sample consists of 100 student teachers. Intelligence Scale by Raven and Mental Health Questionnaire by Srivasatava were used in the study. Results suggested that high intelligence is associated with positive wellbeing; and deficits in intelligence with poor mental health of student teachers.

**Sinha, G. and Bhan, R. (1996)** studied the mental health among B.Ed. prospective teachers in Kurukshetra University. The sample consisted of 259 (141 male and 118 female) prospective teachers. Mental Health Inventory by Srivastava was used in the study. It is concluded that male prospective teachers were significantly higher mental health than female prospective teachers.

**Reddy (1995)** studied the attitudes of student teachers and success of student teachers, and reported that attitude of teachers do not significantly influence the success of student teachers.

**Roos et al (1995)**, the Influence of Early Field Experiences on the attitudes of Pre service Teachers, investigated the effects of early field experience on the attitudes of elementary pre service teachers toward teaching. Pre-test and post-test data were collected by means of an instrument employing a semantic differential scale measuring attitudes toward teaching. Results offer support for the inference that these pre service elementary teachers have positive attitudes toward teaching prior to early field experience and have even more positive attitudes toward teaching after their easily field experience.

**Anderson et al. (1995)** about the pre service Teacher's Attitude toward children. Results from a teacher attitude questionnaire given to 1,405 pre service teachers revealed large differences in attitudes toward children, associated with age, gender, and major. The most positive were females in elementary, least

positive males in secondary. Those in special education were most positive, in music art and physical education least positive. Whether these attitudes manifest themselves in the classroom remains unknown.

**Kumar (1995)**, in a study, found that there is significant difference in the attitude of male and female teacher trainees towards teaching profession.

**Goodwin et al. (1993)** in their study, the interactive Video Approach to pre service Teaching Training: An Analysis of students' Perceptions and Attitudes, investigated the integration of interactive video technology in to a traditional teacher education programme, analysing student attitudes about classroom management strategies. Students completed a survey following a seminar demonstration of an interactive videodisk on classroom management. Subjects revealed positive attitudes toward the use of interactive video.

**Koontz and Franklin (1992)** in their study 'An Assessment of Teacher Trainees Attitude' towards selected Instructional Media, they selected two groups: 168 students and 170 pre service teachers. Based on the final results of the study, it was concluded that a formal course in the selection and utilization of instructional media can function as a primary factor in the development of student's attitudes in a positive direction.

**Mathai (1992)** found that attitude towards teaching profession is a significant predictor variable of success in teaching. In the study, the effects of Hands-on, Minds-on Teaching Experiences on Attitudes of Pre service Elementary Teachers (1992) Pedersen and Mecurdy examines the effects of a science method course on the attitude of the pre service elementary teachers (N=145) toward teaching science. Results indicated a significant positive change in attitude that was not significantly different for low and high science achievers.

**Piel et al. (1992)** conducted a study in the Educational Attitudes of Pre service Teachers. Two populations of undergraduate students (pre service elementary education majors and non-education majors) were compared with respect to their attitudes toward learning. Data suggest that education majors' attitudes reflect generalized ambivalence toward important subject areas taught in elementary school, with significantly more positive attitudes displayed toward reading and literature. In spite of highly visible recommendations for more extensive academic coursework, results indicate the impracticability of addressing teacher competence through added coursework before appropriate attitude adjustment processes have been planned and implemented.

**Pugh et al (1991)** conducted a study, an Investigation of pre service Teachers' Attitude toward Theory and Practical Application in Teacher preparation. To determine program effectiveness, students were surveyed at the end of the spring and fall semesters for 6 years, examining their attitudes towards theory and practical application in teacher education. The study noted whether they felt competent about subject matter, audio-visuals, classroom management and routine, and communication. Results found their attitudes more positive in the fall on all four measures.

## Studies Related to Mental Health and Creativity

**Rothenberg, A. (2009)** study of creativity, mental health and alcoholism in this study he described about two specific creative functions homo spatial and janusian and find out that mental illness does not allow creativity but interlope pt.

**Singh Palta, R. (2007)** conducted a study to find out the relationship between creativity, mental health and academic achievement of prospective teachers. The sample consists of 180 prospective teachers. Creativity Scale by Singh, Mental Health Questionnaire by Shen and Gupta and Academic Achievement (marks obtained by the previous year were considered). Findings suggested that there was significant positive correlation among creativity and academic achievement and mental health and academic achievement.

**Kumar and Anand (2003)** carried out a study on creativity, problem solving ability in relation to mental health of 100 B.Ed. student teachers. Creativity Scale, Problem Solving Ability Questionnaire and Mental Health Questionnaire were used to assess the creativity, problem solving and mental health of the subjects. Results of the study revealed that creativity; problem solving ability and mental health was significant and positively correlated with student teachers.

**Cropley, A. J. (1990)** studied of creativity and mental health in everyday life and found relation is possible between creativity and mental health in everyday life.

## Studies Related to Mental Health and Stress

**Singh (2013)** examined the relationship between mental health and stress among B.Ed. student teachers of 50 student teachers from various B.Ed. colleges in Jalandhar city. Mental Health Questionnaire by Upinder Dhar and Teacher Stress scale by Smith was used in the study. It was found that there were significant differences between the stress scores of high and low mental health and the relationship between mental health and stress of student teachers. Student teachers with high mental health possess low teacher stress than the student teachers with low mental health and high academic stress.

**Sohail, L. (2013)** conducted a study to find out the relationship between stress, mental health and academic performance. The sample consists of 250 male and female prospective teachers. Mental Health Questionnaire, Stress Questionnaire and Academic Achievement marks obtained by previous academic year were taken as index. Results indicated that mental health and stress were low. There is negative correlation between academic performance, mental health and stress; also higher level of stress is associated with poor academic performance.

**Bishakha Majumdar, H.A. (2011)** made an attempt to find out the nature of the mental health, academic stress and self-esteem among prospective teachers. The sample consists of 350 prospective teachers studying at the University of Calcutta from both science and humanities stream. Mental Well-Being Scale by Warwick Edinburgh, Academic Stress Inventory by Singh and Self Esteem Scale by Rosenberg were used in the study. Results revealed that there is a negative relation between mental health; high self-esteem being predictive of positive mental health and adaptive coping strategies. Institutional variables such as teaching style, equipments and facilities and opportunities for career development were found to be related to academic stress.

**Naik, S. and Francis, T. (2010)** conducted a study on creativity in relation to mental health among B.Ed. student teachers in different colleges of Tamil Nadu. The sample consists of 150 (75 male and 75 female) student teachers. Mental Health Questionnaire by Sharma and Creativity Test by Singh were administered to subjects. It was found that there was no significant relationship ( $r = -0.18$ ) between high creativity student teachers with their mental health and no significant relationship was found between low creativity student teachers with their mental health.

**Alam, R. (2010)** examined the interrelationship between mental health, academic stress and academic success among B.Ed. student teachers on a representative sample of 250 student teachers (125 male and 125 female) selected from different colleges of Hyderabad city. Mental Health Inventory by Singh and Academic Stress Scale by Abha Rani Bisht were used in the study. Findings suggested that male student teachers were better in their mental health than female student teachers; both male and female student teachers secured low academic stress scores.

**Mohammad, T. (2009)** examined the effect of emotional intelligence on occupational stress, mental health and physical health on a sample of 250 prospective teachers. Emotional Intelligence Scale by Sharma, Teachers' Occupational Stress Questionnaire by Singh and Singh, Mental Health Inventory by Shen and Gupta and Physical Health Checklist were administered to sample. Results show that emotional intelligence and job burnout were explained 43.9% of mental health and 13.5% of variance of physical health of the prospective teachers.

**Ayodhya, G. (2006)** examined the effect of stress on mental health of 120 (60 male and 60 female) B.Ed. Student teachers. It is concluded that male and female student teachers experienced less stress and possess better mental health than male student teachers. The cognitive excellence is a resource for adapting to stressful conditions and fostering mental health.

**Chaudhary (2001)** explored to find out the gender differences on occupational stress and mental health of 400 male and female B.Ed. student teachers, selected out of 20 districts in Haryana state. Personal Data Sheet, Mental Health Scale by Magotra and Occupational Stress Scale by Padhi were used for the study. Results revealed that male student teachers were better than female student teachers on mental health and occupational stress.

**Ciarrochi, S. and Anderson, C. (2000)** studied the emotional intelligence, stress and mental health of 80 student teachers. To assess the emotional intelligence, stress and mental health of the subjects, Emotional Intelligence Inventory by Singh, Stress Questionnaire by Gupta and Mental Health Scale by Anand Kumar were used. Findings suggested that emotional intelligence is a distinctive construct as well as being important in understanding the relationship between stress and mental health of student teachers.

### **Studies Related to Mental Health, Stress and Creativity**

**Asha (2003)** examined the effect of creativity, intelligence and academic stress on mental health of B.Ed. student teachers. The sample consisted of 126 student teachers (61 male and 65 female) from various colleges of Calicut city. Descriptive Test of Creativity by Shen Gupta, Mental Abilities Test by Mathew, Academic Stress Scale by Singh and Mental Health Inventory by Anand Kumar were administered to subjects. Findings suggested that the high creative and high intelligent groups of male and female student teachers experienced less stress and better mental health than the less creative and less intelligent male and female student teachers.

### **RESEARCH GAP**

The study has been undertaken to gain new insight into mental health, stress and creativity of prospective teachers. In the field of psychology, education and allied sciences; a number of studies have shown that mental health is not only influenced by social, psychological and academic aspects of pupils but by creativity, teaching attitude and academic stress of the prospective teachers.

In today's modern and fast moving technological society it has been seen that the prospective teachers are very much stressed. Their life gets affected with the daily demands of the life. In a study it was found that 70% of students reported that they often and always feel stressed by their academic work and 56% always worrying about grades, tests, college acceptance. There are several reasons such as exams, assignments, papers, projects, competitive nature in the field of study, financial problems, worried about future job prospects which disturb mental as well as physical health of the students. When it becomes too much then mental health issues may develop. Education plays a predominant role to aim at all round development of the learners focusing on their physical, intellectual, moral and spiritual aspects.

No study has been undertaken so far with the prospective teachers on their mental health and stress in relation to creativity. The researcher being a teacher educator is interested to know how mental health and stress influences the creativity of prospective teacher.

## CHAPTER III

### RESEARCH METHODOLOGY

#### RESEARCH DESIGN

**Problem → Objective → Hypothesis → Selecting sample → Data collection → Data Analysis → Interpretation → Drawing conclusion → Educational Implication**

In any discipline whether it is science, social science, commerce or humanities etc, methodology plays a leading role in carrying out the study systematically and objectively to be more scientific in nature. Research is a systematic effort to find a solution of the problem. These efforts require certain techniques to be followed properly. Methodology is a total sum of these techniques/steps being carried out by a researcher in order to find out the real dynamics operating for any problem and behavioral outcomes. It is a kind of decision making process in which the researcher has to select the appropriate model, sampling techniques, measuring instruments and data analysis methods suitable for selected problem. However, the objectivity of the scientific investigation is contingent upon the accuracy of research methodology adopted by the researcher.

Research is a systematic effort to gain new knowledge. For good and appropriate results, investigations require systematic and accurate procedure. Anything to be done properly must be planned beforehand. This helps the researchers to proceed directly without confusing with the concomitant events. A well thought out plan of action, followed by a systematic execution brings out fruitful results. Research is not a haphazard task but it requires proceedings in a definite direction, done with definite intention of taking a specific problem and of finding its solution in a scientific manner.

Formulation of research problem is followed by research design. It is the scientific procedure within which research is conducted in a smooth and unbiased fashion. Research design is an arrangement of conditions for collecting and analysing the data in a manner that aims to combine relevance to the research purpose with economy in procedure, it is a kind of architecture prepared in advance by the researcher with minimum expenditure of time, money and other requirements.

In this regard the methodology has been presented in the following sections:

1. Null Hypotheses

2. Research Method
3. Population
4. Sample and sampling technique
5. Variable
6. Tools Used
7. Procedures for Data Collection
8. Statistical Analysis

### 3.1.0 Null Hypothesis

Before testing the hypothesis for significance level at 0.05 margin of error, research question and hypotheses help narrow the findings to the level of operationalizing the variables. “Research questions are questions in quantitative or qualitative research that narrow the purpose statement to specific questions that researchers seek to answer. Researcher typically develops them before identifying the methods of the study” (Creswell, Educational Research, 2012, pp. 110-111). On the other, “Hypothesis are statements in quantitative research in which the investigator makes a prediction or a conjecture about the outcome of a relationship among attributes or characteristics” (2012, p. 111). Since it is a survey research with cross-sectional techniques, using structured questionnaires, with re-standardization and pilot tested instrumentation. The research questions and hypothesis guide the researcher when ideas lost in the information pool. The research questions with their corresponding null hypotheses are stated in the following way.

In view of the above stated objectives, the null hypotheses for this study have been presented below for empirical verification:

1. There is no significant difference in the mental health of prospective teachers in the context to gender and locale.
2. There is no significant difference in the stress level of prospective teachers on the basis of gender and locale.
3. There is no significant difference in the Creativity of prospective teachers in the context to gender and locale.
4. There is no significant difference in the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.
5. There is no significant difference in the relationship between stress and creativity of prospective teachers on the basis of gender and locale.

### 3.2.0 Research Method

Research design may be referred to as the plan, structure and strategy of investigation conceived so as to obtain answers to research questions and control variances (Kerlinger, 1973). The research design therefore enables the researcher to anticipate what the appropriate research decisions should be so as to maximize the validity of results. It is critical that the choice of research design be appropriate to the subject

under investigation (Patton, 1987). In the case of quantitative research, the goal is to gather data that prove or disprove the knowledge claim (Borg & Gall, 1989).

In this study Ex post facto research has been used to collect the data. Quantitative research in education can be categorized as one of the two types, viz., descriptive studies and studies intended to discover causal relationships. Descriptive studies deal with finding out “what is,” and the causal-comparative method “is aimed at the discovery of possible causes for the phenomena being studied by comparing subjects in whom a characteristic is present with similar subjects in whom it is absent or present to a lesser degree” (Borg & Gall, 1989).

The descriptive method of research has been the most popular and widely used research method in sociology and education, because of the ease of this method. Information can be gathered by a questionnaire or interview schedule. Although the descriptive method of research is relatively less sophisticated in comparison to the experimental method, it has its own advantages. The descriptive studies are more than mere collection of data. They involve measurement, classification, analysis, comparisons and interpretations. Such researches seek to find answers to questions through the analysis of variable relationships. They collect and provide three type of information on (1) what exists with respect to variables or conditions in a situation (2) what we want by identifying standards or norms, with which to compare the present conditions or what experts consider to be desirable and (3) how to achieve goals by exploring possible ways and means on the basis of the experiences of others and opinions of experts.

In the activities of descriptive studies these researchers are not different from those of other researchers. As in any other study they (1) identify and define their problem; (2) state their objectives and hypotheses; (3) list the assumptions upon which their hypotheses and procedures are based; (4) choose appropriate subjects and source materials; (5) select or construct tools for collecting data; (6) specify categories of data that are relevant for the purpose of the study and capable of bringing out significant similarities, differences and relationships (7) describe, analyses and interpret their data in clear and precise terms; and (8) draw significant and meaningful conclusions.

A research design is characterized by adjective like flexible, appropriate, efficient, and economical and so on. The design which minimizes bias and maximizes the reliability of data collected and analysed is called a good design. A research design is the detailed procedure of testing the hypotheses and analyzing the obtained data. It is a detailed plan of investigation. The research design thus may be defined as the sequence of those steps taken ahead of time to ensure that the relevant data will be collected in a way that permits an objective analysis of different hypotheses formulated with respect to the research problem. It helps the researcher in testing the hypotheses by reaching valid and objective conclusions regarding the relationship between independent and dependent variables. The selection of any research design is obviously not based upon the whim of the researcher, rather it is based upon the purpose of investigation, types of variables and conditions in which the research is conducted. The purpose of any design is to provide a maximum amount of information relevant to the problem under investigation at minimum cost.

The present chapter deals with the method, population and sampling technique employed for the study, sample size, tools used, administration of the tools, i.e., the process of data collection and decision regarding data analysis.

### 3.3.0 Population

All research questions address issues that are of great relevance to important groups of individuals known as a research population. A research population is generally a large collection of individuals or objects that is the main focus of a scientific query. It is for the benefit of the population that researches are done. However, due to the large sizes of populations, researchers often cannot test every individual in the population because it is too expensive and time-consuming. This is the reason why researchers rely on sampling techniques. Population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait. Usually, the description of the population and the common binding characteristic of its members are the same. "Government officials" is a well-defined group of individuals which can be considered as a population and all the members of this population are indeed officials of the government.

A population refers to any collection of specified group of human beings or of non-human entities such as objects, educational institutions time units, geographical areas, prices of wheat or salaries drawn by individuals. Some statisticians call it universe. In the present study, all the Prospective teachers of B.Ed. and BTC degree colleges of Faizabad District population.

The population for the present study consists of all prospective teachers taking training in B.Ed. and BTC degree colleges of Faizabad District.

### 3.4 Sample and Sampling

**Sampling** is the process whereby a researcher chooses her sample. This might seem pretty straightforward: just get some people together, right? But how does Brooke do that? Should she just stand on a corner and start asking people to take her survey? Should she send out an email to every college student in the world? Where does she even begin? Because sampling isn't as straightforward as it initially seems, there is a set process to help researchers choose a good sample. Let's look closer at the process and importance of sampling.

Sampling is a process by which a relatively small number of individuals or measures of individual's objects or events is selected and analyst in order to find out something about entire population from which is selected. It has to reduce expenditure, save time and energy permit measurement of greater scope of produce greater precision and accruing. The repetitive proportion of population is called sample

The sample consist 500 students of prospective teachers of Faizabad District. The sample has been selected on the basis of stratified random sample. In this method from the list of students of every college are selected.

As the objectives of the study was based on a study of mental health and stress in relation to creativity of prospective teachers of Faizabad District, the study was conducted on randomly selected sample of 250 rural and 250 urban prospective teachers.

Sample involved in the present study consisted of 500 (250 males and 250 females) B.ED. and BTC degree college's prospective teachers taking training in the urban and rural areas of Faizabad District.

### 3.5 Sampling technique

In order to formulate a sample design that truly represents the population, both systematic bias and sampling error brought to minimum by following objective sampling procedure.

#### 3.5.1 Criteria of Selection of Schools

1. Only B.Ed. and BTC degree colleges were selected.
2. Colleges located in the urban and rural areas were selected.

#### 3.5.2 Criteria of Selection of Prospective Teachers

1. Only B.Ed. and BTC degree colleges prospective Teachers were selected.
2. Only 500 prospective teachers (250 male prospective teachers and 250 female prospective teachers) were selected.
3. Only 250 prospective teachers were selected from the urban colleges out of which 150 were male teachers the 150 were female teachers.
4. Only 250 prospective teachers were selected from the rural colleges out of which 150 were male teachers and 150 were female teachers

**Table no. 3.1 Showing Sample Distribution of secondary school teachers**

<b>Locale</b>	<b>Rural</b>	<b>Urban</b>	<b>Total</b>
<b>Gender</b>			
<b>Male</b>	<b>125</b>	<b>125</b>	<b>250</b>
<b>Female</b>	<b>125</b>	<b>125</b>	<b>250</b>
<b>Total</b>	<b>250</b>	<b>250</b>	<b>500</b>

#### 3.5.3 Selection of Colleges

In Faizabad District, there are too many degree colleges. Out of these, these colleges were selected reselected randomly for study.

**Table 3.2 Male prospective teachers of Urban colleges of Faizabad District**

S. No.	Institutions	Total Prospective Teachers
1	K.S. Saket Post Graduate College	25
2	Chaudhari Multan singh college of education	23
3	KalpanashikshanPrashikshanMahavidyalaya	24
4	Jhunjhunwala PG college Faculty of Engineering and tech.	27
5	Sri ParamhansshikshanParishikshansansthan, Mahavidyalaya, Ayodhaya, Faizabad	26
	Total	125

**Table – 3.3Female prospective teachers of Urban colleges of Faizabad District.**

S. No.	Institutions	Prospective Teachers
1	Mahila post Graduate College.	24
2	ManishiMahilaMahavidyalaya	27
3	GramodayaMahilaMahavidyalaya	26
4	SavitriMahilaMahavidyalaya	23
5	Sri VinayakMahavidyalayaFaizabad	25
	Total	125

**Table – 3.4 Male prospective teachers of Rural colleges of Faizabad District.**

S. No.	Institutions	Prospective Teachers
1	Kisan post Graduate college	17
2	Bhavdiya Degree College	15

3	District Institute of Education and Training , FZD	20
4	Laxmishobha Educational Institutes	38
5	SantramchaudhariVidyalaya	35
	Total	125

**Table – 3.5 Female prospective teachers of Rural colleges of Faizabad District.**

S. No.	Institutions	Prospective Teachers
1	Chandrabali Singh Urmila Degree College	26
2	R.D. Singh Memorial Institute.	22
3	Urmila Degree College	20
4	Shiv Savitri Degree College	32
5	Chandrawati Degree College	25
	Total	125

Table 3.2 and 3.3 shows the population of Urban Prospective Teachers including male and female Prospective Teachers. Table 3.4 and 3.5 shows the population of rural male and female Prospective Teachers.

Present study includes the Prospective Teachers who appeared for B.Ed. and B.T.C. In the 2016 year. In Urban Area total number of Prospective Teacher are 250 out of which 125 were male and 125 were female. In Rural area total numbers of Prospective Teachers during this study were 250 out of which 125 were male and 125 were female.

### 3.6.0 Variables of the Study

A variable is defined as anything that has a quantity or quality that varies. Your experiment's variables are not eating and throwing a ball. Now, let's science up that earlier statement. 'You are going to manipulate a variable to see what happens to another variable.' It still isn't quite right because we're using the blandest term for variable, and we didn't differentiate between the variables. Let's take a look at some other terms that will help us make this statement more scientific and specific.

Three types of variables viz. Independent and dependent variables have been kept under consideration under the present study. Male and female prospective teachers of B.Ed. and BTC

degree colleges are kept under independent variable where as their mental health; stress and creativity are kept under dependent variable. B.Ed. and BTC colleges are the controlled variable.

### 3.6.1 Independent variable

An independent variable is a variable believed to affect the dependent variable. This is the variable that you, the researcher, will manipulate to see if it makes the dependent variable change. In our example of hungry people throwing a ball, our independent variable is how long it's been since they've eaten.

**“Male and female student of urban and rural colleges.”**

### 3.6.2 Dependent variable

The dependent variable is the variable a researcher is interested in. The changes to the dependent variable are what the researcher is trying to measure with all their fancy techniques. In our example, your dependent variable is the person's ability to throw a ball. We're trying to measure the change in ball throwing as influenced by hunger.

**“Mental Health ,Stress and Creativity ”**

### 3.7.0 Tools used

There are three tools were used to collect the data in the present study-

1. Mental Health - Prepared by Pramod Kumar
2. Stress– Prepared by Vijaya laxmi and Shruti Narayan.(2008)
3. Creativity- Prepared by Baqer Mehndi.(1985)

### 3.7.1 DESCRIPTION OF TOOL

#### CREATIVITY (BAQER MEHDI)

The theoretical framework for the preparation of the test battery was provided by empirical studies on the nature of creativity. Especially useful in clarifying the concept of creativity has been the distinction Guilford has made between two types of thinking abilities, namely, convergent thinking and divergent thinking. Guilford defines divergent thinking as a kind of mental operation in which we think in different directions, sometimes searching, sometimes seeking variety. Unlike convergent thinking, where information leads to one right answer or a recognized best or conventional answer, divergent production leads to novel responses to given stimuli. The unique feature of divergent thinking to certain well known ability factors which seem to go with creative output. The primary traits related to divergent thinking and therefore to creativity have been enumerated by Guilford as follows:

1. Sensitivity to problems, a trait best indicated by tests asking examinees to state defects or deficiencies in common implements, or in social institutions, or to state problems created by common objects or actions.
2. Fluency of thinking, which has to do with fertility of ideas.
3. Flexibility of thinking, consisting of two factors. Namely, spontaneous flexibility (defined as “the ability or disposition to produce a great variety of ideas, with freedom from inertia or from

perseveration.”), and adaptive flexibility which facilitates the production of a most unusual type of solution.

4. Originality, indicated by unusualness of responses, clever responses or remote associations and relationships. One must get away from the obvious, the ordinary, or conventional in order to make a good score.
5. Redefinition, a factor which causes an ability to give up old interpretation of familiar objects in order to use them or their parts in some new ways. Improvising, in general, probably reflects the ability of re-definition.
6. Elaboration, indicated by a task in which the examinee is given one or two simple lines and told to construct on this foundation a more complex object.

In the preparation of the verbal and non-verbal tests of creativity, tasks pertaining to four of the above six traits, viz. fluency, flexibility, originality, and elaboration have been used. The remaining two could not be included as the test would have become very time-consuming to be the most important ones, and it was felt that taken together they would give valid information about the creative potential of the individual.

## DESCRIPTION OF THE VERBAL TEST

The verbal test which has been described in the present manual is part of the total battery which consists of both verbal and non-verbal tests.

The verbal test of creativity includes four sub-tests, namely, consequences test; unusual uses test, similarity test, and product improvement test.

(i) Consequences Test: - The consequences test consists of three hypothetical situations:

(a) What would happen if man could fly like birds?

(b) What would happen if our schools had wheels?

(c) What would happen if man does not have any need for food?

The subject is required to think as many consequences of these situations as he can, and write them under each situation in the space provided. The situations being hypothetical minimize the effect of experience and also provide the subject with an unlimited opportunity to make responses. The test encourages free play of imagination and originality. An example is given on the test booklet to acquaint the subjects with the nature of the test. The time allowed for the three problems is 4 minutes each.

(ii) Unusual Uses Test:- This test presents the subject with the names of three common objects – a piece of stone, a wooden stick, and water – and requires him to write as many novel, interesting and unusual uses of these objects as he may think of. The example given on the test booklet properly acquaints the subjects with the nature of the task. This test measures the subject’s ability to retrieve items of information from his personal information in storage. Evidently, it measures also the subject’s ability to shift frames of reference to use the environment in an original manner. The time allowed for the three tasks is 5 minutes each.

(iii) New Relationships Test: - This test presents the subject with three pairs of words apparently different-tree and house, chair and ladder, air and water, and requires him to think and write as many novel relationships as possible between the two objects of each pair in the space provided.

The test provides an opportunity for the free play of imagination and originality. The time allowed for each pair of words is 5 minutes.

(iv) Product Improvement Test: - In this test, the subject is asked to think of a simple wooden toy of a horse and suggest addition of new things to it to make it more interesting for the children to play. The time allowed is 6 minutes.

The total time required for administering the test is 48 minutes in addition to the time necessary for giving instructions, passing out test booklets to children and collecting them back.

## RATIONALE FOR THE ACTIVITIES INCLUDED IN THE TEST

In this section, an attempt has been made to give a rationale for the selection of different types of activities included in

- (1) Consequences:- The basis of this activity is Guilford's Consequences Test or Torrance's just Suppose Activity. The tasks included in this activity are based on familiar things but are presented in the form of a hypothetical situation. The tasks confront the subject with a situation which he can think of with a large number of possibilities to hypothetical happening. This implies cause and effect thinking. The event is mentioned and the subject has to think of the consequences that may occur as a result of that stimulus, event, or happening, whether the happening is usual or unusual, logical or illogical. Thus the number of relevant responses produced by the subject yields a measure of his ideational fluency, the number of shifts in the thinking trends of the consequences gives the measure of verbal flexibility, and the statistical infrequency of the response or the departure in thinking from the commonplace gives the measure of originality.
- (2) Unusual Uses:- The basic idea of these tasks comes from Guilford's Brick Uses Test or Torrance's Tin Can Uses Test, or Cardboard Boxes Uses Test. Common things like water, a wooden stick and a piece of stone are used as stimuli to let the subject's thinking go in different directions. The activity appears playful to the child but quickly puts him on a train of thought which will yield many novel responses. The number of relevant responses may give the measure of one's ideational fluency, the number of thought categories, the measure of verbal flexibility, and uncommonness of responses, the measure of originality.
- (3) New Relationships:- Mednick worked extensively with word associations, and his definition of creativity is based upon remoteness of such associations. In this activity, articles of daily use with which the child is quite familiar are taken so as to enable him to think more naturally about relationships between two apparently dissimilar objects. The items of this activity provide possibilities for scoring responses for fluency, flexibility, and originality in the same fashion as for Unusual Uses Test.
- (4) Product Improvement:- This test of verbal imagination is similar to the one found in Torrance's Product Improvement Activity. Torrance used a picture of a toy monkey, but in this test the subject is only asked to imagine a figure of horse toy and then give responses which would indicate what he will do to make it more interesting and unusual for the child to play with. The task takes the child to the world of imagination and spurs him to think in different directions. Apart from ideational fluency, the test also measures flexibility and originality.

## TECHNICAL INFORMATION ABOUT THE TEST

## 1. Item Validity

The test was administered to two samples – one urban and the other rural, consisting of 300 and 175 pupils respectively, studying in classes VII and VIII. Each item was scored for fluency, flexibility and originality. The raw scores for each item were converted into T scores with a mean of 50 and SD 10 and were added up to get the total score for each item. The item scores were then correlated, first, with the total activity scores, and then with the grand total i.e. the total of all four activities. The total activity scores were also correlated with the grand total.

Another method for studying the usefulness of the items in a given activity was to obtain separate scores for fluency, flexibility, and originality for each set of items under a given activity in order to see how the factor scores were correlated among themselves and how they correlated with the grand total.

Tables 1(a), (b) and 2 give the results.

TABLE 1(a)

Correlation of test items with the total activity score & grand total

(Urban Sample) N = 300

Activities	Item	Correlation with Activity Total	Correlation with Grand Total
I	1	.824	.741
	2	.861	.741
	3	.766	.555
II	1	.864	.758
	2	.864	.768
	3	.840	.708
III	1	.874	.722
	2	.882	.762
	3	.843	.659
IV	1	1.000	.761

All correlations are significant beyond .01 levels.

TABLE 1(b)

Correlation of test items with the total activity score & grand total

(Rural Sample) N = 175

Activities	Item	Correlation with Activity Total	Correlation with Grand Total
I	1	.751	.412
	2	.798	.496
	3	.745	.591
II	1	.695	.562
	2	.793	.692
	3	.760	.541
III	1	.717	.552
	2	.668	.502
	3	.692	.515
IV	1	1.000	.541

All correlations are significant beyond .01 levels.

The above table shows that:

1. The items in each activity are correlating highly with the activity total indicating that together they are measuring the same thing,
2. Their correlations with the grand total are also considerably high, again pointing to the fact that the items are highly internally consistent. This is more clearly shown in the urban sample than in the rural sample, but the correlations in the rural sample are also considerably high and leave no room for any doubt about the internal validity of the test.

TABLE 2

Correlation between Test Activities and the Total Creativity Score on Urban and Rural Samples

Activity	Urban (N = 300)	Rural (N = 175)
I	.818	.646
II	.862	.741
III	.806	.695
IV	.761	.541

All correlation are significant beyond .01 level.

The correlation in the above table show a significantly high degree of relationship between the activities and the total creativity score (all being significant beyond .01 level). The correlation range from .761 to .862 for the urban sample and from .541 to .741 for the rural sample. Such high correlations show once again the usefulness of the activities in measuring the creative thinking abilities of the individual which the test purports to do.

2. Factor Validity The correlations between the different factors of creativity and the total creativity score are given in Tables 3 and 4.

TABLE 3

Correlation Coefficients between Various Factors of Creativity Score

on the Urban Sample (N = 300)

Factors	Fluency	Flexibility	Originality	Creativity Total
Fluency	-			
Flexibility	.944	-		
Originality	.796	.776	-	
Creativity Total	.966	.960	.889	-

All correlations are significant beyond .01 level.

The correlations are much higher than would be expected on the basis of results obtained by Guilford in his factor analytic studies of the Structure of intellect. That they are as high as that may be due to the high verbal component present in each factor. It seems that the verbal factor is largely contributing to the inter-correlations among factors.

3. Correlation between Creativity and Intelligence

An important finding which enables us to place high reliance on the tests is their significant but considerably low correlations with verbal and non-verbal tests of intelligence. In the rural sample where Raven's Progressive Matrices was used, the correlations with verbal creativity tests were found to be .194 and .181 respectively. In the urban sample where Mohsin's verbal group tests of intelligence was used, the correlations with verbal and non-verbal creativity tests came out to be .176 and .159 respectively.

#### 4. Correlations between the Verbal and Non-verbal Tests of Creativity

The correlations between the verbal and the non-verbal tests of creativity based on the total creativity scores were found to be .456 and .356 for the urban and rural samples respectively, indicating that while our two tests are measuring the same construct, namely, creativity, they are giving somewhat different information about it. It is recommended that both the tests should be used to have more completed information about the creativity of an individual. Validity studies will indicate which type of creativity score is more specifically related to creative performance in a particular field.

#### RELIABILITY OF THE TEST

The test-retest reliabilities of the factor scores and also the total score were obtained on a small sample (N = 31).

TABLE 5

Test-retest Reliabilities of Factor Scores and the

Total Creativity Score (N = 31).

Fluency	Flexibility	Originality	Total Creativity Score
.945	.921	.896	.959

As will be seen, both the factor score and the total creativity score reliabilities are considerably high ranging from .896 to .959. These values are highly satisfactory. The reliability of the total creativity score which came out to be .959 is again quite high. Inter-scorer reliabilities for the factor scores in one study were found to range from .653 to .981.

#### VALIDITY OF THE TEST

The validity coefficients against the teacher rating for each factor are given in table 6.

TABLE 6

Validity Coefficient for Factor Scores Against Teacher Rating (N = 300)

Fluency	Flexibility	Originality	Total Creativity Score
.40	.32	.34	.39

All correlations are significant beyond .01 level.

The validity coefficients for factor scores and the total creativity score are high enough (sig. beyond .01 level) to place confidence in the use of the test. Higher correlations with teacher ratings are usually not obtained due to the unreliability of the ratings.

### 3.7.2 :STRESS SCALE ( VIJAYA LAXMI AND SHRUTI NARAYAN)

#### Introduction

**The concept of stress was first introduced in the life sciences by Hans Selye in 1936. Derived from the Latin word 'Stringere' stress was popularly used to mean** hardship, strain, adversity or affliction and again to denote force, pressure, strain or strong effort with reference to an object or person. Psychologically, stress is a *response* to an external threat that involves fear, anxiety and irritation or anger. Physiologically stress refers to physical discomfort or physical strain or some physical impairment. Men experiences stress when there are demands on **him, which** exceed his adjustive resources. Man's acijustive resources are limited and when the pressure on him exceeds he faces stress, a kind of disorganization of the body. Stress is a normal reaction for people of all ages. It's caused by our body's instinct to protect itself from emotional or physical pressure or in extreme situations from danger. Too much stress can have a negative effect on one's body mind and feeling. How one handles his stress has a lot to do with his health. When stress becomes too frustrating and lasts for long periods, it can become harmful distress. Recognizing the early *signs* of stress and doing something about it can improve the quality of our life.

Men and women differ in their reaction to stress. Sheller E.Taylor, a professor of psychology at UCLA revealed an interesting finding that 'women enjoy a greater life expectant than men'. One reason may be that the tending and befriending system protects them from some of the demanding effects of stress.

Stress is a subject which is hard to avoid. The termis discussed not only in our everyday conversation but has become a topic of public issue to attract widespread media attention; the issue of stress figures everywhere. Women and men have different views about it as stress can be experienced from a variety of sources. People across all ages, gender and professional fields view stress at different levels and experience it as originating from different sources.

Keeping in mind the degree, sources and dimensions in terms of which stress is expressed in light of the social system to which **one belongs** i.e. family, religion, neighborhood and workplace; it *was* considered necessary to develop a scale to assess the level of stress among university and college female teachers.

### **Development of Scale**

For assessing the level of stress amongst the university and college female teachers, scale was developed consisting of items keeping in mind the characteristics **and** dimensions of stress, mentioned by pestonjee (1992) and Selye (1936). The items were constructed both in Hindi and English. These 200 items were given to five experts in the field of psychology having considerable experience and were asked to judge the relevance of each item in relation to stress. Accordingly, the items were sorted out by the experts. Out of 200 items, 64 items were retained.

### **The Tryout**

The preliminary draft was administered to a sample of 200 University and College teachers. The sample group was asked to judge how often they go through the situations under question and indicate it on the four point scale (very often, often, sometimes and whenever) provided with each of the question by encircling the answers which suits them. The draft was administered to the subject individually.

**Scoring**—the scoring system is self-revealing, a maximum of four is awarded to answers expressing presence of stress very often said minimum of one is awarded to answers expressing no stress at all. For all the items more score is indicative of more stress.

The Final scale on the basis of the data obtained from all the 200 subjects, item analysis was carried out to determine the validity and difficulty indices of each item. The total number of scores was divided into a 'high' group and a 'low' group. To create those two groups the scores were ranked from highest to lowest so that the highest score was at the top of the list. High group was asighned as the top 27% of the scores and

low group as the bottom 73% of the scores. The discrimination index and difficulty level of item was found by method described by Salkin (2003).

only 26 items having difficulty index of 12 or more and validity index of above .24 were selected for the final scale. The frequency distribution and statistics of standardization sample is given in table 2.

**Table-2: Frequency distribution and statistics of score of standardization upon stress scale.**

Scores	Frequency	Smoothed frequency
Below-24	0	1.33
25-29	4	10.0
30-34	26	25.3
35-39	46	60.3
40-44	49	40.1
45-49	27	33.1
50-54	23	21.0
55-59	13	13.3
60-64	4	6.66
65-69	3	2.66
70-74	1	2.66
75-79	4	1.66
80 and Above	0	1.33
	N = 200	Mode = 39.0
Mean = 42.065	Median = 40.0	
SD = 9.25	SEM = .654	N = 200

**Reliability** :Reliability of the scale was determined by kuder-Richardson formula 20 on the scores of standardization sample. The reliability coefficient was equal to .94, which is very high.

**Validity** :To determine the validity of the scale, tetracoric between the total score on 26 items selected for final scale and 64 items pool of preliminary draft was calculated, which was .94. Thus, it can be said that 26 items scale is as good in discriminating subjects having high level of stress from low level of stress. Furthermore, factorial validity of the scale was also established by factor analysis of the data on 200 subjects on the 26 selected items using principal component analysis method. Seven factors mentioned in Table 3 were extracted after the rotation was done by Kaiser varimax method. Every item having more than  $\pm .45$  factor loading on any given factor was considered to be psychologically relevant in labeling of factors.

**Table-3: Factors underlying level of stress.**

Factor No.	Factors	Relevant Items and Rotated Factor loadings on them of the given factor	
I	Generalized Stress	10	.64
		11	.50
		15	.61
		19	.59
		22	.54
		25	.68
II	Memory Concentration and Thought Process problem	2	.72
		8	.51

		9	.54
		12	.59
		20	.45
		26	.64
III	Interpersonal Process Stress	4	.58
		5	.58
		6	.63
		7	.68
IV	Psychosomatic problems (upset stomach, respiratory & allergic disorder)	16	.68
		17	.73
		18	.65
V	Desire of Change	21	.67
		23	.65
VI	Avoidance & Carelessness Tendencies	13	.54
		14	.50
		24	.60
VII	Work stress and desire for sleep	1	.66
		3	.75

Cumulative percentage of eigen values Table-4 shows that 57.2% of the variance of the test is due to these seven factor.

**Table-4 : Contributed (Eigen Value) of seven principal factors extracted for stress scale.**

Factors	Eigen Value	Cum. Pct.
I	6.83	26.3
II	1.86	33.4
III	1.37	38.7
IV	1.33	43.9
V	1.22	48.6
VI	1.13	52.9
VII	1.11	57.2

#### Directions for administration and scoring

1. It is a self-administering scale. It can be administered on individual as well as in group setting the instructions printed on the scale form are sufficient to take care of the questions that are asked.

2. No time limit should be given. However, most of the subjects finish it within 15 minutes.

3. Though the scale is self-administering, instructions printed on the scale form should be read out to the subjects.

4. Before administering the scale, it is advisable to emphasize orally that replies should be checked as quickly as possible and frankness and sincere cooperation are required. The subjects should be told that the replies would always remain strictly confidential.

5. It should also be emphasized that none of the options are right and wrong.

6. It should be duly emphasized that all the items have to be answered in terms of the options mentioned i.e. very often, often, sometimes and never.

7. Each items score are to be awarded according to following score very often (4), often (3), sometimes (2) and never (1).

The maximum of 104 and the minimum is 26. Scores obtained for each item are summated to get a total score. The score obtained from stress scale range between 26-104.

Percentile equivalents of raw scores were calculated on the basis of the graphical method.

**Table-5 : Percentile equivalents of Raw Score upon Stress scale for female University and College teachers.**

Raw Scores	Percentile Score
78	99
66	96
59	93
56	90
54	87
53a	84
52	81
50	78
49	75
48	72
47	69
46	66
45	63
44	60
43	57
42	54
41	47
40	41
39	35
38	30
37	27
36	24
35	20
34	15
33	12
32	9
31	6
30	3

### 3.7.3: MENTAL HEALTH BATTERY( PRAMOD KUMAR)

The concept of mental health is as old as human beings. In recent years clinical psychologists as well as educationists have started giving proper attention to the study of mental health. However, in India, relatively very few works have been conducted.

Mental health as defined by Kornhauser (1965) connotes those behaviours, perceptions and feelings that determine a person's overall level of personal effectiveness, success, happiness and excellence of functioning as a person. It depends on the development and retention of goals that are neither too high nor too low to permit realistic successful maintenance of belief in one's self as a worthy, effective human-being (Lakshminarayanan&Prabhakaran, 1993). So a mentally healthy person is firm in his intentions and is least disturbed by strains and stresses of day-to-day life.

Thus the concept of mental health takes a 'Gestalt' view, of the individual. It incorporates the concepts of personality characteristics and behaviour all in one. It may also be understood as the behavioural characteristic of the person. A mentally healthy person shows a homogeneous organisation of desirable attitudes, healthy values and righteous self-concept and a scientific perception of the world'sawhole. Several psychologists like Erickson (1936), Rogers (1969), Hurlock (1972) have expressed their view in a similar tone. A mentally sound or healthy person should also be understood as a dynamic and conscientious person who is found to be reasonably rational in the choice of means for the realisation of his or her pious ends (Anand, 1988). So mental health is an attitudinal concept toward ourselves and others (Lehner&Kubs,' 1962). It also presents a humanistic approach towards the understanding and assessment of the self, positive feeling, attitudes towards self and others.

After reviewing the literature in this field (Jahoda, 1959 ; Maslow &Mittlernan, 1951 ; Rogers, 1961 ; Whittaker, 1970), following six popular indices of mental health were finally selected for inclusion in the present battery :

- (1) Emotional Stability
- (2) Over-all Adjustment
- (3) Autonomy
- (4) Security-Insecurity
- (5) Self-concept
- (6) Intelligence

A brief description of each of these indices is as under:

#### 1. Emotional Stability

It refers to experiencing subjective stable feelings which have positive or negative values for the individual.

#### 2. Adjustment

It refers to individual's achieving an overall harmonious balance between the demands of various aspects of environment, such as home, health, social, emotional and school on the one hand and cognition on the other.

#### 3. Autonomy

It refers to a stage of independence and self-determination in thinking.

#### 1. Security-Insecurity

It refers to a high (or low) sense of safety, confidence, freedom from fear, apprehension or anxiety particularly with respect to fulfilling the person's present or future needs.

#### 2. Self-Concept

It refers to the sum total of the person's' 'attitudes and knowledge towards himself and evaluation of his achievements.

#### 3. Intelligence

It refers to general mental ability which helps the person in thinkingrationally, and in behaving purposefully in his environment.

## METHOD

### Item Analysis

MHB intends to assess the status of mental health of persons in the age range of 13 to 22 yrs. As it is a battery of six tests, so items for each part were separately written and submitted to a group of experts in the fields to judge their face validity. Subsequently, language experts also made necessary corrections and modifications. Following Kelley's method, (N = 370) they were subjected to item analysis which finally yielded about 150 items for the MHB. In selecting item preference was given to those items which had high positive discrimination index (Singh, 1998). The social desirability values of the items in the first five parts were determined by correlating the items with Hindi version of Morlowe-Crowne (M-D) Social-Desirability Scale (1960). Items which yielded high and significant correlations, with **M-D** scale were dropped. Finally a set of 130 items were retained for **MHB**. Following are 130 items selected dimension wise for MHB.

		<b>Total No, of Items</b>
Part I	Emotional Stability (ES)	15
Part II	Over-all Adjustment (OA)	40
Part III	Autonomy (AY)	15
Part IV	Security-Insecurity (SI)	15
Part V	Self-Concept (SC)	15
Part VI	Intelligence (1G)	30
		<b>Total = 130</b>

### Instructions

The following standard steps must be followed for smooth administration of

MHB:

- (i) Instruction for each part is separate and is printed just before the items for the concerned part starts. The examinees should read the instruction carefully and if there is any confusion, they should ask to clarify it by raising their hands. The examiner should attend to such examinee very carefully.

- (ii) There is no fixed time limit for the first five parts. However, generally a normal examinee having average mental health takes about 25 minutes in giving complete answers.
- (iii) Part. VI is a speed test. The total allotted time for this part is 10 minutes. Therefore, all examinees must start answering the items and stop at the time instructed by the examiner. They are required to work as fast as possible.

### Scoring

The scoring of MHB comprises of two sections- Section A and Section B. **Section A-** Item Nos. I to IV of preliminary information should be given weight to determine socio-economic status (SES) of the examinee. d] [k] x and ?kof item No. II, III and IV each should be given the score of 1, 2, 3, and 4 respectively whereas d] [k] x] ?k andM+ of item No. I should be given a score 5, 4, 3, 2 and 1 respectively. Scores earned should be added together to yield final total score and finally, SES should be judged as under:

15 17 = Upper

9 14 = Middle

8 or below - Low

Section B-The answers of those items (in each part) which tally with the answers given in the scoring key would be given a score of +1. If they don't tally, they will be given a score of zero

### Scoring

Part I	Item Nos.:1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 14, 15 = ugha
	Item Nos. 6, 11, 13 = gka
Part II	Item Nos. :16, 19, 22, 26, 27, 30, 35, 37, 40, 41, 42, 43, 47, 49, 50, 52, 53 = gka
	Item Nos.17, 18, 20, 21, 23, 24, 25, 28, 29, 31, 32, 33, 34, 36 38, 39, 44, 45, 46, 48, 51, 54, 55 = ugha

<b>Part III</b>	: Item Nos. : 58, 60, 61, 62, 63, 65, 66 = d ItemNos. : 56, 57, 59, 64, 67, 68, 69, 70 = [k
<b>Part IV</b>	: Item Nos. :71, 72, 73, 74, 75, 77, 79, 80, 82 = gka Item Nos. :76, 78, 81, 83, 84, 85 = gka
<b>Part V</b>	: Item Nos. :86, 87, 88, 89,-91, 92, 93, 94, 95, 96, 97, 100 = lgh Item Nos. :90, 98, 99 = xyx
<b>Part VI</b>	: Item Nos. : 101, 105, 106, 109, 113, 117, 125, 127 = d Item Nos. : 107, 108, 110, 115, 118, 119, 120, 122, 123, 124, 126, 128, 129 = [k Item Nos. :103, 104, 114, 121 = x Item Nos. :102, 111, 112, 116, 130 = [k

### Reliability

Both temporal stability reliability and internal consistency reliability of MHB were computed. The details are given in Table 1

**TABLE 1 Reliability Coefficient of MHB •**

	Mean Age	N	Test-retest reliability	Odd-even (whole length) reliability
Part I : Emotional'			r,, 876	r,, = .725
Part II Over-all Adjustment			r <sub>n</sub> 821	r,, = .871
Part III : Autonomy	15.6	102	r,, - .767	r <sub>n</sub> = .812
Part IV : Security-Insecurity	Yrs.		r <sub>n</sub> = .826	r <sub>n</sub> = .829
Part V : Self-Concept			r, 786	r <sub>n</sub> = .861
Part VI : Intelligence			r, = .823	r <sub>n</sub> = .792

Note All correlation values were significant (P < .01).

### Validity

MHB was validated against the different tests developed earlier. Part•.MHB was validated against Emotional Stability Test developed earlier by :Gupta& Singh (1985). Part II was validated against High School Adjustmer Inventory (HSAI) developed earlier by Singh and Sen Gupta (1987) and Hindi adaptation of Bell's Adjustment Inventory by Mohsin, Shamshad and Jehan(1967). For part III and part V Construct validity was computed. Part IV was validated

against Neuroticism Scale of MPI as adapted by Jalota&Kapoor(1975). Likewise, part V.I was validated against Jalota Group General Mental Ability Test (1976): Only relevant parts of MHB with suitable criteria were given to the random sample of 102. The standard instructions of the test and the criteria were followed. The details are given in Table 2.

**TABLE 2 Validity Coefficients of MHB**

Parts of MHB	N	Concurrent Validity	Parts of MHB	N	Construct Validity
Part I : ES	102	.673	Part III : AY	102	.681i
Part II : QA		.704*	Part V : SC		
Part IV : SI		.821			
Part VI : IG		.823			

\* P < .01 Norms

Percentile norms for MHB have been developed. For this, MHB was administered to a fresh cross-sectional sample of 500 with mean age of 15.5 years. The break up of sample following sex, rural-urban, SES and educational status have been shown in Table 3.

The differences among the different subsamples were tested by means of t-ratio.'t-ratios computed on the basis of total spore of MHB with respect to male and female (t =1 ,003), rural-urban (t---1.32), high and middle SES 7351 as well as between Intermediate and Bachelor (t=.826), Bachelor and Master (t =

**TABLE 3 Break-up of a Sample of 500**

Sex		Region		S E S			Educational Status		
Male	Female	Rural	Urban	High	Middle	Low	Inter- mediate	Bachelor	Master
N = 260	240	200	300	100	200	200	50	350	1100
500		500		500			500		

Intermediate and Master ( $t= 1,00$ ) were not significant. However, t-ratios with respect to high SES and Low SES ( $t=5.32$ ) as well as middle and low ( $t=3.721$ ) were found to be significant. Accordingly, data with respect to sex, rural-urban and educational status were pooled together for preparing percentile norms. However, separate norms were prepared for SES trichotomy.

**Table 4 shows the percentile norms for high SES sample whereas Table 5 and 6 show the percentile norms for middle SES and low SES respectively.**

**TABLE 4**

Percentile Norms for High (N = 100), Middle (N = 200) and Low SES Sample (N = 200)

Percentile Rank	SESH	SESM	SESL
P99	129	129	129
P95	111	128	127
P90	109	121	116
P80	106	111	106
P70	101	101	98
P60	91	99	95
P55	81	96	91
P50	76	81	86
P40	71	77	81
<b>P30</b>	61	71	76
P20	59	68	72
P10	52	<b>55</b>	<b>63</b>
<b>PS</b>	<b>31</b>	<b>43</b>	<b>51</b>

### Qualitative Interpretation

A five-point qualitative criterion has been developed for classifying sample with respect to their mental health.

P90 and above	Excellent
P70 to P89	Good
P50 to P69	Average
P30 to P49	Poor
Below P29	Very Poor

### T-test

Independent samples t-test as parametric method was utilized to test differences between two group samples. The ratio of difference between means of two groups was calculated and paired sample t-test applied in case of identical samples. In order to find out the significance of difference t-test was used. The formula for t-test is

$$t = \frac{(M1-M2)}{\sigma D}$$

### F-ratio

ANOVA as a family of statistical tests that compares means of groups to assess whether differences across means are reliable. It compares mean difference between groups and within groups to provide data for more than one condition or group. The F-ratio is computed by using the following formula:

$$F = \frac{\text{MSb} \quad \text{between the group variance}}{\text{MSw} \quad \text{within the group variance}}$$

The critical values of F-ratio are found in F table, which indicates the critical values necessary to test the null hypothesis of selected levels of significance.

**SPSS:** -IBM SPSS platform offers advanced statistical analysis, a vast library of machine learning algorithms, text analysis, open source extensibility, integration with big data and seamless deployment into applications. It's easy-to-use, flexible and scalable platform makes IBM SPSS accessible to users with all skill levels and outfits projects of all sizes and complexity to help you and your organization to find new opportunities, improve efficiency and minimize risk.

### 3.9.0 Profile of Faizabad District:

#### Introduction:

**Faizabad** is a District located near Ayodhya in Uttar Pradesh, India. Ayodhya is identified with the legendary city ., and as such, is believed to be the birthplace of Rama and setting of the epic Ramayana. The accuracy of this identification is central to the Ayodhya dispute: modern scholars variously believe that the present-day Ayodhya is same as the legendary Ayodhya, or that the legendary city is a mythical place that came to be identified with the present-day Ayodhya only during the Gupta period around the 4th-5th century CE.

**Hydrogeology:** General Geology: Faizabad district forms a part of central Ganga plain and is underlain by a thick pile of alluvium deposits of quarternary age. This alluvium is a pile of unconsolidated sediments made up of sequence of clay, silt, kankar and different grades of sand. Faizabad District is located on the banks of river Ghaghra (locally known as Saryu). Total area of Faizabad District is 2,643 sq. km. The Latitude of Faizabad District : 26.47 N and Longitude of Faizabad District : 82.12 E. It is surrounded by Barabanki, Gonda, Basti, Ambedkar Nagar and Sultanpur districts. The national highway No.27 which connect New delhi to Nepal is passes through Faizabad district.

#### Topography

The topography of Faizabad is comprise of alluvial soil, sand, gravels. The mountain, plateau and other geographical reliefs are missing as an entire district belongs to Gangatic plain. The general slope of relief is west to east and stretch is about 130 KM. The major river is Saryu, Marha.

The **Saryu** is a river that flows through the Indian states of Uttarakhand and Uttar Pradesh. This river is of ancient significance, finding mentions in the Vedas and the Ramayana. The earliest references to Sarayu in the Rigveda may not be to the present Saryu river of Uttar Pradesh, but the Hari-Rud river (Harayu in Avestan language) flowing through Afghanistan-Iran-Turkmenistan border regions. The Saryu river of India forms at the confluence of the Karnali (or Ghaghara) and Mahakali (or Sharda) in Bahraich District. The Mahakali or Sharda forms the western Indo-Nepal border. Ayodhya is situated on the banks of river Sarayu. Some mapmakers consider the Sarayu to be just a section of the lower Ghaghara River. On Ram Navami, the festival that celebrates the birthday of Lord Rama, thousands of people take a dip in the Saryu River at Ayodhya.

## **Culture & Heritage**

Cultural heritage of the district originates in the past from the kingdom of Suryavanshis. In the lineage of Suryavanshi Kshatriyas, King Raghu was a glittering character after whom the Suryavansh became popular as Raghuvansh. In the third generation of king Raghu birth of Shri Rama took place, whose image is still alive in the heart of all Hindus as God. The period of the Ramayana was, perhaps the most glorious period in the history of ancient India. For not only did this age mark the composition of the holiest scriptures, the Vedas, and other sacred literature that laid the foundation of Indian culture and civilization, but the era was also exemplary in its rule of law and truthfulness. The regent was answerable to his subjects in matters involving the prestige of the state and society. The veracity of the facts lies in the undiminished reverence for the epic even after more than three millennia. Lord Ram was the ‘AdarshPurush’ of the Ramayana – an ideal in every fact of human behavior. His fourteen year of exile impressed the human mind more vitally than other period of his life. Because he had roved the wilderness, giving up his just heritage, merely to preserve the honor of his father’s word. Apart from this Faizabad had a special place in Indian history as well. So from religious and historical point of view Faizabad also enjoys eminent place.

## **Tourism**

Faizabad is a District in Uttar Pradesh which is located on the left bank of the Ghaghara River. The nawabi culture of the city has given Faizabad an identity of its own. There are many tourists attractions in Faizabad and these attractions should be on the tourists must visit list while on a Tour to Faizabad. The Tourist attraction of Faizabad comprises of old historical buildings, the museums, the temples, the gardens that adds to the beauty of the District.

A major Tourist attraction in Faizabad which should not be missed while on a Tour to Uttar Pradesh is the city of Ayodhya. The rich heritage of the country and the rich lineage of the city as a king’s Districts evident from the beautiful architecture that are an inseparable part of the buildings of Faizabad. The District draws attention of pilgrims and heritage lovers from all over the world as it opens the traveller to a world of mythological and spiritual wonders. Faizabad is a fusion of sanctity, religion, traditions, history and architecture which offers varied experiences from historical to religious.

Faizabad’s lineage as a ruler’s District started from the time when it was made the capital city by the Nawabs of Awadh. On the other hand, Ayodhya, which is often referred to as the sister city of Faizabad

boasts of holding the prestigious history as being the birth place of Lord Rama. Faizabad stands as an ethnic city which has remained important to the people of all caste and creed.

**Climate**

The Climate of the district may be treated as normal. The effect of rains, winter and summer are not very harsh. So a pleasant weather remains throughout the year. Usually the summer extends from April to July, the rainy season from August to September and the winter from October to March.

**RAINFALL:**

Rainfall Normal: 1035 mm.

**TEMPERATURE:**

Maximum 43.7 °C

Minimum 1.0 °C

**Urbanization:**

Urbanization is another important feature under the study. Although, the area under urban limits is increasing continuously, still the growth rate of number of residential households is quite high. The share of urban population has increased from 18.12 per cent in 1962 to 23.78 per cent in 2012.

**Education:** The Faizabad education system has remained distinct from that of the rest of state's other cities, with a characteristic emphasis on a broad education. Faizabad's schools are run by the state government and by private organizations, many of which are religious. English is the medium of instruction in most private schools, while government schools and colleges offer both Hindi and English medium education. Urdu is also used. Schools in Faizabad follow the 10+2+3 plan. After completing their secondary education, students typically enroll in schools that have a higher secondary facility and are affiliated with the Uttar Pradesh Board of High School and Intermediate Education, the ICSE, or the CBSE. They usually choose a focus on liberal arts, business, or science. Vocational programs are also available. Faizabad attracts students and learners from all over country. As of 2010, Faizabad has one Narendra dev Agricultural University, and Dr.R.M.L.Awadh University. The colleges are each affiliated with a university or institution based either in Faizabad or elsewhere in India.

## CHAPTER IV

### RESULTS AND DISCUSSIONS

#### 4.1.0 Introduction

It is a fact that the quality of education is mediated by the quality of teachers and what the teachers do. For better or worse, teachers determine the quality of education. The qualities of teachers include all personal and professional dimensions of a teacher. Quality conscious teachers are those who are professionally equipped, socially committed, intellectually mature and psychologically integrated in their work with children and young people. Hence, we can very well say that a teacher, in order to make himself or herself effective in his or her work of teaching, must be professionally equipped and must feel psychologically stable and socially comfortable.

Data collected through the administration of the tools on selected sample are raw in nature. These data need to be organized, analyzed and interpreted for drawing sound conclusions and valid generalizations. Organization of data includes editing, classifying and tabulating quantitative information. Editing implies checking of the gathered raw data for accuracy, usefulness and completeness. Classification refers to dividing of the data into different categories, classes and groups. Thus in brief analysis data refers to the

study of the organized material in order to discover inherent facts. Further the data are studied from various angles for accessing the new facts. Actually the basic purpose of analysis is to summarize the completed observations in such a manner that they veiled answers to the research problems while the purpose of interpretation is to search for the broader meaning of these answers by linking them to other available knowledge. Both these purposes, of course, govern the entire research process, all preceding steps have been undertaken in order to make their fulfillment possibility. The analysis is not an end in itself, but is a basic preliminary step in the scientific development of the problem. Through the various phases of a complex situation may be studied more objectively. For arriving at the aims and objectives of the present study the researcher has done analysis and interpretation of the data from many angles. It was thus proper to give interpretation first after analysis of each part to make the analysis meaningful.

Thus, the analysis of data means studying the tabulated material in order to determine inherent factors or meanings. It involves breaking down the existing complex factors into simpler parts and putting the parts together in new arrangement for the purpose of interpretation. Thus analysis and interpretations of data help researchers to attack the related problems with appropriate statistical techniques to avoid the unnecessary labour. The data was analyzed with the help of Mean, S.D. Coefficient of Correlation and 't' test as to find out the significance of difference between the means of various groups taken at a time and also to find correlation between variables. .

The present study is an attempt of the investigator to explore the study of mental health and Stress in relation to Creativity of prospective teachers.

The Fourth Chapter deals with the results and discussion of the data related to the different objectives of the study. The researcher has formulated five objectives for the present study.

**Objective 4.1.0: To study the mental health of prospective teachers in the context to gender and locale.**

**Hypothesis Ho: There is no significant difference in the mental health of prospective teachers in the context to gender and locale.**

**Research Hypothesis H<sub>1</sub>: There is significant difference in the Mental health of Prospective teachers in the context to gender and locale.**

To analyze this objective few sub-objectives are prepared-

#### 4.1.1 To study the Mental Health of rural and urban Prospective Teachers.

Table-4.01

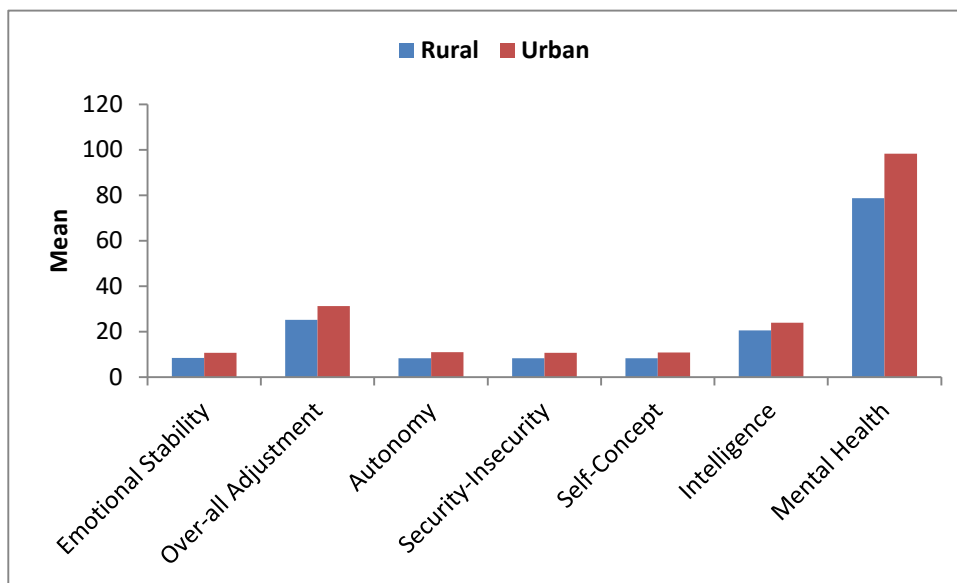
Mean, SD and t-ratio of Mental Health of  
Rural and Urban Prospective Teachers

Source	Area	N	Mean	S. D.	t-ratio
Emotional Stability	Rural	250	8.43	3.073	10.851*
	Urban	250	10.68	1.151	
Over-all Adjustment	Rural	250	25.14	6.711	13.234*
	Urban	250	31.28	2.940	
Autonomy	Rural	250	8.35	2.953	12.773*
	Urban	250	11.00	1.446	
Security-Insecurity	Rural	250	8.26	2.764	12.279*
	Urban	250	10.66	1.383	
Self-Concept	Rural	250	8.34	3.085	11.639*
	Urban	250	10.80	1.313	
Intelligence	Rural	250	20.61	6.049	8.153*
	Urban	250	23.88	1.918	
Mental Health	Rural	250	78.73	20.630	14.346*
	Urban	250	98.31	6.319	

\*Significant at 0.05 level of significance

From the table-4.01 it is clear that the calculated value of t-ratio- 14.346 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Mental Health between Rural and Urban Prospective Teachers' and the research hypothesis is accepted that "there is significant difference in Mental Health between Rural and Urban Prospective Teachers'. Hence it is stated that there is significant difference in Mental Health between Rural and Urban Prospective Teachers. Table no. 4.01 also shows that t-ratio related to dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are 10.851, 13.234, 12.773, 12.279, 11.639 and 8.153 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all

dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Prospective Teachers.



Graph 4.01

Mean of Mental Health

Rural and Urban Prospective Teachers

From the observation from Table 4.01 that the Mean of Mental Health and its dimensions of Rural Prospective Teachers is Mental Health-78.73 Emotional Stability-8.43, Over-all Adjustment-25.14, Autonomy-8.35, Security-Insecurity-8.26, Self-Concept-8.34 and Intelligence-20.61 which is less than the Mean of urban Prospective Teacher's Mental Health-98.31, Emotional Stability-10.68, Over-all Adjustment-31.28, Autonomy-11.00, Security-Insecurity-10.66, Self-Concept-10.80 and Intelligence-23.88. The exists difference in Mental Health and its dimensions as Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Prospective Teachers is significant at .05 level of significance. So it is stated that Mental Health of urban Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of teachers of rural Prospective Teachers. The findings have some similarly with the study of Palta singh(2007) where the findings suggested that there was significant positive correlation among creativity and academic achievement and mental health and academic achievement.

**4.1.2 To study the Mental Health of rural and urban male Prospective Teachers.**

Table-4.02

Mean, SD and t-ratio of Mental Health of

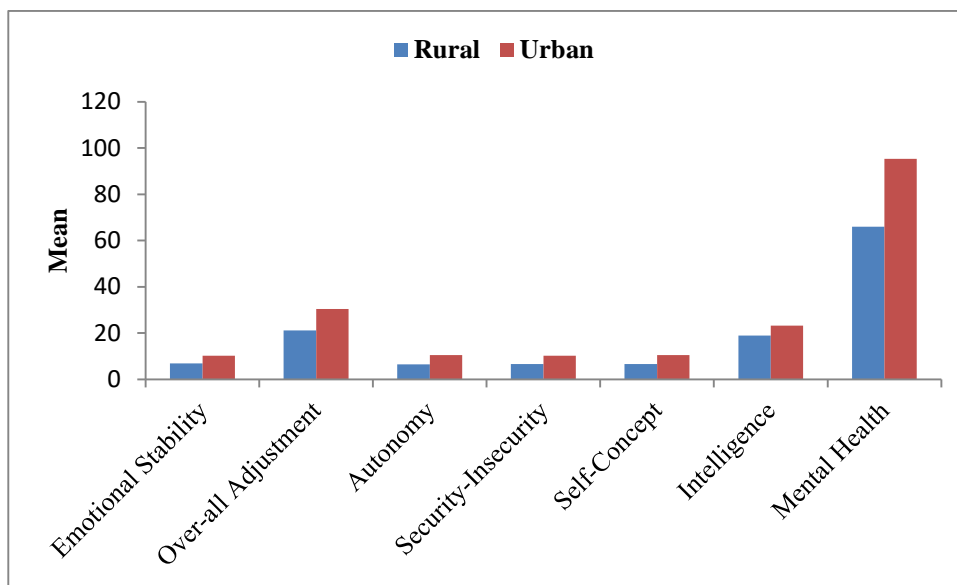
Rural and urban male Prospective Teachers

Source	Area	N	Mean	S. D.	t-ratio
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Emotional Stability	Rural	125	6.94	2.792	12.324*
	Urban	125	10.26	1.130	
Over-all Adjustment	Rural	125	21.11	4.616	19.499*
	Urban	125	30.47	2.737	
Autonomy	Rural	125	6.52	1.933	18.825*
	Urban	125	10.54	1.406	
Security-Insecurity	Rural	125	6.60	1.836	17.819*
	Urban	125	10.24	1.358	
Self-Concept	Rural	125	6.66	2.559	15.004*
	Urban	125	10.55	1.371	
Intelligence	Rural	125	18.88	6.945	6.786*
	Urban	125	23.26	1.984	
Mental Health	Rural	125	65.92	12.591	23.659*
	Urban	125	95.34	5.891	

\*Significant at 0.05 level of significance

From the table-4.02 it is clear that the calculated value of t-ratio- 23.659 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Mental Health between Rural and Urban Male Prospective Teachers' and the research hypothesis is accepted that "there is significant difference in Mental Health between Rural and Urban Male Prospective Teachers'. Hence it is stated that there is significant difference in Mental Health between Rural and Urban Male Prospective Teachers. Table no. 4.02 also shows that t-ratio related to dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are 12.324, 19.499, 18.825, 17.819, 15.004 and 6.786 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Male Prospective Teachers.



Graph 4.02

Mean of Mental Health of Rural and Urban Male Prospective Teachers

It is observed from Table 4.02 that the Mean of Mental Health and its dimensions of Rural Male Prospective Teachers is Mental Health-65.92, Emotional Stability-6.94, Over-all Adjustment-21.11, Autonomy-6.52, Security-Insecurity-6.60, Self-Concept-6.66 and Intelligence-18.88 which is less than the Mean of urban Male Prospective Teacher's Mental Health-95.34, Emotional Stability-10.26, Over-all Adjustment-30.47, Autonomy-10.54, Security-Insecurity-10.24, Self-Concept-10.55 and Intelligence-23.26. The exists difference in Mental Health and its dimensions as Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Male Prospective Teachers is significant at .05 level of significance. So it is stated that Mental Health of urban Male Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are respectively better than Mental Health of teachers of rural male Prospective Teachers.

**3. To study the Mental Health of rural and urban female Prospective Teachers.**

Table-4.03

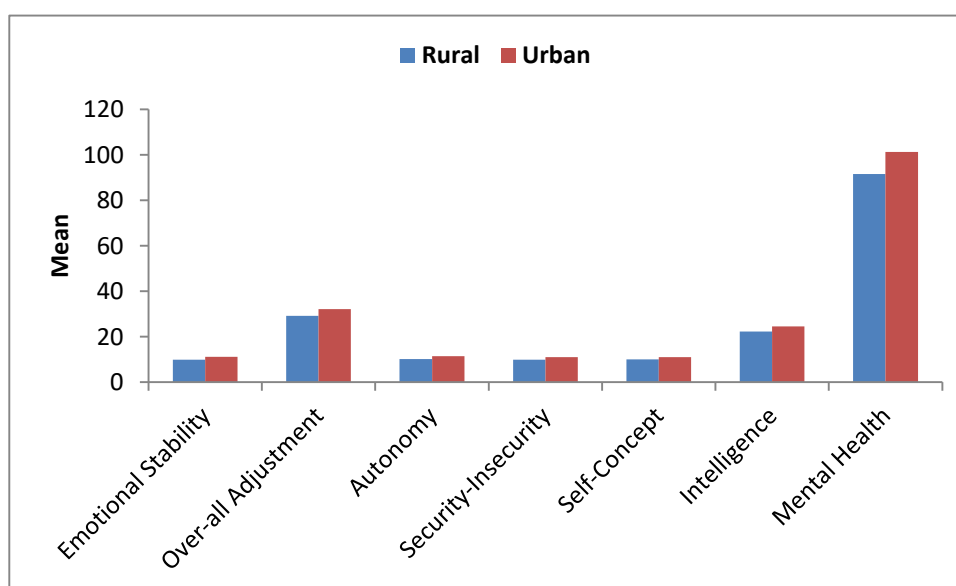
Mean, SD and t-ratio of Mental Health of Rural and urban female Prospective Teachers

Source	Area	N	Mean	S. D.	t-ratio
Emotional Stability	Rural	125	9.92	2.589	4.760*
	Urban	125	11.10	1.015	
Over-all Adjustment	Rural	125	29.18	6.028	4.846*
	Urban	125	32.08	2.925	
Autonomy	Rural	125	10.18	2.652	4.815*

	Urban	125	11.46	1.341	
Security-Insecurity	Rural	125	9.91	2.537	4.561*
	Urban	125	11.07	1.284	
Self-Concept	Rural	125	10.02	2.621	4.029*
	Urban	125	11.06	1.207	
Intelligence	Rural	125	22.34	4.381	5.164*
	Urban	125	24.50	1.634	
Mental Health	Rural	125	91.54	19.109	5.492*
	Urban	125	101.28	5.260	

\*Significant at 0.05 level of significance

From the table-4.03 it is clear that the calculated value of t-ratio- 5.492 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Mental Health between Rural and Urban Female Prospective Teachers' and the research hypothesis is accepted that 'there is significant difference in Mental Health between Rural and Urban Female Prospective Teachers'. Hence it is stated that there is significant difference in Mental Health between Rural and Urban Female Prospective Teachers. Table no. 4.03 also shows that t-ratio related to dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are 4.760, 4.846, 4.845, 4.561, 4.029 and 5.164 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Female Prospective Teachers.



Graph 4.03

Mean of Mental Health of

## Rural and Urban Female Prospective Teachers

It is observed from Table 4.03 that the Mean of Mental Health and its dimensions of Rural Female Prospective Teachers is Mental Health-91.54, Emotional Stability-9.92, Over-all Adjustment-29.18, Autonomy-10.18, Security-Insecurity-9.91, Self-Concept-10.02 and Intelligence-22.34 which is less than the Mean of urban Female Prospective Teacher's Mental Health-101.28, Emotional Stability-11.10, Over-all Adjustment-32.08, Autonomy-11.46, Security-Insecurity-11.07, Self-Concept-11.06 and Intelligence-24.50. The exists difference in Mental Health and its dimensions as Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Female Prospective Teachers is significant at .05 level of significance. So it is stated that Mental Health of urban Female Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of teachers of rural Female Prospective Teachers. Similar findings were found in the study of Kumar and Anand(2003)that creativity; problem solving ability and mental health was significant and positively correlated with student teachers.

#### 4.1.4 To study the Mental Health of male and female Prospective Teachers.

Table-4.04

Mean, SD and T-ratio of

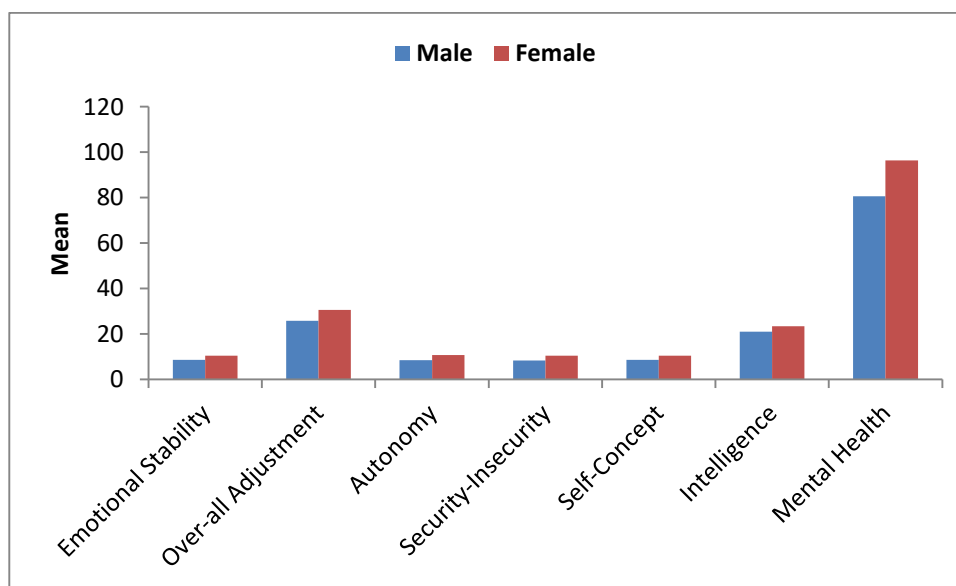
Mental Health of male and female Prospective Teachers

Source	Gender	N	Mean	S. D.	t-ratio
Emotional Stability	Male	250	8.60	2.699	8.901*
	Female	250	10.51	2.050	
Over-all Adjustment	Male	250	25.79	6.028	9.806*
	Female	250	30.63	4.947	
Autonomy	Male	250	8.53	2.628	10.566*
	Female	250	10.82	2.194	
Security-Insecurity	Male	250	8.42	2.434	10.215*
	Female	250	10.49	2.089	
Self-Concept	Male	250	8.60	2.830	8.666*
	Female	250	10.54	2.102	
Intelligence	Male	250	21.07	5.550	5.680*
	Female	250	23.42	3.473	
Mental Health	Male	250	80.63	17.704	10.812*

	Female	250	96.41	14.813	
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\*Significant at 0.05 level of significance

From the table-4.04 it is clear that the calculated value of t-ratio- 10.812 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Mental Health between Male and Female Prospective Teachers' and the research hypothesis is accepted that "there is significant difference in Mental Health between Male and Female Prospective Teachers'. Hence it is stated that there is significant difference in Mental Health between Male and Female Prospective Teachers. Table no. 4.04 also shows that t-ratio related to dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are 8.901, 9.806, 10.566, 10.215, 8.666 and 5.680 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Male and Female Prospective Teachers. There are so many researches exists which result is similar like Suresh Kumar (2008) that there is significant difference in Mental Health between Male and Female Prospective Teachers.



Graph 4.04

Mean of Mental Health

Male and Female Prospective Teachers

It is observed from Table 4.04 that the Mean of Mental Health and its dimensions of Male Female Prospective Teachers is Mental Health-80.63, Emotional Stability-8.60, Over-all Adjustment-25.79, Autonomy-8.53, Security-Insecurity-8.42, Self-Concept-8.60 and Intelligence-21.07 which is less than the Mean of female Prospective Teacher's Mental Health-96.41, Emotional Stability-10.51, Over-all Adjustment-30.63, Autonomy-10.82, Security-Insecurity-10.49, Self-Concept-10.54 and Intelligence-23.42. The exists difference in Mental Health and its dimensions as Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Male and Female Prospective Teachers is significant at .05 level of significance. So it is stated that Mental Health of Female Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of teachers of Male Prospective Teachers. Possible reasons is that male having less patience than female.

#### 4.1.5 To study the Mental Health of rural male and female Prospective Teachers.

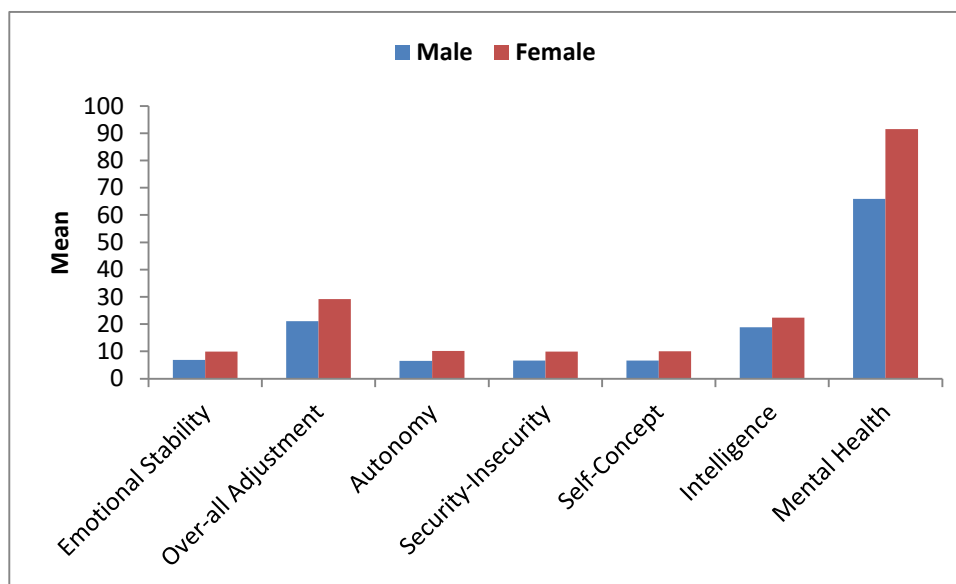
Table-4.05

Mean, SD and t-ratio of Mental Health of  
rural male and female Prospective Teachers

Source	Gender	N	Mean	S. D.	t-ratio
Emotional Stability	Male	125	6.94	2.792	8.738*
	Female	125	9.92	2.589	
Over-all Adjustment	Male	125	21.11	4.616	11.874*
	Female	125	29.18	6.028	
Autonomy	Male	125	6.52	1.933	12.456*
	Female	125	10.18	2.652	
Security-Insecurity	Male	125	6.60	1.836	11.825*
	Female	125	9.91	2.537	
Self-Concept	Male	125	6.66	2.559	10.254*
	Female	125	10.02	2.621	
Intelligence	Male	125	18.88	6.945	4.716*
	Female	125	22.34	4.381	
Mental Health	Male	125	65.92	12.591	12.519*
	Female	125	91.54	19.109	

\*Significant at 0.05 level of significance

From the table-4.05 it is clear that the calculated value of t-ratio- 12.519 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Mental Health between rural Male and Female Prospective Teachers' and the research hypothesis is accepted that 'there is significant difference in Mental Health between rural Male and Female Prospective Teachers'. Hence it is stated that there is significant difference in Mental Health between rural Male and Female Prospective Teachers. Table no. 4.05 also shows that t-ratio related to dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are 8.738, 11.874, 12.456, 11.825, 10.254 and 4.716 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between teachers of rural Male and Female Prospective Teachers. This findings is contradictory by the study of Subramanyam, K. and Viswanatha Reddy,S.(2012) that no significant interaction is found between type of course and gender with regard to their mental health status.



Graph 4.05

Mean of Mental Health

Rural Male and Female Prospective Teachers

It is observed from Table 4.05 that the Mean of Mental Health and its dimensions of rural Male Prospective Teachers is Mental Health-65.92, Emotional Stability-6.94, Over-all Adjustment-21.11, Autonomy-6.52, Security-Insecurity-6.60, Self-Concept-6.66 and Intelligence-18.88 which is less than the mean of rural female Prospective Teacher's Mental Health-91.54, Emotional Stability-9.92, Over-all Adjustment-29.18, Autonomy-10.18, Security-Insecurity-9.91, Self-Concept-10.02 and Intelligence-22.34. The exists difference in Mental Health and its dimensions as Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence

between rural Male and Female Prospective Teachers is significant at .05 level of significance. So it is stated that Mental Health of rural Female Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of rural Male Female Prospective Teachers. Some possible reasons may be female become more concern about their work in comparison to male.

#### 4.1.6 To study the Mental Health of urban male and female Prospective Teachers.

Table-4.06

Mean, SD and t-ratio of Mental Health of

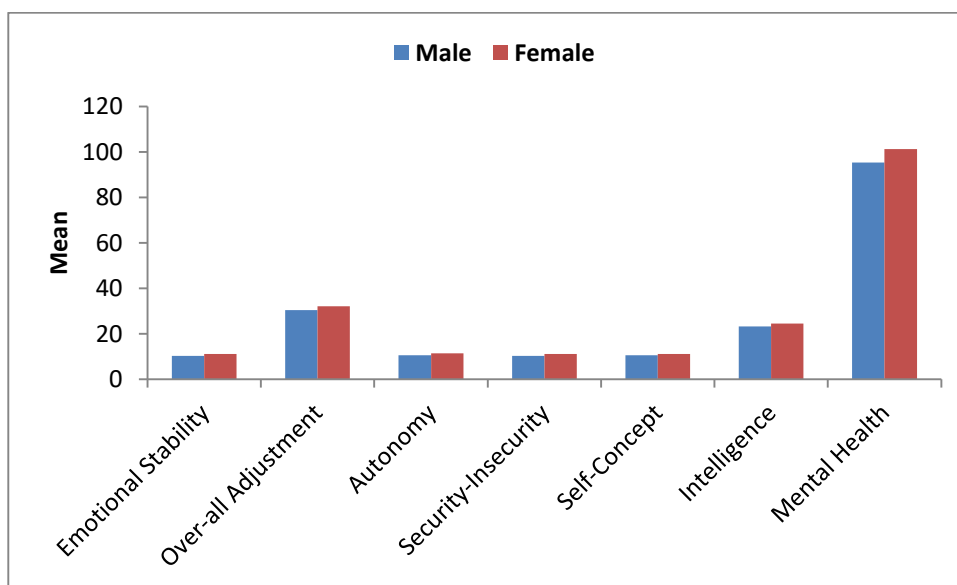
Urban male and female Prospective Teachers

Source	Gender	N	Mean	S. D.	t-ratio
Emotional Stability	Male	125	10.26	1.130	6.185*
	Female	125	11.10	1.015	
Over-all Adjustment	Male	125	30.47	2.737	4.487*
	Female	125	32.08	2.925	
Autonomy	Male	125	10.54	1.406	5.294*
	Female	125	11.46	1.341	
Security-Insecurity	Male	125	10.24	1.358	4.977*
	Female	125	11.07	1.284	
Self-Concept	Male	125	10.55	1.371	3.086*
	Female	125	11.06	1.207	
Intelligence	Male	125	23.26	1.984	5.393*
	Female	125	24.50	1.634	
Mental Health	Male	125	95.34	5.891	8.414*
	Female	125	101.28	5.260	

\*Significant at 0.05 level of significance

From the table-4.06 it is clear that the calculated value of t-ratio- 8.414 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Mental Health between urban Male and Female Prospective Teachers' and the research hypothesis is accepted that "there is significant difference in Mental Health between urban Male and Female Prospective Teachers'. Hence it is stated that there is significant difference in Mental Health between urban Male and Female Prospective Teachers. Table no. 4.06 also shows that t-ratio related to dimensions of Mental Health like Emotional Stability, Over-all Adjustment,

Autonomy, Security-Insecurity, Self-Concept and Intelligence are 6.185, 4.487, 5.294, 4.977, 3.086 and 5.393 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between teachers of urban Male and Female Prospective Teachers. There are so many researches to this result like Kamau and Catherine(1992) that there is significant difference in Mental Health between urban Male and Female Prospective Teachers. While result of burnout, locus of control and mental health of prospective teachers is contradictory of this result that there is no significant difference in Mental Health between urban Male and Female Prospective Teachers.



Graph 4.06

## Mean of Mental Health

## Urban Male and Female Prospective Teachers

It is observed from Table 4.06 that the Mean of Mental Health and its dimensions of urban Male Prospective Teachers is Mental Health-95.34, Emotional Stability-10.26, Over-all Adjustment-30.47, Autonomy-10.54, Security-Insecurity-10.24, Self-Concept-10.55 and Intelligence-23.26 which is less than the mean of urban female Prospective Teacher's Mental Health-101.28, Emotional Stability-11.10, Over-all Adjustment-32.08, Autonomy-11.46, Security-Insecurity-11.07, Self-Concept-11.06 and Intelligence-24.50. The exists difference in Mental Health and its dimensions as Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between urban Male and Female Prospective Teachers is significant at .05 level of significance. So it is stated that Mental Health of urban Female Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of urban Male Female Prospective Teachers possible reasons is that female prospective teachers are more less emotionally exhausted, more internally controlled.

**Objective4.2.0: To explore the stress level of prospective teachers on the basis of gender and locale.**

**Hypothesis Ho: There is no significant difference in the stress level of prospective teachers on the basis of gender and locale.**

**Research HypothesisH<sub>2</sub>: There is significant difference in the stress level of prospective teachers on the basis of gender and locale.**

**4.2.0To analyze this objective few sub-objectives are prepared-**

**4.2.1 To explore the Stress of rural and urban Prospective Teachers.**

Table-4.07

Mean, SD and T-ratio of Stress of

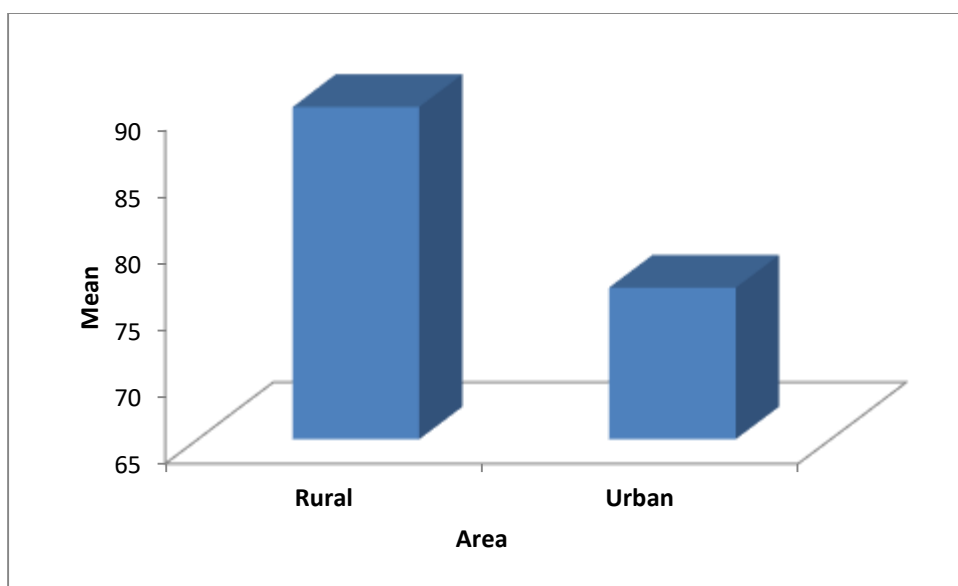
Rural and Urban Prospective Teachers

Area	N	Mean	S. D.	t-ratio
Rural	250	89.94	20.986	7.112*
Urban	250	76.42	21.517	

\*Significant at 0.05 level of significance

From the table-4.07 it is clear that the calculated value of t-ratio- 7.112 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Stress between rural and urban Prospective Teachers' and the research hypothesis is accepted that 'there is significant difference in Stress between rural and urban Prospective Teachers'. Hence it is stated that there is significant difference in Stress between rural and urban

Prospective Teachers. Similar findings found in the study of Joshith and Prakash (2014) that the scores of male teacher trainees in teaching performance; mental health and stress were higher in male teacher trainees than female teacher trainee.



Graph 4.07

Mean of Stress of rural and urban Prospective Teachers

It is observed from Table 4.07 that the Mean of Stress of rural Prospective Teachers is 89.94 which are more than the Mean of Stress of urban Prospective Teachers is 76.42. The existing difference in Stress between rural and urban Prospective Teachers is significant at .05 level of significance. So it is stated that rural Prospective Teachers take comparatively high Stress than Stress of urban Prospective Teachers. There are so many causes may be possible because of lack of Teaching aids and materials.

**4.2.2 To explore the Stress of rural and urban male Prospective Teachers.**

Table-4.08

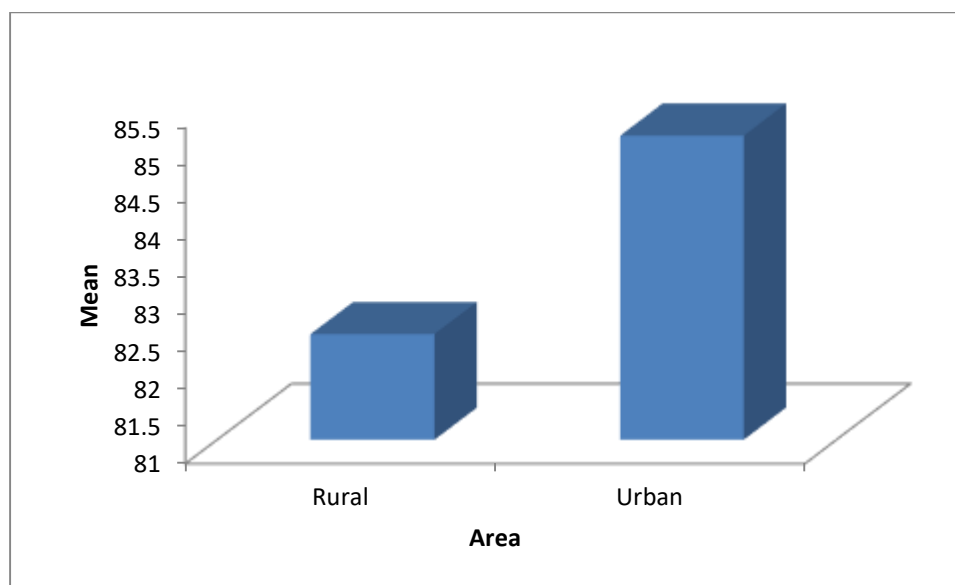
Mean, SD and t-ratio of Stress of Rural and urban male Prospective Teachers

Area	N	Mean	S. D.	t-ratio
Rural	125	82.42	22.159	0.000**

Urban	125	85.08	20.422	
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\*\*Insignificant at 0.05 level of significant

From the table-4.08 it is clear that the calculated value of t-ratio- .988 is less than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is accepted at .05 level of significance that 'There is no significant difference in Stress between rural and urban male Prospective Teachers' and the research hypothesis is rejected that "there is significant difference in Stress between rural and urban male Prospective Teachers'. Hence it is stated that there is no significant difference in Stress between rural and urban male Prospective Teachers.



Graph 4.08

Mean of Stress of rural and urban male Prospective Teachers

It is observed from Table 4.08 that the Mean of Stress of rural male Prospective Teachers is 82.42 which are more than the Mean of Stress of urban male Prospective Teachers is 85.08. The exists difference in Stress between rural and urban male Prospective Teachers is not significant at .05 level of significance. So it is stated that rural and urban male Prospective Teachers take similar Stress. In exist difference in Stress between rural and urban male Prospective Teachers may be possible due to sample or statistical error.

#### 4.2.3 To explore the Stress of rural and urban female Prospective Teachers.

Table-4.09

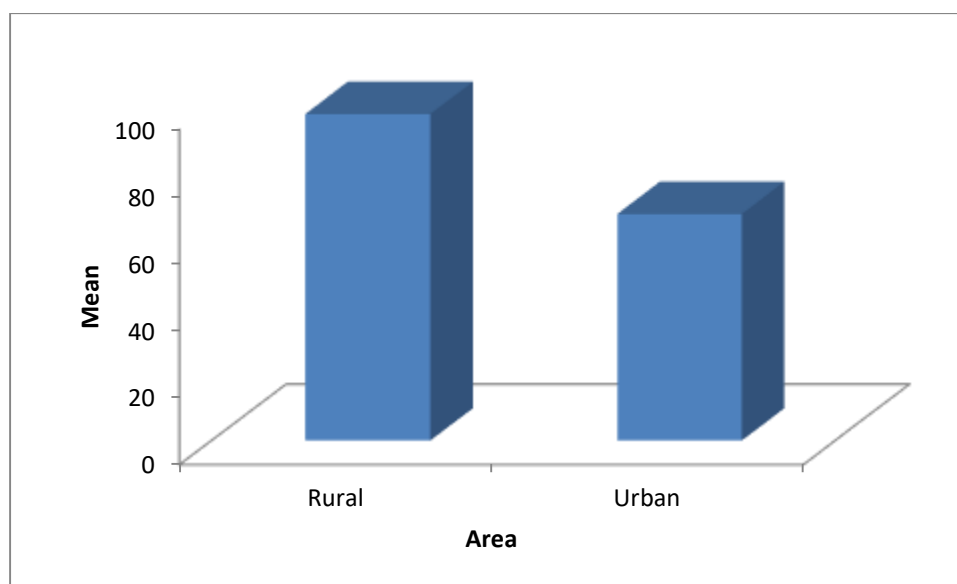
## Mean, SD and t-ratio of Stress of

## Rural and urban female Prospective Teachers

Area	N	Mean	S. D.	t-ratio
Rural	125	97.47	16.706	13.121*
Urban	125	67.77	19.015	

\*Significant at 0.05 level of significance

From the table-4.09 it is clear that the calculated value of t-ratio- 13.121 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Stress between rural and urban female Prospective Teachers' and the research hypothesis is accepted that "there is no significant difference in Stress between rural and urban female Prospective Teachers'. Hence it is stated that there is significant difference in Stress between rural and urban female Prospective Teachers.



Graph 4.09

Mean of Stress of rural and urban female Prospective Teachers

It is observed from Table 4.09 that the Mean of Stress of rural female Prospective Teachers is 97.47 which are more than the Mean of Stress of urban female Prospective Teachers is 67.77. The exists difference in Stress between rural and urban female Prospective Teachers is significant at .05 level of significance. So it is stated that rural female Prospective Teachers take comparatively high Stress than Stress of urban female Prospective Teachers.

#### 4.2.4 To explore the Stress of male and female Prospective Teachers.

Table-4.10

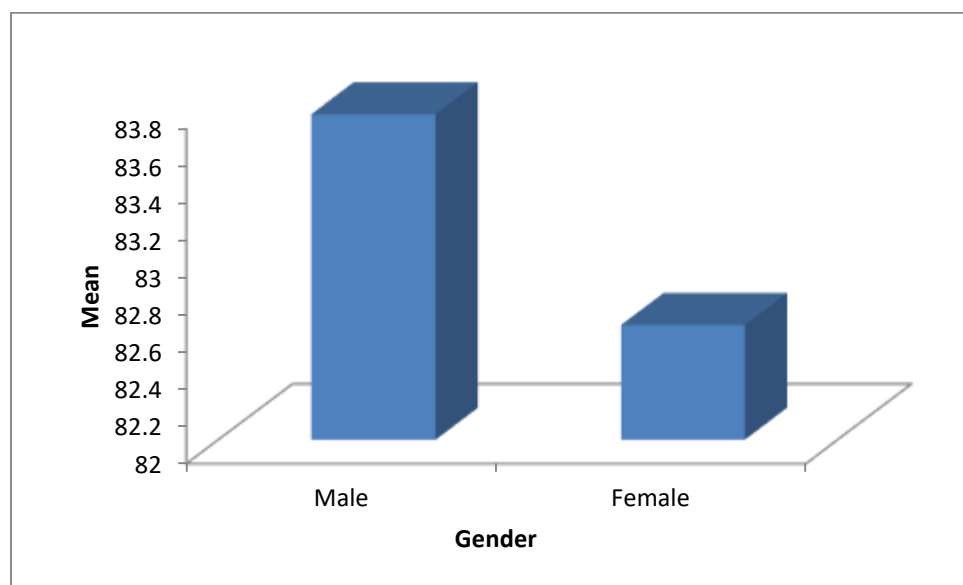
Mean, SD and t-ratio of Stress of

## Male and female Prospective Teachers

Gender	N	Mean	S. D.	t-ratio
Male	250	83.75	21.307	.566**
Female	250	82.62	23.249	

\*Insignificant at 0.05 level of significance

From the table-4.10 it is clear that the calculated value of t-ratio- .566 is less than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is accepted at .05 level of significance that 'There is no significant difference in Stress between male and female Prospective Teachers' and the research hypothesis is rejected that "there is no significant difference in Stress between male and female Prospective Teachers'. Hence it is stated that there is no significant difference in Stress between male and female Prospective Teachers. While Some previous researches not supporting this finding as Ayodhya (2006) that there is significant difference in Stress between male and female Prospective Teachers.



Graph 4.10

Mean of Stress of male and female Prospective Teachers

It is observed from Table 4.10 that the Mean of Stress of male Prospective Teachers is 83.75 which are more than the Mean of Stress of female Prospective Teachers is 82.62. The exists difference in Stress

between male and female Prospective Teachers is not significant at .05 level of significance. So it is stated that male and female Prospective Teachers take similar Stress. In exist difference in Stress between male and female Prospective Teachers may be possible due to sample or statistical error.

#### 4.2.5 To explore the Stress of rural male and female Prospective Teachers.

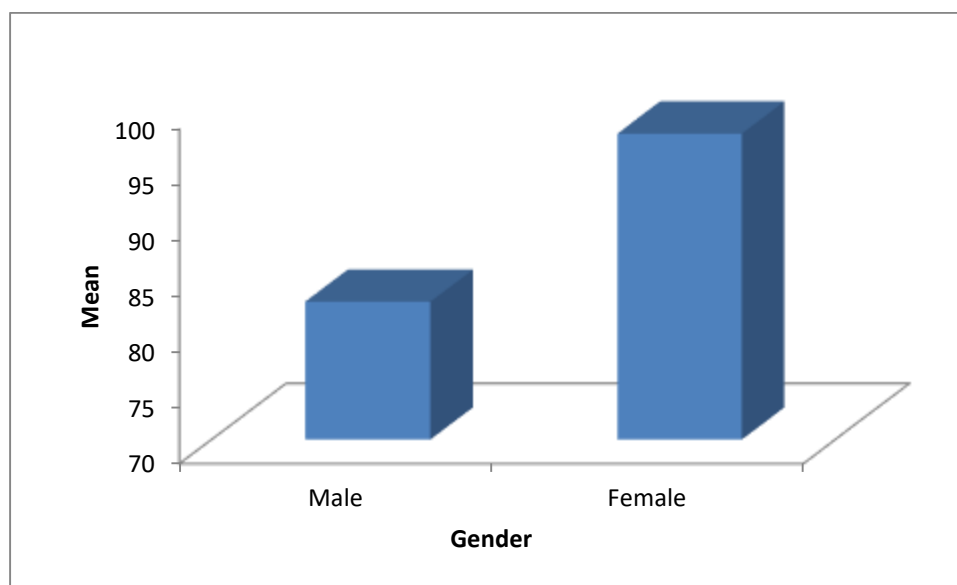
Table-4.11

Mean, SD and t-ratio of Stress of  
Rural male and female Prospective Teachers

Gender	N	Mean	S. D.	t-ratio
Male	125	82.42	22.159	6.066*
Female	125	97.47	16.706	

\*Significant at 0.05 level of significance

From the table-4.11 it is clear that the calculated value of t-ratio- 6.066 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Stress between rural male and female Prospective Teachers' and the research hypothesis is accepted that 'there is no significant difference in Stress between rural male and female Prospective Teachers'. Hence it is stated that there is significant difference in Stress between rural male and female Prospective Teachers.



Graph 4.11

Mean of Stress of rural male and female Prospective Teachers

It is observed from Table 4.11 that the Mean of Stress of rural male Prospective Teachers is 82.42 which are more than the Mean of Stress of rural female Prospective Teachers is 97.47. The exists difference in Stress between rural male and female Prospective Teachers is significant at .05 level of significance. So it is stated that rural female Prospective Teachers take comparatively low Stress than Stress of rural male Prospective Teachers.

#### 4.2.6 To explore the Stress of urban male and female Prospective Teachers.

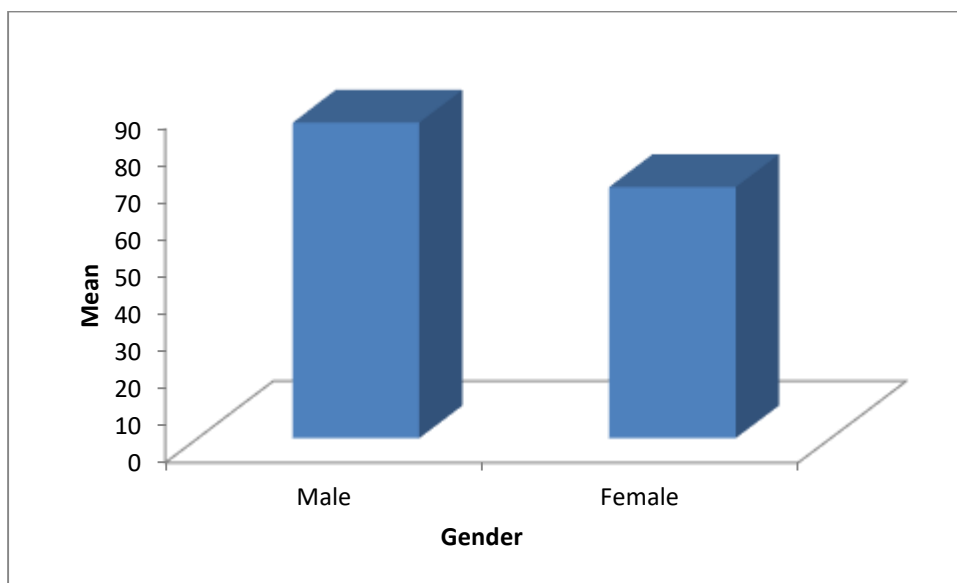
Table-4.12

Mean, SD and T-ratio of Stress of  
Urban male and female Prospective Teachers

Gender	N	Mean	S. D.	t-ratio
Male	125	85.08	20.422	6.936*
Female	125	67.77	19.015	

\*Significant at 0.05 level of significance

From the table-4.12 it is clear that the calculated value of t-ratio- 6.936 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Stress between urban male and female Prospective Teachers' and the research hypothesis is accepted that 'there is no significant difference in Stress between urban male and female Prospective Teachers'. Hence it is stated that there is significant difference in Stress between urban male and female Prospective Teachers.



Graph 4.12

#### Mean of Stress of urban male and female Prospective Teachers

It is observed from Table 4.12 that the Mean of Stress of urban male Prospective Teachers is 85.08 which are more than the Mean of Stress of urban female Prospective Teachers is 67.77. The exists difference in Stress between urban male and female Prospective Teachers is significant at .05 level of significance. So it is stated that urban female Prospective Teachers take comparatively low Stress than Stress of urban male Prospective Teachers.

**Objective 4.3.0: To find out the Creativity of prospective teachers in the context to gender and locale.**

**Hypothesis Ho: There is no significant difference in the Creativity of prospective teachers in the context to gender and locale.**

**Research Hypothesis H<sub>3</sub>: There is significant difference in the Creativity of prospective teachers in the context to gender and locale.**

**4.3.0 To this objective few sub-objectives are prepared-**

**4.3.1 To find out the Creativity of rural and urban Prospective Teachers.**

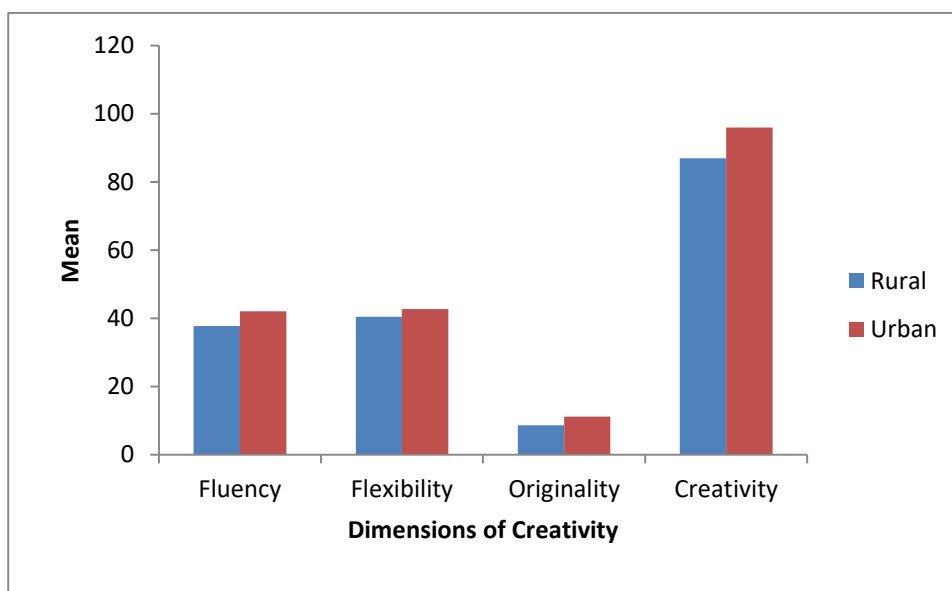
Table- 4.13

Mean, SD and t-ratio of Creativity of  
Rural and Urban Prospective Teachers

Source	Area	N	Mean	S. D.	t-ratio
Fluency	Rural	250	37.78	11.882	4.929*
	Urban	250	42.08	7.007	
Flexibility	Rural	250	40.52	10.207	2.812*
	Urban	250	42.74	7.183	
Originality	Rural	250	8.62	5.907	5.046*
	Urban	250	11.16	5.372	
Creativity	Rural	250	86.91	15.973	6.514*
	Urban	250	95.98	15.129	

\*Significant at 0.05 level of significance

From the Table-4.13 it is clear that the calculated value of t-ratio- 6.514 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Creativity between Rural and Urban Prospective Teachers' and the research hypothesis is accepted that 'there is significant difference in Creativity between Rural and Urban Prospective Teachers'. Hence it is stated that there is significant difference in Creativity between Rural and Urban Prospective Teachers. Table no. 4.13 also shows that t-ratio related to dimensions of Creativity like Fluency, Flexibility and Originality are 4.929, 2.812 and 5.046 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Rural and Urban Prospective Teachers. Contrasting studies have also been found in the findings of



Graph 4.13

#### Mean of Creativity Rural and Urban Prospective Teachers

It is observed from Table 4.13 that the Mean of Creativity and its dimensions of Rural Prospective Teachers is Creativity-78.73 Fluency-8.26, Flexibility-8.34 and Originality-20.61 which is less than the Mean of urban Prospective Teacher's Creativity-98.31, Fluency-10.66, Flexibility-10.80 and Originality-23.88. The exists difference in Creativity and its dimensions as Fluency, Flexibility and Originality between Rural and Urban Prospective Teachers is significant at .05 level of significance. So it is stated that Creativity of urban Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of teachers of rural Prospective Teachers.

#### 4.3.2 To find out the Creativity of rural and urban male Prospective Teachers.

Table- 4.14

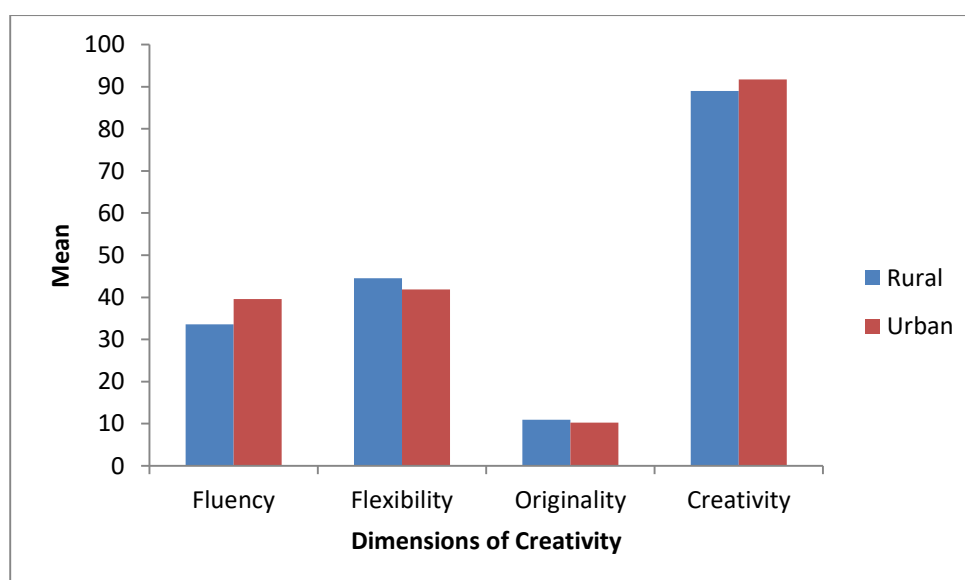
Mean, SD and t-ratio of Creativity of  
Rural and urban male Prospective Teachers

Source	Area	N	Mean	S. D.	t-ratio
Fluency	Rural	125	33.56	13.382	4.490*
	Urban	125	39.59	6.824	

Flexibility	Rural	125	44.49	5.639	3.198*
	Urban	125	41.86	7.270	
Originality	Rural	125	10.90	6.406	.910**
	Urban	125	10.25	4.887	
Creativity	Rural	125	88.95	15.811	1.440**
	Urban	125	91.70	14.278	

\*Significant at 0.05 level of significance

From the table-4.14 it is clear that the calculated value of t-ratio- 1.440 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Creativity between Rural and Urban Male Prospective Teachers' and the research hypothesis is accepted that "there is significant difference in Creativity between Rural and Urban Male Prospective Teachers'. Hence it is stated that there is significant difference in Creativity between Rural and Urban Male Prospective Teachers. Table no. 4.14 also shows that t-ratio related to dimensions of Creativity like Fluency, Flexibility and Originality are 4.490, 3.198 and .910 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Rural and Urban Male Prospective Teachers.



Graph 4.14

Mean of Creativity

Rural and Urban Male Prospective Teachers

It is observed from Table 4.14 that the Mean of Creativity and its dimensions of Rural Male Prospective Teachers is Creativity-65.92, Fluency-6.60, Flexibility-6.66 and Originality-18.88 which is less than the Mean of urban Male Prospective Teacher's Creativity-95.34, Fluency-10.24, Flexibility-10.55 and Originality-23.26. The exists difference in Creativity and its dimensions as Fluency, Flexibility and Originality between Rural and Urban Male Prospective Teachers is significant at .05 level of significance. So it is stated that Creativity of urban Male Prospective Teachers according to Fluency, Flexibility and Originality are respectively better than Creativity of teachers of rural male Prospective Teachers.

#### 4.3.3 To find out the Creativity of rural and urban female Prospective Teachers.

Table- 4.15

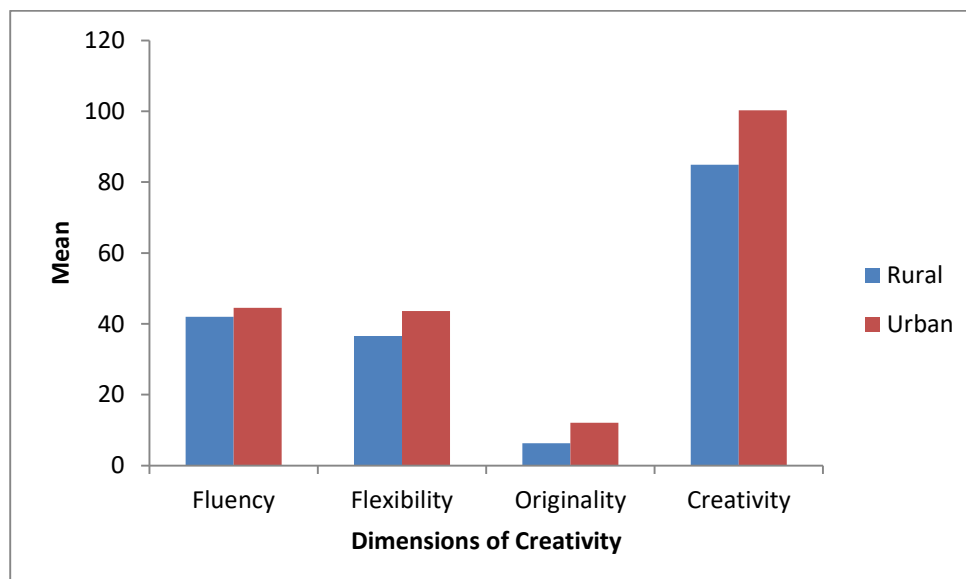
Mean, SD and t-ratio of Creativity of  
Rural and urban female Prospective Teachers

Source	Area	N	Mean	S. D.	t-ratio
Fluency	Rural	125	42.00	8.279	2.761*
	Urban	125	44.57	6.289	
Flexibility	Rural	125	36.54	12.066	5.665*
	Urban	125	43.62	7.014	
Originality	Rural	125	6.33	4.299	9.017*
	Urban	125	12.08	5.690	
Creativity	Rural	125	84.87	15.935	7.911*
	Urban	125	100.26	14.792	

\*Significant at 0.05 level of significance

From the table-4.15 it is clear that the calculated value of t-ratio- 7.911 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Creativity between Rural and Urban Female Prospective Teachers' and the research hypothesis is accepted that 'there is significant difference in Creativity between Rural and Urban Female Prospective Teachers'. Hence it is stated that there is significant difference in Creativity between Rural and Urban Female Prospective Teachers. Table no. 4.15

also shows that t-ratio related to dimensions of Creativity like Fluency, Flexibility and Originality are 2.761, 5.665 and 9.017 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Rural and Urban Female Prospective Teachers.



Graph 4.15

#### Mean of Creativity Rural and Urban Female Prospective Teachers

It is observed from Table 4.15 that the Mean of Creativity and its dimensions of Rural Female Prospective Teachers is Creativity-91.54, Fluency-9.91, Flexibility-10.02 and Originality-22.34 which is less than the Mean of urban Female Prospective Teacher's Creativity-101.28, Fluency-11.07, Flexibility-11.06 and Originality-24.50. The exists difference in Creativity and its dimensions as Fluency, Flexibility and Originality between Rural and Urban Female Prospective Teachers is significant at .05 level of significance. So it is stated that Creativity of urban Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of teachers of rural Female Prospective Teachers.

#### 4.3.4 To find out the Creativity of male and female Prospective Teachers.

Table- 4.16

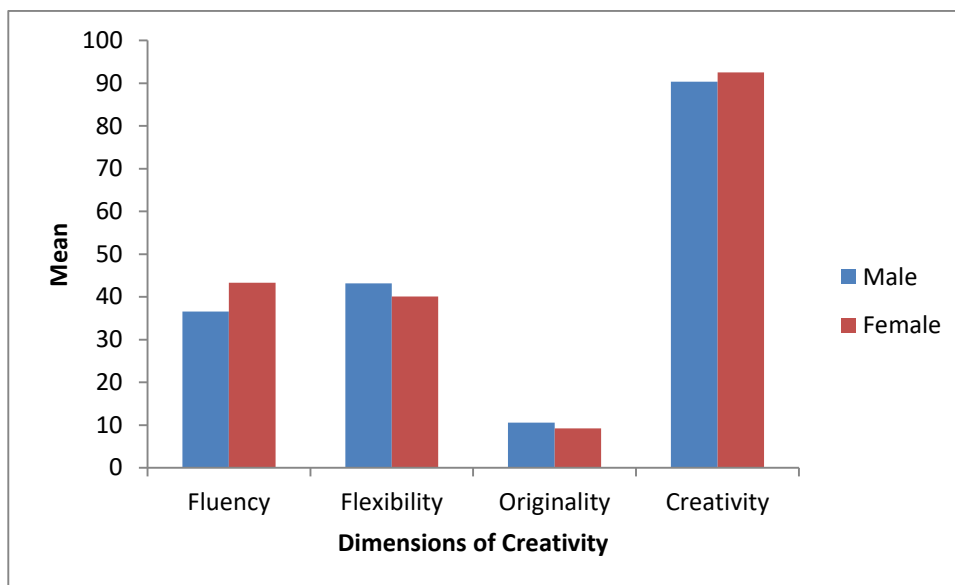
Mean, SD and t-ratio of

Creativity of male and female Prospective Teachers

Source	Gender	N	Mean	S. D.	t-ratio
Fluency	Male	250	36.58	11.023	7.972*
	Female	250	43.28	7.449	
Flexibility	Male	250	43.17	6.625	3.947*
	Female	250	40.08	10.467	
Originality	Male	250	10.58	5.695	2.669*
	Female	250	9.20	5.799	
Creativity	Male	250	90.32	15.097	1.549**
	Female	250	92.56	17.170	

\*Significant at 0.05 level of significance, \*\*Insignificant at 0.05 level of significance

From the table-4.16 it is clear that the calculated value of t-ratio- 1.549 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Creativity between Male and Female Prospective Teachers' and the research hypothesis is accepted that "there is significant difference in Creativity between Male and Female Prospective Teachers'. Hence it is stated that there is significant difference in Creativity between Male and Female Prospective Teachers. Table no. 4.16 also shows that t-ratio related to dimensions of Creativity like Fluency, Flexibility and Originality are 7.972, 3.947 and 2.669 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Male and Female Prospective Teachers. This findings is supported by the study of Nathen (1994) find out there is significant difference in Creativity between Male and Female.



Graph 4.16

Mean of Creativity Male and Female Prospective Teachers

It is observed from Table 4.16 that the Mean of Creativity and its dimensions of Male Female Prospective Teachers is Creativity-80.63, Fluency-8.42, Flexibility-8.60 and Originality-21.07 which is less than the Mean of female Prospective Teacher's Creativity-96.41, Fluency-10.49, Flexibility-10.54 and Originality-23.42. The exists difference in Creativity and its dimensions as Fluency, Flexibility and Originality between Male and Female Prospective Teachers is significant at .05 level of significance. So it is stated that Creativity of Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of teachers of Male Female Prospective Teachers.

**4.3.5 To find out the Creativity of rural male and female Prospective Teachers.**

Table- 4.17

Mean SD and t-ratio of Creativity of

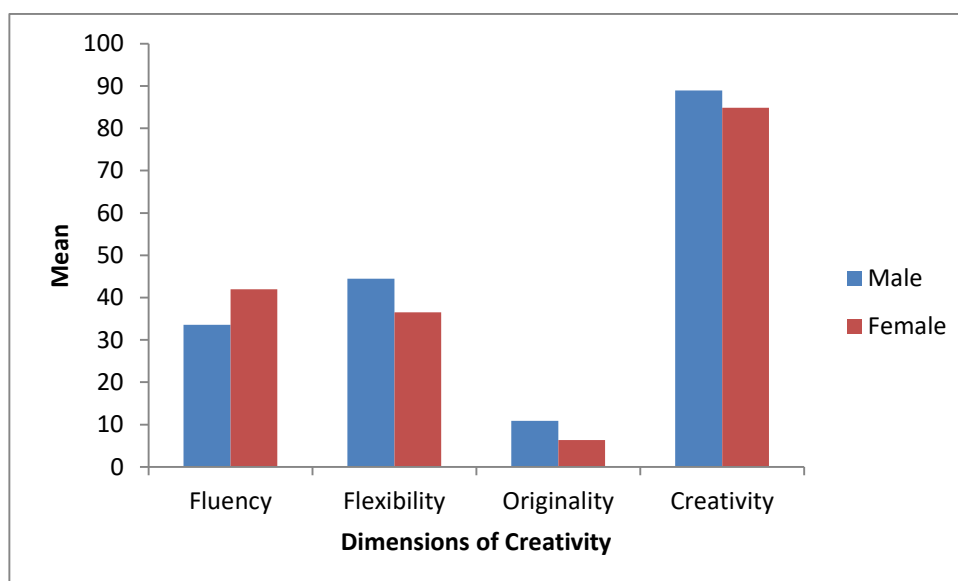
Rural male and female Prospective Teachers

Source	Gender	N	Mean	S. D.	t-ratio
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Fluency	Male	125	33.56	13.382	5.997*
	Female	125	42.00	8.279	
Flexibility	Male	125	44.49	5.639	6.669*
	Female	125	36.54	12.066	
Originality	Male	125	10.90	6.406	6.632*
	Female	125	6.33	4.299	
Creativity	Male	125	88.95	15.811	2.032*
	Female	125	84.87	15.935	

\*Significant at 0.05 level of significance

From the table-4.17 it is clear that the calculated value of t-ratio- 2.032 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Creativity between rural Male and Female Prospective Teachers' and the research hypothesis is accepted that 'there is significant difference in Creativity between rural Male and Female Prospective Teachers'. Hence it is stated that there is significant difference in Creativity between rural Male and Female Prospective Teachers. Table no. 4.17 also shows that t-ratio related to dimensions of Creativity like Fluency, Flexibility and Originality are 5.997, 6.669 and 6.632 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between teachers of rural Male and Female Prospective Teachers. This finding is supported by Chaturvedi, (2008.) found there is significant difference in Creativity between rural Male and Female Prospective Teachers. While result of, compared creativity of male and female students of B.Ed. and the study revealed there is no significant difference in creativity of boys and girls.is contradictory of this result that there is no significant difference in Creativity between rural Male and Female Prospective Teachers.



Graph 4.17

### Mean of Creativity rural Male and Female Prospective Teachers

It is observed from Table 4.17 that the Mean of Creativity and its dimensions of rural Male Prospective Teachers is Creativity-65.92, Fluency-6.60, Flexibility-6.66 and Originality-18.88 which is less than the mean of rural female Prospective Teacher's Creativity-91.54, Fluency-9.91, Flexibility-10.02 and Originality-22.34. The exists difference in Creativity and its dimensions as Fluency, Flexibility and Originality between rural Male and Female Prospective Teachers is significant at .05 level of significance. So it is stated that Creativity of rural Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of rural Male Female Prospective Teachers. Some possible reasons may be female are hardworking and having creative mind.

#### 6. To find out the Creativity of urban male and female Prospective Teachers.

Table- 4.18

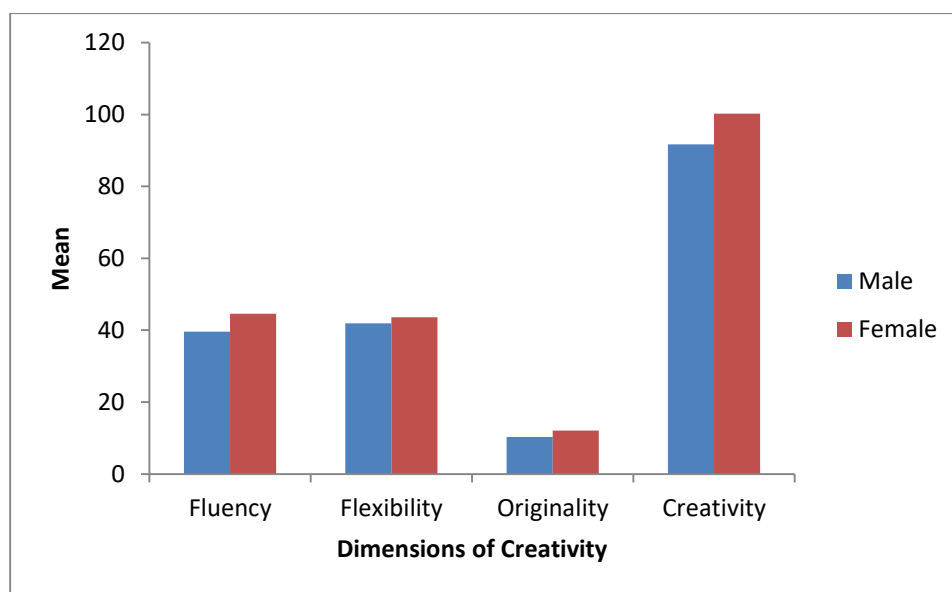
Mean, SD and t-ratio of Creativity of  
Urban male and female Prospective Teachers

Source	Gender	N	Mean	S. D.	t-ratio
Fluency	Male	125	39.59	6.824	5.995*
	Female	125	44.57	6.289	
Flexibility	Male	125	41.86	7.270	1.948*
	Female	125	43.62	7.014	
Originality	Male	125	10.25	4.887	2.731*
	Female	125	12.08	5.690	
Creativity	Male	125	91.70	14.278	4.655*
	Female	125	100.26	14.792	

\*Significant at 0.05 level of significance

From the table-4.18 it is clear that the calculated value of t-ratio- 4.655 is greater than the table value of t-ratio at .05 level of significance. Therefore the null hypothesis is rejected at .05 level of significance that 'There is no significant difference in Creativity between urban Male and Female Prospective Teachers' and the research hypothesis is accepted that "there is significant difference in Creativity between urban Male and Female Prospective Teachers'. Hence it is stated that there is significant

difference in Creativity between urban Male and Female Prospective Teachers. Table no. 4.18 also shows that t-ratio related to dimensions of Creativity like Fluency, Flexibility and Originality are 5.995, 1.948 and 2.731 which is significant at .05 level of significance. Hence it is stated that there is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between teachers of urban Male and Female Prospective Teachers.



Graph 4.18

#### Mean of Creativity urban Male and Female Prospective Teachers

It is observed from Table 4.18 that the Mean of Creativity and its dimensions of urban Male Prospective Teachers is Creativity-95.34, Fluency-10.24, Flexibility-10.55 and Originality-23.26 which is less than the mean of urban female Prospective Teacher's Creativity-101.28, Fluency-11.07, Flexibility-11.06 and Originality-24.50. The exists difference in Creativity and its dimensions as Fluency, Flexibility and Originality between urban Male and Female Prospective Teachers is significant at .05 level of significance. So it is stated that Creativity of urban Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of urban Male Female Prospective Teachers.

**Objective 4: To investigate the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.**

**Hypothesis Ho: There is no significant difference in the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.**

**Research Hypothesis H<sub>3</sub>: There is significant difference in the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.**

To analyze this objective few sub-objectives are prepared-

#### 4.4.1 To investigate the Mental Health of low, medium and high Creative rural Prospective Teachers.

Table 4.19

Mean and S.D. for Mental Health of low,

Medium and High Creative rural Prospective Teachers

Level	N	Mean	Std. Deviation
Low	87	64.02	15.833
Medium	124	84.54	19.158
High	39	93.08	14.726

From the above table 4.19 it can be seen that, Mental Health of low Creative rural Prospective Teachers is 64.02, Mental Health of medium Creative rural Prospective Teachers is 84.54 and Mental Health of high Creative rural Prospective Teachers is 93.08. So it is found that there is difference in Mental Health among low, medium and high Creative rural Prospective Teachers.

Table 4.20

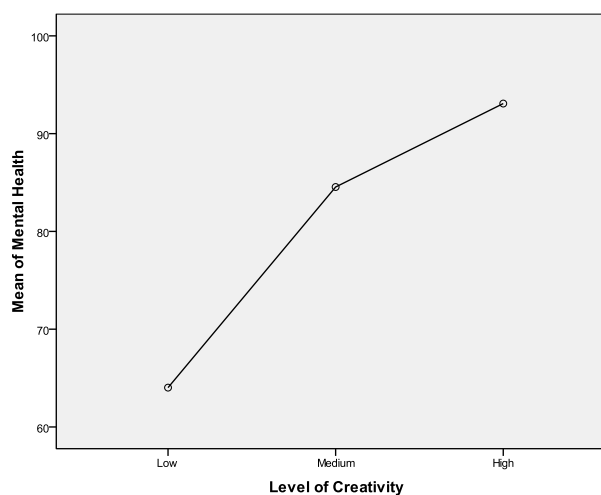
ANOVA of Mental Health of low, medium and High Creative rural Prospective Teachers

Source	Sum of Squares	Df	Mean Square	F-ratio
Between Groups	31031.522	2	15515.761	

Within Groups	74941.522	247	303.407	51.138*
Total	105973.044	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.20, it can be seen that, a significant difference was observed in Mental Health of low, medium and high Creative rural Prospective Teachers in relation to Job Mental Health  $F=51.138$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Mental Health among low, medium and high Creative rural Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Mental Health among low, medium and high Creative rural Prospective Teachers.' It means that, there is significant difference in Mental Health among low, medium and high Creative rural Prospective Teachers. This agrees with the earlier studies as Palta singh (2007) that Mental Health of rural Prospective Teachers is significantly affected by Creativity levels. The mean scores of Mental Health of low, medium and high Creative rural Prospective Teachers are presented in the following Graph.



**Graph 4.19**

Mean Plot of Mental Health of Low,  
Medium and High Creative rural Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Mental Health of rural Prospective Teachers. So that it is determined the following objectives related to Mental Health of low, medium and high rural Prospective Teachers -

1. To comparative study of Mental Health of low and medium Creative rural Prospective Teachers.
2. To comparative study of Mental Health of medium and high Creative rural Prospective Teachers.
3. To comparative study of Mental Health of high and low Creative rural Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.21  
t-value of Mental Health of low,  
Medium and High Creative rural Prospective Teachers

Group	Mean Difference	Std. Error	t-Value
Low- medium	20.517	2.417	8.488*
Medium- high	8.537	2.919	2.924*
High- low	29.054	2.905	10.001*

\*Significant at 0.05 level of significance

It is observed from Table 4.21 that the Mean difference in Mental Health between Low and Medium Creative rural Prospective Teachers are 20.517 with Standard Error 2.417. The calculated t-value is 8.488 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between low and medium Creative rural Prospective Teachers. So it stated that of low Creative rural Prospective Teachers having low Mental Health than Medium Creative rural Prospective Teachers.

Table 4.21 shows that the Mean difference in Mental Health between Medium and high Creative rural Prospective Teachers is 8.537 with Standard Error 2.919. The calculated t-value is 2.924 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Mental Health between male Medium and high Creative rural Prospective Teachers. So it stated that Medium Creative rural Prospective Teachers having low Mental Health than high Creative rural Prospective Teachers.

From the above Table 4.21 how that the Mean Significant difference in Mental Health between high and low Creative rural Prospective Teachers is 29.054 with Standard Error 2.905. The calculated t-value is 10.001 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between high and low Creative rural Prospective Teachers. So it stated that high Creative rural Prospective Teachers having high Mental Health than low Creative rural Prospective Teachers.

#### 4.4.2 To investigate the Mental Health of low, medium and high Creative urban Prospective Teachers.

Table 4.22

Mean and S.D. for Mental Health of low,

Medium and High Creative urban Prospective Teachers

Level	N	Mean	Std. Deviation
Low	38	88.32	4.971
Medium	123	97.59	4.363
High	89	103.57	2.083

From the above table 4.22 , it can be seen that, Mental Health of low Creative urban Prospective Teachers is 88.32, Mental Health of medium Creative urban Prospective Teachers is 97.59 and Mental Health of high Creative urban Prospective Teachers is 103.57. So it is found that there is difference in Mental Health among low, medium and high Creative urban Prospective Teachers.

Table 4.23

ANOVA of Mental Health of low,

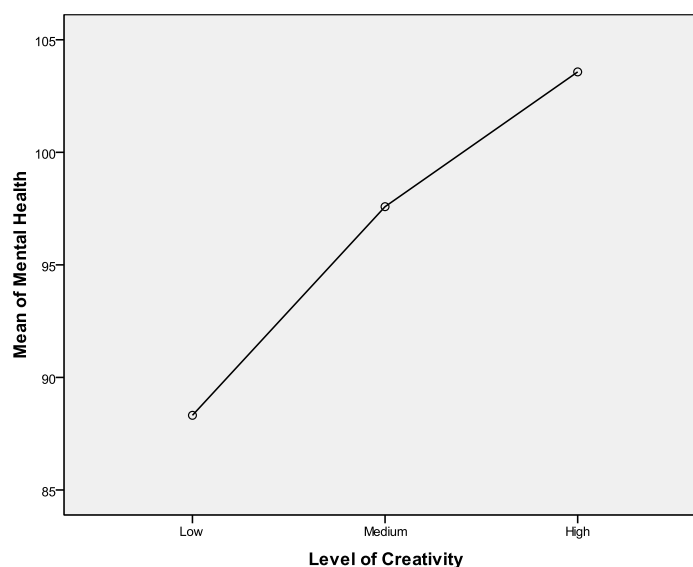
Medium and High Creative urban Prospective Teachers

Source	Sum of Squares	Df	Mean Square	F-ratio
Between Groups	6325.445	2	3162.722	

Within Groups	3617.839	247	14.647	215.928*
Total	9943.284	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.23, it can be seen that, a significant difference was observed in Mental Health of low, medium and high Creative urban Prospective Teachers in relation to Job Mental Health  $F=215.928$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Mental Health among low, medium and high Creative urban Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Mental Health among low, medium and high Creative urban Prospective Teachers.' It means that, there is significant difference in Mental Health among low, medium and high Creative urban Prospective Teachers. The mean scores of Mental Health of low, medium and high Creative urban Prospective Teachers are presented in the following Graph.



Graph 4.20

Mean Plot of Mental Health of Low,  
Medium and High Creative urban Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Mental Health of urban Prospective Teachers. So that it is determined the following objectives related to Mental Health of low, medium and high urban Prospective Teachers -

1. To comparative study of Mental Health of low and medium Creative urban Prospective Teachers.

2. To comparative study of Mental Health of medium and high Creative urban Prospective Teachers.

3. To comparative study of Mental Health of high and low Creative urban Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.24  
t-value of Mental Health of low,  
Medium and High Creative urban Prospective Teachers

Group	Mean Difference	Std. Error	t-value
Low- medium	9.270	.897	10.334*
Medium- high	5.988	.451	13.277*
High- low	15.257	.836	18.250*

\*Significant at 0.05 level of significance

It is observed from Table 4.24 that the Mean difference in Mental Health between Low and Medium Creative urban Prospective Teachers are 9.270 with Standard Error .897. The calculated t-value is 10.334 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between low and medium Creative urban Prospective Teachers. So it stated that of low Creative urban Prospective Teachers having low Mental Health than Medium Creative urban Prospective Teachers.

Table 4.24 shows that the Mean difference in Mental Health between Medium and high Creative urban Prospective Teachers is 5.988 with Standard Error .451. The calculated t-value is 13.277 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Mental Health between male Medium and high Creative urban Prospective Teachers. So it stated that Medium Creative urban Prospective Teachers having low Mental Health than high Creative urban Prospective Teachers.

From the above Table 4.24 how that the Mean Significant difference in Mental Health between high and low Creative urban Prospective Teachers is 15.257 with Standard Error1 .836. The calculated t-value is 18.250 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between high and low Creative urban Prospective Teachers. So it stated that high Creative urban Prospective Teachers having high Mental Health than low Creative urban Prospective Teachers. This finding is contradictory by the study of Kumar and Anand

(2003) that creativity ; problem solving ability and mental health was significant and positively correlated with student teachers.

#### 4.4.3 To investigate the Mental Health of low, medium and high Creative male Prospective Teachers.

Table 4.25

Mean and S.D. for Mental Health of low,

Medium and High Creative male Prospective Teachers

Level	N	Mean	Std. Deviation
Low	71	68.70	15.236
Medium	123	81.06	16.253
High	56	94.80	12.206

From the above table 4.25 , it can be seen that, Mental Health of low Creative male Prospective Teachers is 68.70, Mental Health of medium Creative male Prospective Teachers is 81.06 and Mental Health of high Creative male Prospective Teachers is 94.80. So it is found that there is difference in Mental Health among low, medium and high Creative male Prospective Teachers.

Table 4.26

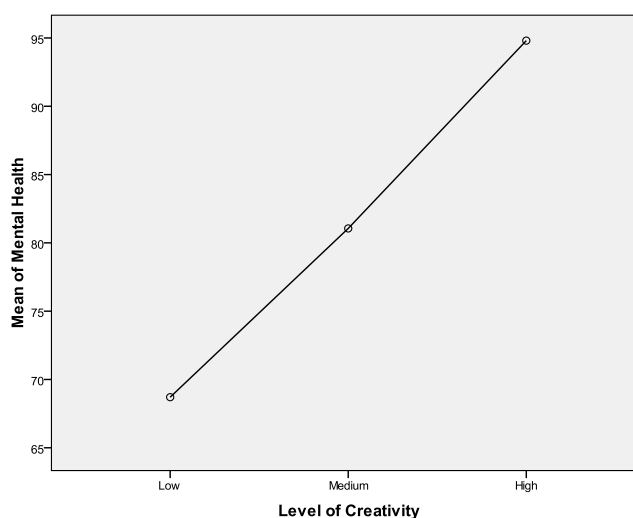
ANOVA of Mental Health of low, medium and High Creative male Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
Between Groups	21370.174	2	10685.087	46.570*
Within Groups	56672.230	247	229.442	
Total	78042.404	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.26, it can be seen that, a significant difference was observed in Mental Health of low, medium and high Creative male Prospective Teachers in relation to Job Mental Health  $F=46.570$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Mental Health among low, medium and high Creative male Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Mental Health among low,

medium and high Creative male Prospective Teachers.’ It means that, there is significant difference in Mental Health among low, medium and high Creative male Prospective Teachers. The mean scores of Mental Health of low, medium and high Creative male Prospective Teachers are presented in the following Graph.



Graph 4.21

Mean Plot of Mental Health of Low,  
Medium and High Creative male Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Mental Health of male Prospective Teachers. So that it is determined the following objectives related to Mental Health of low, medium and high male Prospective Teachers -

1. To comparative study of Mental Health of low and medium Creative male Prospective Teachers.
2. To comparative study of Mental Health of medium and high Creative male Prospective Teachers.

## 3. To comparative study of Mental Health of high and low Creative male Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.27  
t-value of Mental Health of low, Medium and  
High Creative male Prospective Teachers

Group	Mean Difference	Std. Error	t-Value
Low- medium	12.353	2.327	5.308*
Medium- high	13.747	2.193	6.268*
High- low	26.099	2.435	10.718*

\*Significant at 0.05 level of significance

It is observed from Table 4.27 that the Mean difference in Mental Health between Low and Medium Creative male Prospective Teachers are 12.353 with Standard Error 2.327. The calculated t-value is 5.308 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between low and medium Creative male Prospective Teachers. So it stated that of low Creative male Prospective Teachers having low Mental Health than Medium Creative male Prospective Teachers.

Table 4.27 shows that the Mean difference in Mental Health between Medium and high Creative male Prospective Teachers is 13.747 with Standard Error 2.193. The calculated t-value is 6.268 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Mental Health between male Medium and high Creative male Prospective Teachers. So it stated that Medium Creative male Prospective Teachers having low Mental Health than high Creative male Prospective Teachers.

From the above Table 4.27 how that the Mean Significant difference in Mental Health between high and low Creative male Prospective Teachers is 26.099 with Standard Error 2.435. The calculated t-value is 10.718 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between high and low Creative male Prospective

Teachers. So it stated that high Creative male Prospective Teachers having high Mental Health than low Creative male Prospective Teachers.

#### 4.4.4 To investigate the Mental Health of low, medium and high Creative female Prospective Teachers.

Table 4.28

Mean and S.D. for Mental Health of low,  
Medium and High Creative female Prospective Teachers

Level	N	Mean	Std. Deviation
Low	54	74.96	19.729
Medium	124	100.94	3.305
High	72	104.71	2.139

From the above table 4.28 , it can be seen that, Mental Health of low Creative female Prospective Teachers is 74.96, Mental Health of medium Creative female Prospective Teachers is 100.94 and Mental Health of high Creative female Prospective Teachers is 104.71. So it is found that there is difference in Mental Health among low, medium and high Creative female Prospective Teachers.

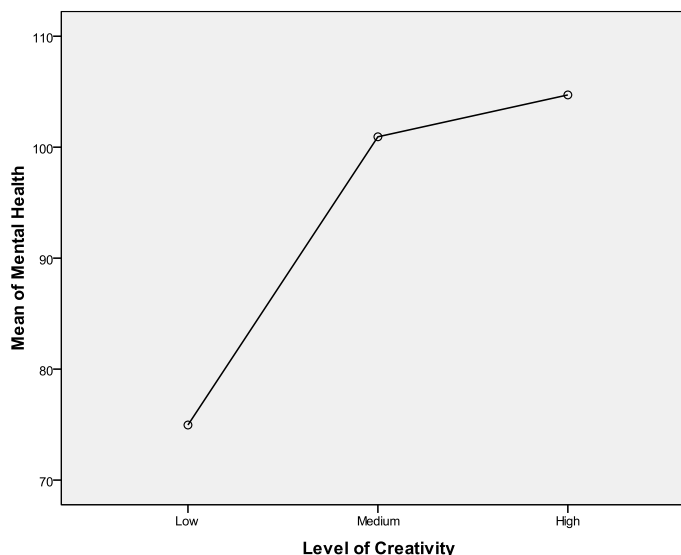
Table 4.29

ANOVA of Mental Health of low,  
Medium and High Creative female Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
Between Groups	32336.279	2	16168.140	179.096*
Within Groups	22298.285	247	90.276	
Total	54634.564	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.29, it can be seen that, a significant difference was observed in Mental Health of low, medium and high Creative female Prospective Teachers in relation to Job Mental Health  $F=179.096$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Mental Health among low, medium and high Creative female Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Mental Health among low, medium and high Creative female Prospective Teachers.' It means that, there is significant difference in Mental Health among low, medium and high Creative female Prospective Teachers. The mean scores of Mental Health of low, medium and high Creative female Prospective Teachers are presented in the following Graph.



Graph 4.21

Mean Plot of Mental Health of Low,  
Medium and High Creative female Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Mental Health of female Prospective Teachers. So that it is determined the following objectives related to Mental Health of low, medium and high female Prospective Teachers -

1. To comparative study of Mental Health of low and medium Creative female Prospective Teachers.
2. To comparative study of Mental Health of medium and high Creative female Prospective Teachers.
3. To comparative study of Mental Health of high and low Creative female Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.30

t-value of Mental Health of low, Medium and High Creative female Prospective Teachers

Group	Mean Difference	Std. Error	t-Value
Low- medium	25.973	2.701	9.616*
Medium- high	3.773	.389	9.699*
High- low	29.745	2.697	11.028*

\*Significant at 0.05 level of significance

It is observed from Table 4.30 that the Mean difference in Mental Health between Low and Medium Creative female Prospective Teachers are 25.973 with Standard Error 2.701. The calculated t-

value is 9.616 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between low and medium Creative female Prospective Teachers. So it stated that of low Creative female Prospective Teachers having low Mental Health than Medium Creative female Prospective Teachers.

Table 4.30 shows that the Mean difference in Mental Health between Medium and high Creative female Prospective Teachers is 3.773 with Standard Error .389. The calculated t-value is 9.699 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Mental Health between male Medium and high Creative female Prospective Teachers. So it stated that Medium Creative female Prospective Teachers having low Mental Health than high Creative female Prospective Teachers.

From the above Table 4.30 how that the Mean Significant difference in Mental Health between high and low Creative female Prospective Teachers is 29.745 with Standard Error 2.697. The calculated t-value is 11.028 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between high and low Creative female Prospective Teachers. So it stated that high Creative female Prospective Teachers having high Mental Health than low Creative female Prospective Teachers.

#### 4.4.1 To investigate the Mental Health of low, medium and high Creative Prospective Teachers.

Table 4.31

Mean and S.D. for Mental Health of low,  
Medium and High Creative Prospective Teachers

Level	N	Mean	Std. Deviation
Low	125	71.41	17.524
Medium	247	91.04	15.351
High	128	100.38	9.561

From the above table 4.31 , it can be seen that, Mental Health of low Creative Prospective Teachers is 71.41, Mental Health of medium Creative Prospective Teachers is 91.04 and Mental Health of high Creative Prospective Teachers is 100.38. So it is found that there is difference in Mental Health among low, medium and high Creative Prospective Teachers.

Table 4.32

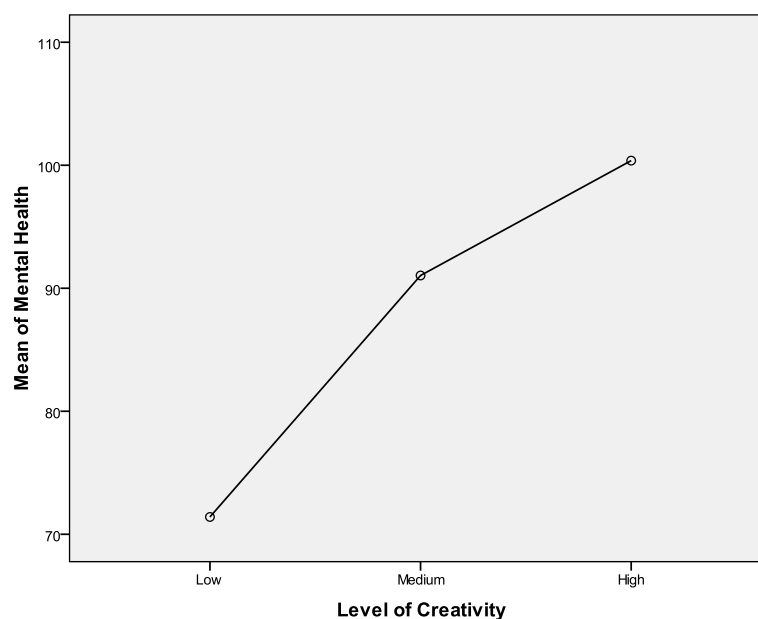
ANOVA of Mental Health of low,  
Medium and High Creative Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
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Between Groups	56155.936	2	28077.968	129.615*
Within Groups	107662.864	497	216.625	
Total	163818.800	499		

\*Significant at 0.05 level of significance

From the results of the above table 4.32, it can be seen that, a significant difference was observed in Mental Health of low, medium and high Creative Prospective Teachers in relation to Job Mental Health  $F=129.615$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Mental Health among low, medium and high Creative Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Mental Health among low, medium and high Creative Prospective Teachers.' It means that, there is significant difference in Mental Health among low, medium and high Creative Prospective Teachers. The mean scores of Mental Health of low, medium and high Creative Prospective Teachers are presented in the following Graph.



Graph 4.23

Mean Plot of Mental Health of Low,  
Medium and High Creative Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Mental Health of Prospective Teachers. So that it is determined the following objectives related to Mental Health of low, medium and high Prospective Teachers -

1. To comparative study of Mental Health of low and medium Creative Prospective Teachers.

2. To comparative study of Mental Health of medium and high Creative Prospective Teachers.

3. To comparative study of Mental Health of high and low Creative Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.33  
t-value of Mental Health of low,  
Medium and High Creative Prospective Teachers

Group	Mean Difference	Std. Error	t-Value
Low- medium	19.628	1.847	10.626*
Medium- high	9.339	1.292	7.228*
High- low	28.967	1.781	16.264*

\*Significant at 0.05 level of significance

It is observed from Table 4.33 that the Mean difference in Mental Health between Low and Medium Creative Prospective Teachers are 19.628 with Standard Error 1.847. The calculated t-value is 10.626 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between low and medium Creative Prospective Teachers. So it stated that of low Creative Prospective Teachers having low Mental Health than Medium Creative Prospective Teachers.

Table 4.33 shows that the Mean difference in Mental Health between Medium and high Creative Prospective Teachers is 9.339 with Standard Error 1.292. The calculated t-value is 7.228 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Mental Health between male Medium and high Creative Prospective Teachers. So it stated that Medium Creative Prospective Teachers having low Mental Health than high Creative Prospective Teachers.

From the above Table 4.33 how that the Mean Significant difference in Mental Health between high and low Creative Prospective Teachers is 28.967 with Standard Error 1.781. The calculated t-value is 16.264 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Mental Health between high and low Creative Prospective Teachers. So it stated that high Creative Prospective Teachers having high Mental Health than low Creative Prospective Teachers.

**Objective 4.5.0: To assess the relationship between stress and creativity of prospective teachers on the basis of gender and locale.**

**Hypothesis Ho: There is no significant difference in the relationship between stress and creativity of prospective teachers on the basis of gender and locale.**

**Research Hypothesis H<sub>3</sub>: There is significant difference in the relationship between stress and creativity of prospective teachers on the basis of gender and locale.**

To analyze this objective few sub-objectives are prepared-

#### **4.5.1 To assess the Stress of low, medium and high Creative rural Prospective Teachers.**

Table 4.34

Mean and S.D. for Stress of low,

Medium and High Creative rural Prospective Teachers

Level	N	Mean	Std. Deviation
Low	87	107.79	8.111
Medium	124	88.81	11.820
High	39	53.72	14.290

From the above table 4.34, it can be seen that, Stress of low Creative rural Prospective Teachers is 107.79, Stress of medium Creative rural Prospective Teachers is 88.81 and Stress of high Creative rural Prospective Teachers is 53.72. So it is found that there is difference in Stress among low, medium and high Creative rural Prospective Teachers.

Table 4.35

ANOVA of Stress of low,

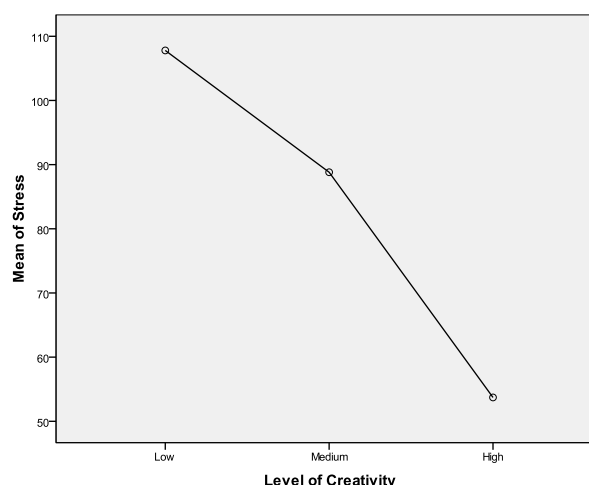
Medium and High Creative rural Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
Between Groups	79056.309	2	39528.154	319.037*
Within Groups	30602.907	247	123.898	
Total	109659.216	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.35, it can be seen that, a significant difference was observed in Stress of low, medium and high Creative rural Prospective Teachers in relation to Job Stress  $F=319.037$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Stress among low, medium and high Creative rural Prospective Teachers and alternative hypothesis is

accepted that is ‘There is significant difference in Stress among low, medium and high Creative rural Prospective Teachers.’ It means that, there is significant difference in Stress among low, medium and high Creative rural Prospective Teachers. The mean scores of Stress of low, medium and high Creative rural Prospective Teachers are presented in the following Graph.



**Graph 4.24**

Mean Plot of Stress of Low,  
Medium and High Creative rural Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Stress of rural Prospective Teachers. So that it is determined the following objectives related to Stress of low, medium and high rural Prospective Teachers -

1. To comparative study of Stress of low and medium Creative rural Prospective Teachers.
2. To comparative study of Stress of medium and high Creative rural Prospective Teachers.
3. To comparative study of Stress of high and low Creative rural Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.36  
t-value of Stress of low,  
Medium and High Creative rural Prospective Teachers

Group	Mean Difference	Std. Error	t-value
Low- medium	18.979	1.372	13.833*
Medium- high	35.097	2.522	13.916*
High- low	54.075	2.448	22.089*

\*Significant at 0.05 level of significance

It is observed from Table 4.36 that the Mean difference in Stress between Low and Medium Creative rural Prospective Teachers are 18.979 with Standard Error 1.372. The calculated t-value is 13.833 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between low and medium Creative rural Prospective Teachers. So it stated that of low Creative rural Prospective Teachers having high Stress than Medium Creative rural Prospective Teachers.

Table 4.36 shows that the Mean difference in Stress between Medium and high Creative rural Prospective Teachers is 35.097 with Standard Error 2.522. The calculated t-value is 13.916 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Stress between male Medium and high Creative rural Prospective Teachers. So it stated that Medium Creative rural Prospective Teachers having high Stress than high Creative rural Prospective Teachers.

From the above Table 4.36 how that the Mean Significant difference in Stress between high and low Creative rural Prospective Teachers is 54.075 with Standard Error 2.448. The calculated t-value is 22.089 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between high and low Creative rural Prospective Teachers. So it stated that low Creative rural Prospective Teachers having low Stress management than high Creative rural Prospective Teachers.

#### 4.5.2 To assess the Stress of low, medium and high Creative urban Prospective Teachers.

Table 4.37

Mean and S.D. for Stress of low,

Medium and High Creative urban Prospective Teachers

Level	N	Mean	Std. Deviation
Low	38	88.32	4.971
Medium	123	97.59	4.363
High	89	103.57	2.083

From the above table 4.37, it can be seen that, Stress of low Creative urban Prospective Teachers is 88.32, Stress of medium Creative urban Prospective Teachers is 97.59 and Stress of high Creative urban Prospective Teachers is 103.57. So it is found that there is difference in Stress among low, medium and high Creative urban Prospective Teachers.

Table 4.38

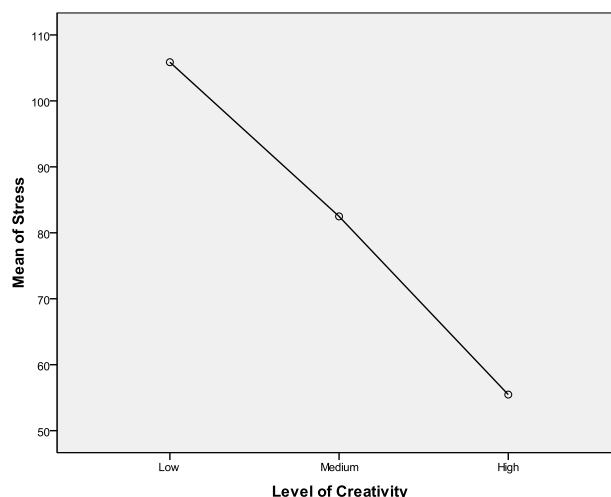
ANOVA of Stress of low,

Medium and High Creative urban Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
Between Groups	76537.802	2	38268.901	243.976*
Within Groups	38743.254	247	156.855	
Total	115281.056	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.38, it can be seen that, a significant difference was observed in Stress of low, medium and high Creative urban Prospective Teachers in relation to Job Stress  $F=243.976$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Stress among low, medium and high Creative urban Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Stress among low, medium and high Creative urban Prospective Teachers.' It means that, there is significant difference in Stress among low, medium and high Creative urban Prospective Teachers. The mean scores of Stress of low, medium and high Creative urban Prospective Teachers are presented in the following Graph.



Graph 4.25

Mean Plot of Stress of Low,  
Medium and High Creative urban Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Stress of urban Prospective Teachers. So that it is determined the following objectives related to Stress of low, medium and high urban Prospective Teachers -

1. To comparative study of Stress of low and medium Creative urban Prospective Teachers.
2. To comparative study of Stress of medium and high Creative urban Prospective Teachers.
3. To comparative study of Stress of high and low Creative urban Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.39

t-value of Stress of low,  
Medium and High Creative urban Prospective Teachers

Group	Mean Difference	Std. Error	t-value
Low- medium	23.381	1.832	12.762*
Medium- high	27.016	1.744	15.490*
High- low	50.397	1.692	29.785*

\*Significant at 0.05 level of significance

It is observed from Table 4.39 that the Mean difference in Stress between Low and Medium Creative urban Prospective Teachers are 23.381 with Standard Error 1.832. The calculated t-value is 12.762

which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between low and medium Creative urban Prospective Teachers. So it stated that of low Creative urban Prospective Teachers having high Stress than Medium Creative urban Prospective Teachers.

Table 4.39 shows that the Mean difference in Stress between Medium and high Creative urban Prospective Teachers is 27.016 with Standard Error 1.744. The calculated t-value is 15.490 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Stress between male Medium and high Creative urban Prospective Teachers. So it stated that Medium Creative urban Prospective Teachers having high Stress than high Creative urban Prospective Teachers.

From the above Table 4.39 how that the Mean Significant difference in Stress between high and low Creative urban Prospective Teachers is 50.397with Standard Error 1.692. The calculated t-value is 29.785 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between high and low Creative urban Prospective Teachers. So it stated that low Creative urban Prospective Teachers having low Stress management than high Creative urban Prospective Teachers.

#### 4.5.3 To assess the Stress of low, medium and high Creative Male Prospective Teachers.

Table 4.40

Mean and S.D. for Stress of low,

Medium and High Creative Male Prospective Teachers

Level	N	Mean	Std. Deviation
Low	71	104.97	7.119
Medium	123	85.60	11.278
High	56	52.77	11.930

From the above table 4.40 , it can be seen that, Stress of low Creative Male Prospective Teachers is 104.97, Stress of medium Creative Male Prospective Teachers is 85.60 and Stress of high Creative Male Prospective Teachers is 52.77. So it is found that there is difference in Stress among low, medium and high Creative Male Prospective Teachers.

Table 4.41

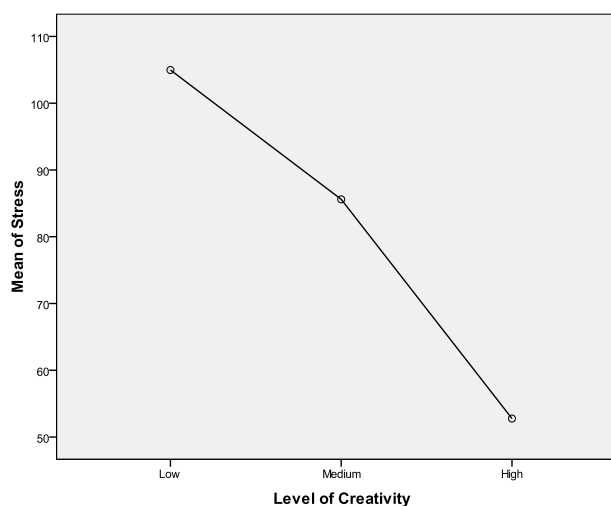
ANOVA of Stress of low,

Medium and High Creative Male Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
Between Groups	86151.719	2	43075.859	395.626*
Within Groups	26893.405	247	108.880	
Total	113045.124	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.41, it can be seen that, a significant difference was observed in Stress of low, medium and high Creative Male Prospective Teachers in relation to Job Stress  $F=395.626$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Stress among low, medium and high Creative Male Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Stress among low, medium and high Creative Male Prospective Teachers.' It means that, there is significant difference in Stress among low, medium and high Creative Male Prospective Teachers.. The mean scores of Stress of low, medium and high Creative Male Prospective Teachers are presented in the following Graph.



Graph 4.26

Mean Plot of Stress of Low,  
Medium and High Creative Male Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Stress of Male Prospective Teachers. So that it is determined the following objectives related to Stress of low, medium and high Male Prospective Teachers -

1. To comparative study of Stress of low and medium Creative Male Prospective Teachers.
2. To comparative study of Stress of medium and high Creative Male Prospective Teachers.
3. To comparative study of Stress of high and low Creative Male Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.42  
t-value of Stress of low,  
Medium and High Creative Male Prospective Teachers

Group	Mean Difference	Std. Error	t-value
Low- medium	19.370	1.322	14.652*
Medium- high	32.834	1.891	17.363*
High- low	52.204	1.804	28.937*

\*Significant at 0.05 level of significance

It is observed from Table 4.42 that the Mean difference in Stress between Low and Medium Creative Male Prospective Teachers are 19.370 with Standard Error 1.322. The calculated t-value is 14.652 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between low and medium Creative Male Prospective Teachers. So it stated that of low Creative Male Prospective Teachers having high Stress than Medium Creative Male Prospective Teachers.

Table 4.42 shows that the Mean difference in Stress between Medium and high Creative Male Prospective Teachers is 32.834 with Standard Error 1.804. The calculated t-value is 28.937 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Stress between male Medium and high Creative Male Prospective Teachers. So it stated that Medium Creative Male Prospective Teachers having high Stress than high Creative Male Prospective Teachers.

From the above Table 4.42 how that the Mean Significant difference in Stress between high and low Creative Male Prospective Teachers is 52.204 with Standard Error 1.351. The calculated t-value is 22.972 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between high and low Creative Male Prospective Teachers. So it stated that low Creative Male Prospective Teachers having low Stress management than high Creative Male Prospective Teachers.

#### 4.5.4 To assess the Stress of low, medium and high Creative Female Prospective Teachers.

Table 4.43  
Mean and S.D. for Stress of low,  
Medium and High Creative Female Prospective Teachers

Level	N	Mean	Std. Deviation
Low	54	110.15	8.265
Medium	124	85.73	15.791
High	72	56.63	11.581

From the above table 4.43, it can be seen that, Stress of low Creative Female Prospective Teachers is 110.15, Stress of medium Creative Female Prospective Teachers is 85.73 and Stress of high Creative Female Prospective Teachers is 56.63. So it is found that there is difference in Stress among low, medium and high Creative Female Prospective Teachers.

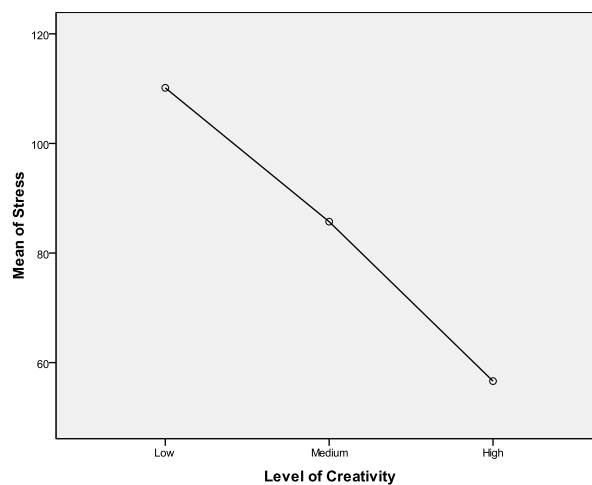
Table 4.44

ANOVA of Stress of low,  
Medium and High Creative Female Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
Between Groups	90770.533	2	45385.266	255.856*
Within Groups	43814.367	247	177.386	
Total	134584.900	249		

\*Significant at 0.05 level of significance

From the results of the above table 4.44, it can be seen that, a significant difference was observed in Stress of low, medium and high Creative Female Prospective Teachers in relation to Job Stress  $F=255.856$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Stress among low, medium and high Creative Female Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Stress among low, medium and high Creative Female Prospective Teachers.' It means that, there is significant difference in Stress among low, medium and high Creative Female Prospective Teachers. The mean scores of Stress of low, medium and high Creative Female Prospective Teachers are presented in the following Graph.



Graph 4.27

Mean Plot of Stress of Low,  
Medium and High Creative Female Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Stress of Female Prospective Teachers. So that it is determined the following objectives related to Stress of low, medium and high Female Prospective Teachers -

1. To comparative study of Stress of low and medium Creative Female Prospective Teachers.
2. To comparative study of Stress of medium and high Creative Female Prospective Teachers.
3. To comparative study of Stress of high and low Creative Female Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.45  
t-value of Stress of low,  
Medium and High Creative Female Prospective Teachers

Group	Mean Difference	Std. Error	t-value
Low- medium	24.422	1.810	13.492*
Medium- high	29.101	1.968	14.787*
High- low	53.523	1.769	30.256*

\*Significant at 0.05 level of significance

It is observed from Table 4.45 that the Mean difference in Stress between Low and Medium Creative Female Prospective Teachers are 24.422 with Standard Error 1.810. The calculated t-value is 13.492 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between low and medium Creative Female Prospective Teachers. So it stated that of low Creative Female Prospective Teachers having high Stress than Medium Creative Female Prospective Teachers.

Table 4.54 shows that the Mean difference in Stress between Medium and high Creative Female Prospective Teachers is 29.101 with Standard Error 1.968. The calculated t-value is 14.787 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Stress between Female Medium and high Creative Female Prospective Teachers. So it stated that Medium Creative Female Prospective Teachers having high Stress than high Creative Female Prospective Teachers.

From the above Table 4.45 how that the Mean Significant difference in Stress between high and low Creative Female Prospective Teachers is 53.523 with Standard Error 1.769. The calculated t-value is 30.256 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between high and low Creative Female Prospective Teachers. So it stated that low Creative Female Prospective Teachers having low Stress management than high Creative Female Prospective Teachers.

#### 4.5.5 To assess the Stress of low, medium and high Creative Prospective Teachers.

Table 4.46

Mean and S.D. for Stress of low,  
Medium and High Creative Prospective Teachers

Level	N	Mean	Std. Deviation
Low	125	107.21	8.027
Medium	247	85.66	13.703
High	128	54.94	11.845

From the above table 4.46, it can be seen that, Stress of low Creative Prospective Teachers is 107.21, Stress of medium Creative Prospective Teachers is 85.66 and Stress of high Creative Prospective Teachers is 54.94. So it is found that there is difference in Stress among low, medium and high Creative Prospective Teachers.

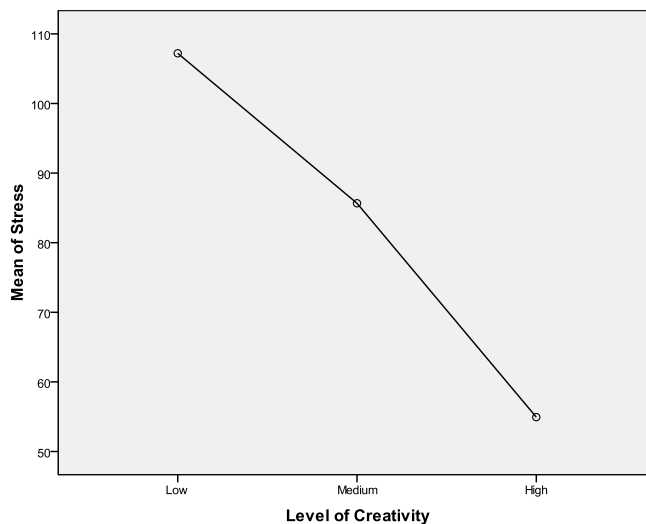
Table 4.46

ANOVA of Stress of low,  
Medium and High Creative Prospective Teachers

Source	Sum of Squares	df	Mean Square	F-ratio
Between Groups	175789.871	2	87894.935	606.726*
Within Groups	71999.201	497	144.868	
Total	247789.072	499		

\*Significant at 0.05 level of significance

From the results of the above table 4.46, it can be seen that, a significant difference was observed in Stress of low, medium and high Creative Prospective Teachers in relation to Job Stress  $F=606.726$  at .05 level of significance. Hence, the null hypothesis is rejected that is 'There is no significant difference in Stress among low, medium and high Creative Prospective Teachers and alternative hypothesis is accepted that is 'There is significant difference in Stress among low, medium and high Creative Prospective Teachers.' It means that, there is significant difference in Stress among low, medium and high Creative Prospective Teachers. The mean scores of Stress of low, medium and high Creative Prospective Teachers are presented in the following Graph.



Graph 4.28

Mean Plot of Stress of Low,  
Medium and High Creative Prospective Teachers

After the interpretation of analysis of variance it is necessary to know that in which mean difference is significant in Stress of Prospective Teachers. So that it is determined the following objectives related to Stress of low, medium and high Prospective Teachers -

1. To comparative study of Stress of low and medium Creative Prospective Teachers.
2. To comparative study of Stress of medium and high Creative Prospective Teachers.
3. To comparative study of Stress of high and low Creative Prospective Teachers.

After the analysis of analysis of variance t-test used to study about above objectives and calculated t-value is given below table no.-

Table 4.48

t-value of Stress of low,  
Medium and High Creative Prospective Teachers

Group	Mean Difference	Std. Error	t-value
Low- medium	21.544	1.129	19.082*
Medium- high	30.726	1.362	22.559*
High- low	52.271	1.270	41.158*

\*Significant at 0.05 level of significance

It is observed from Table 4.48 that the Mean difference in Stress between Low and Medium Creative Prospective Teachers are 21.544 with Standard Error 1.129. The calculated t-value is 19.082 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between low and medium Creative Prospective Teachers. So it stated that of low Creative Prospective Teachers having high Stress than Medium Creative Prospective Teachers.

Table 4.48 shows that the Mean difference in Stress between Medium and high Creative Prospective Teachers is 30.726 with Standard Error 1.362. The calculated t-value is 22.559 which is greater than table value even at .05 level so, it is significant at .05 level. It indicates that there exists significant difference in Stress between Female Medium and high Creative Prospective Teachers. So it stated that Medium Creative Prospective Teachers having high Stress than high Creative Prospective Teachers.

From the above Table 4.48 how that the Mean Significant difference in Stress between high and low Creative Prospective Teachers is 52.271 with Standard Error 1.270. The calculated t-value is 41.158 which is greater than table value even at .05 level so, it is significant at .05 levels. It indicates that there exists significant difference in Stress between high and low Creative Prospective Teachers. So it stated that low Creative Prospective Teachers having low Stress management than high Creative Prospective Teachers. This findings is contradictory by the study of Subha Govindrajan (2012) that stress does affect the creativity.

## CHAPTER V

### SUMMARY AND CONCLUSION

The process of education of man begins when he is in the womb of his mother. At that time he has a kind of environment and he has to adapt himself to other environment as soon as he is born. If the infant fails to adapt it to the environment of the womb, its development is retorted and it becomes weak or sick. Such as infant does not succeed well in adaptation the outside environment after birth. The outside environment is very much extensive than the womb of the mother and as such it needs more adaptation after birth. As the child grows up, his environments become more and more complex and accordingly the need of adaptation also increases. This activity of adaptation is a part of his education process. To prepare himself for adaptation or develop himself for environmental needs, man requires a systematic education which may continue from womb to the grave .After birth, the infant begins to learn from his mother then gradually it learns from the family, community and the other members of the society. Learning is synonymous to education that is learning process is a part of educational process. Mostly it is seen that two children are not same or they do not have identical abilities or experiences. A child's mental development is seen only from his behavior which is manifest in his actions and reactions. In human beings responses, sensation, perception, memory, imagination and reasoning manifest its mental behavior. As man's behavioral patterns progress, the mental development makes itself With age the power of thinking, begins to exhibit a certain flexibility and the formation of concepts develop through contact with society, and these develop the child's mind and make him a social being.

In wider sense, mental development means to understand, remembering, attention, observation, thinking, reasoning and problem solving. Sorenson has rightly said- "psychologically and educationally, a knowledge of the order of mental growth can be used to advantage by the teacher. The curriculum and teaching can be adjusted to the learning ability or mental capacity of the pupil."

Mental Health implies that the individual behavior should be balanced and also that this balance should be maintained in every situation. From this view point, any person possessing the following qualities should be considered to be mentally healthy if person free from anxiety and conflict, fully adjusted, self confident, self controlled, emotionally stable. An individual who enjoys a meaning full and satisfactory life and also possesses the highest morality can be regarded as a mentally healthy individual. Such a person can adjust himself to any situation, since he possesses seemingly inexhaustible capacity to bear mental tension, despite, failure, frustration etc. In the opinion of R.C. Kullhan, “An adjustment is relatively good enough if it both reduces tension created by the conflict of frustration and makes constructive changes in the conditions causing the frustration.”

### Mental Health and Education

The history of education reveals that there was a time when, in the school, no attention whatever was paid to the child’s intelligence, interests and mental condition. Education was purely teacher- centered and its sole aim was to instill the three R’s somehow in the child. Now, however, education has become child – centered; the curriculum is framed, keeping in mind the child’s mental condition, mental level interests and other abilities and qualities education aims at the complete development of the child. Children who are not mentally healthy cannot take full interest in studies; nor can they focus their attention upon books and this cant exploit teaching to their own full advantage. It is essential for every teacher to have Knowledge of mental health so that he may help in maintaining the mental health of his students, diagnose or identify students, suffering from mental ill health and also help in the treatment of students suffering from this problem or any problem of adjustment. It is, thus, almost self- evident that education and mental hygiene cannot be separated from each other. In any democratic country, the aims of self realization, good human relations, economic self – sufficiently and civic responsibility cannot be fulfilled if its children do not enjoy the best mental health.

Maintaining the mental health of the student can be considered one of the primary aims of education because, without satisfactory mental health, it is impossible to develop the child’s innate abilities. Students who become the victims of fear, anxiety, despair and frustration and problems of adjustment cannot concentrate upon reading and hence they do not make progress in learning. Besides, children suffering from problems of adjustment create many other problems in the school, the understanding and solution of which necessitates knowledge of mental understanding and solution of which necessitates knowledge of mental hygiene in the teacher.

Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel and act. It also helps determine how we handle stress, relate to others, and make choices. Mental health is important at every stage of life, from childhood and adolescence through adulthood. Mental health is a circumstance of psychological welfare in which a person understands his capabilities and possesses adequate coping mechanisms for everyday stress. Mental health also means working in a productive manner and contributing to one's community.

Stress can be defined as the brain's response to any demand. Many things can trigger this response, including change. Changes can be positive or negative, as well as real or perceived. They may be recurring, short-term, or long-term and may include things like commuting to and from school or work every day, traveling for a yearly vacation, or moving to another home. Changes can be mild and relatively harmless, such as winning a race, watching a scary movie, or riding a rollercoaster. Some changes are major, such as marriage or divorce, serious illness, or a car accident. Other changes are extreme, such as exposure to violence, and can lead to traumatic stress reactions.

Creativity is regarded the greatest asset of mankind. It is an ability that is most vital for shaping the future of man. Creativity is an essential aspect of human activity and attainments. Creativity does not concern only with scientific or artistic creation. It is found almost in every individuals exhibits work.

Creativity is the act of turning new and imaginative ideas into reality. Creativity is characterized by the ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions. Creativity involves two processes: thinking, then producing. If you have ideas but don’t act on them, you are imaginative but not creative.

Teachers' mental health plays an important role in the teaching learning process. If the teacher is not sound in mentally healthy he can do incalculable harm to the nation in terms of poor guidance to the students. He cannot do justice to the job. His maladjustment will not only adversely affect his personality but produce maladjustments in students put under in charged. Well-adjusted teachers freely help the needed students. He serves as a model of good mental health by communicating his own enthusiasm for learning, by accepting the challenges of his job and inspiring confidence. The following activities are important to develop mental health to the students as well as teachers: In-service / Training programme Seminar, workshop and conferences Close relationship should be established between teachers and the community.

### **Objectives of the study**

1. To study the mental health of prospective teachers in the context to gender and locale.
2. To explore the stress level of prospective teachers on the basis of gender and locale.
3. To find out the Creativity of prospective teachers in the context to gender and locale.
4. To investigate the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.
5. To assess the relationship between stress and creativity of prospective teachers on the basis of gender and locale.

### **RESEARCH HYPOTHESES**

1. There is significant difference in the mental health of prospective teachers in the context to gender and locale.
2. There is significant difference in the stress level of prospective teachers on the basis of gender and locale.
3. There is significant difference in the Creativity of prospective teachers in the context to gender and locale.
4. There is significant difference in the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.
5. There is significant difference in the relationship between stress and creativity of prospective teachers on the basis of gender and locale.

### **NULL HYPOTHESES**

1. There is no significant difference in the mental health of prospective teachers in the context to gender and locale.

2. There is no significant difference in the stress level of prospective teachers on the basis of gender and locale.
3. There is no significant difference in the Creativity of prospective teachers in the context to gender and locale.
4. There is no significant difference in the relationship between mental health and creativity of prospective teachers on the basis of gender and locale.
5. There is no significant difference in the relationship between stress and creativity of prospective teachers on the basis of gender and locale.

## Findings

### Findings related to Mental Health

1. There is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Prospective Teachers and found Mental Health of urban Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of teachers of rural Prospective Teachers.
2. There is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Male Prospective Teachers and found Mental Health of urban Male Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are respectively better than Mental Health of teachers of rural male Prospective Teachers.
3. There is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Rural and Urban Female Prospective Teachers found Mental Health of urban Female Prospective Teachers

according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of teachers of rural Female Prospective Teachers.

4. There is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between Male and Female Prospective Teachers and found
5. Mental Health of Female Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of teachers of Male Prospective Teachers. There is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between teachers of rural Male and Female Prospective Teachers and found Mental Health of rural Female Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of rural Male Female Prospective Teachers.
6. There is significant difference in all dimensions of Mental Health like Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence between teachers of urban Male and Female Prospective Teachers and found Mental Health of urban Female Prospective Teachers according to Emotional Stability, Over-all Adjustment, Autonomy, Security-Insecurity, Self-Concept and Intelligence are comparatively better than Mental Health of urban Male Female Prospective Teachers.

### **Findings related to Stress**

1. There is significant difference in Stress between rural male and female Prospective Teachers and found rural Prospective Teachers take comparatively high Stress than urban Prospective Teachers.
2. There is no significant difference in Stress between rural and urban male Prospective Teachers and found rural and urban male Prospective Teachers take similar Stress. In exist difference in Stress between rural and urban male Prospective Teachers may be possible due to sample or statistical error.
3. There is significant difference in Stress between rural and urban female Prospective Teachers and found rural female Prospective Teachers take comparatively high Stress than Stress of urban female Prospective Teachers.
4. There is no significant difference in Stress between male and female Prospective Teachers and found male and female Prospective Teachers take similar Stress. In exist difference in Stress between male and female Prospective Teachers may be possible due to sample or statistical error.

5. There is significant difference in Stress between rural male and female Prospective Teachers found rural female Prospective Teachers take comparatively low Stress than Stress of rural male Prospective Teachers.
6. There is significant difference in Stress between urban male and female Prospective Teachers found urban female Prospective Teachers take comparatively low Stress than Stress of urban male Prospective Teachers.

### **Findings related to Creativity**

1. There is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Rural and Urban Prospective Teachers and found Creativity of urban Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of teachers of rural Prospective Teachers.
2. There is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Rural and Urban Male Prospective Teachers found Creativity of urban Male Prospective Teachers according to Fluency, Flexibility and Originality are respectively better than Creativity of teachers of rural male Prospective Teachers.
3. There is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Rural and Urban Female Prospective Teachers. Creativity of urban Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of teachers of rural Female Prospective Teachers
4. There is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between Rural and Urban Female Prospective Teachers and found Creativity of Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of teachers of Male Female Prospective Teachers.
5. There I s significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between teachers of rural Male and Female Prospective Teachers found Creativity of rural Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of rural Male Female Prospective Teachers.
6. There is significant difference in all dimensions of Creativity like Fluency, Flexibility and Originality between teachers of urban Male and Female Prospective Teachers found Creativity of urban Female Prospective Teachers according to Fluency, Flexibility and Originality are comparatively better than Creativity of urban Male Female Prospective Teachers.

### **Findings related to Mental Health and Creativity**

1. There is significant difference in Mental Health among low, medium and high Creative rural Prospective Teachers and comparatively found low Creative rural Prospective Teachers have low Mental Health than Medium Creative rural Prospective Teachers, Medium Creative rural Prospective Teachers have low

Mental Health than high Creative rural Prospective Teachers, High Creative rural Prospective Teachers have high Mental Health than low Creative rural Prospective Teachers.

2. There is significant difference in Mental Health among low, medium and high Creative urban Prospective Teachers and comparatively found low Creative urban Prospective Teachers have low Mental Health than Medium Creative urban Prospective Teachers, Medium Creative urban Prospective Teachers have low Mental Health than high Creative urban Prospective Teachers, High Creative urban Prospective Teachers have high Mental Health than low Creative urban Prospective Teachers.

3. There is significant difference in Mental Health among low, medium and high Creative male Prospective Teachers and comparatively found low Creative male Prospective Teachers have low Mental Health than Medium Creative male Prospective Teachers, Medium Creative male Prospective Teachers have low Mental Health than high Creative male Prospective Teachers, High Creative male Prospective Teachers have high Mental Health than low Creative male Prospective Teachers.

4. There is significant difference in Mental Health among low, medium and high Creative female Prospective Teachers and comparatively found low Creative female Prospective Teachers have low Mental Health than Medium Creative female Prospective Teachers, Medium Creative female Prospective Teachers have low Mental Health than high Creative female Prospective Teachers, High Creative female Prospective Teachers have high Mental Health than low Creative female Prospective Teachers.

5. There is significant difference in Mental Health among low, medium and high Creative Prospective Teachers and comparatively found low Creative Prospective Teachers have low Mental Health than Medium Creative Prospective Teachers, Medium Creative Prospective Teachers have low Mental Health than high Creative Prospective Teachers, High Creative Prospective Teachers have high Mental Health than low Creative Prospective Teachers.

### **Findings related to Stress and Creativity**

1. There is significant difference in Stress among low, medium and high Creative rural Prospective Teachers and comparatively found low Creative rural Prospective Teachers have high Stress than Medium Creative rural Prospective Teachers, Medium Creative rural Prospective Teachers have high Stress than high Creative rural Prospective Teachers, low Creative rural Prospective Teachers have low Stress management than high Creative rural Prospective Teachers.

2. There is significant difference in Stress among low, medium and high Creative urban Prospective Teachers and comparatively found low Creative urban Prospective Teachers have high Stress than Medium Creative urban Prospective Teachers, Medium Creative urban Prospective Teachers have high Stress than high Creative urban Prospective Teachers, low Creative urban Prospective Teachers have low Stress management than high Creative urban Prospective Teachers.

3. There is significant difference in Stress among low, medium and high Creative Male Prospective Teachers and comparatively found low Creative Male Prospective Teachers have high Stress than Medium

Creative Male Prospective Teachers, Medium Creative Male Prospective Teachers have high Stress than high Creative Male Prospective Teachers, low Creative Male Prospective Teachers have low Stress management than high Creative Male Prospective Teachers.

4. There is significant difference in Stress among low, medium and high Creative Female Prospective Teachers and comparatively found low Creative Female Prospective Teachers have high Stress than Medium Creative Female Prospective Teachers, Medium Creative Female Prospective Teachers have high Stress than high Creative Female Prospective Teachers, Low Creative Female Prospective Teachers have low Stress management than high Creative Female Prospective Teachers.

5. There is significant difference in Stress among low, medium and high Creative Prospective Teachers and comparatively found Low Creative Prospective Teachers have high Stress than Medium Creative Prospective Teachers, Medium Creative Prospective Teachers have high Stress than high Creative Prospective Teachers, Low Creative Prospective Teachers have low Stress management than high Creative Prospective Teachers.

## **Conclusions**

The study has been undertaken to gain new insight into mental health, stress and creativity of prospective teachers. The findings of the study revealed that mental health and stress is affected by creativity. The study showed that if creativity is high then mental health will be good and stress level will be low and if creativity is low then mental health will be poor and stress level will be high.

The findings of the study showed that creativity does not affect stress. There is no significant difference in stress of rural and urban male prospective teachers both take similar stress.

## EDUCATIONAL IMPLICATIONS

1. Findings of this study will be helpful to the prospective teachers in assigning to them works according their interest and creativity.
2. This study will help to know about the acquired knowledge of their prospective teachers through personal and mental ability.
3. This study will help the college management to manage the effective academic environment for prospective teachers to learn.
4. From the help of this study we can check their behaviour by which we come to know that in which area his behavior is superior.
5. With the help of this study mental health, stress and creativity level may improve.
6. With the help of this study we can measure stress level mental health and help them to adjust well.
7. In this study it is find out that the rural prospective teachers have low creativity hence, more training should be organized for the prospective teachers to make them reach full achievement.
8. With the help of this study we can know special ability of Prospective teachers accordingly we can provide educational and vocational guidance.
9. Teachers will come to know about the level of Creativity of Prospective teachers through personal and mental ability.
10. This study will help to know about the achievement of Prospective Teachers through the capability and skills of them.
11. Teachers will come to know about the acquired knowledge of their students which in turn help the teachers to teach effectively in the class.
12. Prospective teachers will come to know about their mental health and stress through the creativity which will help them to achieve their goal.
13. It will help the policy Makers to make the policies of classroom teaching and curriculum construction for the prospective teachers.
14. It will help the students to categories the prospective teachers rank wise through achievement this will affect their teaching progress.

## Suggestions for Further Research

In an attempt for solution of the problem, new problems arise. It is from this point of view, some suggestions are being made for further investigation of some of the important issues that seem to originate from the present work.

1. This study may be applicable on larger samples and other states taking students of different stages of education and from different type of institutions so as to examine the phenomenon in further details.
2. Study on mental health, stress and creativity may be extended to identify association with intelligence, personality.
3. Study on mental health, stress and creativity may be extended to identify its relationship with birth order.
4. Study may be extended to identify its relationship with intelligence.
5. Study may be extended to evaluate the effect of family social condition on the mental health, stress and creativity.
6. Similar studies may be conducted by controlling the intervening variables like cast, culture and socio-economics status.
7. More objectives assessment of mental health, stress and creativity can be made by using some other forms of test and techniques.
8. Case studies may be conducted for acquiring in depth knowledge into the phenomenon of high and low achievement.
9. Cross-cultured studies of these variables among Prospective teachers in Indian and some foreign countries may be attempted.
10. Longitudinal studies may be conducted to the study the impact of background variables of Prospective teacher's mental health, stress and creativity.
11. Another study could be made by comparing the prospective teachers studying in co-educational and non-co-educational colleges,
12. A comparative study may be carried out on the prospective teachers studying in Minority colleges, traditional universities, religious universities and private universities.
13. A preventive and remedial programmes may be designed to enhance the positive mental health, stress and improve creativity.

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**“A real friend is one who walks in when the rest of the world walks out”**

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Reference is a relation that obtains between certain sorts of representational tokens (e.g., names, a Republican,” I use a particular sort of representational token — i.e. the name ‘George W. Bush’— to refer to a particular individual — namely, George W. Bush. While names and other referential terms are hardly the only type of representational token capable of referring, linguistic tokens like these have long stood at the center of philosophical inquiries into the nature of reference. Accordingly, this entry will focus almost entirely on mental states, pictures) and objects. For instance, when I assert that “George W. Bush is linguistic reference. For more on the reference of mental states, see the entries on [causal theories of mental content](#), [externalism about mental content](#), and [teleological theories of mental content](#). For more on the reference of pictures, see the entry on [Goodman's aesthetics](#).

Proper names are standardly considered a paradigm example of linguistic reference — or, more specifically, a relation that obtains between certain sorts of linguistic expressions and what speakers use those expressions to talk about. Other expressions which are generally considered to be of the referring sort include indexicals like ‘I’, ‘here’, ‘now’, and ‘that’. While it is highly questionable that all words refer, most philosophers of language assume that at least certain sorts of terms (e.g. proper names and indexicals) regularly and reliably do so. It is these sorts of terms that will serve as our primary focus below. Assuming that at least certain sorts of terms do in fact refer, the central question regarding linguistic reference becomes: how do such terms refer? What, in other words, is the ‘mechanism’ of reference? Subsidiary questions concern the relation between reference and meaning, reference and truth, and reference and knowledge. Some philosophers have thought that the nature of reference is able to shed light on important metaphysical or epistemological issues. Other philosophers, however, are less sanguine. Indeed, certain philosophers have gone so far as to deny that reference is a substantive relation, one deserving of serious philosophical scrutiny.

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