

General Problem: On Stress

Specific Problem: To prepare two checklists on stress (Stressor and effect of stress) and to study the causes and effects of stress among the school student.

Basic Concept:**Stress:**

The word 'Stress' is derived from the Latin word 'Stringere', which means 'to draw out tight'.

According to McGrath (1976), "stress is involved in an environmental situation that is perceived as presenting a demand which threatens to exceed the person's capabilities and resources for meeting that demand."

According to Humphrey, "stress can be considered as any factor, acting internally or externally, that makes it difficult to adapt and that induces increased effort on the part of the person to maintain a state of equilibrium both within the internal and the external environment."

Process of stress:

Stress can be described as a substantial imbalance between environmental demands and capabilities to meet those demands. At first, a physical or psychological demand is placed on the individual in a particular situation. Then, the individuals make a clear perception about the demands and try to assess their abilities needed to meet that demand. If the individuals perceive that they can meet the demands with their abilities, then, it will be an easy task for them. But, if they perceive an imbalance between the demands placed on them and their abilities to meet it, stress begins to build up. Then, the individuals respond psychologically and physically. As a result, an increase in anxiety level, worries, heightened physiological activation (increased heartbeat, blood pressure, increased muscle tension, etc.), possible changes in concentration, etc., will occur.

Finally, their performance may either improve or decline due to this stress.

Stressors:

Stressors are the factors which trigger stress. Stressors may be any environmental condition or even a psychological factor like personality traits, perceptual difference, etc.

Types of stressors:

There are many stressors, which can be categorised into 4 main groups called physiological, environmental, social and psychological.

1. Physiological stressors include excessive exercise, lack of rest and sleep, chronic pain, physical injury, diseases, etc.
2. Environmental stressors include different kinds of pollution, excessive humidity, extreme temperature, lack of proper illumination, presence of radioactive substances, crowding or isolation, excessive noise, etc.
3. Social stressors are found in each of our personal and work situation and also in the familial domain. In the family domain, social stressors include break-up of intimate relationships, lack of healthy relationship with parents, siblings or neighbours, incompatible sexual relationship, etc. In work situations, stressors include lack of leadership qualities, autocratic leadership, unclear work responsibility, lack of team work, work overload or under load, discrimination in pay or promotion, workplace sexual harassment, etc. In the personal domain, low self-esteem, frustration, assuming

every responsibility without delegating the workload to others, sense of competitiveness and chronic guilt, anger, hostility, etc., are key stressors.

4. Psychological stressors mainly focus on emotion inducing factors that activate stress directly or indirectly. The situations that we cannot manage according to social expectations are factors that induce psychological stress. Separation from near and dear ones, bereavement, etc., are also very stressful. Overburdened with petty matters like traffic jam, power cuts, etc., together end up being very stressful.

Causes of Stress:

The factors which generate stress are called stressors or causes of stress.

External or Environmental Factors:

1. Stressful life events:

Any major life event which occurs suddenly leads to stress within an individual. The events include academic failure, divorce, imprisonment, disappointment in life, losing job, death of family members, etc. Sudden confrontation with any of these events disturbs the individuals deeply.

2. Minor hassles of everyday life:

In our daily life, we sometimes become troubled by a number of repetitive or persistent minor events. These may be minor in intensity, but are major in frequency. These are called hassles of daily life. Such hassles may include quarrels with friends or Spouse over petty issues, obtaining poor marks in examinations, health worries, new financial responsibilities, moving to a new community, regular traffic jam, absenteeism of domestic help, etc.

3. Work-related stress:

Work itself is a stress-producing factor which comprises a number of related factors. All these factors singly or in combinations produce stress. Individuals may face a number of stress-producing situations such as long working hours, gender discrimination and bias, lack of appreciation by seniors, inadequate or low salary, unclear job description, unfriendly colleagues, etc.

4. Physical environment:

As human beings effect, influence and change the natural environment for their needs, the environment also effects human mind and body in return. Deforestation, industrial waste, loud noise and such other human activity results in air, water, noise, soil and many other forms of pollution. These pollutants, in return, affect the physical wellbeing of the humans. The physical problems like asthma or constant anxiety for availability of resources like water can lead an individual to be stressed.

Causes of Stress:

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Internal Factors:

1. Need:

The various needs of individuals like to reach a difficult target, create pressure on the individual. Low or over-estimation of self along with high aspiration level creates an unrealistic demand on self. This may lead to stress.

2. Personality trait and types:

Usually, three types of personality, Type-A, Type-B and Typical have different impacts or effects on an individual's susceptibility to stress.

The persons with personality type- A are high achievers, ambitious, competitive and workaholics. Their high aspiration levels may make them more stressed since they want to complete a lot of work within a time limit.

Individuals with Type-B personality are basically optimists. They can manage stressful situations properly. Moreover, due to their normal levels of aspiration and positive attitude towards life, they don't feel stressful.

People with Type-C personality suppress all their negative feelings like anger, hostility and rage. This disrupts their equilibrium and immune system. As a result, their body becomes weak and less resistant to diseases like cancers especially lung cancer.

3. Attitude:

It has been seen that people with a positive attitude experience lesser stress than people with negative attitude.

Effects of stress:

1. Upsets the internal mechanism and balance:

Stress disturbs our homeostasis thereby inducing physiological imbalance. It interferes with the functioning of both mind and body. It activates autonomic nervous system (ANS). The Sympathetic nervous system of ANS gets activated when body is aroused particularly during stress. It prepares the body for emergency reaction of fight or flight response. As a result, it raises the heartbeat, blood pressure, muscle tension, etc.

The effect of stress on physical health may be summarised as follows-

- **Affects the immune system:** Stress has a major negative effect on the immune system of an individual. Stress drains the resources of the person highly disturbing his/her complex immune system. Immune system consists of the mechanism by virtue of which the body is able to recognise and destroy the potentially harmful agents and elements like bacteria, viruses, other infection producing germs and cancerous cells. Prolonged exposure to stress seems to severely affect this system.
- **Causes hypertension:** Hypertension, also referred to as high blood pressure indicates that blood pressure in the arteries is persistently elevated. It is dangerous, silent killer. The risk is that it is not always identified by any particular symptom. High blood pressure slowly damages the various organs such as kidneys, heart, brain and eyes.
- **Cardiac problems:** Extensive research work in psychology suggest that Type A personality is linked to experiencing high levels of stress culminating to heart problems. They are target-oriented, competitive and try to achieve more than others. They tend to judge themselves by the amount of success, money, assets and friends they have. All these traits create a lot of pressure on them. Consequently, they experience a lot of stress. This may ultimately lead to cardiac problems.
- **Psychosomatic disorders:** Stress is related to different psychosomatic disorders. 'Psyche' means 'soul' and 'soma' means body. The mind and body are interconnected as often psychological trouble adversely affects the physiological mechanisms of the body. It then gets manifested through different psychosomatic diseases like ulcer, asthma, common cold, headache, diabetes and many others.

2. Effect of stress on work performance:

There is a belief that stress energises the body and there is some arousal. The arousal seems to enhance the productive efficiency of the person initially. However, after some time, the performance drops. As the stress is experienced excessively or when it is becoming uncontrollable, person reaches a fatigue point, where the performance starts to decline. The ultimate end, called burnout, is manifested through exhaustion, ill health and break down.

PRELIMINARIES:

- Age: 16-18 years.
- Sex: Both male and female.
- Education: Studying in class 10-12
- Condition: fresh and cooperative.
- Duration of study: 1st November – 5th November, 2025.

MATERIALS REQUIRED:

- Statements for preparing the checklist.
- Pen.
- Pencil.
- Paper.
- Internet.
- Printer.

PROCEDURE:

- Domains were selected and following that we had prepared two different sets of checklists on causes and effects of stress following five Points (strongly agree, agree, sometimes, disagree, strongly disagree).
- We have administered those checklists on our sample group.
- Data is collected from the sample group.
- After collection of data, we have scored all the checklists and necessary calculations have been done.
- On the basis of the result obtained after calculations, interpretation and conclusion has been drawn.

INSTRUCTION TO THE PARTICIPANTS OR SUBJECTS:

“Please sit comfortably and pay attention to my instruction. I shall present you two checklists, one after the other, containing 10 and 15 statements respectively. Please go through them carefully and put a tick against the suitable option with which you agree. Ask me, if you have any inconvenience. ”

DATA COLLECTION:

The data collected from the sample group is given in the following pages:

RESULT TABLE:

CAUSES:

SL.NO	DATA GIVEN BY SUBJECTS										SCORING										SUMMATION	MEAN
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10		
1	A	E	E	D	B	D	C	A	A	C	5	1	5	4	4	2	3	5	5	3	37	3.7
2	D	D	C	D	D	B	C	C	D	D	2	2	3	4	2	4	3	3	2	2	27	2.7
3	B	B	B	D	D	C	C	A	B	C	4	4	2	4	2	3	3	5	4	3	34	3.4
4	D	C	C	E	B	A	D	A	E	E	2	3	3	1	4	5	2	5	1	1	27	2.7
5	B	A	A	E	D	A	A	A	B	B	4	5	1	1	2	5	5	5	4	4	36	3.6
6	A	B	C	A	C	C	B	C	B	B	5	4	3	5	3	3	4	3	4	4	38	3.8
7	D	B	E	D	D	C	C	E	D	C	2	4	5	4	2	3	3	1	2	3	29	2.9
8	D	B	B	A	D	A	B	E	E	D	2	4	2	5	2	5	4	1	1	2	28	2.8
9	B	B	B	A	E	A	E	D	B	D	4	4	2	5	1	5	1	2	4	2	30	3.0
10	A	A	A	B	C	A	A	C	A	B	5	5	1	4	3	5	5	3	5	4	40	4.0

EFFECTS:

SL.NO	DATA GIVEN BY SUBJECTS										SCORING										SUMMATION	MEAN
	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10		
1	A	B	B	E	E	A	B	E	D	C	5	4	4	1	1	5	4	1	2	3	30	3.0
2	A	C	C	A	B	A	B	A	A	B	5	3	3	5	4	5	4	5	5	4	43	4.3
3	B	B	D	A	B	A	B	D	C	B	4	4	2	5	4	5	4	2	3	4	37	3.7
4	E	E	E	E	D	A	E	C	E	D	1	1	1	1	2	5	1	3	1	2	18	1.8
5	C	A	C	B	A	A	D	B	A	A	3	5	3	4	5	5	2	4	5	5	41	4.1
6	B	B	B	E	C	A	B	E	C	D	4	4	4	1	3	5	4	1	3	2	31	3.1
7	B	B	B	A	B	A	E	E	D	B	4	4	4	5	4	5	1	1	2	4	34	3.4
8	B	C	C	E	B	B	E	E	B	D	4	3	3	1	4	4	1	1	4	2	27	2.7
9	D	E	E	E	D	A	D	D	A	B	2	1	1	1	5	5	2	2	5	4	28	2.8
10	E	E	E	E	D	C	E	E	A	E	1	1	1	1	5	3	1	1	5	1	20	2.0
11	E	C	B	A	D	B	E	B	C	C	1	3	4	5	5	4	1	4	3	3	33	3.3
12	A	B	A	A	B	A	B	C	A	A	5	4	5	5	4	5	4	3	5	5	45	4.5
13	B	C	B	C	B	B	B	E	B	C	4	3	4	3	4	4	4	1	4	3	34	3.4
14	B	B	B	B	B	A	E	D	C	D	3	4	4	4	4	5	1	2	3	2	33	3.3
15	A	A	A	A	B	A	D	A	C	B	5	5	5	5	4	5	2	5	3	4	43	4.3

INTERPRETATION

In the questionnaire of causes of stress, the statements are from two categories of causes- i) Internal causes of stress (1, 2,5,6,8), ii) External causes of stress (3, 4,7,9,10).

From the result table of causes of stress, it is observed that the mean value against statement 6 (mean- 3.8) is higher than the mean values against all other statements of internal causes.

Statement 6: I face difficulty in meeting deadlines.

This implies that my sample experiences problems in managing time, workload, and task-related demands. This difficulty may be associated with increased stress levels, pressure to perform, and reduced concentration or motivation. Persistent challenges in meeting deadlines can reflect feelings of being overwhelmed, inefficiency in planning and prioritization, and emotional exhaustion. Such experiences may contribute to anxiety, frustration, and a sense of reduced competence, thereby negatively affecting psychological well-being and overall functioning.

From the result table of causes of stress, it is also observed that among the statements of external causes of stress, the mean value against statement 10 (mean-4.0) is higher than the mean values of all other statements.

Statement 10: Regular traffic jams annoy me a lot.

This implies that my sample has heightened irritability and sensitivity to everyday environmental stressors. Frequent exposure to uncontrollable situations such as traffic congestion can evoke feelings of frustration, anger, and impatience. This response suggests a lower tolerance for daily hassles, which is often associated with elevated stress levels. Persistent irritation in such situations may contribute to emotional strain, increased physiological arousal, and difficulty maintaining emotional regulation, thereby negatively affecting psychological well-being.

In the questionnaire of effects of stress, the statements are from three categories of effects- i) Behavioural effects of stress (1, 2,3,4,5), ii) Physiological effects of stress (6, 7,8,9,10) and iii) Psychological effects of stress (11, 12,13,14,15).

From the result table of effects of stress, it is observed that among the statements of behavioural effects of stress (1, 2, 3, 4, 5), the mean value against statement 2 (mean- 4.3) is higher than the mean values against all other statements.

Statement 2: I have irregular sleep patterns.

The statement indicates a behavioural consequence of stress, as stress often disrupts daily routines and healthy habits. Individuals experiencing stress may delay sleep, have inconsistent bedtimes, or experience frequent awakenings due to persistent worry or mental tension. Such irregular sleep behaviour reflects difficulty in maintaining self-regulation and routine under stress. Over time, this disruption can lead to fatigue, reduced productivity, irritability, and a diminished ability to cope with stress, further reinforcing stress-related behavioural difficulties.

From the result table of effects of stress, it is observed that among the statements of Physiological effects of stress (5, 6, 7, 8, 9, 10) the mean value against statement 7 (mean- 3.4) is higher than the mean values against all other statements.

Statement 7: I experience headache when I am stressed.

The statement reflects a clear physiological response to stress. Stress activates the body's autonomic nervous system, leading to muscle tension, increased blood pressure, and changes in blood flow, which commonly result in headaches. This symptom indicates that prolonged or intense stress is affecting the body's physical functioning. Such stress-induced physiological reactions can cause discomfort, fatigue, and reduced efficiency in daily activities, highlighting the direct impact of stress on bodily health.

From the result table of effects of stress, it is observed that among the statements of psychological effects of stress (11, 12, 13, 14, 15) the mean value against statement 12 (mean- 4.5) is higher than the mean values against all other statements.

Statement 12: I overthink about small things for a long time.

The statement reflects the cognitive effects of stress on an individual's psychological functioning. Stress often leads to excessive rumination, where minor issues are repeatedly analysed and magnified. This pattern of overthinking indicates heightened anxiety, mental restlessness, and difficulty in controlling intrusive thoughts. Prolonged rumination can drain emotional energy, impair decision-making, and increase feelings of worry and self-doubt, thereby intensifying psychological stress and reducing overall well-being.

CONCLUSION

After conducting the study, it can be concluded that the internal stressor mostly experienced by the sample is **“I face difficulty in meeting deadlines.”** The external stressor mostly experienced by the sample is **“Regular traffic jams annoy me a lot.”** The prominent behavioural effect of stress includes **irregular sleep patterns.** The Physiological effects of stress include **headaches.** The psychological effects include **overthinking about small things a lot.**