



Physical inactivity among youth and associated health conditions

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Abstract

The issue of physical inactivity is on the rise among the young generation, and they present a great challenge to the general health and well-being of these people. The rapid pace at which people are changing their lives, the rising levels of academic demands, and more screen time activities have severely lowered the level of physical activity among the youth. The current work paper observes the trends in physical inactivity among youth and the health-related conditions. The study adopted a descriptive research design in order to evaluate the levels of physical activity, lifestyle habits, and the chosen measures of physical and mental health among youth. The structured questionnaire and the measures of basic health were used in the collection of data. The results demonstrate that the prevalence of physical inactivity is high, with such health conditions as overweight, fatigue, stress, and lack of physical fitness. Among physically inactive youth, mental health problems in the form of anxiety and low disposition were also frequently reported. The paper demonstrates that more attention should be given to the necessity of engaging in regular physical activities and that educational institutions, families, and community-specific programs should help to encourage youth to enjoy healthy activities to enhance the overall health outcomes in the future.

Keywords: Physical inactivity, youth, health conditions, lifestyle habits, physical activity, mental health, overweight

Introduction

Physical inactivity has become a major issue of public health concern, especially when it comes to the youth, as they are a very important group of people in regard to health, output, and human capital before and after birth. Youth is a sensitive period in life during which health-related behaviour is formed, most of which is made in adolescence, and which still persists well into adulthood. Exercise is very important in keeping the body physically fit, stress-free, and generally living better. Nevertheless, bulky social and technological transformations have played a role in the conspicuous reduction in rates of physical exercise in youths all over the world (Tremblay *et al.*, 2011) [1]. The changes that have occurred in the past few years, like the rise of academic stress, spending a lot of time on the screen, extensive use of digital gadgets, and less outdoor activities, have considerably shifted the daily routines of the youth. The changes have led to increased sedentary behaviour and less participation in organised and unorganised physical exercises. The case of urbanization, insufficient open space, and evolving recreational habits and preferences has also contributed to the issue, and physical inactivity is now an exclusive attribute of contemporary youth culture. Exercise is also linked to various negative health effects when it comes to the young population. They are at an increased risk of being overweight and obese, having inadequate cardiovascular condition, decreased muscle power, and a swift emergence of lifestyle illnesses (Stierlin *et al.*, 2015) [2]. In addition to the physical health outcomes of poor exercise, psychological problems that may arise have been linked to poor self-esteem, stress, anxiety, and mental health conditions such as low self-esteem. Physical and mental complication is a risky determinant in individual growth and health services at the national level. There is also the necessity to understand the prevalence of challenges raised by physical inactivity and the disabilities associated with health among the youth, so as to come up with effective health promotion policies. It would be a

valuable descriptive examination of engaged physical inactivity that investigates the current state of the activity behaviour, lifestyles, and overall health conditions of the young people (Zhang *et al.*, 2020) [3]. The knowledge can allow health workers, educators, and policymakers to identify key areas that require intervention and sensitization. Thus, the proposed research targets the discussion of the issue of physical inactivity among the youth and the health issues it brings, and the importance of the issue that must be strongly considered in the context of the health and well-being of the youth.

Research objective

1. To assess the level of physical inactivity among youth.
2. To examine the physical health conditions prevalent among physically inactive youth.
3. To identify common mental and psychological health issues among youth with low physical activity levels.
4. To study lifestyle patterns and daily routines related to physical inactivity among youth.
5. To present a health profile of youth in relation to their physical activity status.

Physical Inactivity

A state of physical lack of exercise is referred to as physical inactivity, where a person lacks the recommended degree of exercise necessary to remain in the best health. Based on the health policy of the world, physical activity involves any movement of the body caused by skeletal muscles that leads to the use of energy, like walking, cycling, sports, or recreational activities. Physical inactivity is therefore an absence of or a lack of involvement in these activities in life. It is usually defined as uninterrupted stagnant activities, such as sitting, screen time, and the lack of vigorous movement. Healthwise, physical inactivity is construed as a belief factor that is behavioural in nature and it leads to a tremendous array of health challenges. It does not mean total immobility; rather, it is a way of life characterized by

low energy consumption (Wu *et al.*, 2017) [4]. The contemporary lifestyles, technology, and evolution of social values have altered the routine, transforming the physically active routines into sedentary ones. This, therefore, has made the trend of physical inactivity a common phenomenon, particularly among the youth. Theoretically, there are a number of factors related to physical inactivity that are associated with each other. Personal determinants include motivation, exercise attitudes, time constraints, and health awareness. The determinants of the lifestyle of the family, which are affected by peers, recreational space accessibility, and institutional support, are the social and environmental determinants (Andriyani *et al.*, 2020) [5]. The academic and career demands also limit the potential of physical activity, especially among young adults and students. These are just some of the factors that motivate the activity patterns and lead to inactivity in the long term. The even more significant phenomenon connected with physical inactivity is that of lifestyle behaviour. It often goes along with poor diets, lack of sleep, and excessive screen time, forming unhealthy behavioural patterns. The right, in the context of the broad array of thought conceptualized image of physical inactivity, allows an opportunity to provide a full assessment of the consequences of the phenomenon (Zhang *et al.*, 2025) [6]. One should also note that physical inactivity is not a mere individual choice amongst behavioural and social phenomena, but needs to be considered to come up with effective interventions that may be employed to promote active lifestyles and better health results among the youth.

Youth Health in the Contemporary Context

Youth is a very crucial phase in human development that involves adolescence and early adulthood, during which physical, mental, and social abilities are developed. The health of young people is the primary foundation for the well-being of an individual as well as the development of society as a whole because this group of people forms a huge segment of the working and future leadership. The modern kids are experiencing special health issues because of the unceasing socio-economic, technological, and cultural transformations that have altered life patterns and daily activities. Physically, youth are at a growing and developmental stage, where proper nutrition, good physical exercise, and good sleep are required to maintain their best health. Nevertheless, the growing trends of sedentary lifestyles, overuse of screen time, and conservation lifestyles are causing a rise in the rate of overweight, obesity, cardiovascular risk factors, and musculoskeletal problems in the youth (Starks *et al.*, 2023) [7]. The bad sleeping habits of good physical activity in their youth would most likely be carried into adulthood, where they increase the chances of developing chronic health diseases at an early age. Another important aspect of the youth's well-being is their mental and psychological health. Modern residents are susceptible to increased academic demands, social issues, and digital anxiety factors, and this leads to anxiety, depression, low self-esteem, and sleep disturbances. The isolation of social life, cyber-bullying, and the lack of disconnection due to the use of digital resources are additional contributing factors to mental health risks. The lifestyle behaviours are an ideal focus of the health of the youth and include diet, physical activity, substance use, sleep, and social interactions (Amiri *et al.*, 2020) [8]. Poor lifestyle habits, such as poor eating

habits, fast foods, and a lack of recreational or physical activities, have adverse physical and mental health effects. The causes of these behaviours are influenced by environmental and socio-cultural factors, including family habits, peer influence, educational pressures, and urban living conditions, which are influential. Youth health is, therefore, a multidimensional construct in the modern scenario comprising physical fitness, mental well-being, and lifestyle practices (Baharudin *et al.*, 2014) [9]. The only way to understand the health status of youth involves taking a comprehensive approach, which takes into account the behavioural, social, and environmental determinants. Due to the specifics of the modern world, where a healthy body and mind are required in youth to secure long-term health and productivity, special treatment, notification, and favourable conditions are needed to promote active, well-balanced, and healthy lifestyles.

Health Conditions Associated with Physical Inactivity

It is generally accepted that physical inactivity is a considerable risk in the development of various negative health outcomes, including physical and mental health. In young people, lack of physical exercise interferes with the normal physiological development and exposes youths to various health-related challenges that may persist even after growing up. Among the most evident consequences of physical inactivity are overweight and obesity. Inactive lifestyles together with unhealthy eating habits cause the energy balance between the amount of energy consumed and the amount of energy used to be disrupted, causing people to gain excessive weight and to develop diabetes mellitus type 2, along with the early onset of cardiovascular diseases. Physical inactivity also has an impact on musculoskeletal health. The absence of physical activity decreases muscle mass, range of motion, and bone mass, predisposing the body to exhaustion, back issues, and chronic joint conditions (De Moraes *et al.*, 2009) [10]. Moreover, cardiovascular endurance is reduced, and the effectiveness of metabolic processes is impaired, exposing young people to the increased risk of hypertension and other metabolic diseases. Physical inactivity is closely related to mental health outcomes. Research shows bio-sedentary lifestyles are linked with augmented degrees of stress and anxiety, as well as unhappiness symptoms. It has also been found that exercise can release endorphins and boost mood, resulting in more energy and motivation as compared to a lack of movement, which results in low self-esteem, unmotivating, and mood in general. Less physical activity could also have an indirect effect on cognitive functions, attention span, and academic performance. In addition, physical inactivity tends to combine with other maladaptive lifestyle behaviours, such as excessive screen time, disturbed sleeping habits, and unhealthy diet, and become a group of risk behaviours that increase health risks (De Moraes *et al.*, 2009) [10]. These factors combined make one vulnerable to chronic conditions at later stages in life and minimize the overall quality of life. The awareness of the spectrum of health-related issues with physical inactivity is the key to the promotion of preventive strategies and interventions. Through the determination of the physical and mental health risks in the segment of the sedentary youth, educators, healthcare providers, and policymakers could formulate focused programmes that promote active lifestyles, alleviate the health risks, and instill the well-being of the youngsters in the long term.

Patterns of Physical Activity and Inactivity

Physical activity among young people includes any movement of the body, structured and unstructured physical activities, as well as sporting activities, active commuting to school and workplace, and recreational activities. However, in recent years, the pattern of activity has changed among youths, whereby the lifestyle of active life is rapidly being overtaken by sedentary behaviours. Most youths, a good percentage of their day is spent at computer screens (in their smartphones, computers, and televisions) or studying and working around their homes (with very little physical activity). This tendency of low participation in moderate-vigorous physical activity is one of the specific attributes of modern youth lifestyles. Physical inactivity is found in varying degrees and in diverse forms among the various age groups, sexes, socio-economic settings, and geographical areas. Research has indicated that male youngsters tend to engage more in outdoor games and sports when compared to female counterparts, whereas urban youngsters tend to engage in sedentary activities, given that there is limited availability of open spaces and playgrounds (Moradi *et al.*, 2020) [11]. Rural youths, on the other hand, might be involved in more strenuous work in their day-to-day tasks, but they lack activity in their free time. The daily activities also affect the activity levels because academic commitments, part-time employment, and spending much time on the screens lessen the chances of engaging in physical activities. Psychosocial determinants of patterns of inactivity also exist. The impact of influence among peers, family lifestyle, personal motivation, and the awareness of health benefits is critical in understanding the extent to which the youths get engrossed in physical activities. Lots of adolescents complain about low motivation to attend sports or organized physical activities, most frequently citing the lack of time, interest, or facilities as their explanation (Chen *et al.*, 2014) [12]. The cumulative impact of being sedentary, a sedentary academic life, combined with sedentary recreational activities and housewifely life, is contributing to a consistent effect of inactivity, and this is an ongoing trend of behaviour. Awareness of these trends is paramount in determining groups that are at a greater risk of health problems as a result of inactivity. Through the frequency, duration, and nature of engagement in physical and non-physical activities, teachers, health experts, and policy makers can use specific interventions to promote regular physical activities, foster healthier habits, and avoid the health effects of inactive lives in the long term among young people.

Nutritional Status and Body Composition

Body composition and nutritional status have a close relation to the physical activity levels and general health in youth. Growth, development, and energy balance can only be achieved by proper nutrition, and physical exercises are necessary in maintaining healthy body compounds through fat and lean muscle mass maintenance. Nonetheless, the sedentary behavior of young people is regularly accompanied by unhealthy eating habits, which leave an imbalance between body mass and body metabolism. A lot of these teens feed on high-calorie, low-nutrient food, they miss meals, or they depend on processed food and fast foods, which causes them to lack proper intake of the nutrients necessary in the body, at the same time exposing them to high amounts of energy. One of the most important

markers of nutritional and health conditions is body composition, which includes body mass index (BMI), body fat percentage, and lean muscle mass. Physically inactive youths tend to possess greater amounts of fat in the body and less mass of the muscles, thereby contributing to increasing the chances of being overweight and obese (Vancampfort *et al.*, 2021) [13]. The physical looks are not the only changes, but the health implications of these changes are grave, such as insulin resistance, high cholesterol levels, and cardiovascular diseases, predisposition being one of them. The lack of physical activity also leads to the gain of fat, especially in the abdominal area, and it may have adverse effects on posture, flexibility, and overall body fitness. The mental health and intellectual potentials may also be affected by poor nutritional conditions and fatigue balance in the body, in addition to the physical impact of the condition (Micklesfield *et al.*, 2021) [14, 15]. Underfeeding or overeating can lead to fatigue, energy insufficiency, and concentration issues, as well as influence academic performance and personal functioning. Young people who perceive body image challenges as a result of weight gain or body composition change can also be psychologically stressed, anxious, or suffer low self-esteem. The connection between nutritional status, physical inactivity, and body composition is important to create interventions to promote healthy eating habits, exercise routines, and balanced lifestyles. Holistic methods involving integration of dietary instructions, physical exercises, and sensitization can be used to ensure that the youth attains ideal growth, a healthy body shape, and minimization of both short-term and long-term health complications.

Lifestyle Practices and Daily Routine Patterns

Patterns of lifestyle and daily routine are very critical factors that affect the health and well-being of youth, especially when physical inactivity is involved. Modern society has to deal with the emergence of the trends of rapid urbanization, technological progress, and academic requirements that have affected the everyday lives of adolescents and young adults to a great extent. A large portion of young people dedicate a lot of their time to sedentary behavior, including studying, sitting online, using computer tools as an entertainment factor, etc., which eliminates the possibility of regular exercise. This movement towards a sedentary nature has become an icon of modern youth behaviour. In the cases of physically inactive youth, the daily routine can reveal abnormalities in terms of sleeping, eating habits, and recreational swimming. There is prolonged screen time, studying late, and irregular sleep patterns that make one feel fatigue, lack of concentration, and lack of energy (Field, 2021) [15]. Lifestyles of eating are often distinguished by the lack of breakfast, eating processed or fast food, and irregular feeding habits; this results in inadequate nutritional status and unbalanced intake and expenditure of energy. All these lifestyles, along with little physical activity, increase the chances of gaining weight, becoming obese, and developing other health-related issues. Lifestyle practices are also dependent on social and environmental factors. Peer influence, family lifestyles, and inaccessibility to recreational facilities may discourage the youth from joining outdoor games or sports (Davison & Schmalz, 2006) [16]. Certain adolescents, especially those living in urban areas, might not have access to safe playgrounds or organised

physical education because of this factor, which strengthens sedentary ways of living. On the other hand, there are a few youths in the rural areas who might be busy with some physical work around their homes or in the fields, but remain inactive during their free time. It is also important to understand the lifestyle habits and daily trends of the youth in an effort to determine patterns that are contributing to physical inactivity and related health hazards. Educators, parents, and policymakers can formulate specific interventions by looking at daily schedules, activity levels, eating habits, and leisure activities of the person (Ibrahim *et al.*, 2023) ^[17]. Organized physical workouts, a focus on a healthy assortment of food, and a healthy everyday lifestyle are critical steps toward enhancing the condition of young people, preventing the development of lifestyle-related diseases, and developing habits that would help them to stay healthy in the long term.

Role of Family and Social Environment

The social and family environment is crucial in determining the behaviour of physical activity and the overall health of young people. Family factors and parental attitudes, behaviour, and support since early childhood have been found to play a huge role in determining whether adolescents lead active lifestyles or not. Physically active parents involved in exercises, such as promoting sports or outdoor recreation, offer youth a good example. On the other hand, a lack of awareness about the importance of exercise and unhealthy families or those with a sedentary lifestyle that do not emphasize the benefits of exercise may unwittingly support inactivity (Dai & Ouyang, 2025) ^[18]. Monitoring, supporting, and engaging their parents in exercises are essential in setting healthy habits, fostering motivation, and lessening the amount of time spent engaging in nonproductive activities, like spending too long watching the screen. Wider social context, such as peers, school, and community, also has a substantial influence on levels of youth activities. The peer groups will affect the sporting activities, recreational activities, and outdoor games; the social support will most often be a motivator towards participation. On the other hand, peer influence or encouragement of inactive leisure activities or computer games may enhance laziness. Schools and colleges are very important as they have physical education classes, sports arenas, and sensitization programs which promote normal body movement and exercise (Marqués-Sánchez *et al.*, 2021) ^[19]. Parks, playgrounds, and other safe walking or cycling routes are additional community infrastructure designed to influence the youth participation in physical activity. Healthier lifestyles are achieved through a supportive social environment that supports safe, enjoyable, and accessible forms of exercise. Behavior is also defined by cultural norms and social attitudes toward physical activity, and, therefore, societies that ascribe more importance to active recreation tend to have more active young people.

Implications of Findings for Youth Health

The implications of the findings of this study on the problem of physical inactivity among the youth and its consequences on health have exceptionally significant ramifications on individual health and the health of a population, as a whole. The existence of sedentary jobs and the absence of physical exercise among the youth is an

indicator that depicts the threat of short-term and long-term health issues. Physical inactivity leads to more overweight and obese young people, with low muscular strength, and an early manifestation of lifestyle disorders, such as cardiovascular complications, insensitivity to insulin, and metabolic health. These physical impacts not only affect the growth and development in the adolescent stage, but also provide a high probability of having permanent health-related issues even in adulthood. Mental and psychological health is another harm that is caused by inactivity. The study notes that individuals who lead sedentary lives tend to experience stress, anxiety, insufficient self-worth, and lack of motivation, which means that not engaging in physical activities is not only a major health risk of such a lifestyle, but it is also a serious psychological health risk. The risks are further increased by poor lifestyle choices, sleeping disorders, and poor feeding behaviors, which have a multitude of influences on the overall health contribution. The implications of these findings for the population as a health problem are that there is a dire need to implement interventional measures to curb the lifestyles of the youth. The school, colleges, family, and community organizations have a significant level when it comes to ensuring that physical activity and healthy habits are promoted. The negative effects of sedentary behavior may be mitigated through the introduction of physical education that involves a fitness program, designated playgrounds, and an understanding of the benefits of exercise. Additionally, one should also promote balanced nutrition, a restriction in screen time, sport, and outdoor activity, which increases physical and mental health.

Conclusion

The recent studies on physical inactivity among the youth and the associated morbidity rates of ill health elicit an alarming tendency in the escalating trends of sedentary lifestyle and the multifaceted impact of sedentary lifestyle on the health status. The findings indicate that a significant proportion of the younger generation engaged in minimal physical exercise and spent vast amounts of time on non-physical activities such as screen time, studying, or social media activities, which are the cause of numerous health complications, both physical and psychological. Physically, the health of the less active young people was found to have more experiences of overweight, obesity, decreased muscle strength, fatigue, and earlier effects of lifestyle disorders such as insulin resistance and cardiac risk factors. Physical inactivity was related to mental health characterized by growing stress, anxiety, diminished motivation, and poor psychological well-being, and this affirms the interrelationship of physical and non-physical health outcomes. Lifestyle habits aggravate these health risks, and they include poor sleeping habits, improper eating habits, and an inability to engage in recreation, among others. Such findings demonstrate that the role of physical activity in youth health is paramount and that this factor needs to be implemented by initiating measures that are likely to promote active lifestyles. In the paper, the authors outline that educating more individuals (in terms of age) and working with these young individuals by instilling healthy lifestyles in them through their educational institutions, families, and community organizations would help instill some favourable physical activities in the younger generation. The bad consequences of not taking recreational

setups, combined with behavioral counseling, through education, and physical education, can be lessened through awareness. In totality, the paper has demonstrated that addressing the problem of physical inactivity is not a personal cause of interest, but a national health concern and a significant factor in improving the physical, mental, and social well-being of young adults, and modeling long-term healthy lifestyle behaviours that can be applied at the adult stage.

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