Chapter I
Introduction

Wellness is generally used to mean a healthy balance of mind, body and spirit that results in an overall feeling of well being. Later on in 1950s people began using the phrase high level wellness. Dunn defined wellness as “an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable, it requires that the individual maintain a continuum of balance and purposeful direction within the environment where he is functioning”. He also stated that “wellness is a direction in progress toward an ever higher potential of functioning.

1.1 Wellness

Alternative approaches to wellness are often denoted by the use of two different phrases: Health and Wellness & Wellness programs. These kinds of wellness programs offer alternative medicine techniques to improve wellness. Whether the techniques to improve wellness. Whether the techniques actually improve physical health is controversial and subject of much debate. James Randi and the James Randi Educational foundation are outspoken critics of this alternative new age of concept of wellness. The behaviours in pursuit of wellness often include many health related practices, such as making healthy lifestyle changes and utilizing natural therapies. Wellness, as luxury pursuit, is found obviously in the more affluent societies because it involves managing the body state after the basic needs of food, shelter and basic medical care have already been met. Many of the practices applied in the pursuit of wellness, in fact, are aimed at controlling the side effects of affluence, such as obesity and inactivity. Wellness grew as a popular concept starting in the 19th century, just as the middle class began emerging in the industrialized world, and the resources to pursue wellness and forms of self-improvement. (Wikipedia, 2014).

Wellness is the result of personal initiative seeking a more optimal, holistic and balanced state of health. Wellness suggests awareness of our current and potential state of health in multiple dimensions (physical, emotional, mental, spiritual, environmental, social and occupational) is important to each of us. Wellness implies the careful maintenance; ability to impact, balance and measure our health in each of these dimensions is valuable to us holistically. Achievement of health, happiness and
success that we have defined as ideal for ourselves could also be considered as achieving wellness.

Each individual need a dynamic balance of multi dimensional health and methods to move us closer to wellness admits any myriad of life situations, goals, uncertainty, struggles and hardships. Achieving or maintaining wellness could involve healthy thinking, active physical movement, eating well, fiscal responsibility, productivity, as well as emergency preparedness, avoiding common pitfalls. Awareness of the potential and control each of us has in each dimension of our lives is all part of the never ending journey towards a higher state and wellness. Wellness begins with a conscious decision to seek multidimensional health and willingness to live more healthfully. Everything we do, feel, think and believe has a holistic and direct impact on our state of health.

The World Health Organization state the definition of health, “A state of complete physical, mental, and social, wellbeing, and not merely the absence of disease or infirmity but Wellness is a active process of becoming aware of and making choices toward a healthy and fulfilling life. Wellness is more than illness. Wellness is dynamic process of change and growth. Over 50 years ago, WHO defined health as being more than freedom from illness, diseases and debilitating conditions. In recent years, public health experts have identified wellness as a sense of wellbeing and quality of life. Healthy people 2010 objectives use the number of activity days as one indicator of wellness. Many illnesses are curable and may have only a temporary effect on health. Others such as diabetes are not curable but can be managed with proper eating, physical activity, and sound medical supervision. It should be noted that those possessing manageable conditions may be more at risk for other health problems, so proper management is essential. For example, unmanaged diabetes is associated with high risk for heart disease and other health problems.

• **Wellness as a positive component of optimal health**

Death, disease, illness, and debilitating conditions are negative components that detract from optimal health. Death is the ultimate opposite of optimal health. Disease, illness, and debilitating conditions obviously detract from optimal health. Wellness has been recognized as the positive component of optimal functioning, a good quality of life, meaningful work, and contribution to society. Wellness allows the expansion
of one’s potential to live and work effectively and to make a significant contribution to society.

Wellness reflects how one feels about life as well as one’s ability to function effectively. A positive total outlook on life is essential to wellness and each of the wellness dimensions. A well person is satisfied in his/her work, is spiritually fulfilled enjoys leisure time is physically fit, is socially involved, and has a positive emotional-mental outlook. This person is happy and fulfilled. Many experts believe that a positive total outlook is a key to wellness. The way one perceives of the dimensions of wellness affects total outlook. Researchers use the term self perceptions to describe these feelings. Many researchers believe that self perceptions about wellness are more important than actual ability. For example, a person who has an important job may be less meaning and job. Apparently, one of the important factors for a person who has achieved high-level wellness and a positive life’s outlook is the ability to reward him/her. Some people, however, seem unable to give themselves credit for their life experience. The development of a system that allows a person to positively perceive the self is important of course, the adoption of positive lifestyles that encourage improved self perception is also important.

1.1.1 Dimensions of Wellness

The above summary indicates that there are several key dimensions to defining wellness. These are: physical; psychological/emotional; social; intellectual; spiritual; occupational; environmental. These are briefly discussed further, below.

The literature on physical wellness focuses on physiological considerations of body type, genetic predisposition, and harm-avoidance behaviours. Maintaining a healthy lifestyle of fitness, flexibility, and strength through a healthy exercise regime and diet is the central focus of physical wellness. In addition, seeking medical care when appropriate, as well as keeping a realistic view of one’s own physical capabilities and limits is important.

Psychological and emotional wellness develops as one matures. Gaining a strong sense of purpose or identity, while maintaining optimism, is important, as is having high self-esteem and a positive and realistic self-concept. Being able to reflect on emotions and communicate with others in a constructive and assertive manner were important aspects within the definitions. Myers, Sweeney, & Witmer, (2005) and Ryff & Singer (2006) appear to provide the broadest conceptualizations, having refined
definitions recently to emphasize the importance of self-view and awareness of one’s feelings, actions, relationships, and autonomy, self-actualization and a sense that these aspect develop as we mature. In addition, coping with stress and maintaining a positive attitude toward life and being optimistic about the future are common themes within the definition of psychological/emotional wellness are important factors.

Social wellness is broad in scope because it includes the interaction of the individual with others, the community, nature and work. The quality and extent of these relations is affected by motivation, action, intent, and perception of oneself and others to the interactions. The more individuals have a strong social network both within family and friends and out in the community or at work, the better their health. Social wellness relates strongly to level of communication skills and comfort level one feels in interacting with others within a variety of different settings or situations.

Intellectual wellness involves acquiring an optimum level of stimulating intellectual activity. This acquired knowledge can be used or shared as critical reasoning, development of talent, and higher order thinking, both for personal growth and the betterment of society. Intellectual stimulation is being considered as more closely tied to emotional well-being, as cognitive functioning is part of the psychological aspect of wellness, especially in making changes in behaviour, which can include improving one’s state of wellness.

The key aspects of spiritual wellness are the creation of personal values and beliefs by each individual toward life’s purpose, and oneself in relation to others, the community, nature, the universe, and a higher power. Spiritual wellness is found within shared community and there is a continual process of finding meaning and purpose in life, while contemplating and coming to terms with one’s place in the complex and interrelated universe.

Occupational wellness is the extent to which one can express values and gain personal satisfaction and enrichment from paid and non-paid work; one’s attitude toward work and ability to balance several roles; and the ways in which one can use one’s skills and abilities to contribute to the community.

Environmental wellness is a broad dimension that considers the nature of an individual’s interaction with the environment on a local, community and global level. The environment includes home, work, the community, and nature.
1.1.2 Behaviours that contribute to wellness

A lifestyle based on good choices and healthy behaviours maximizes the quality of life. It helps people avoid disease, remain strong and fit, and maintain their physical and mental health as long as they live. The human body is designed to work best when it is active. It readily adapts to nearly any level of activity and exertion; in fact, physical fitness is defined as a set of physical attributes that allow the body to respond or to adapt to the demands and stress of physical effort. The more we ask of our bodies- our muscles, bones, heart, lungs- the stronger and more fit they become. However, the reverse is also true: the less they can do. When our bodies are not kept active, they begin to deteriorate. Bones lose their density, joints stiffen, muscles become weak, and cellular energy system begin to degenerate. To be truly well, human beings must be active. Unfortunately, a sedentary lifestyle is common among Indians today. The benefits of activity are both physical and mental immediate and long term. In the short term, being physically fit makes easier to do everyday tasks, such as lifting, it provides reserve strength for emergencies; and it helps people look and feel well. In the long term, being physically fit confers protection against chronic diseases and lowers the risk of dying prematurely. Physically active individuals are less likely to develop or die from heart disease, respiratory disease, high blood pressure, cancer, osteoporosis, and type-2 diabetes. Their cardio respiratory system tends to resemble those people 10 or more years younger than themselves. As they get older, they may be able to avoid weight gain, muscle and bone loss, fatigue, and other problems associated with aging. With healthy hearts, strong muscles, lean bodies, and a repertoire of physical skills they can call on for recreation and enjoyment, fit people can maintain their physical and mental well-being throughout their lives.

In addition to being sedentary, many people have a diet that is too high in calories, unhealthy fats, and added sugars, and too low in fiber, complex carbohydrates fruits, and vegetables. This diet is linked to a number of chronic disease, including heart disease, stroke, high blood pressure, type 2 diabetes, and certain kinds of cancer. A healthy diet promotes wellness in both the short and long term. It provides necessary nutrients and sufficient energy without also providing too much of the dietary substances linked to diseases.

Overweight and obesity are associated with a number of disabling and potentially fatal conditions and diseases, including heart disease, cancer, and type 2 diabetes. Healthy body weight is an important part of a fit and well lifestyle. Maintaining a
healthy body weight requires a lifelong commitment to regular exercise, healthy diet, and effective stress management. Many people cope with stress by eating, drinking, or smoking too much. Others don’t deal it at all. In the short term, inappropriate stress management can lead to fatigue, sleep disturbances, and other unpleasant symptoms. Over longer periods of time poor management of stress can lead to less efficient functioning of the immune system and increase susceptibility to disease. There are effective ways to handle stress, and learning to incorporate them into daily life is an important part of a fit and well lifestyle. Tobacco use is associated with 8 of the top 10 causes of death. A hundred years ago, before cigarette smoking was widespread, lung cancer was considered a rare disease; today nearly 25% of the American population smoking, lung cancer is the most common cause of cancer death among both men and women and one of the leading causes of death overall. Alcohol or drug intoxication is an especially notable factor in the death and disability of young, particularly through unintentional injuries and violence. Unintentional injuries, homicide, and suicide are the top three leading causes of death for 15 to 35 years old; in this group, the mortality rate for males is more than twice that for females.

The most effective way of dealing with disease and injury is to prevent them. Many of lifestyle strategies discussed here – being physically active, managing body weight, and so on – help protect you against chronic illnesses. In addition, you can take specific steps to avoid infectious diseases, particularly those that are sexually transmitted. These diseases are preventable through responsible sexual behaviour, another component of fit and well lifestyle. Unintentional injuries are the leading cause of death for people age 45 and under, but they, too, can be prevented. Learning and adopting safe, responsible behaviours is also part of a fit and well lifestyle. Other important behaviours in fit and well lifestyle include developing meaningful relationships, planning ahead for successful aging, becoming knowledgeable about the health the health care system, and acting responsibly in relation to the environment (Fahey, Insel, & Roth, 2004).

1.1.3 Adolescent

Adolescent is a time of many transitions for both teens and their families. To encourage that teens and adults navigate these transitions successfully, it is important for both to understand what is happening to the teen physically, cognitively and socially; how these transitions affect teens; what support resources are available. The
complexities of defining adolescence: adolescence is difficult to define in precise term, for several reasons. First, it is widely acknowledge that each individual’s experiences this period differently depending on or his physical, emotional, and cognitive maturation as well as other contingencies. Reference to the onset of puberty, which might be seen as a clear line of demarcation between childhood and adolescence, cannot resolve the difficulty of definition. Puberty occurs at significantly different points for girls and boys as well as for different individuals of the same sex. Girls begin puberty on average 12-18 months earlier than boys, the median age of girls; first period is 12 years while boys, first ejaculation generally around age 13. However, can experience the menarche as early as 8 years old. Evidence shows, moreover that puberty is beginning earlier than even before the age of puberty for both girls and boys has declined by fully three years over the past two centuries, largely due to higher standards of health and nutrition (WHO, 2004).

Adolescence is the time between childhood and adulthood. Individuals are likely to undergo extreme emotional, physical, and mental changes while progressing through this stage. During this stage forming a self identity and establishing a solid understanding of themselves and the world around them. Research indicates that adults generally dislike and mistrust adolescents more than any other age groups (Willis, 1981). The negative attitude is based on stereotypes. All adolescents are viewed as being a like, and these views often focus on the delinquent, addicted, or disturbed minority. It is true that adolescents are loud vulgar, ill-mannered, immoral, grateful, irresponsible sexually promiscuous, untidy, rebellions, or lazy? Such activities are commonly considered to be accurate description of adolescents. Actually they reflect stereotypes board, oversimplified images of this age group. A stereotype represents a commonly held conception or idea about a group of persons, but it may not be accurate. It is usually based on prejudiced attitudes and feelings about specific persons that are applied to a whole group.

• **Parental relationships**

One of the stereotypes of adolescents is that as a group they are in a mass rebellion against their parents and parental values. There is no question that adolescence is a time for children to consolidate their growing independence. A survey of 6000 adolescents from 10 nations found few adolescents who were alienated from their parents (Atkinson, 1988a, b). Instead today’s youth were shown to have great respect
from their parents. An extensive national survey of a probability sample of 1500 students in grades 7 through 12 revealed widespread agreement with parental values (National Association of Secondary School Principals, 1984). Overall, the evidence suggests that adolescents still turn to parents for guidance and share parental values on major issues. The concept of parent-child alienation as a usual feature of adolescence is a myth (Rutter, 1980).

- **Societal Influence on Adolescents**
  The society in which adolescents grow up has an important influence on their development, relationship, adjustment, and problems. The expectations of the society mould their personalities, influence their roles and guide their features. The structure and functions of the society either help them fulfill their needs or create new problems by stimulating further tension and frustration. Because adolescents are social beings who are part of a large society, there is a need to understand this social order and some of the ways it influences them. The seven important influences on today adolescent: technological and social change, urbanization, materialism and poverty, mass communications, social & emotional stress, family disorganization and life events and stress.

- **Adolescent in their families**
  Parents and adolescents are experiencing and identity crises relating to sexual life, roles, authority, and values. In other ways they are different, especially in their basic personalities and orientations to life. Parents having difficulties while handling them. What youths expect of their parents in the way of interest and help, communication, love and acceptance, trust, autonomy, home life, and parental example.

- **Sexual identity crisis**
  Both parents and children are questioning their sexual identity during middle age and adolescence. The bodily changes at puberty require adolescents to readjust to their new sexuality. The reversal of these bodily changes for the female at menopause requires also that she readjust to her new, infertile sexual identity.

- **Crises of roles**
  Parents and adolescents start questioning their own roles in life adolescents have to face up to what they want out of life philosophically and vocationally. The father
faces the fact that his life is over and that he may not have accomplished nearly all he wanted to. He wonders where he is going, whether he should change jobs, and how he will find security for the future. The mother has to decide whether to continue her job or whether to go back to school to improve her job status. If she had been at home, she has to decide whether to take up a profession or how else to fulfil herself during the years after the children are launched. Her role of motherhood is about over, and she wonders what role she can best fulfil now. This change in roles for parents and adolescents has some pitfalls. Will parents short pressuring their adolescents to assume roles they really wanted for themselves but never were able to fulfil.

- **Emotional readjustment**

  Middle age and puberty demand drastic emotional readjustment. Up until puberty, children in emotionally healthy families have formed close dependent emotional attachment with their parents. Children have dependent primarily on their parents to meet their needs for love, affection, approval, and support, parents, in turn, usually gain satisfaction by knowing that their children need them and depend upon them. Adolescents need to break the emotional dependence of childhood, and re-established more reciprocal adult ties with parents. The dependency-independency crisis must be solved in such way that the parent and adolescent remain friends, but now relate to each other as adults.

- **Sexual maturation & physical growth of adolescents**

  Adolescence is a period of sexual maturation and physical growth. The changes that occur are triggered and controlled by the hypothalamus and endocrine glands that secrete hormones that stimulate and regulate the growth process.

- **Conflict with adolescents**

  By the time children reach adolescence, their communication with others has gained greater sophistication across context. In conflict situations, they no longer express unrestrained hostility as a small child does in addition; they exhibit greater flexibility in conflicts with their parents. Nonetheless, adolescent still express more hostility and show more rigidity than do adults. Even with their increased maturity, adolescents are still developing their conflict management skills. For example, when observing interactions between mother & teenager, researchers have found that mothers more consistently respond to their child in flexible and positive manner regardless of the
child’s comment (Fletcher, Fischer, Barkley, & Smallish, 1996). However the researcher also found that, unlike the mothers the teenagers tended to parallel the mothers, comments in terms of following a negative comment with a negative reply. Given the broad range of what qualifies as a teenager, adolescence consists of multiple stages rather than one. Traditional perspectives hold that due to parallel hormonal and physiological changes during puberty, conflict behaviour first increases from the early stages of adolescence to the middle stages and then decreases again by late adolescence with no peak during middle adolescence. In attempting to resolve this controversy, researcher has found that conflict increases in hostile and coercive families (Ruteter and Conger, 1995). Mothers and fathers take on different role during conflict than they had with their younger children. In particular adolescent boys begin to act more assertive and forceful with their mothers but not their fathers. Mothers complement their son’s behaviour, by being less dominant, whereas father become more dominant (Paikoff and Brooks – Gunn, 1991). Mothers still experience more conflicts with their adolescent children than do fathers.

The topics of conflict evolve as the child matures where as young children are concerned with gaining social control, adolescents attempt to gain personal control. Adolescents and parents often disagree about the extent to which parental control and supervision over the adolescent are legitimate. Specifically parents and adolescents have conflict about such routine, day to day issues as responsibility for chores, doing school work, observing a curfew, and respecting the adolescent’s right to privacy. Interestingly, the issues of parent-adolescent conflict persist across generations, thus today’s ‘rebellious’ adolescents mature into tomorrow’s ‘controlling’ parents (Montemayor, 1983).

Although conflict between parents and teens may be inevitable, effective conflict management does not always occur. The potential costs of poorly managed parent-adolescent conflict are great. For example, adolescents may become ‘ungovernable’, use of drugs, and or run away from home certain communication behaviours during conflict have been linked with such teenage misbehaviours (Alexander, 1973). Specifically the researcher found that when parents and adolescent do not reciprocate each other’s supportive communication behaviours (e.g. showing empathy and equality) and do reciprocate each other’s defensive behaviours (e.g. Showing indifference and superiority) the child appears more likely to engage in delinquent behaviours.
• **Emotional processing in adolescence**

The environmental and biological changes at adolescence lead to new social encounters and heightened awareness and interest in other people may be associated with increased attention to socially silent stimuli, particularly faces, and the processing of emotional information. Recognition of facial expressions of emotion is one area of social cognition that has been investigated during adolescence.

**Physical Development**

Physical development in adolescence is dependent on many factors, and therefore, I have delimited this discussion to the factors in which I have identified essential components to the promotion of physical development. These include adequate physical growth, regular physical activity, healthy eating, and health habits such as smoking, alcohol or drug use.

Adolescence is a dynamic period of growth and maturation marked by rapid change in selected and lean body mass. While all adolescents follow the same pattern of growth in each child. Genetics and nutrition were the most important determinants of the onset, rate and extent of growth (Hockenberry & Wilson, 2007). Once the process of growth begins, the changes and progression are usually predictable. General growth includes accumulation of body mass, along with increases in height & weight. There are also many other predictable physical developments in this age group; increases in size and strength of the heart and blood volume, increases in size and capacity of the lungs, an increased metabolic rate and significant brain growth (Hockenberry & Wilson, 2007).

• **Contributing factors of health habits on adolescent development**

Health habits such as smoking, alcohol and drug use can also influence growth and development in adolescents. There are many reasons why adolescents may choose to use tobacco, alcohol and other drugs. Examples of possible reasons are that these substances provide the opportunity to challenge authority, demonstrate anatomy, and peer acceptance (Hockenberry & Wilson, 2007). Moreover, evidence has suggested that many of the practices that contribute to health and wellness in adulthood were often established during adolescence (Hedber, Bracken, & Tashwick, 1999). Therefore, it is important to recognize that these health habits have the potential to play a key role in adolescent wellness. Smoking has been associated with many
serious health diseases (Anonymous, 2007). Irwin (2006) found that person who began smoking at a young age were at increased risk of illness and death attributable to smoking. Hedberg, Bracken and Stashwick (1999) also found that “behaviours such as smoking were established in adolescence and could continue into adulthood and the cumulative effects of ongoing health compromising behaviour contributed to adult onset disease” (p.137). Clearly there are serious health risk associate with smoking.

Along with the many studies on the effects of smoking are the well documented consequences of alcohol and drug use. According to health Canada (2004a), nearly one quarter of current and former drinkers reported that their drinking had caused harm to themselves or to someone else in their lives. Substance use has also been associated with problems such as school dropout rate, delinquency, low academic achievement, family conflict and verbal and physical assault (Addley, 2005).

- Condition of adolescents in India

Home to 20 per cent of the world's adolescent population, India has one of the worst track records in their health and education parameters, according to a new report by the UNICEF. Almost 47 per cent of girls in the age group of 11 to 19 years are underweight in India, which is the highest in the world, a UNICEF report on the 'State of the World's Children' released here today said. Also a total of 56 per cent of girls and 30 per cent of boys in the age group are anaemic which places the country along with the least developed African nations. The report says that around 25 per cent (243 million) of Indians belong to the age-group of 11-19 years. Almost 40 per cent of the section is out of school and 43 per cent get married before the age of 18, out of whom 13 per cent become teenage mothers. School attendance in the 11-13 years age group is 86 per cent and 14-17 years is 64 per cent. On the positive front, the report shows that the number of girls who got married before the age of 18 years has decreased from 54 per cent in 1992-93 to 43 per cent in 2007-08. But the figure is the eight highest in the world and Pakistan fares much better with just 25 per cent of girls getting married before the age of 18 years. Some 6,000 adolescent mothers die every year and there is a 50 per cent higher risk of infant deaths among mothers who are aged below 20 years. Adolescents with correct knowledge of HIV/AIDS are 35 per cent in boys and 28 per cent in girls. The report further said that about one-third of adolescents report physical abuse and about one-third of adolescents report sexual abuse. "Certainly, now 74 per cent of adolescents are in school. Most of them are
getting primary education. But there is a high-dropout rate afterwards, both in male and females. It is still an area of concern," Karin Hulshof, country representative for UNICEF said. On child marriage, she said, there is a gradual decline in the marriage before 18 years but still the ratio is "far from satisfactory". The lack of knowledge regarding HIV/AIDS, health, abuse and unemployment are other areas where a lot of work needs to be done. Hulshof said "health and reproductive services and knowledge" must be provided to every person in the age group. Blaming poverty for the poor state of adolescents in India, MP and Convener of the Parliamentary Forum on Children Naveen Jindal said, "We have to ensure that no adolescent is denied of environment of opportunity." He said "poverty and responsibility bring early maturity and loss to adolescence." D K Sikri, Secretary, Ministry of Women and Child Welfare, pointed to the Rajiv Gandhi Scheme for Empowerment of Adolescent Girls - Sabla - which was launched in November on a pilot basis in 200 districts across India. Sikri said the scheme is aimed at addressing the multi-dimensional problems of adolescent girls between 11 and 18 years and was to be implemented through the platform of Integrated Child Development Scheme (ICDS) projects and anganwadi centres. The girls would be empowered by improvement in their nutritional and health status and upgrading home, life and vocational skills. It also aims at equipping the girls on family welfare, health, hygiene and information and guidance on existing public services, along with mainstreaming of school girls into formal or non-formal education. Nutrition would also be provided to all girls of 11 to 15 years who are out of school and those of 15 to 18 years. The scheme is expected to tackle the inter-generational cycle of malnutrition, effectively, to prepare young girls for future motherhood. It would eventually result in the reduction of high levels of anaemia, maternal mortality rate and child marriages. Sikri said around 1.92 crore girls were benefiting from the scheme and 1.2 crore registered for the training. He said states like Gujarat, Uttarakhand, Andhra Pradesh and Kerala performed exceptionally well in the pilot programme (PTI).

1.1.4 Different approaches to testing

There are four main ways or ‘modes’ in which tests may be administered today, particularly in relation to online ability testing. These are as follows.
• **Open mode**
This approach to testing involves free access to the test for candidates, for example when they are asked to complete it online in their own time and without any restrictions. The test content can be set up on a website, making administration cheap and simple without protection or supervision, thus damaging its reliability and validity. In providing the test in this way there is no certainty about who, in fact, has undertaken it or whether the person has been helped to answer items in some way, for example by another person. Thus the main issues are about authenticity and / or collusion involving another person. There are also problems about the timing of the test as well as security of the items.

• **Controlled mode**
This approach involves identification of the test-taker, for example through an online log-in which can be monitored, perhaps at fixed date and time. Otherwise, the person could be given the test to take away and complete. But this, too, has problems of authenticity and potential collusion, and of timing and security. Once again, there is need for forensic data analysis through keyboard pattern recognition and/ or supervised repetition of the test. There is also a potential problem that the candidate’s online link to the test may be broken during assessment so advice needs to be given beforehand on what the person should do to deal with this problem.

• **Supervised mode**
This is more traditional approach. Any candidate has to attend a test session office where there is a trained administrator/ supervisor who will either supervise computer-based testing or administer a paper and pencil-based assessment. There is greater assurance about who is taking the test and that there is no help for the test-taker. Issues which arise are the need for administration training, together with time and material or equipment costs. These issues are best resolved through provision of training for the supervisor.
• Managed mode
This approach usually involves a secure testing centre where trained staff is available to supervise the testing of candidates, either through the use of computers or a paper/pencil method. There is, therefore, a controlled environment and uniformity in the conditions for test-takers. The costs of training, time, labour and of materials or equipment are involved, together with some anxiety and/or inconvenience for them. Resolution is again provided through training for the supervisors.

1.1.5 Measuring attitude
The term attitudes is useful in two ways; firstly when we want to explain someone’s past or present behaviour towards others, an or issue, object or event; and secondly, when we try to predict how the person will behave in the future. If we observe that an individual avoids certain other people, frequently makes disparaging remarks about them, and visibly bristles when someone enters the room, then we attribute to that person a particular form of negative attitude.

There have been many attempts to define the term. The most well known is that of the social psychologist Gordon Allport who said, An attitude is a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual’s response to all objects and situations with which is it related. Others have viewed it as a tendency to evaluate a stimulus with some degree of favour or disfavour, being expressed in cognitive, emotional or behavioural responses (Ajzen & Fishbein, 2000). Probably the most common view is that an attitude is a predisposition to behave in a particular way and its object may be anything a person distinguishes from others or holds in mind, whether concrete or abstract. Attitudes change as people learn to associate them with pleasant or unpleasant circumstances or outcomes. An attitude is, an attribution made towards something, someone or some event. We identify this when an individual behaves consistently across many situations, encouraging us to make the attribution. Other factors may be associated in order to characterize it and the person’s feeling which contribute to these may be positive or negative. In seeking to measure an attitude to measure an attitude we are concerned with its magnitude and direction. Attitudes influence how people behave and thus may have an impact at many professional levels. Disregarding them can hinder collaborative working in many settings, whilst knowledge can guide service development and facilitate planning and change.
• **Attitude Measurement**

A number of techniques, mostly using questionnaires, have been developed for the analysis of attitudes. Different scales suitable for this purpose have also been developed. The construction of attitude questionnaires similar characteristics to those who have discussed in relation to other psychological attributes; we must firstly design items which are relevant and appropriate, and then make use of a scale representing different numerical values. The most common method used has been to develop a scale made up of a set of positive and negative statements.

• **Thurstone’s scales**

Thurstone and his colleagues used two approaches to the development of attitude scales in 1929: pair comparisons and equal-appearing intervals. To begin with, they collected a large number of items indicating both positive and negative thoughts about a particular topic. The pair comparisons method was more difficult and time consuming because it involved asking many people referred to as judges to compare the items with each pair indicated the more positive attitude. The method of equal-appearing intervals has been more widely used because, instead, the judges are asked to independently sort them into 11 categories on a continuum ranging from most favourable, through neutral, to the most unfavourable attitude. In some instances the favourable to unfavourable dimension may not apply, depending on the attitude involved, and an alternative dimension based on a degree of attitude may be needed.

• **Likert scale**

This is based on the work of Rensis Likert (1932) and many researchers prefer his method. To construct likert scales a large number of favourable and unfavourable items need to be developed. This time, however, they are administered to large trial group respondents who will rate them on a continuum, often from 1 through to 5, sometimes from 1 to 7. In the use of the five-point scale the numbers are given meaning, usually 1= strongly agree, 2= agree, 3= not certain or undecided, 4= disagree and 5= strongly disagree. Total score on these initial set statements are determined by summing the scores for all of the items. From the total scores a discrimination index can be calculated, enabling selection for the final questionnaire of positively and negatively phrased items which discriminate significantly between respondents.
• **Guttman’s scalogram**

Louis Guttman sought in the 1940s to develop a method which would identify whether responses on an attitude questionnaire represent a single dimension and thus reflect unidimensional attitudes (Guttman, 1944). His method is less well-known than those of Thurstone and Likert. Using his Scalogram analysis Guttman arranged his items in increasing order of difficulty of being accepted by respondents, so that if an individual agrees with an item which states a higher level of acceptance then that person must agree with all the other items at a lower level. This would work only if all of the items in the scale are representative of the same attitude in the same way as cognitive test items which are measuring the same construct. The aim of the scalogram is, therefore the design of cumulative ordinal scale. Guttman thought that, despite the difficulty of establishing a true interval scale, his approach could make an approximation to this. A factor called the reproducibility coefficient could be determined to indicate the degree, to which a true unidimensional scale is derived, and this is derived, and this is determined by calculating the proportion of respondents whose responses fit into a perfect arrangement having an increasing degree of acceptance.

• **The semantic differential**

The semantic differential, also a type of numerical rating scale, was developed by Osgood, Suchi and Tannenbaum (1957) following studies in a range of cultures. It has been extensively in research in the fields of personality and social psychology. Their research suggested that people give meaning to terms and concepts with regard to three dominant aspects, known as semantic dimensions. These are:

- **The Evaluative Dimension:** Bad.
- **The Potency Dimension:** Weak.
- **The activity Dimension:** Passive.

Their semantic differential was designed to provide a measurement based upon the meanings people attribute to terms or concepts connected with attitudes. This uses a questionnaire which lists bipolar adjectives such as good- bad, valuable- worthless, enjoyable- unenjoyable, or friendly- unfriendly. Each bipolar pair is linked to a dimension or scale having seven points, with the two ends represented by the contrasting adjectives and the mid-point being a neutral position, like this:
Limitation of attitude measures

One problem common to all of these attitude measures is that of social desirability. This means that people may respond to them in a manner which has been influenced by the investigator or to preserve their self-image in some way. People could also feel apprehensive about disclosing their true attitudes towards an issue. Various tactics have been adopted by designers to overcome these problems, for example in trying to make a measure’s purpose less obvious by including irrelevant items and by giving assurances about anonymity and confidentiality. An individual’s response set may also be disrupted by the inclusion of both positively and negatively expressed items. A multi-indicator approach to attitude measurement, involving the administration of a number of instruments, is probably the best way of providing more reliable and valid assessments, and acknowledges that people’s attitudes are more complex than previously thought. Attitudes were once perceived to be simple in nature and straightforward to measure. Today this view has changed to reflect the view that they are more interconnected and multifaceted than was once thought.

Assessing Behaviour

The assessment of behaviours rather than attitudes uses a somewhat different approach. In creating behaviour-based scale items, the process is similar to that of any other scale development. The focus of the literature search and interviews would include clearly identifying the target behaviours and defining them in a way that is accepted. Because the focus of many behavioural scales in their use in assessing behavioural change, it is critical to identify the antecedent conditions that trigger the behaviour as well as the consequences of the behaviour.

1.2 Statement of problem

Children’s unhealthy food choices, sedentary lifestyles, and resulting overweight can have adverse consequences in terms of health, academic achievement Opportunity for physical activity at many schools are limited because of cutbacks in recess and
physical education classes. Schools are ideal setting to help improve children’s health by providing more healthful food option throughout the total school environment, more opportunities for children to be active, and more behaviour – focussed nutrition education. Almost all schools have the health and wellness policies. From the above scenario there is the need to see what exist exactly in society about adolescent wellness. This is the age where we were found the many conflicts and problems. Researcher wants to know the current status of adolescent wellness. After knowing the status researcher implemented the wellness program on the same. Thus the researcher showed interest in the research problem, “The Effect of Wellness Program on Adolescent Children from Pune City.”

1.3 Significance of the study
1. It will be helpful to the policy maker, for constructive work and to form wellness program in school.
2. It will be helpful to the Physical Educators to check and implement the wellness program on their respective students.
3. It will be needful to the school organization to prepare the wellness policy of their school.
4. It will be beneficial to the students to improve their wellness awareness and implementation in daily routine.
5. It will be helpful to the parents to understand the wellness of their children and it will give a firm support to their duties regarding children.

1.4 Objectives
The objectives of the present study are:
1. To develop the wellness inventory for adolescent school children.
2. To standardize the wellness inventory for adolescent school children.
3. To measure the wellness of adolescent school children from Pune city.
4. To state the present wellness status of schools from Pune city.
5. To Prepare and implement the wellness program for adolescence school children from Pune city.
6. To measure the effectiveness of the developed wellness program.
7. To suggest Wellness Program for school children.
1.5 Assumptions
The assumptions of the present study are:
1. It was assumed that the data collected would reflect the participant’s true opinion.
2. It was assumed that the students will give active response.
3. It was assumed that the developed wellness inventory will assess actual wellness of the school children.
4. It was assumed that students take active part in the experimental study.

1.6 Hypothesis
H$_1$ There will be significant effect of wellness program on adolescence school children from Pune city.

1.7 Delimitations
The delimitations of the present study are:
1. This study was delimited to Pune city only.
2. This study was delimited to male and female adolescent school children from Pune city.
3. This study was delimited to the secondary school children aged between 14-17 years.

1.8 Limitations
The limitations of the present study are:
1. Student’s mental condition at the time of data collection was considered as limitation of the study.
2. The findings of the study were solely based on student’s response.
3. The effect of Socio-economic status on the lifestyle of the students was a limitation of the study.
4. The environmental situation during the period of program implementation was considered a limitation of the study.

1.9 Operational Definitions
Wellness
Wellness means physical, emotional, social, intellectual, occupational and spiritual well-being of Adolescent School Children from Pune City measured through a wellness inventory.
Wellness Inventory
A form containing a set of wellness assessment questions, submitted to adolescent school children from Pune city called as wellness Inventory.

Adolescent school children
A chronological age between 14 to 17 students and those in standard VIII to X from Pune city schools named as adolescent school children.

Wellness program
A review based lecture cum program of wellness dimensions called as wellness program.
References


Spurr, s. (2009). Student perceptions of Adolescent wellness.


19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no.2. p.100) and entered into force on 7 April 1948.