



SPORTS ACTIVITIES' CRITICAL ROLE TO DEVELOP ADOLESCENCE MENTAL HEALTH

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"Youth of a nation are the trustees of posterity"

– Benjamin Disraeli

Introduction:

The future of India lies in the hands of the youth. They work as strong pillars to build and maintain cultural heritage of India. A part from the education any country's progress depends on youths' physical, physiological and mental health (holistic stage of the health) of the youth. By observing their daily life style, their behavior, eating habits, physical activities and posture we realize the fact that there are several problems among the present day youth are facing. These problems are most often psychological and are developed during their stages of the development. The best way to gift them a happy and healthy life is to help them to recognize, identify and find out remedies to such problems. The science of Physical activities, yoga and recreational activities has been considerably contributed to the youth related problems and solutions. Physical education and sports science is rapidly developing areas where many researches has been done and revealed critical role of all these activities is prearranged positive influence on the youth physical and especially mental health and behavior. All the sports person and parents should aware psychological/Mental stages of youth life and child's needs when they are passes through these stages.

Concern about the growth in adolescent problem behaviors (e.g. delinquency, drug use, stress) has headed to better attention in positive youth development, and a surge in funding for Physical activities.' We evaluate the potential of youth sport programs to foster positive development, while decreasing the risk of problem behaviors. Works on the positive and negative outcomes of youth sport is presented. We propose that youth sport programs actively work to assure positive outcomes through developmentally appropriate designs and supportive child–adult (parent/coach) relationships. This paper attempt to point out the major mental problems of the youth, causes behind it and discusses many physical activities which helps youth to build and maintain their mental abilities more authoritative and accurate.

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There are several cusses and cause factors in the life of a youth that creates mental pressure in his/her life. These problems are caused not as mere occurrences of their young adult hood; but are developed through the different stages of his/her personality. Some of those causes are the following.

Positive Thinking Pattern:

The human body cannot achieve an optimum level of health and fitness without the mind being of a cantered and balanced nature. As mental rest and relaxation is one of the seven key components of good health and fitness, it is important that you become familiar with the approaches and techniques associated with balancing the mind's activities which develop positive thinking.

Understanding Positive Thinking and Self-Talk:

Positive thinking doesn't mean that one's keeps your head in the sand and ignore life's less pleasant situations. Positive thinking just means that you approach unpleasantness in a more positive and productive way. A power of thinking that best is going to happen, not the worst.

Positive thinking often starts with self-talk. Self-talk is the endless stream of unspoken thoughts that run through the head. These automatic thoughts can be positive or negative. Some of self-talk comes from logic and reason. Other self-talk may arise from misconceptions that could be creating because of lack of information. If the thoughts that run through the head are mostly negative, then outlook on life is more likely pessimistic. If the thoughts are mostly positive, life likely an optimist - someone who practices positive thinking is having good command on their decision making skills and self - esteem.

Kramer, Erickson and Colcombe (2006) explain that the largest positive effects observed from exercise on cognition are in areas referred to as 'executive central command'. The researchers continue that the components of brain executive central command include working memory, planning, scheduling, multitasking and dealing with ambiguity (e.g., such as doubt and uncertainty). The authors emphasize that these components are often areas of substantial decline with aging.

Health benefits that positive thinking may provide include:

- Increased life span
- Lower rates of depression
- Lower levels of distress
- Greater resistance to the common cold
- Better psychological and physical well-being
- Reduced risk of death from cardiovascular disease
- Better coping skills during hardships and times of stress

Positive outlook enables you to cope better with stressful situations, which reduces the harmful health effects of stress on your body. It's also thought that positive and optimistic people tend to live healthier lifestyles - they get more physical activity, follow a healthier diet, and don't smoke or drink alcohol in excess.

Anxiety:

Source of stress in our daily lives are rarely just objective, such as extreme heat or noise. The interactional perspective on stress suggests that stress arise from an imbalance between our perceived capabilities and perceived situation demands (COX 1985). Stress manifests itself in emotional states, as well as physiological, physiological and behavioral responses.

Timothy J. Schoenfeld, Pedro Rada, Pedro R. Pieruzzini, Brian Hsueh, and Elizabeth Gould conducted study on Adult male C57BL/6 mice (6 weeks of age) were group housed, provided food and water ad libitum, and maintained on a 12 h light/dark cycle. Runners had ad libitum access to an external running wheel (Lafayette Instruments). All experiments were performed in compliance with the Princeton University Institutional Animal Care and Use Committee and the NRC Guide for the Care and Use of Laboratory Animals. They investigated the effects of cold water stress on the hippocampus of sedentary and runner mice and found that while stress increases expression of the protein products of the immediate early genes *c-fos* and *arc* in new and mature granule neurons in sedentary mice, it has no such effect in runners. They further indicated that running enhances local inhibitory mechanisms in the hippocampus, including increases in stress-induced activation of hippocampal interneurons, expression of vesicular GABA transporter (vGAT), and extracellular GABA release during cold water swim stress. Finally, blocking GABAA receptors in the ventral hippocampus, Running also stimulates the production of more dendritic spines, primary sites of excitatory synapses, on excitatory neurons throughout the hippocampal circuitry (Redila and Christie, 2006; Stranahan et al., 2007; Leuner and Gould, 2010). The ventral hippocampus of rodents has been implicated in emotional processing, such as stress and anxiety regulation (Bannerman et al., 2004; Fanselow and Dong, 2010; Snyder et al., 2011).

They suggested that the hippocampus of runners may be fine-tuned to respond to different environments optimally (Glasper et al., 2012). That is, socially housed runners may activate their greater numbers of new neurons to enhance cognition under low stress conditions and silence these cells through local GABAergic mechanisms to reduce anxiety under high stress conditions. Whether new neurons play some role in dampening stress responses in runners or whether their silence signals no involvement under high stress conditions remains to be determined.

This finding shows that physical activities like running, swimming are helping to reduce anxiety and help to maintain calmness in stressful situation.

Life style Diseases:

Compared to how humans lived prior to civilization, and even how people lived up until the present century – and some still do – we in the developed nations move very much less. It may be obvious, it may be overstated and it may seem insignificant in the scheme of healthy living, but it is not. Many of us have lost perspective on exercise and physical activity in a modern world.

Basically, a lifestyle is the way that depicts how we spend our life ranging from our eating patterns to behaviour and social interactions. But today everyone is in the race of achieving success. A human being can be easily related with a machine or robot that spends his/her entire day working and gets to sleep at night. We have no time to spend with our family and friends due to our busy routines and the only way to relish some time is limited to food table.

Our eating patterns have changed; turning from organic and fresh fruits and vegetables to the artificial processed foods like fizzy drinks, ready to cook meals, and junk food. The more we eat high fat and processed food, the more we are likely to have obesity, diabetes and cardiovascular diseases. Obesity is also one of the common health problems in the modern world.

a. Preventing Diabetes:

Glucose is stored in muscle and liver in a form called glycogen. Exercise helps remove glucose from the blood by using glucose for fuel, and by enhancing the efficiency by which glucose is stored and retrieved in muscle, liver and fat cells. Muscle and blood fats (triglycerides) are also used up and this helps fat metabolism. Improving the way insulin works – called insulin sensitivity - is part of the positive effect of exercise.

b. Immunity:

Much different kind of exercises helps us to maintain body temperature, shape, and metabolism. Exercise increases immunity to certain illnesses.

- Physical activity may help flush bacteria out of the lungs and airways. This may reduce your chance of getting a cold, flu, or other illness.
- Exercise causes changes in antibodies and white blood cells (WBC). WBCs are the body's immune system cells that fight disease. These antibodies or WBCs circulate more rapidly, so they could detect illnesses earlier than they might have before. However, no one knows whether these changes help prevent infections.
- The brief rise in body temperature during and right after exercise may prevent bacteria from growing. This temperature rise may help the body fight infection better. (This is similar to what happens when you have a fever.)
- Exercise slows down the release of stress hormones. Some stress increases the chance of illness. Lower stress hormones may protect against illness.

c. Obesity:

Obesity results from energy imbalance: too many calories in, too few calories burned. A number of factors influence how many calories (or how much "energy") people burn each day, among them, age, body size, and genes. But the most variable factor-and the most easily modified-is the amount of activity people get each day.

Physical activity, and diet, are the cornerstones of obesity prevention and management. Optimal nutrition in combination with regular physical activity during the growing years increases the likelihood of a healthy pattern of physical maturation consistent with the genetic potential of an individual child. Physical activity is beneficial at all stages during the formative years and active play is important in physical, mental and social aspects of growth and development, helping to set a pattern of participation in physical activity across the lifespan.

Obesity and Psychosocial Health Problems, In addition to short- and long-term physical health problems, obese children and adolescents are likely to suffer poorer psychological and social health than their normal-weight peers (low self-esteem and self-concept,²⁹ reduced quality of life, depression¹ and social discrimination).

Impact on Our Mood:

Physical activity has been shown to have a positive impact on our mood. A study asked people to rate their mood immediately after periods of physical activity (e.g. going for a walk or doing housework), and periods of inactivity (e.g. reading a book or watching television). Researchers found that the participants felt more content, more awake and calmer after being physically active compared to after periods of inactivity. They also found that the effect of physical activity on mood was greatest when mood was initially low.

There are many studies looking at physical activity at different levels of intensity and its impact on people's mood. Overall, research has found that low-intensity aerobic exercise for 30-35 minutes, 3-5 days a week, for 10-12 weeks was best at increasing positive moods (e.g. enthusiasm, alertness).

Impact on Our Self-Esteem:

Exercise not only has a positive impact on physical health, but it can also increase our self-esteem. Self-esteem is how we feel about ourselves and how we perceive our self-worth. It is a key indicator of the mental wellbeing and ability to cope with life stressors. Many situations during the competition and matches teaches how to cope up with the real life situation with the calm mind and such experiences develop self esteem in the youth.

Physical activity has been shown to have a positive influence on self-esteem and self-worth. This relationship has been found in children, adolescents, young adults, adults and older people, and across both males and females.

Conclusion:

Many research studies have shown that when people receive appropriate mental health care, their use of medical services declines. A mental health improves quality of life and increase lifespan too. When once free of depression, anxiety, excessive stress and worry, addictions, and other psychological problems, they are more able to live their lives to the fullest.

Mental Health Strengthens and Supports Our Ability to:

- have healthy relationships
- make good life choices
- maintain physical health and well-being
- handle the natural ups and downs of life
- discover and grow toward our potential

By this paper researcher like to enlightening benefits of the exercises effects on mental health. Exercise improves mental health by reducing anxiety, depression, and negative mood and by improving self-

esteem and cognitive function.² Exercise has also been found to alleviate symptoms such as low self-esteem and social withdrawal.³ Exercise is especially important in patients with schizophrenia since these patients are already vulnerable to obesity and also because of the additional risk of weight gain associated with antipsychotic treatment, especially with the atypical antipsychotics

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