

**AN ASSESSMENT OF PSYCHO-SOCIAL ASPECTS, HEALTH  
STYLE AND NUTRITIONAL STATUS OF PANJAB UNIVERSITY  
GIRLS' STUDENTS**

**A DISSERTATION**

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**DEDICATION**

*DEDICATED TO  
MY LOVING FATHER & MOTHER  
AND  
BROTHERS & SISTERS*

# PANJAB UNIVERSITY CHANDIHARH



## CERTIFICATE

*This is to certify that the dissertation entitled, “An Assessment of **psycho-social aspects, health style and nutritional status of Panjab University girls’ students**” submitted to the Department of Physical education, Panjab University, Chandigarh **in lieu of a paper for the partial fulfilment of the requirements for the degree of Master of Philosophy (2018-19)** is a faithful record of bonafide research work carried out by **ANISHA NEGI** under my supervision and no part of her dissertation has been submitted for any other degree or diploma at any other universities/institutes.*

**Dated:**

**Prof. Gurmeet Singh  
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*Forwarded  
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## **DECLARATION**

*I, solemnly declare that the research work conducted on the topic entitled “**An Assessment of psycho-social aspects, health style and nutritional status of Panjab University girls’ students**” is my original and bonafide piece of research work carried out by myself. I, further declare that, the results of the research mentioned in this dissertation have not been submitted either in full or partially for the award of any degree at any universities/institutes.*

**Dated:**

**ANISHA NEGI**

(Research Scholar)



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## CHAPTER-I

### INTRODUCTION

*“All evolution is born of inquiry. Doubt is often better than overconfidence, for it leads to inquiry, and inquiry leads to invention.”*

*Hudson Maxim*

Modern scientific development both in the field of general education and physical education, laid very enormous prominence on the nutritious personality development of every beginners. Physical Education is an essential part of education. The nation's strength and personality depend primarily upon the wellbeing and happiness of the citizens. Hence it becomes imparity to assess the contribution of Physical education programmes in the conditions of realization of education aims such as integrated personality development and formation of attractive achievement, low nervousness and leadership patterns. Physical Educationist's and Sports scientists believe that healthy participation in sports and games do immensely influence attractive human skill development, and leadership pattern formation through personality development.

Education is regarded as enduring process, which is proficient of effecting desirable behavior adaptation and healthier social adjustment of an individual. The quality of such modification depends mainly on the personality, which is the result of stable interactory processes between natural world and nurture. The knowledge and inter personal communication supply much to the personality inspiration. Such an importance of total development of human systems has given birth to the modern concept of human growth as human resource development. It is based on the attainment of human resources. Human capital development is the enrichment of human resources in the form of acquaintance, abilities, skills, potentialities, talents and multi diverse forms for life experiences dominated today by advancement in science and technology human abilities-professional, technical, sports and games achievements—are believed to be influence by the sequential and constant synchronization of psycho-sociological and spiritual aspects. Empirical studies explain that man's potentialities are controlled and development mostly by the

psychological makeup of a person. The most vital conscious behavioral components revealing the human characteristics are termed as cognitive domain, affective domain and cognitive domain. It is an established fact that personality is one of the psychological correlates reflected in a motivated, less anxious and good leadership output in a better way. The best abilities and potentialities of any youth get their best form of expression and utility when the youth involve themselves in education processes and Physical education programmes.

Woman is very beautifully defined as the significant 'other', meaning that if man is the important creature of this world, so is the woman. Woman is the base of the everyday flourishing cosmos with scientific and technological innovations. Almost all the activities of this global world revolve around the word 'woman'. The garden of this whole world looks beautiful because it is cared by a very hardworking and enduring gardener in the form of woman who spends most of her time in nourishing and caring this garden. Gone are days when women had to remain under veils and in the four walls of the houses. Now women have shown their existence to this global world by empowering themselves with knowledge, skill and hard work. There is no denying the fact that in today's era there is no sphere of life where women have not shown their talent and remarkable performance. If any group of this society has shown its drastic and recognizable progress in this dynamic world, it is the women. Modern woman not only breaks free from the custody of the man but also travel in space to show her potential and caliber to this world.

Women are almost one half of the world's population having enormous potential and caliber being utilized for the economic, social and human resource development of the country. In today's era women have to be more committed and responsible because of rapid social changes and fast changing urbanization process. But the history of women is not linear, nor does it have a well-organized structure. Women witnessed a series of ups and downs, having more pitfalls in history. In fact, the history of women is closely interwoven with culture, society and above all, with the lives of the people. Untangling the threads of history of women always remained a sphere of interest for many historians and thinkers. In India, during the Vedic and Mughal periods, women enjoyed greater freedom in the society and family. All

important decisions of the family were taken only in consultation with 2 women. Women had great freedom of mobility. But in later days they were gradually suppressed and finally neglected by the society as well as by the family. They were restricted from going out of the houses and not permitted to attend social functions, religious ceremonies, political meetings, etc. Modern world is also not a bed of roses for women. They have been facing enormous physiological, psychological, social, economic, political and cultural problems.

### **PSYCHO- SOCIAL ASPECTS**

Psycho-social means psychological and social aspect of an individual. Psycho-social status of an individual is affected by family, social support network, individual factors like values, attitudes, educational attainment and coping strength when faced with stresses. It involves both psychological and social variables which influence various aspects of student's behavior and development. In this study the investigator selects four psycho-social aspects namely family problems, college problems, social problems and personal problems which influence the study habits and academic achievement of the higher secondary students.

The term psychosocial aspects is used nowadays in the literature to refer to a wide range of issues including, but not limited to, mental, emotional, social, physical, economic, cultural, and spiritual health and, consequently, it has been defined in numerous ways. It is agreed that a model of psychosocial well-being should include and reflect the interconnectedness of the various aspects of overall well-being (**Latane, 1981**).

The term 'psycho-social' was first used by psychologist **Erik Erikson (1959)** in his description of the stages of psychosocial development. It means, it relates to many phases of individual's life. The individual needs not be fully aware of this relationship with her or his environment. Problems that occur in one's psychosocial functioning can be referred to as "psychosocial dysfunction" or "psychosocial morbidity." This refers to the lack of development or diverse atrophy of the psychosocial self, often occurring alongside other dysfunctions that may be physical, emotional, or cognitive in nature.

Psycho related to psychological make-up and social related to social environment which includes family members, peer group etc. This is a state of an individual's body and mind in which he/ she remains imbalance between her/his psychological as well as demands of social environment. When the balance is disturbed or seem to be in danger, the individual get imbalance which results into the deterioration of his psychological and social make-up. Youngsters are in a period of exploration and experimentation that needs adjustment to physical maturity, changing roles within families and with peer groups and emergence of a more independent lifestyle. **(shiferaw, Fantahun& bekele,2006)**

Life in the University environment presents many social - emotional challenges that can impact on students' well-being. Dimensions of students' psychosocial well-being and their measurement 86 Universities should assume their responsibility not only for the students' formal education, but also for their development in all its forms and especially in what quality of life and well-being are concerned. University students do not make efforts only to obtain good grades at the University, but also to live a good life. It is important to know that University students are constantly facing the risk of poor academic achievement or impaired social functioning in the context of their developmental and of broader social changes, of financial and accommodation problems, and also due to the specific demands of the academia **(Misra & McKean, 2000; Ross, Cleland, Macleod, 2006; Verger, et al. 2009)**. But it's also important to know how much satisfaction, happiness and other characteristics of good life students are experiencing in the University environment. To know that the University students are not satisfied, are not feel good about themselves and their social world, has the same importance as knowing that they are stressed or at risk **(Haynes, 2002; Cicognani et al., 2008; Sheu Hung-Bin et al., 2009)**

Psycho-social aspects mean psychological and social aspect of an individual. Psycho-social status of an individual is affected by family, social support network, individual factors like values, attitudes, educational attainment and coping strength when faced with stresses. The psycho-social problems are related to psychological and social factors which influence the mental of an individual. A social influence includes peer group pressure. Parents support, cultural and religious background,

socio-economic status, social support network, individual factors (like values, attitudes, educational attainment, and coping strengths when faced with stresses) as well as inter-personal relationships, all these help to shape the personality and influence the psychological make-up of an individual, students who have the psycho-social problems regarding ineffective communicating with others. Thus, the main attempt is to develop researcher's understanding on psycho social conditions (**Lundy, J.L. 1996**).

**Lata and Yadav (2011)** corroborated that Laurence Steinberg considered "The teenage brain is like a car with good accelerator but weak breaks, with powerful impulses to school and peer ecologies entails exposure to a set of opportunities, demands, rules and relationship that complement and complex, social experiences with parents and siblings self-regulation, cognitive capacity and social behavior. The psycho-social reflects both the under controlled, externalizing or behavior problems such as conduct disorders, educational problems like anxiety, depression etc. The emotional problems have been relatively neglected compared with behavioral problems because these are not easy to be detected by the parents or teachers

Man is a social creature. As a member of the social circle individual comes in the contact of his/her neighborhood and the community to which he/she belongs. The social wellbeing, routine and personality of the neighbors unconsciously and consciously influence the social behavioral of an individual. Every community and society is characterized by its unique cultural pattern, social customs, traditions and social characteristics. An individual as a member of society picks up these things which go in shaping his behavior and influence his/her all round development. Emotionally disturbed individuals become socially maladjusted and disapproved by the society. Tense emotions stand in the way of social interaction, reactions of motions for instance and temper out bursts are never appreciated by the society. An individual should be emotionally balance and mature to win the friends and social applauses. These emotions interfere with the growth and development of human beings, due to these nerves of an individual get tense, digestive system is also disturbed as well as endocrine glands produces the unwanted hormones. Learning also suffers from these emotions. Learning of fundamental or advance skills of games or

events is prolonged due to constant interference of emotional because distress and frustration proves great obstacles for learning in sports. Individual adopt timid or aggressive attitude in the face of emotions and they suffer from frustration. The same stimuli in a given situation are perceived differently by different individuals, leading to varied responses. Differences in behavior are bound to appear, the basic of which lies in the psychological characteristics.

**Ahmad et al. (2007)** expressed that individual suffer from psycho-social problems at one time or the other during their development. Many of these problems are of transient nature and cannot be noticed sometimes. Further children may exhibit these problems in one setting and not in other e.g. home & school. Several key transitional periods (moving from early elementary to middle school, moving from middle school to high school or moving high school to college) can present new challenges for a person and symptoms of dysfunction may occur. Home and school environment have inevitable part of life for an individual from the childhood. When a child enters the school, he/she faces the many problems due to situations arisen in new environment. There are many children in the school who have the desire of attention and want to share his/her experiences with others. At home, a child receives the special attention and recognition usually given to the all children of his age-group, whereas. In school he/she is called upon to share that attention with other individuals. A careful study of the individual personality and the child with his/her environment situation is necessary in each case. There is tendency to attribute entirely for bad home environment and training. Nature allows extreme individual differences at the time of birth even in physical capacities which are essential of life. There are number of inborn differences in intelligence which mark differences in general activity, assertiveness and temper etc. The psycho-social problems aroused by many reasons which threaten the vital balance. The individual must, somehow, mitigate its effects. Sometimes, children/adolescent do not have their social emotional development well in tune with according to their chronological age. Therefore, they may feel difficulties in getting along with their peers in classrooms and in sports activities.

**Mangal (2007)** had corroborated that Erikson in 1959 had developed the theory of psycho-social development which covers normal development over the

entire life span of human beings. He postulated that the development of an individual is the result of his/ her interaction with social environment. Right from his/ her birth his/ her social development puts him/her under specific pressures or conflicts by making specific demands at different ages or development stages of life. The individual tries to meet these specific demands and resolve the crises by reacting psychologically in his/ her own style depending upon the situation.

Erikson also discovered the eight stages of issues or crises of life arising at different stages of one's development and connected them with the eight stages of one's psycho-social development which covers an individual's whole life duration. He explained this particular phase as "socially a most vital arena" during which inadequacy is a governing terror. This concern is most often expressed in group play and games where a child has the chance to test him/ her in relation to others. Individual's attitudes towards oneself and also toward common experiences give to the development in life as well as provide a reflect picture to him/ her. In a game with other children, "getting beside" and "making the game work" are significant to the individual, this setting affords a wealth of information about one-self and one's capabilities. Unlike the parents who accept the child on the basis of love, the peer will communicate to the child on the basis of what he/she offers to the group. The mutuality and interpersonal dependence are also developed moderately naturally in these surroundings. Children willingly to accept roles from each- other and make their own conformity for "the greater good and they infrequently require standards imposed by adults.

Psychosocial aspect assessed in this present study comprise of four sub-variables of psycho-social aspects i.e. family problems, college/school problems, personal problems and social problems between residential and non-residential girls' students of Panjab University. In this competition era, youth deals with many psychosocial problems. Many of these problems are of short-term nature and are often not observed. Further, youngsters may exhibit these problems in one surroundings and not in other (home, school & college). Psycho-social problems refer to various family problems, school/college problems, personal problems and social problems. Problems related to the external activities of a person, which are observed directly, like behavior

that evils or pressure to others, lying, destruction of the set of lowest, are family problems. Personal problems are the problems that related to any of the particular feeling's cognitive skills, teachers' and parental inspiration an academic field as well as adjustment with the school. Social problems are the problems related to social environment such as behavior, social participation, peer influence and adjustment with family, society and religion. Therefore, the major areas of challenges and changes that faced by an individual are physiological, psychological and cognitive as well as emotional changes (**Kaur, 2006**). **Bhardwaj, 1997; Kakkar, 1999; Prathiba, 2006 & Jeevarthina, (2010)** corroborated that youth usually feel nervous about loss of control, sexuality, dependence, the need to be rational, acceptance by peers, competence and body image; these are age related psycho-social problems and connected with the social expectation. Peer relationship can also be a focus on considerable situations. Because youth are fetching less dependent on parents and are trying to be independent, their peer group becomes the focus of self- worth. The factors accountable for youngster maladjustment include monetary instability, parental disorder, insufficiency of school assistance, lack of understanding of youth psychology on the part of parents and school conveniences etc. leaving home may also be a way of telling parents that the home circumstances have become seriously intolerable (**Husen & Postlethwaite 1994**). Youngsters who don't feel acknowledged may experience aloneness and a sense of disaffection.

## **HEALTH STYLE**

In calculation to being sedentary, many people have a diet that is too high in calories, unhealthy fats, added sugars, too low in fibers, complex carbohydrates, fruits and vegetables. This diet is linked to a number of prolonged diseases including heart diseases, stroke, high blood pressure, type 2 diabetes and certain types of cancer. It has been estimated that 15% of death in the United States can be attributes to poor diet combined with lack of exercise. In India per capital consumption of food is decreasing. But fats ingestion increased steadily and consumption of protein reducing from 1970. A healthy diet promotes wellness in both the short and long duration.

Everyone knows that “first happiness is disease free body”. A healthy being can easily all the sorrows- happiness, regards- disregards, hot-cold and can do his

day-to-day chore efficiently, happily, cherish from Labor work to office to office work, from study path to sports work, from worship country to worship god, entirety depend on our healthy physique (**Shri Naryana-Mahajan, 1996**).

## **STATUS OF WOMEN'S HEALTH**

The health status of women is one of the vital elements in the assessment of quality of life of the people. Health related indicators like maternal mortality rates, infant mortality rates, life expectancy, fertility rates along with nutritional status, reproductive health of women point towards women's well-being and physical status. Above all, women's health plays an important role in determining the health of the future population as it has an inter-generational effect.

The nutritional status of women, especially that of rural women and women belonging to lower socio-economic status, is far from what is desired. The low nutritional status of women in India applies to all the age groups but is more acute in the case of young girls and pregnant mothers. While in the lowest socio-economic groups the low nutritional status of women is mainly due to poverty, in the middle-income groups it is aggravated by general neglect and is the indirect result of stronger gender discrimination.

Several health-related programs and plan of action has been launched and operated with high priority by government for improving health status of the women. Obviously, there is no instant magic solution for removing the discrimination and to ensure that women and girls enjoy equal privileges and rights. Because in certain stages, women themselves become the perpetrators of discrimination on against them female children for which there is need for a complete social change and it has to start by empowering the young girls themselves. They should learn about health, disease, nutrition, adolescence, and hazards of early marriage, childcare, and also their legal rights. The emphasis should be given to girls' education that can delay the age at marriage, enhance their self-image and self-esteem and help to participate in decision-making processes. The health of Indian women is intrinsically linked to their status in society. Over 70% of the women report for diagnostic and treatment services at an advanced stage of disease, resulting in poor survival and high mortality rates.

The most fundamental aspect of human life is health which unfortunately cannot be given or distributed. It is to be actively acquired or won. It forms an integral component of overall socio- economic development of any nation. It is a matter of concern and care to certain sensitive members of family and society, irrespective of caste, creed, country, culture, etc. The concept of health keeps changing from time to time and of course varies from person to person. For example, some people say absence of disease is a healthy condition, some even accept obese is a good state of body in comparison on normal or ideal weight. So, for a lay man there is no agreed definition of health though there have been many definitions. However, the most accepted scientific definition of health put forward by the World Health Organization (WHO, 1948) states:

The health style has seven different dimensions-physical health, environmental health, occupational health, social health, emotional health, spiritual health and spiritual. A person who enjoys health in these planes is said to be in a state of positive health. The importance of the WHO definition lies in the fact that, every effort of the health programs is to be focused on the overall development of an individual and it should be the ultimate goal of all.

It is very difficult for us to define any universally acceptable conceptualization of health. The definition needs to be positive, holistic, acceptable to many cultures, able to surmount the constraints of different disciplinary boundaries and able to avoid the problematic notion of health as the sole possession of an individual. Bearing these criteria in mind, **Pat Pridmore (1947)** and **David Stephens (1950)** have developed the following definition: “Health is a resource for life. It is a relative and positive concept emphasizing social, mental and spiritual well-being as well as physical capacities. It is the extent to which an individual or group is able to realize aspirations, satisfy needs and adapt to change in the environment.”

We can often trace the origins of popular concepts of health back to the thinking of early Greek philosophers such as Hippocrates, whose doctrine of universal-sympathy or harmony viewed health as a state of balance or equilibrium between the internal and external environments of an individual’. The external environment was considered to comprise the four elements of earth, air, fire, and water.

Health is an essential input for the development of human resources and the quality of life and in turn the social and economic development of the nation. It is regarded as a priority for sustained development interventions at the individual, community and national levels. Improved health is a part of total socioeconomic development and is regarded as an index of social development (**WHO, 1946**).

The Environment has been the subject of great concern during recent decades. Health outcome depend on many factors, including sanitation, clean drinking water, food security, and responsible health behavior. Convergent action is, therefore, urgently needed. The purpose of environmental Health is to create and maintain ecological conditions that will promote health and thus prevent diseases (**Ashrit, R.R. 2006**).

The term environment implies all the external factors-living and non-living, material and non-material- which surrounds man. For descriptive purpose, environment has been divided into three components, all closely related:

- (i) Physical: Water, air, soil, housing, wastes, radiation etc.
- (ii) Biological: Plant and animal life including bacteria, viruses, insects, rodents and animals.
- (iii) Social: Customs, culture, habits, income, occupation, religion etc. (**Park, K. 2005**)

Cleanliness or sanitation of physical environment is essential for healthy living. According to W.H.O, environmental sanitation means "The control of all those factors in man's environment which exercise or may exercise a deleterious effect on his physical development, health and survival".

This definition sees health as having no purpose of its own but only as a vehicle for living. It reflects a broad conceptualization of health that acknowledges its positive, relative and changing nature as well as its multiple-causality. It emphasizes social and personal resources as well as physical capacities and acknowledges the importance of being

## **WOMEN AND HEALTH**

Health style of Indian women has to be viewed seriously. Nearly 60,000 women die every year in pregnancy: 90% of working women have irregular periods; junk food causes girls to hit puberty at 7 years; menopause is starting to hit women at

20's; 40% of women are exposed to second hand smoking; 35% of women in every 30s are affected by thyroid problems; 1.21 crore Indian women are smokers; 28% have chances to get breast cancer; 75% Indian of working women have health problems; more than 90 Crore people of India are having either this disease or that disease; 50% of the disease can be self-controlled; 83 % of all death before 65 years can be preventable; fitness status of Indians is also not appreciable. 85% of the people lead sedentary life; 43% of the children have no fitness; 35% of children have less ling efficiency; 60% of the children don't have basic movement skills; 84% of the adolescent are not doing any physical activity; only 19% of the Indians are doing physical exercises that too occasionally; our lung capacity is 30% weaker than the Europeans; children fitness is very low than their parents when they were in childhood; if a person walks for six minutes or more in 400m track. If a person's pace is 24 minutes per miles or more, he or she has to improve his or her health, fitness & wellness (**Chhajer, 2014**).

## **HEALTH EDUCATION**

Health is an inseparable part of development. "Health for all and all for health" is our goal (**Bagchi 1990**). Good health is the imperative part of the great experience of living. Health implies a sound mind in a sound body, in a sound family and in a sound environment. The health status of women, which includes their physical, mental and social conditions in addition to their biological and physiological problems, is affected by the existing norms and manner of society concerning their needs and capacities. These attitudes influence the prerequisite and utilization of precautionary and healing health care services. There are so many cultural aspects or norms, which influence women's health. These are; (i) attitude to marriage (ii) age of marriage (iii) 'fertility rate (iv) Sex of the child, (sex willpower test) (v) the pattern of family organization (vi) the place of women in the relations (vii) the expected role of women as distinct by social meetings. The women who are the leading producer of the necessities of life. Hence it is essential to study their current problems concerning preservation of obligatory health and sanitation inside their existing socio-economic environment (**Park and Park, 1991**).

"Health education is communication activity concerning planned social actions and learning experiences designed to enable people to gain control over the

determinants of health behaviors and the condition that affect their health status and the health status of others. The aim of “health education is to enhance positive health and prevent or diminish ill health in individuals and groups” (Dhillon & Tolsma, 1992).

In 1954, the World Health Organization (WHO) described the aim of health education as follows:

- ✓ To make health a valued community asset.
- ✓ To help individuals to become competent in and to carry out those activities they must undertake for themselves as individuals or in small groups, in order to realize fully the state of health defined in the constitution of the WHO.
- ✓ To promote the development and proper use of the health services.

## **THE DIMENSIONS OF HEALTH STYLE**

No matter what our age or health status, we can optimize our health in each of the following interrelated dimensions. Wellness in any dimension is not a static goal but a dynamic process of change and growth. The well-being of a person comprises the dimensions of health: physical health, emotional health, social health, spiritual health, intellectual health, environmental health and occupational health. Personal health depends partially on one’s active, passive and assisted opinions about his/her health in daily living. From these opinions he could get information for his personal judgments and engagements to create.

## **PHYSICAL HEALTH**

A physically healthy person is active, does not get tired easily, does not get sick easily, is strong, and is full of energy. The physical wellbeing is defined as something a person can achieve by developing all health related components of her/his lifestyle. For human, Physical health refers to the condition of the body and the way it reacts to diseases because of regular physical activity & exercise, good nutritious food, avoiding harmful habits, making responsible decision about sex, learning about and recognizing the symptoms of disease, getting regular medical and dental checkups, taking steps to prevent injuries at home , and to take enough sleep

and rest. As a country's or region's people experience improved nutrition, health care, standard of living and quality of life, their height and weight generally increase. The habits we develop and the decisions we take today will mostly determine not only how many years we will live, but the quality of our life during those years.

### **EMOTIONAL HEALTH**

Optimism, trust, self-esteem, self-acceptance, self-confidence, self-control, satisfying relationship and an ability to share feelings are just some of the qualities and aspects of emotional wellbeing. The word emotional health refers to the quality of a person's health determines the person's emotions. What he feels towards self, other people and circumstances determines his emotional health. It also refers to a person's way of handling success as well as defeat of coping with daily problems and stress, and the management of his study, work, and other activities. An emotionally healthy person is in control of his thoughts, feelings, and behavior. He feels good about himself and has good relationships with other people. According to medical experts, people with good emotional health have a lower rate of stress-related diseases like, headaches, ulcers, migraines, stomachaches, and asthma.

### **SOCIAL HEALTH**

The social dimension of health encourages contributing to one's human and physical environment to the common welfare of one's community. Social health emphasizes the interdependence with others and nature. It includes the pursuit of harmony in one's family. As you travelled on this health path you will become more aware of your importance in society as well as the impact you have on nature and your community. You will take an active part in improving our world by encouraging a healthy living environment and initiating better communication with those around you. You will actively seek ways to preserve the beauty and balance of nature along the pathway. This refers to the effective way a person performs his role in life as a son, daughter, friend, neighbor, or citizen. This involves a person's ability to perform his responsibilities and to maintain good relationships with others. Giving love and respect to others is an important factor of social health. In short, a socially healthy person makes friends easily and keeps them; does not quarrel with others; and is

considerate and kind to others. Social health also involves cooperating with others whenever a task needs to be done.

### **SPIRITUAL HEALTH**

Spiritual health is a personal matter involving values and beliefs that provide a purpose in our lives. This refers to a person's belief in God, sense of values, and his ability to exercise what he believes is right. A person's religious faith also contributes to his health and well-being. While different individuals may have different views of what spiritualism is, it is generally considered to be the search for meaning and purpose in human existence, leading one to strive for a state of harmony with oneself and others while working to balance inner needs with the rest of the world. It is better to live each day in a way that is consistent with our values and beliefs than to do otherwise and feel untrue to ourselves. It is important for everyone to explore what they believe is their own sense of meaning and purpose. The path to spiritual health may involve meditation, prayer, affirmations, or specific spiritual practices that support your connection to a higher power or belief system. Yoga and meditation can help to develop spiritual health. Having compassion, the capacity for love and forgiveness, altruism, joy, and fulfillment help us to enjoy our spiritual health.

### **ENVIRONMENTAL HEALTH**

The demographic growth and fast urbanization all over the world are bringing profound social and environmental changes. Therefore, the attainment of a healthy environment is becoming more and more complex. The term environmental sanitation is now being replaced by environmental health. The purpose of environmental health is to create and maintain ecological conditions that will promote health and thus prevent disease (**Park, K. 2005**).

### **INTELLECTUAL HEALTH**

A mentally healthy person is able to concentrate on a task for an extended period of time. He is alert, able to listen, and think. The way a person thinks and handles situations also indicates his intellectual/mental health. Intellectual health also entails creativity, general knowledge, and common sense. It also involves a person's

ability to make sound decisions. This is important to a person's health and well-being. We can become mentally healthy by learning from people around you. Playing mind games can add to your mental skills, too. Reading and taking special classes can also stimulate your mental health.

## **OCCUPATIONAL HEALTH**

The occupational dimension of health is involved in preparing for work in which one will gain personal satisfaction and find enrichment in one's life through work. Occupational development is related to one's attitude about one's work. Travelling a path toward occupational health, he/she will contribute unique gifts, skills and talents to work that are gratifying for you. We will know when we are on the correct path for career wellness, when our work and hobbies become exciting. On our occupational health journey, we'll begin to value the importance of not only our personal gratification, but also our contribution to the well-being of the community at large. The choice of profession, job satisfaction, career ambitions, and personal performance are all important components of our path's terrain. As we travelled the health path, we will begin to believe that-occupationally. It's better to choose a career which is consistent with our personal values, interests and belief than to select one that is unrewarding to us. It's better to develop functional, transferable skills through structured involvement opportunities than to remain inactive and uninvolved.

### **Some Ways of Maintaining Good Health:**

- ✓ Have adequate and regular exercise at least 3x a week.
- ✓ Take enough rest and sleep at least 8 hours daily.
- ✓ Eat balanced meals. If possible, avoid junk foods, and fatty foods.
- ✓ Learn to properly deal with problems.
- ✓ Maintain harmonious relationships with family members, friends, and other people in your community.
- ✓ Do your responsibilities, and for students – study well.
- ✓ Have a regular checkup.
- ✓ An ounce of prevention is worth a pound of cure.

## **NUTRITION**

The word nutrition comes from a Latin root “Nutr” meaning to nurture or nourish. Nourishment is that which sustain life. Nutrition concerns with the food people eat and how their body uses it. Nutrition May be defined as the science that interprets the relationship of food to the functioning of living organism.

Nutrition is usually taken as another significant indicator of health and overall status of youth. Adequate nutrition is particularly critical for adolescents as it is a primary determinant of the spurts of growth that the characteristics teenage years. Poor nutrition is often cited as a major reason for the delay in the onset of puberty in Indian young people. Also, gender discrimination in India is a one of the main causes of female under nutrition

Person’s physical growth is a vigorously changeable and essentially very important phenomenon, individual growth and body composition has own characteristics. It is the results of three forces i.e. genetic program, the action of environmental factors and the interaction between the two. Increase of fat gain is a difficult phenomenon which are synchronized and affected by several mechanism and factors (**Maffeis, 2000**).

Adipose tissue is an essential body component for the survival. It serves as a reservoir for energy during the nutrition derivation and insulates the body from the environment to maintain thermal homeostatic (Babette, 2002). A certain nominal amount of fat is necessary to allow the body to function accurately and proficiently. This level of essential fat is necessary for temperature regulations, Shocks absorption and regulation of essential body nutrients, including vitamins A, D, E, and K. The accurate amount of fat considered essential to normal body functioning has been debated, but most experts consent that male should possess not less than 5% and females not less than 10%. Low level of fat frequently in women places risk for bone loss (osteoporosis) and many other complications. Fat stored beyond the essential level is classified as non-essential fat. The normal range of fat for healthy male is between 10 and 20 percent while the healthy range for women is between 17 to 28 percent. These levels are associated with good metabolic fitness, good health and well-being.

## **NUTRITIONAL STATUS & WOMEN**

Nutrition is one of the basic requirements of any living organism to grow and sustains life. But the quality and quantity of nutrients necessary to keep an organism in good health during its life span vary not only with age of the organism but also with many other factors. Any major deviation in quantity from its requirements can affect the growth and life span in a number of ways.

The human being needs a wide range of nutrients to keep him healthy and active and he must derive most of these nutrients through his daily diet. Several of these nutrients are known to be quite essential since deficiencies due to inadequate intake of these nutrients are often encountered in the human subjects. The chief source of nutrient is food. It provides energy to keep the body warm and muscles active, supplies building material needed for growth and development. Compensating for the loss incurred by daily wear and tear, food also serves as the protective function.

Natural food stuff contains nutrients in minute quantities and each nutrient is responsible for a specific task-in the body. The major nutrients are energy, protein, calcium, iron, and fats soluble vitamins & water soluble vitamins, ascorbic acid and B-complex vitamins thiamin, riboflavin, nicotinic acid, pyridoxine, folic acid and vitamin B12- The major nutrients like energy, protein and minerals like calcium and iron are essential for growth and maintenance of the integrity of the body tissues. The other nutrients namely vitamins and trace minerals are required for the metabolism of these major nutrients and to maintain tissues at an optimum level of activity. Studies have been carried out on the quantitative requirement of these nutrients. The dietary requirements of above nutrients depend upon the age, sex and quality of man's habitual diet.

## **NUTRITIONAL REQUIREMENTS**

Good nutrition aims to achieve and maintain a desirable body composition and high potential for physical and mental work. Balancing energy intake with energy expenditure is necessary for a desirable body weight. Energy expenditure depends according to age, sex, and activity of the individual. The food requirement

varies Average intake of nutrients is classified according to age and sex. The amount of food requirements of women has been cited in the given below; -

## **ENERGY**

Calorie needs increases with the metabolic demands of growth and energy expenditure. Although individual needs vary, girls consume fewer kilocalories than boys. Boys need 2500-2800 kilocalories a day. Sometimes the large appetite characteristic of this growth period leads to adolescence to satisfy their hunger with snack foods that are high in sugar and fat and low in protein. During adolescence from the age of 10 years there are marked differences in the calorie needs of boys and girls **(Mueller 1976)**.

## **CARBOHYDRATES**

Like any nutrient, consuming carbs is all about balance. In reality, carbs are essential for proper body function. Carbs are broken down into glucose, which is your brain and body's main fuel. Carbs also ensure your body is not breaking down proteins to gain energy, preventing loss of muscle mass. Complex carbohydrates take longer to break down and keep you fuller for longer, meaning you cut down on unhealthy snacking. Whole grains, vegetables, and fruits are all examples of healthy complex carbohydrates. Since carbohydrates can be made in the body from same amino acids and from glycerol of fat. No recommended allowances have been established. The median intake of meals ranged between 300-325gm/day from 10-17 years of age with 10 percentile levels close to 200 and 90 percentile levels approximately 400gm/day **(Virginia 1980)**.

## **PROTEIN-AMINO ACIDS**

Protein is critical for good health. Protein is essential in forming muscles to creating new enzymes and hormones. Proteins are comprised of small building blocks called amino acids. They are the building blocks of cells, which turn over quicker and regenerate more slowly as a person age. Ensuring these vital building blocks are there helps enhance optimal ageing at the time of your life when it becomes more important to support your nutritional intake and make up for any deficiencies. There are 20 amino acids in total, but the nine essential amino acids are: - Histidine,

Isoleucine, Leucine, Lysine, Methionine, Phenylalanine, Threonine, Tryptophan & Valine. Animal proteins provide all essential amino acids, while plant proteins may be lacking several of these essential elements. To ensure we are getting all essential amino acids, include a variety of proteins in your diet, such as meat, eggs, dairy, nuts, and beans. Where you do eat meat, try to eat only lean meat. Protein needs represent 12-14 per cent of energy needs. Protein intake usually exceeds 1 gm/kg body weight. This means growth needs and for the pubertal changes in both sexes and for the developing muscle mass in boys. The protein needs for both boys and girls are the same up to the age of 10 years. But there is a gradual difference in their requirement from the age of 10 years where the boys have higher requirement compared to girls. This pattern is similar in calorie requirement. The RDA levels for males increase 1gm/kg body weight i.e. 45gm to 56 gm at 11-14 years and 0.85gm/kg at 15-18 years and 0.8gm/kg at 19- 22 years; for females 46gm at 11-18 years and then decreases to 44 gm at 19-22 years. The allowances per kilogram are same for both sexes at comparable ages (**Johnston 1958: WHO 1973**).

## **LIPIDS**

Another oft-targeted nutrient, dietary fat has earned a bad reputation because of its association with body fat. A multitude of diets have sprung up condemning all fat, but the reality is much more nuanced. Fat is an essential nutrient that boosts absorption of vitamins and helps protect organs. Some types of fats are undoubtedly bad. Trans fats, found in processed and baked foods, increase the risk of heart disease and should be eaten very rarely, if ever. Unsaturated fats, found in natural sources, actually protect the heart and aid the prevention of heart disease. These good fats can be found in nuts, avocados and salmon. No allowances have been established for fat intake. The ranges from minimum to maximum intakes are 27-47 per cent for males and 24-51 per cent for females.

## **VITAMINS**

A vitamin is an organic compound and an essential micronutrient that the body needs in small amounts. The essential vitamins are: Vitamin A, Vitamin C, Vitamin D, Vitamin E, B vitamins. Vitamin D is particularly critical for bone and immune health, so it's a must have. No food provides every essential vitamin. A diverse and

healthy diet is needed. If your diet is restrictive, there's nothing wrong with taking a supplement which contains multivitamin to fill in the gaps. That said, try and get your vitamins naturally where possible. Unfortunately, though for most of us, this isn't possible, so make sure you get them through other means. The need for thiamin, riboflavin and niacin increased directly with increased calorie intake. Folic acid and B12 are essential for Deoxyribonucleic Acid (DNA) and Ribonucleic Acid (RNA) synthesis and needed in higher amounts when tissue synthesis is occurring rapidly. Tissue growth involves amino acid metabolism particularly transamination to synthesis non-essential amino acid. So, requirement for B6 is increased. Premenstrual tension can be reduced if adolescent girls consume 100mg/day B6. The structural functional integrity of the new-formed cells depends on the availability of vitamin A, C and E (**Mueller 1976**).

## **MINERALS**

Minerals are another essential micronutrient, with each essential mineral fulfilling a different role. Seven essential minerals are: Sodium, Iron, Potassium, Calcium, Magnesium, Zinc, Phosphorus & Calcium are essential for bone health, muscle and nerve function, and circulation. 99 per cent of the body's calcium is found in the bones and teeth. Calcium is found in dairy, leafy greens and fish such as sardines and salmon. Sodium is another essential nutrient that's gained a bad reputation. Sodium keeps nerves and muscles working correctly. Sodium should be consumed carefully. It is all about moderation. Sodium can be found naturally in nuts, vegetables, meats and legumes, but intake should be limited to around one teaspoon of salt. Processed, frozen, and canned foods with high sodium should be avoided. Keeping hydrated is really important. Water is absolutely essential for survival, especially as it makes up to 60 per cent of the human adult body. A few days without water can lead to serious illness and even death. Our body relies on water. It is critical for waste removal and temperature regulation, and is an essential element of every cell. To remain hydrated, drink water throughout the day, and eat foods with high water contents - fruits and vegetables in particular. Keep drinks, like coffee and nasty soft drinks which dehydrate you to a minimum.

The girls need to ensure adequate intake of iron as the loss 0.5 mg/day by way of menstruation. The daily menstrual loss of iron is computed from the iron content of blood lost during menstrual period averaged over a month. If this lost iron is not replaced it predisposes to iron deficiency anemia. During adolescence there is an increase in body mass corresponding to about 4.3 kg/year in the males and 4kg/year in the females with a further increase in hemoglobin by 2gm/dl in the males and 1gm/dl in the females, the respective requirements for growth alone is 0.7 mg/day in males and 0.45mg/day in the females. While the obligatory losses also increase with age standard for calcium intake differ markedly during adolescence FAO/WHO standard allows 0.6-0.7gm between 10 and 15 years and 0.5-0.06gm from 16-19 years.

Since bone grows in volume and densely as well as the length calculations of calcium requirement based in height increments alone under estimates calcium needs. It has estimated that females must retain 200mg of calcium/day for bone growth alone during the peak (**Srilakshmi 2002**).

## **PHOSPHORUS**

The dietary study shows that ratio of calcium and phosphorus is 1:1. The calcium and phosphorus ratio in the CRC study was 0.8: to 0.85 in males between 10 and 17 years in females by 18 years. When their milk consumption decreases, a wide variation in calcium and phosphorus ratio can be tolerated so long as the vitamin D intake is adequate. Large intake of phosphorus from soft drinks by adolescent with low milk intake has raised concern about low calcium and phosphorus (**R D A 1974: Srilakshmi 2002**).

It is generally accepted that the evaluation of the nutrition status of individuals or population can provide an objective standard for the assessment of the adequacy of dietary intakes (**Kumar 2008**). Several methods are used to know the dietary history or nutrition status on children. The dietary provides information not only on the amount and quality of food consumed.

**Estimation food record:** It is a method in which the food is recorded from, subjects, parents, caretakers or local field investigation is instructed to recall all food and beverages consumed by the subjects during the specified time period. However, food

records are used most often in the research setting because they are labor intensive and time consuming. As available, these records are analyzed and compared to the dietary reference intakes (DRIs) using a computerized nutrient analysis program. A limitation of food records is that parents tend to forget to record all foods eaten or modify feeding practices to be more healthy which may leads to underestimates of intake.

**Weight food record:** In this method weight of food using dietary scales. Here accuracy and precision are greater for the weight compared to estimate food records.

**Food frequency questionnaire:** In this method frequency of food items which are consumed during a specific time period (e.g. daily, weekly, monthly or yearly). Food frequency questionnaire has two main components i.e. a list of food and second a set of frequency of use response categories. These questionnaires collect information on both the frequency and amount consumed of specific foods and are useful in the clinical setting to identify usual eating patterns (**Gibson, 2002**). A limitation of the food frequency questionnaires is that the amounts of food thus intake of energy and some nutrients are often over reported.

**Twenty-Four Hour Recall:** This is the most widely used method in which the subject is interviewed. Most of the dietary counseling is based on this method. This method provides information about what the respondent exactly food intake during the previous 24hrs periods or preceding day. This method is mostly applicable when sample represent the population. The quality and quantity of dietary intake are assessed by prospective food records (with weighed or estimated food portions), retrospective 24-hrs recalls (Previous 24 hours or of a “typical” 24-hours period) or Food frequency questionnaires. The prospective food records are usually carried out for 3 to 7 days and provide the most accurate assessment of actual intake. The interviewer asks the individual how often-daily, weekly, monthly specific foods are eaten. A food frequency checklist is designed which may include a few broad categories of foods or all the foods commonly used. The individual may be asked to maintain a food dairy for several days. In this method the subject keeps recording whatever he/she eats such as the kind of food and the amount of food or beverages for

several days. If this record is kept carefully, some valuable information about food habits is made available (**Gibson, 2002**).

### **STATEMENT OF THE PROBLEM**

The problem is specified as “**AN ASSESSMENT OF PSYCHO-SOCIAL ASPECTS, HEALTH STYLE AND NUTRITIONAL STATUS OF PANJAB UNIVERSITY GIRLS’ STUDENTS**”.

### **OBJECTIVES OF THE STUDY**

The objectives of the study were:

- 1) To assess the psycho-social aspects of Panjab University residential and non-residential girls’ students.
- 2) To assess the health style of Panjab University residential and non-residential girls’ students.
- 3) To assess the nutritional status of Panjab University residential and non-residential girls’ students.
- 4) To find out the relationship between the health style and psycho-social variables of Panjab University residential and non-residential girls’ students.
- 5) To find out the relationship between the nutritional status and health style of Panjab University residential and non-residential girls’ students.
- 6) To find out the relationship between psycho-social variables and health style of Panjab University residential and non-residential girls’ students.

### **HYPOTHESES OF THE STUDY**

On the basis of different research finds, experts’ opinion and scholars own understanding of the problem, following hypotheses has set: -

- 1) There would be no significant difference between Panjab University residential and non-residential girls’ students on the variable psycho-social aspects.
- 2) There would be no significant difference between Panjab University residential and non-residential girls’ students on the variable health style.

- 3) There would be no significant difference between Panjab University residential and non-residential girls' students on the variable nutritional status.
- 4) There would be no significant difference of psycho-social aspects in relation to health style of Panjab University residential and non-residential girls' students.
- 5) There would be no significant difference of health style in relation to nutritional status of Panjab University residential and non-residential girls' students.
- 6) There would be no significant difference of nutritional status in relation to psycho-social aspects of Panjab University residential and non-residential girls' students.

### **DELIMITATIONS OF THE STUDY**

Keeping in view the limited resources time and facilities at the disposal of the researcher, the present study was delimited to the area and scope of the population, as well as the content of the study.

The present study has been delimited in following manner:

- 1) The study was delimited to the girls' students of Panjab University Chandigarh Campus.
- 2) The study was delimited to the psycho-social aspects, health style and nutritional status of Panjab University girls' students.
- 3) The study was delimited to the residential and non-residential girls' students of Panjab University Campus.
- 4) The study was also delimited to the age group of 18-25 years.
- 5) The study was delimited to the under-graduate and post-graduate girls' students only.

### **LIMITATIONS OF THE STUDY**

The subjects might not try their best effort to accomplish the testing. The researcher would not be able to control over their everyday routine, diet and hereditary factors as the Panjab University residential and non-residential girls' students came from different socio-economic groups and their social environment is

different which would be considered as limitations of this study. Any other comparable factors like climatic conditions, emotional setup, home environment etc. that influence the performance would be considered as limitations of the study.

## **DEFINITIONS/ EXPLANATION OF THE TERMS**

### **ASSESSMENT**

An assessment is the attempt of a skilled professional, usually psychologist, to use the techniques, methods and tools of psychology to learn either general or specific facts about another person, either to inform others of how they function now, or to predict their behavior and functioning in the future.

### **PSYCHO-SOCIAL ASPECTS**

A psycho-social aspect (perceived happiness, problems, stress and family strength) is a family illness caused/ influenced by life experiences as well as maladjusted, cognitive and behavioral process (**farlex**).

### **FAMILY PROBLEMS**

Those disagreements which are in the opinion of the child, interferes his/her effective interaction with the members of his family.

### **COLLEGE/ SCHOOL PROBLEMS**

College/school problems are related to those situations which obstruct balance between satisfaction of the student and his environment.

### **SOCIAL PROBLEMS**

It refers to the situation in which an individual find imbalance between or cannot make him/herself secure and comfort in the face of overcharging conditions those conditions and pressure of her/his social environment. It refers to that situation which an individual finds incompatibility with comfort, security and identity in the face of over changing social pressure and environment.

### **PERSONAL PROBLEMS**

It refers to that surroundings and position which create the disagreements with student's own desires, needs, satisfaction and requirements. It has imbalance mutual

dissatisfaction arising out from his/her life activities. It may be due to his/ her interpersonal settlement between his/ her wishes.

#### **HEALTH: -**

Health is the quality, resulting from the total functioning of the individual in his environment that empowers him to achieve a personally satisfying and socially useful life. It is a quantity of life involving dynamic interaction and interdependence among the individual's physical well-being, his mental and emotional reactions, and the social complex that empowers him to achieve a personally satisfying and socially useful life in which he exists **(St.Paul) 1967**.

#### **NUTRITION: -**

Nutrition is the study of food and nutrients and their effect on health, growth and development of the individual. It is the sum total of the processes involved in the taking in and the utilization of food substances by which growth, repair and maintenance of the body are accomplished **(Jean Bogert, 1956)**.

#### **HYPOTHESIS**

“A hypothesis is a tentative statement asserting a relationship between certain facts” **Theodorson (1961)**.

#### **SIGNIFICANCE OF THE STUDY**

The purpose of this study would be to assess the psycho-social aspects, health and nutritional status of residential and non-residential Panjab University girls' students and to find out the relationship among the above said variables, and also to highlight any differences between students living at home & away from home and to examine their health style and nutritional status. This study will be helpful to evaluate the current status of residential and non-residential Panjab University girls' students and benefits in creating awareness among students, teachers, higher authorities, administration and their family members also. It will also be contributing in knowing the attitudes, health and nutritional habits of the residential and non-residential Panjab University girls' students and provide basis for counseling them. The study will not only be beneficial to Panjab University authorities, but also provide help to various universities and institutions where residential and non-residential students studying

together on psycho social aspects, health and nutritional status. The findings of the present study will have provided the basis for the implication of the results in the hostels for the improvement of girls' health and nutritional status. The present study will also play a vital role in the improvement of the psycho-sociological make-up of students.

## CHAPTER-II

### REVIEW OF THE RELATED LITRATURE

The review of related literature that is relevant to the present study helps in locating the problem, tracing and evaluating reports of the research findings. This is in fact, the first step to get an indication of direction for the main problem in particular area. The study of the related literature helps in understanding a number of studies that are related to the problem under consideration. It also helpful to identify the research area in which research work is needed. Moreover, it outlines the scope for drawing a base for the conceptual framework of study undertaken. This chapter was endeavoring to examine the studies that were taken in the area of psycho-social aspects, health style and nutritional status. The researcher made sincere and dedicated efforts to locate the literature that was directly or indirectly related to the current study.

#### PSYCHO-SOCIAL ASPECTS

**Pedro (1999)** conducted a study on Social and Psychological Factors in the Academic Achievement of Children of Immigrants: A Cultural History Puzzle. The influence of various factors in immigrant students' school achievement was examined in informing broader discourses on schooling, inequality, and related conceptual issues. The ways in which different types of predictors of school achievement behave in context with factors related to adolescence and cultural adaptation in a sample of children of immigrants were explored. The influence of cultural background remains enigmatic and could not be disaggregated entirely by key demographic and socio-psychological factors considered in this study. The latter explained almost 40% of the variation in student achievement. The two groups found to excel in American schools (Asian and Cuban) have more established inroads in the community and may be able to provide greater social and cognitive support. The lowest achievers were from groups that have the least support, encounter language problems in school, and felt most unwelcomed by the mainstream. The cultural compatibility between each group and the school context appears to vary in systematic ways and is addressed in a model proposed in the article.

**Cecil L. Powell & Kimberly R. Jacob Arriola (2003)** conducted a study on Relationship between Psychosocial Factors and Academic Achievement among African American Students. The study is to determine psychosocial factors associated with African American students' high school achievement. Psycho-social variables explored included community service, academic motivation, social support, and students' methods of handling unfair treatment. Results showed that after gender and absenteeism were controlled for; only the 57 method of handling unfair treatment was positively associated with grade point average (GPA),  $p < .05$ . Those findings suggest that students who talk to others about being treated unfairly instead of keeping it to them are more likely to have higher GPAs; the findings also have important implications for individuals involved in the counseling and education of high school students. Sedlacek and Brooks's model provides an effective guide for predicting academic achievement and for developing programs to improve academic achievement among students of color.

**Vishwas (2004)** conducted a study to understand the psycho-social problems and adjustment among special children. The sample consisted of 133 special children who were administered Youth Problem inventory (Verma, 1996) and school student's adjustment inventory (Singh, 1988). Results revealed the significance differences between the selected four categories of these children. The boys belonging to the disturbed family category were found to have significantly more psycho-social problems as compared to the blind children (0.05) and physically challenged children (0.01). The girls of disturbed family category had reported significantly more psycho-social problems as compared to the blind category of the girls (0.05), the deaf and dumb girls (0.05) and physically challenged girls (0.01). Within these categories, significant gender differences were also noticed with regard to the physically challenged category. Wherein, the girls were found to have significantly more psycho-social problems as compared to the boys of same categories.

**Harry (2005)** studied Working with Violence, the Emotions and the Psychosocial Dynamics of Child Protection: Reflections on the Victoria Climbié Case. This paper argues for the establishment of a coherent psycho-social perspective at the core of social work education and practice and in inter-professional child

protection work more generally. Central to this must be recognition of the complexities of service users, especially the challenges of working with resistant and often hostile 'involuntary clients' and the impact of violence and other health, safety and contamination fears on the 54 capacities of workers and professional networks to protect children. A psycho-social reading of the case permits us to explain the unexplainable in how Victoria's abuse was missed. The general implications of these arguments are drawn out for education, training and practice.

**Svedberg P et al. (2006)** investigated what psycho-social predictors, life-style factors and health behaviors in early adulthood are of importance for self-ratings of health after the age of 45. Like-sexed adult twins born 1926-1950 (n = 16,080) from the Swedish Twin Registry that participated in a questionnaire in 1973 and in a telephone, interview conducted between 1998 and 2002 were included. Exposure data was collected in 1973 and information on self-rated health and covariates was collected at the second contact 25 years later. Logistic regression using Generalized Estimating Equations was used to evaluate the associations. Conditional logistic regression was used to control for familial and genetic effects in the sample. Pain, lack of exercise, smoking, obesity, unemployment, perceived stress and personality are associated with future poor self-rated health, after controlling for age, sex, illness, education and socio-economic status. Familial and genetic effects influence the associations between recurrent headache, exercise, obesity, and poor self-rated health. Overall, these findings provide support for long-term effects of health behavior and psychosocial risk factors on poor self-ratings of health, beyond the influence of obvious health consequences such as disorders or illnesses. Genetic and familial factors are of importance only for some of these associations.

**Ahmad et al. (2007)** explored about the prevalence of psycho-social problems among school going male adolescents. The study was undertaken during 2002-03, in the schools under rural and urban field practice Ares of the department of community medicine, JNMC, Aligarh. The total population of the male adolescents (10-19 years) for all schools was 2347, out of which a sample of 410 students (205 from the rural schools and 205 from the urban schools) were selected using proportionate probability sampling, but only 390 psycho-social history was obtained from all selected

adolescents and a screening tool- the youth report of Pediatric Symptom Checklist (Y-PSC) was used to screen the psycho-social impairment. The Y-PSC can be administered to the adolescents and youths. It consists of 35 items that are rated as 'Never', 'sometimes', or often present and scored 0, 1, and 2, respectively. The total score is calculated by adding together the score for each of the 35 items. The cutoff score for the Y-PSC is 30 or higher. Items that are left blank/unanswered, the questionnaire is considered invalid. The sensitivity is 95% in middle socioeconomic class samples compared with 80% in lower class samples and specificity ranges from 100% in the lower class compared with 68% in middle class samples and has been found to be valid and reliable tool for screening psychosocial aspects in children and adolescents. In the phase 2, all those adolescents with suspected psychosocial aspects were referred to the psychiatrist for specific diagnosis. The diagnosis was generated as per criteria laid down in ICD-10. Statistical Analysis was done by using SPSS 10 pack for windows. Chi square test (c- test) was used for comparing groups. The results showed that the overall prevalence of psychosocial aspects was 17.9% (82.1% of the population was free of problems). No significant urban and rural difference was observed as also studied by Anita et al. using ICD-10 criteria for the diagnosis of the diseases and Rao using Goldberg's General Health questionnaire (GHQ) for the screening of the problems. The reason for no urban/rural difference might be because the schools from both the areas were more or less similar. High prevalence of 63.7% using GHQ was also shown in the studies and the reason was the selection of the students of schools run by Agra Corporation was the students were from poor families

**Bhatt (2011)** conducted a study of the Impact of home environment on psychosocial competence resilience and vocational aspiration of adolescents. The present study is taken up with two main objectives: (1) to examine the impact of home environment on the psychosocial competence, resilience and vocational aspiration of adolescents. (2) To study the influence of demographic factors such as age, sex, SES, order of birth, number of siblings, primary educational background, religion, caste and type of family of adolescents on their psychosocial Competence, resilience and vocational aspiration. A quota sample comprising of 600 adolescents (300 boys and 300 girls) in the age range of 14-16 years is taken for the study from seven high-

schools of Dharwad City, of Karnataka State, India. The instruments used for the study is Psychosocial Competence Scale by Ajitha Dindigal and Vijaya Laxmi Aminabhavi (2007). The adolescent boys have significantly lower psychosocial competence compared to adolescent girls. Adolescents having two siblings have shown significantly lower psychosocial competence compared to adolescents having no siblings and having one 48 siblings. Adolescents belonging to Brahmin caste have significantly higher psychosocial competence compared to adolescents belonging to other castes.

**Var F.A et al. (2011)** investigated a study on self-esteem and psychosocial problems among Kashmiri youth. A sample of 300 (152 male and 148 female) of higher secondary and college students between the age group of 16-20 years from three district (Anantnag, Shopian and Srinagar) of Kashmir province, both rural and urban background was taken. Socio-demographic sheet was developed for the study which included name, class, age, gender, parental monthly income and education, number of family members and background was used for gender information of the subjects. Youth Problem Inventory developed by the Mithilesh Verma and Rosenberg's self-esteem scale developed by Rosenberg was used to assess the problems self-esteem in the youth. The data obtained for the variables under study have been subjected to different statistical analysis such as percentage, mean, standard deviation (S.D) Pearson's correlation, t- test, ANOVA and Turkey's post hoc to understand the impact and relationship between the variables. The findings indicated significant difference was found in self-esteem in males and females in urban and rural group. However significant difference was found between rural and urban adolescents in family, school, social and personal problems. Male and female groups differed significantly only in personal problems. Significant difference was found among all the three levels of self-esteem and their personal problems and family problems. Overall findings suggest that rural adolescent suffer more problems than urban adolescents and the highlight the need of community based mental health.

**Shafi & Tahira (2012)** conducted a Comparative Study of Health, Nutrition and Socio- Psycho Behavior of Adolescent Boys and Girls. The field work of this thesis has been undertaken in six districts of Kashmir valley i.e. Srinagar, Budgam,

Anantnag, Kupwara, Pulwama and newline Baramulla, covering a sample of 1500 adolescents i.e. 750 boys and equal newline number of girls in the age group of 10-19 years, studying in Government Schools during 2004-07. The findings of the study are interesting and useful for framing programme guidelines towards adolescent development. During last couple of years, various policies have been formulated to bring adolescents to the Centre stage of development planning. These policies are National Health Policies 2002, the National Population Policy 2000, the National AID S Policy 2001, the Woman Policy 2001, the Child and Education Policy, Scheme for Adolescent Girls (Kishori Shakti Yojana) etc. All these policies have addressed the adolescents of the age of 10-19 years. The present study critically examines different dimensions of health, nutrition and socio-psycho behavior of both rural and urban adolescents of Kashmir valley. The suggestions of the study demand interventions to be initiated by Government, parents, teachers, NGO s, academic institutes and newline health workers. Adolescence is a period between childhood and adulthood during which the individual learns the skills needed to flourish as an adult. Although adolescence begins with the biological series of events called puberty, some authors suggest that adolescence was culturally invented during the last century and defined it as a period in which the individual could gain the newline complex skills necessary to navigate adulthood in a Western culture. Newline Puberty, the beginning of adolescence, is marked by dramatic physical changes in both growth rate and sexual characteristics (Gluckberg 1980; Field 1995).

**Dayal and Shrama (2013)** conducted a study on Impact of Psycho-Social and Biographical Variables on Scientific Attitude of Secondary School Students. The aim of this study is to investigate the effects of scientific attitude of secondary school students to promote their science interest, study habits, cognitive style, academic achievement, and scientific creativity, and academic achievement motivation, delay of gratification, Task persistence, Science Methodology, science achievement, SES, School environment and home environment. The research includes a pre-test post-test research with a control group. The subjects of the research consist of 1500 students reading at 10th grade of a secondary school exiting in agar, India. The data collection tools for the research includes the12 tools in which two tools were made by

researcher. As a result of the research, it was determined that scientific attitude depends upon different factors viz. 52 psychological, social and biographical. The results from this study also suggest that the psychological variables were more consistently related to scientific attitude than the socio-biographic variables.

**Elizabeth et al. (2013)** conducted a study on Psychosocial Factors predicting first-Year College Student Success. This study made use of a model of college success that involves students achieving academic goals and life satisfaction. Hierarchical regressions examined the role of six psychosocial factors for college success among 579 first-year college students. Academic self-efficacy and organization and attention to study were predictive of first semester grade point average (GPA) when controlling relevant demographic factors. Academic self-efficacy was even predictive of end-of-year GPA when controlling previous, first-semester GPA. Mediation analyses revealed that first-semester GPA was an important mediator between these two psychosocial variables and end-of-year GPA. Additional psychosocial variables were predictive of college students' life satisfaction: stress and time management, involvement with college activity, and emotional satisfaction with academics. We explore how formulating interventions on the basis of psychosocial factors offers an avenue for students to address specific attitudes, emotions, and behaviors that relate to college success.

**Aglaia et al. (2014)** conducted a study on Psycho-social characteristics of children and adolescents with siblings on the autistic spectrum. This study investigates the psycho-social characteristics of typically developing children who have siblings with autism and their sibling relationship. Children's adjustment at school, their self-esteem and social relations, as well as their friends' attitudes towards their autistic siblings were examined. Participants were 22 siblings of children with autism, aged 8–18 years, 22 mothers and 22 fathers. Parents provided demographic information, and completed the Strengths and Difficulties Questionnaire 47 and the Sibling Inventory of Behavior. Data from siblings of children with autism were based on a semi-structured interview, the Self-Perception Profile for Children and Adolescents and the Siblings Problems Questionnaire. The results of the present study provide evidence for positive parental views on their typically developing children's

emotional and behavioral adjustment. These findings are important and need to be taken into account in order to assess functioning of all family members in families with autism spectrum children.

**Sreeja (2014)** conducted a study on psychosocial adjustments and vocational aspirations of hearing-impaired students at higher secondary level. The present study mainly intended to find out the relationship between psychosocial adjustments and vocational aspirations of hearing-impaired students at higher secondary level. It also enquires about the influence of psychosocial adjustment on the academic achievement of hearing-impaired students. The sample consisted of 200 hearing impaired students selected from various special schools in six revenue districts of Kerala, viz Thiruvananthapuram, Kollam, Pathanamthitta, Kottayam, Ernakulam, and Kozhikode. The sample was selected using random sampling technique. To collect the data required for the study, tools and techniques such as psychosocial adjustment scale and vocational aspiration scale prepared and standardized by the investigator, socioeconomic status scale developed by Kuppuswamy et al. (1978) with slight modifications, and achievement test scores were made use of. The findings of the study ascertain the influence of psychosocial adjustment on the vocational aspirations and academic achievement of hearing-impaired students at higher secondary level.

**Gayathri Hemanth Aradhya (2015)** in her study it was undertaken to assess the prevalence of the psycho-social problems of adolescent girls and to counsel the girls with problems or those who were problem prone. The method of that study was a cross-sectional study in which 500 adolescent girls from 6 higher secondary schools were selected via a simple random sampling method. A psychiatrist was consulted before the study was undertaken. A pre-designed Performa was given to be filled up and the data was analyzed later. Results among Sixty percent of the girls were in the age group of 14 to 15 years. Depression was noted in 10 girls (2%), symptoms of anxiety were noted in 5 girls (1%), stuttering and a poor concentration were observed in 10 girls (1% each), 2 girls (0.4%) came from broken families, 5 girls (1%) were suffering from anorexia nervosa, 3 girls (0.6%) were suffering from bulimia nervosa and 10 girls (2%) had psychosomatic symptoms. 5 girls (1%) reported interpersonal violence among their hostel-mates. The Finding out the prevalence of the

psychosocial problems among adolescent girls and counseling them appropriately can decrease the major psychosocial morbidities which are prevalent in the community. This study was conducted in a south Indian city. 500 adolescent girls from 6 schools were taken up for the study. Oral consents were taken from the girls, before the commencement of the study. The findings of the results showed that approximately 20% of the adolescents have some type of psychosocial problems that impair their ability to function. Adolescents are vulnerable to a psychological dysfunction when they suffer physical injuries, psychological trauma, or major changes in their environment, especially in the absence of strong support systems.

## **HEALTH STYLE**

**Goya and Shaper (1991)** conducted a prospective study of 7725 middle-aged British men, 357 of whom died in an average follow-up period of four years, self-assessment of health status was strongly associated with mortality. Men who reported poor health had an eightfold increase in total mortality compared with those reporting excellent health. Those perceiving fair or poor health were older, more likely to be manual workers and cigarette smokers, more likely to be thin and to be heavy drinkers or to have given up drinking in the past five years. They were also more likely to recall multiple diagnoses and to be on regular medication. Half of those with poor perceived health had chest pain on exertion (angina), one-third had experienced severe chest pain (possible myocardial infarction) half were breathless on exertion and 80% had been off work for more than a month in recent years. At all age levels between 45 and 64 years, and in both manual and non-manual workers, mortality was twice as high in men reporting fair or poor health than in men reporting excellent or good health. In both men with and without recall of at least one major diagnosis, fair or poor perceived health was associated with a two-fold increase in age-adjusted mortality rate. In both groups this increased mortality was to a large extent accounted for by the increase in the prevalence of adverse characteristics such as regular medication, chest pain, breathlessness and current smoking. Self-assessment of health status appears to be a good measure of current physical health and risk of death. It could be useful in both clinical and epidemiological situations.

**Carrigon (1992)** conducted descriptive analysis of corporate health promotion activity evaluations, to determine the type of health promotion professionals employed in the work site health programmes evaluation activities used by the survey participants to revise the health promotion activities, to determine the strength and weakness of the activities. A survey tool was developed specially for the study and mailed to 587 members of the association for health and wellness in business, who was listed in the 1990-1991 edition of the directory of members, and who identified as in-house profession members. A total of 221 (38%) usable responses to the questionnaire were received. Formal evaluations of the health promotion activities were conducted by 146 (67%) survey participants. Evaluation activities were used by the survey participants to review and/or revise the health promotion activities, to determine strengths and weaknesses of the activities, and to improve the effects of the health promotion activities. The reason why the evaluation was not conducted include the lack of personnel, lack of financial resources, lack of the availability of the time and lack of interest by supervisors/executives.

**Bordie and Dugdill (1993)** evaluated and proposed a multivariate mode which explains and predicts health lifestyle. A sample 589 employees enrolled in six employer sponsored health promotion programmes. Different lifestyle patterns were evaluated viz. personal competency, definition of health, health status and control of health. Employees who reported more health- promoting lifestyles perceived them as a competent in handling life situations and defined health as high- level wellness rather than merely the absence of illness, they evaluated their health positively, and in the maintained phase of the company fitness programme they also had their lifestyle pattern.

**Fernando et al. (2000)** conducted a study on the health and nutritional status of school children in two Sri Lankan rural communities. The result highlighted that half of the respondents fell in moderately underweight (wasted) and one fifth in moderately stunted group. A greater proportion of boys were underweight wasted and stunted than girls.

**Shakya et al. (2004)** conducted that assess the nutritional status and morbidity pattern of primary school children. The methods used in this study are descriptive,

cross sectional study was administered in the five governmental schools the schools were selected using simple random sampling technique. From these selected schools, a total number of 818 students studying from class I to V were enumerated in the study using census survey method. The results are revealed that, among 818 students, 61% of the students were found to be malnourished. The students were more stunted (21.5%) than wasted (10.4%). Only 5.4 % of the students were found to be both wasted and stunted. The collected blood and stool samples from the students revealed parasitic infestation of 65.8% and anaemia of 58%. The most common diseases in those schools were: skin diseases (20%), dental caries (19.8%), and lymphadenopathy (The study result revealed the urgent need for initiation of school health program with specific emphasis on prevention of diseases, improvement of personal hygiene and nutritional status with the collaboration of governmental and nongovernmental institutions. The study was conducted to assess the growth and nutritional status of school age children (6-14 years) of tea garden workers of Assam. Compared to NCHS standard and affluent Indian

**Medhi et al. (2006)** proposed that children, the mean height and weight of tea garden children were inferior at all ages. Assessment of nutritional status using WHO recommended anthropometric indicators revealed a high prevalence of malnutrition among tea garden school age children and malnutrition was both chronic and recent in nature. Prevalence of wasting, stunting and underweight was 21.2%, 47.4% and 51.7% respectively among the children in the age group of 6-8 years. Prevalence of stunting and thinness was 53.6% and 53.9% respectively among the children in the age group of 9-14 years age group.

**Alison R et al. (2010)** studied on Patient-oriented outcome measures such as the Medical Outcomes Short Form (SF-36) and the Pediatric Outcomes Data Collection Instrument are important tools for determining the impact of events like sport-related injury on health-related quality of life .The Objective of this study was to compare HRQoL in adolescent athletes and non-athletes using 2 common instruments. The Cross-sectional design was used for the conducting of this study. The sample was consisting of 219 athletes and 106 non-athletes from 7 high schools. The Results revealed that on the SF-36, athletes reported higher scores on the physical

function, general health, social functioning, and mental health subscales and the mental composite score and lower scores on the bodily pain subscale than non-athletes. On the Pediatric Outcomes Data Collection Instrument, athletes reported higher scores on the sport and physical function and happiness subscales and lower scores on the pain/comfort subscale. Author concluded that Athletes reported higher scores on a number of SF-36 and PODCI subscales related to mental, emotional, and physical well-being than non-athletes. Findings suggest that athletic involvement may be a benefit to the overall health status of adolescents and imply that athletes may be a distinct adolescent group requiring their own normative values when using the SF-36 and PODCI.

**Calvin et al. (2010)** Estimated the extra years of life and self-reported healthy life (over 11 years) and years without impairment in activities of daily living (over 6 years) associated with quintiles of physical activity in older adults from different age groups. They estimated PA from the Minnesota Leisure Time Activities Questionnaire. Multivariable linear regression adjusted for health-related covariates. The relative gains in survival and years of healthy life generally were proportionate to the amount of PA, greater among those 75+, and higher in men. Compared with being sedentary, the most active men 75+ had 1.49 more YHL (95% CI: 0.79, 2.19), and the most active women 75+ had 1.06 more YHL (95% CI: 0.44, 1.68). Seniors over age 74 experience the largest relative gains in survival and healthy life from physical activity.

**Jane Lee (2010)** examined the Foucault's (1977) concept of normalization as it applies to the emotions of female elite amateur rowers. Specifically, this study sought to understand how beliefs about emotion, developed through the normalization process, may coerce athletes to continue to train even when physically unhealthy. Interviews were conducted with 11 retired elite amateur female rowers who suffered health problems while training but continued training despite these health problems. Interpretation of the data suggests that the rowers suppressed emotions to avoid appearing mentally weak, negative, or irrational, despite needing to express their concerns about training volumes and health issues to minimize deleterious effects that continued training eventually had on their health.

**Joanna Edel et al. (2013)** Perceived health status does not always reflect actual health status. They investigated the association between objective and self-rated measures of health status and hours of exercise per week in older adults. As part of the TRIL clinic assessment, we gathered information from 473 community dwelling adults over the age of 65, regarding hours spent per week exercising, depression, personality, perceived health status, and objective health status. Regression analyses were performed on these data to investigate whether perceived health status, objective health status, personality and mood are associated with hours of exercise per week. Results obtained from Perceived and objective health status were significantly but weakly correlated. Both perceived and objective health status, as well as depression, was independently associated with hours of exercise per week. The study concludes that exercise uptake in older adults is contingent on both perceived and objective health status, as well as depression. Perceived health status has a stronger association with exercise uptake in older adults with lower depression levels. The current findings have implications for designing exercise interventions for older adults.

**Thomas R et al. (2013)** Revealed the extent to which participation in a 12-month exercise program changed the degree of importance those older adults attached to physical activity. In addition, associations among changes in physical activity importance and health-related and psychosocial outcomes were examined. Community-dwelling older adults (N=179) were recruited to participate in a 12-month exercise trial examining the association between changes in physical activity and fitness with changes in brain structure and psychological health. Participants were randomly assigned to a walking condition or a flexibility, toning, and balance condition. Physical, psychological, and cognitive assessments were taken at months 0, 6, and 12. Results indicated that Involvement in a 12-month exercise program increased the importance that participants placed on physical activity; this positive change was similar across exercise condition and sex. Changes in importance, however, were only associated with changes in physical health status and outcome expectations for exercise midway through the intervention. There were no significant associations at the end of the programme. Author concluded that Regular participation in physical activity can positively influence the perceived importance of the behavior itself. Yet, the implications of such changes on physical activity-related outcomes remain equivocal and warrant further investigation.

**Turkmen et al. (2013)** determined the relationship of physical activity levels and health style of students in Bartın University on 2218 male and female students. IPAQ was adopted to determine their physical activity level. Beside health promotion lifestyle profile questionnaire was used with self-actualization, health responsibility, exercise nutrition, interpersonal support, and stress management in order to determine health style in students. As a conclusion, findings of the study indicated that PA level of University students directly affected their lifestyle behaviors.

**Younis (2014)** assessed the Healthy lifestyle habits among Mosul University Students and to examine relationship between the University student's characteristics and healthy lifestyles habits. The method of his study was Cross-sectional survey design had applied to assess healthy lifestyle habit among Mosul University Students. Random sample consist of (400) students (Male and Female) were students in Mosul University from specialty difference (College of Medicine, College of Dentistry, College of Nursing, College of Pharmacy, College of Fine Arts, College of Education , College of Basic Education and College of Law), From end stage in University. Period of data collection first December 2013 extended from end February 2014. An interview technique method was used for data collection. Data were analyzed through the application of the descriptive and inferential statistical data analysis. The results of that study indicated that Mosul University students have a low score in the total healthy lifestyle habits, demonstrating that female are higher than that of male (56%).

**Hadas et al. (2016)** evaluated the effect of a group-based Pilates training program on balance control and health status in healthy older adults. A single-blind, randomized, controlled trial design was used to collect the data from general community. A total of 88 participants community-dwelling older adults (age  $71.15 \pm 4.30$  years), without evidence of functional balance impairment, were recruited and allocated at random to a Pilates intervention group ( $n = 44$ ) or a control group ( $n = 44$ ). The Pilates intervention group received 36 training sessions over three months (3 sessions a week), while the control group did not receive any intervention. The Outcome measures includes in this problem was Standing upright postural stability, performance-based measures of balance, and self-reported health status was assessed in both groups at baseline and at the end of the intervention period. The Results Compared with the control group, the Pilates intervention did not improve postural stability, baseline functional measures of balance, or health status. The results suggest

that because Pilates training is not task specific, it does not improve balance control or balance function in independent older adults.

**Joanna E. & Brian A. (2017)** stated that the health status does not always reflect actual health status. They investigated the association between objective and self-rated measures of health status and hours of exercise per week in older adults. As part of the TRIL clinic assessment, they gathered information from 473 community dwelling adults over the age of 65, regarding hours spent per week exercising, depression, personality, perceived health status, and objective health status. Regression analyses were performed on these data to investigate whether perceived health status, objective health status, personality and mood are associated with hours of exercise per week. The current findings have implications for designing exercise interventions for older adults. Perceived and objective health status were significantly but weakly correlated. Both perceived and objective health status, as well as depression, was independently associated with hours of exercise per week. They concluded that exercise uptake in older adults is contingent on both perceived and objective health status, as well as depression. Perceived health status has a stronger association with exercise uptake in older adults.

## **NUTRITIONAL STATUS**

**Pai and Naik (1989)** studied on the Nutritional status of selected rural school children aged 6.5 to 10.5 years old from villages in Dharwad district, Karnataka. They observed that in the group 9.5 to 10.5 years old, girls (23.5 kg) weighed significantly more than boys (20.3 kg). They also reported that the all the children were significantly below the standard of the Indian Council of Medical Research in height and weight. Out of 254 children, 124 were classified as normal, 30 were currently underfed with past history of malnutrition, 60 normally fed with past history of malnutrition.

**Tuomo et al. (1995)** studied on Dietary intakes, trace element status, and anthropometric measures were studied in 12- to 13-year-old boys ( $n = 49$ ) playing ice hockey (AB) and in 11- to 12-year-old girls who were gymnasts, figure skaters, and runners (AG;  $n = 43$ ), Thirty-five boys (CB) and 53 girls (CG) not involved in supervised sports were controls. After adjustment for sexual maturation, ABs had larger upper arm muscle circumference than CBs. The sum of four skinfolds was smaller in AGs than in CGs. The intake of energy and all micronutrients examined

was higher in ABs than in CBs. Micronutrient Intakes were not different between AGs and CGs. Compared to CBs, serum ferritin and copper concentrations were lower, but serum zinc concentration was higher in ABs. No differences in trace element status were found between AGs and CGs. Blood investigations did not indicate inadequate trace element status in any of the groups studied.

**Paula J et al. (1999)** assessed the nutrient intake, body composition and biochemical indices of National Figure Skating Championship competitors. Four-day diet records, fasting blood samples, and anthropometric measurements were obtained 2 months after the National Championships from 41 figure skaters 11-18 years of age. Energy, carbohydrate, fat, dietary fiber and cholesterol intake were significantly lower compared to the NHANES III averages for adolescents in the U.S. In general, the mean intakes for most vitamins except vitamin D and E were above the recommended intake. But the athletes had lower intakes of vitamin E and B<sub>12</sub>, and higher intakes of vitamin C, and thiamin (females only) compared with NHANES III. The mean intakes of magnesium, zinc, and iodine by the male skaters were below the recommended levels, as were the mean intakes of calcium, iron, phosphorus, magnesium, and zinc by the female skaters. Also, the number of servings from vegetable, fruit, dairy, and meat groups were below the recommended levels. Biochemical indices of nutritional status were within normal limits for all skaters. But plasma electrolyte concentrations were indicative of potential dehydration status. The results suggest there is a need to develop dietary intervention and educational programs targeted at promoting optimal nutrient and fluid intakes by these athletes to maintain performance and improve long-term health status.

**Hemalatha et al. (1999)** found in their study that occupational activity has a profound effect in their nutritional status whereas the food and nutrient intake of all the groups was deficient in comparison to RDA. The deficiency in food and nutrient intakes was found to increase with increasing intensity of work. Except the heavy workers, all the groups had surplus intakes of cereals and roots and tubers. Also, surplus calorie intake was 17.33 per cent for the groups of housewives and 9.60 per cent for office goers, whereas 13.70 per cent in deficits was found in the weaver groups and 23.07 per cent in stonecutters. Maximum deficit in food and nutrient intake was noticed among the stonecutter followed by two weavers. Hard labour had a profound influence on nutritional status, which leads to under nutrition among the

low-income groups. The socio-economic factors such as income, occupation, and migration have a profound influence on nutrient intake whereas among the biological factors, sex and physiological status of women emerge as strong variables in influencing nutrient intake Busi, et al, (1999).

**Zulkifli et al. (1999)** evaluated the nutritional status of children aged 1-10 years in Malaysia. They found that the nutritional status of the Orang Asli children were poor, with a prevalence of 33.7-65.3% underweight, 55.3-74.4% stunting and 4.4- 29.7% wasting based on the NCHS reference values. The prevalence of malnutrition among the Malay children was lower, underweight - 7.3-34.1%, stunting - 9.8-34.1% and wasting -1.7-17.1%.

**Pablo M. et al. (2000)** conducted a study to accurately describe the eating pattern and nutritional status of international elite flat-water paddlers during 1 week of a high-volume training camp. Ten male and 5 female international elite flat-water paddlers were recruited to take part in this study. These athletes were all members of the Spanish National Team. To assess the intake of energy, macronutrients, and micronutrients, we used the weighed food intake method carried out by an observer. Biochemical and hematological profiles were also obtained. Average daily energy intake in male and female flat-water paddlers was  $21.5 \pm 2.3$  and  $16.5 \pm 1.7$  MJ, respectively. Furthermore, the male athletes showed average carbohydrate and protein intakes of  $7.5 \pm 0.8$  and  $2.2 \pm 0.3$  g  $\cdot$ kg<sup>-1</sup> body weight  $\cdot$  day<sup>-1</sup>, respectively. Similar intakes were found in female paddlers. Carbohydrate  $7.3 \pm 1.1$  and protein  $2.0 \pm 0.3$ g $\cdot$ kg body weight day. Daily relative contribution to energy from fat was higher than recommended for sports practitioners or sedentary people (< 30 % of daily energy) in both genders ( $39.1 \pm 2.1$  and  $40.2 \pm 2.9\%$  for men and women, respectively). Nevertheless, this diet with a high fat content (rich in monounsaturated fatty acids) did not seem to influence the paddlers' blood lipid profile that presented low values for total cholesterol and triglycerides and high values for high-density lipoprotein cholesterol. Flat-water paddlers' micronutrient intake was higher than Recommended Dietary Allowances/Dietary Reference Intake, except for folate that was close to DRI values. Further studies are required in order to understand whether this level of fat intake could impair highly trained athletes' performance and health.

**Mohapatra, et al. (2001)** assess the malnutrition among rural women from Kalahandi district of western Orissa and found that more than half of the women (52.2

per cent) suffered from CED of various grades ranging from grade I to grade III. The Proportion of women with grade I CED (31.1 per cent) was more than grade II (moderate 14.8 per cent) and grade III (severe 6.3 per cent). The anthropometric values decreased gradually as the degree of under-nutrition increased consistently from grade I to grade III excepting the stature. Mean body weight and skin fold values of Kalahandi women were inferior to the national rural average. Nutritional deficiency signs of vitamin-A, B-complex and iodine (for goiter) were observed to be more among these women. The Kalahandi women suffered from higher prevalence of CED, greater body weight deficit and low energy reserves, when their height was normal compared to the rural women.

**Valeria et al. (2004)** they evaluate the body composition, dietary intake, use of nutritional supplements, and biochemical status of 8 Brazilian male elite swimmers, aged 18–21 years, and participants at a national swimming competition. Data from the athletes were obtained through a 4-day food record, a fasting blood sample, and anthropometric measurements. The anthropometric results showed that body composition was compatible with sport category. The dietary assessment showed an adequate ingestion of calories, vitamins, and mineral, with the exception of calcium, for which only half of the sample reached the recommendation. The results also indicated low carbohydrate and high protein and cholesterol intakes. Of the swimmers, 62.5% and 25% consumed synthetic amino acids and antioxidants supplements, respectively. The biochemical indices of the nutritional status were within normal limits in all swimmers, with the exception of creatine-kinase, which was above the recommended level, indicating muscle degradation probably due to poor carbohydrate intake. In conclusion, the results suggest the importance of nutritional education to promote a balanced intake, provide all nutrients in optimal amounts, inhibit unnecessary ingestion of nutritional supplements, maintain ideal performance, and improve the swimmers' health status.

**Fernando et al. (2000)** studied the health and nutritional status of school children in two rural communities in Sri Lanka. The height and weight of children were measured and anthropometric indices calculated. Stool and blood samples were examined for evidence of intestinal helminthiasis, malaria and anaemia. A greater proportion of boys than girls were underweight, wasted and stunted. Over 80% of the children were anemic but did not apparently have iron deficiency anaemia according

to their blood picture. The prevalence of parasitic infections such as hookworm and *Plasmodium* spp. that may contribute to anaemia was low.

**Jennifer C. Gibson et al. (2011)** evaluated that adolescent female team-sport athletes are faced with the challenge of meeting nutrition requirements for growth and development, as well as sport performance. There is a paucity of evidence describing the dietary adequacy of this population in respect to these physiological demands. Therefore, the aim of this study was to comprehensively evaluate the nutrition status of junior elite female soccer athletes. The aim of this study was to comprehensively evaluate the nutrition status of junior elite female soccer athletes. A total of 33 athletes ( $15.7 \pm 0.7$  yr) completed anthropometric assessment, 4-day food records analyzed for macro- and micronutrient intake, and hematological analysis. Energy expenditure was estimated using predictive equations. Mean sum of 7 skinfolds was  $103.1 \pm 35.2$  mm, and body-mass index was  $22.7 \pm 2.7$ . Mean energy intake was  $2,079 \pm 460$  kcal/day, and estimated energy expenditure was  $2,546 \pm 190$  kcal/day. Of the athletes, 51.5% consumed  $<5$ g/kg carbohydrate, 27.3% consumed  $<1.2$ g/kg protein, and 21.2% consumed  $<25\%$  of energy intake from fat. A large proportion of athletes did not meet Dietary Reference Intakes for pantothenic acid (54.5%), vitamin D (100%), folate (69.7%), vitamin E (100%), and calcium (66.7%). Compared with recommendations for athletes, 89.3% and 50.0% of participants had depleted iron and 25-hydroxyvitamin D, respectively. A high proportion of players were not in energy balance, failed to meet carbohydrate and micronutrient recommendations, and presented with depleted iron and vitamin D status. Suboptimal nutrition status may affect soccer performance and physiological growth and development. More research is needed to understand the unique nutrition needs of this population and inform sport nutrition practice and research.

**Agarwal & Deepa (2014)** studied that the Malnutrition is common at hospital admission and tends to worsen during hospitalization. Despite its significant effect on clinical outcome, malnutrition is seldom recognized by health care professionals in hospitalized children. As critical illness has a major impact on nutritional status of children it is imperative to be aware of the nutritional status of the children at admission in order to direct the health care strategies towards the overall improvement of these little lives. Planning and implementation of appropriate nutrition support helps the patient to recover faster, prevent iatrogenic malnutrition and reduce length

of hospitalization. Inadequate feeding leads to malnutrition and may increase the patient's risks of morbidity and mortality. The lack of systematic research and clinical trials on various aspects of nutritional assessment and nutrition support in the PICU is striking and makes it challenging to compile evidence-based practice guidelines. Aim: The aim of the study was and to assess the nutritional status, implement a protocolized nutrition support and evaluate its effect on the nutritional outcome of subjects admitted to a pediatric intensive care unit and 8214; Materials and Methods: The study was carried out in 260 pediatric subjects admitted to the Pediatric Intensive care units (PICU) in a multispecialty tertiary care hospital at Chennai, India. In addition to the routine assessment parameters, the subjective global assessment tool was used to assess the nutritional status of the subjects and interpreted using IAP and WHO reference standards. They Evaluated that the nutritional status of the subjects using W/A, W/H and H/A criteria revealed that a total of 49 % of the children were underweight, 40% were wasted and 52% were stunted. Underweight and stunting was predominant among infants in the age group of 1-6 months of age. The toddlers were more wasted than their other counterparts.

**Armand et al. (2014)** assesses the nutritional status of elite soccer players across match, post-match, training and rest days have not been defined. Recent evidence suggests the pattern of dietary protein intake impacts the daytime turnover of muscle proteins and, as such, influences muscle recovery. We assessed the nutritional status and daytime pattern of protein intake in senior professional and elite youth soccer players and compared findings against published recommendations. Fourteen seniors professional (SP) and 15 youth elite (YP) soccer players from the Dutch premier division completed nutritional assessments using a 24-hr web-based recall method. Recall days consisted of a match, post-match, rest, and training day. Daily energy intake over the 4-day period was similar between SP ( $2988 \pm 583$  kcal/day) and YP ( $2938 \pm 465$  kcal/day;  $p = .800$ ). Carbohydrate intake over the combined 4-day period was lower in SP ( $4.7 \pm 0.7$  g·kg<sup>-1</sup> BM·day<sup>-1</sup>) vs. YP ( $6.0 \pm 1.5$  g·kg<sup>-1</sup> BM·day<sup>-1</sup>,  $p = .006$ ) and SP failed to meet recommended carbohydrate intakes on match and training days. Conversely, recommended protein intakes were met for SP ( $1.9 \pm 0.3$  g·kg<sup>-1</sup> BM·day<sup>-1</sup>) and YP ( $1.7 \pm 0.4$  g·kg<sup>-1</sup> BM·day<sup>-1</sup>), with no differences between groups ( $p = .286$ ). Accordingly, both groups met or exceeded recommended daily protein intakes on individual match, post-match, rest and training days. A similar “balanced” daytime pattern of protein intake was observed in SP and

YP. To conclude, SP increased protein intake on match and training days to a greater extent than YP, however at the expense of carbohydrate intake. The daytime distribution of protein intake for YP and SP aligned with current recommendations of a balanced protein meal pattern.

**Hans Braun et al. (2017)** investigated the energy intake, energy expenditure, and the nutritional status of young female elite football players using 7-day food and activity records and blood parameters. A total of 56 female elite football players completed the requested food and activity protocols. Misreporting was assessed by the ratio of energy intake to energy expenditure. The food records were analyzed concerning energy and macronutrient and micronutrient intakes, and energy expenditure was calculated using predictive equations. Hematological data and 25-hydroxyvitamin D serum concentrations were determined. So the Mean energy intake results was 2262 (368) kcal/d [40.5 (7.0) kcal/kg/d] and estimated EE averaged 2403 (195) kcal/d. Fifty-three percent of the players exhibited an energy availability <30 kcal/kg lean body mass; 31% of the athletes consumed <5 g/kg carbohydrates and 34% consumed <1.2 g/kg proteins. A large proportion of players (%) had intakes below the recommended daily allowance of folate (75%), vitamin D (100%), iron (69%), and calcium (59%). Ferritin and 25-hydroxyvitamin D serum levels were below the recommendations of 59% and 38%, respectively. The results concluded that a remarkable number of players failed to meet the energy balance and the recommended carbohydrate and protein intakes. Low iron and 25-hydroxyvitamin D serum levels were observed showing a suboptimal nutrition status of some young female football players. As a consequence, strategies have to be developed for a better information and application of sport nutrition practice among young female football players.

**Rao et al. (2017)** studied Diet and Nutritional Status of Women in India. The health of women is linked to their status in the society. The demographic consequence of the women has formed expression in various forms, such as female infanticide, higher death rate, lower sex ratio, low literacy level and lower level of employment of women in the non-agricultural sector as compared to men. Generally, at household level, cultural norms and practices and socio-economic factors determine the extent of nutritional status among women. National Nutrition Monitoring Bureau has been carrying out regular surveys on diet and nutritional status of different population

groups since 1972. For the purpose of present investigation, the data collected during 1998-99 and 2005-06 on diet and nutritional status of tribal and rural population respectively in nine States of India was utilized. The intake of all the foods except for other vegetables and roots and tubers was lower than the suggested level among rural as well as tribal women. The study revealed inadequate dietary intake, especially micronutrient deficiency (hidden hunger) during pregnancy and lactation. The prevalence of goiter was relatively higher (4.9%) among tribal women compared to their rural counterparts (0.8%). Tribal women were particularly vulnerable to under nutrition compared to women in rural areas. The prevalence of chronic energy deficiency was higher (56%) among tribal NPNL women compared to rural women (36%).

## **CONCLUSION**

The college and University population faces a unique set of stressor during a developing period when lifelong health behavior usually develops. This stress and anxiety may negatively influence on health and psycho-social behavioral. To maintain good health & nutrition, we need to identify all the dimensions of health and to keep them in balance so that they work best for us. It is the complete physical, mental, emotional, social, and spiritual well-being of a person. Good health does not only mean the absence of an ailment or disease. Health is a condition in which all the given aspects work in a holistic way. Body, mind, spirit, family, friends, community, education, job, and beliefs determine the health of a person. Nutritional assessment is also a necessary to know about the girls' health status either they are taking adequately calories or not.

The present study work on psycho-social aspects, health style and nutritional status take out in this chapter evidently begin the fact that these psycho-social variables cover such a extensive and multifarious area that any amount of research work is unsatisfactory and effort will have to further investigate these variables in different frameworks in order to attain complete knowledge concerning the same. The review of this related literature has facilitated the investigator to originate the present problem undertaken for research so as to fill up the gap and to further put into the existing literature on these selected variables.

## CHAPTER- III

### METHODS AND PRECEDURE

The progress of mankind depends upon well conducted research programme, postulates efficiency, reliable and valid facts. Such facts are obtained through a systematic procedure. Before undertaking the investigation, one has to think of a plan, structure and strategy which would be helpful to elicit answers to information questions. The plan or the overall scheme of the research is prepared first. It includes an attitude of actions to be taken up from the hypothesis to the final analysis of data. Every researcher tries his/her best to establish genuineness, authenticity and trust worthiness of the data collected. To achieve this, accurate information or data, unknown or untapped so far is essential in every study and has to be obtained from various sources direct or indirect. It is necessary to adopt a systematic procedure to collect the essential data. Best observes, "Like the tools in the carpenter's box" each research tool is appropriate in given situation to accomplish a particular purpose. The present study is based on an assessment of psycho-social aspects, health and nutritional status of residential and non- residential Panjab University girls' students. And the chapter deals with the following aspects. 1. Design of the study 2. Selection of the subject 3. Selection of variables 4. Administration of the various tests. 5. Scoring of the tools 6. Statistical techniques employed.

#### DESIGN OF THE STUDY

A survey type study would be designed to establish to assess the psycho-social aspects, health and nutritional status of Panjab University girls' students to highlight any differences between students living at and away from home and to examine aspects of their health and nutritional status. The study would be a descriptive type in which questionnaire were used as the tools.

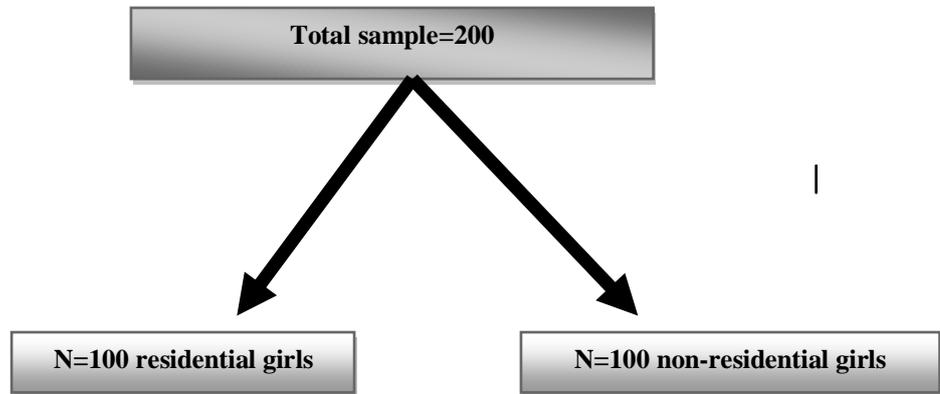
#### SELECTION OF SAMPLE

The sample consists of two hundred (N=200) under-graduate and post-graduate girls' students of Panjab University Chandigarh Campus who were residential and non-residential students. The random sampling method was applied for

the selection the female subjects. The age of the subjects' ranged from 17-23 years. The detailed break-up of sample has been shown in following table-3.1.

**Table-3.1**

**The break-up of total sample**



**SELECTION OF VARIABLES**

The variables that were investigated to achieve the objectives of the study have been listed below:

❖ Psycho-social aspects

It includes four sub variables: -

- Family problems
- School/college problems
- Social problems
- Personal and over sensitivity

❖ Health style

It includes four sub variables: -

- Physical health
- Emotional Health
- Environmental Health
- Spiritual Health
- Intellectual Health
- Social Health
- Occupational Health

- ❖ Nutritional status
- Diet Intake

## **TOOLS TO BE USED**

The following variables were measured by using the following tools: -

1. To measure Psycho-social aspects, “Youth Problem inventory” developed by Dr. (Mrs.) Mithilesh Verma (2010) was used.
2. To measure Health Style, “Health Style: A Self-Test” constructed by United State Development of health and human service (USDHHS, 1999) was administered.
3. To measure Nutritional status, “dietary intake 24-hour recalls method (Swapna, 1995 and Livingstone, 2004) was applied.

## **COLLECTION OF DATA**

For obtaining the data for the present study, the researcher had sought permission and cooperation from many quarters. Investigator got permission from the department of physical education, Panjab University Chandigarh, to collect data for present research from students studying at various department of Panjab University, Chandigarh. The questionnaire was filled by the residential and non-residential Panjab University girls’ students. The test instructions were clearly read out and explained to them and subjects were permitted to ask queries and their doubts were cleared before administering the tests. The subjects were asked to fill their response and handover their test response sheets as soon as they filled it up. The researcher tried her level best that there was no distraction or minimum distraction to the subjects who were attempting the tests.

## **ADMINISTRATION OF THE TEST**

### **1. YOUTH PROBLEM INVENTORY (YPI):**

The youth problem inventory was administered to establish the psycho-social aspects which the subjects were facing. The inventory contained 80 statements pertaining to the four sub-areas problems; family problem, school problems, social problems, and personal problems. The first sub-scale i.e. (I) family problems had 31

statements, (II) college/school problems had 20 statements, (III) social problems had 5 and (IV) personal problems had 24 statements. Against each statement three options had been mentioned i.e. true, partially true and false, and the subjects were required to tick mark (✓) in the appropriate box indicating their response to each statement separately. The inventory had not provided any time limit for attempting the same but usually took 15 minutes for completing the questionnaire.

### **SCORING**

The scoring was done on following pattern as shown:

**Table-3.2**

<b>For true</b>	<b>2 marks</b>
<b>For partially true</b>	<b>1 mark</b>
<b>For false</b>	<b>0 marks</b>

‘Mean’ scores in each area and whole inventory is given below:

**Table-3.3**

<b>Area ‘A’</b>	<b>20.40</b>
<b>Area ‘B’</b>	<b>11.50</b>
<b>Area ‘C’</b>	<b>3.60</b>
<b>Area ‘D’</b>	<b>19.00</b>
<b>Entire inventory</b>	<b>55.00</b>

## EXPLANATION

Simple explanation of the inventory should be done through stanine norms which can be obtain raw score range and percentile rank range that are given as follow:

Area	Types of score	Stanine scores					
		1&2	3&4	5	6&7	8	9
		Non/very few	Below Average	Average	Above Average	Cases for counseling high	
					A	B	
‘A’	<b>Raw scores range</b>	<b>0-7</b>	<b>8-16</b>	<b>17-21</b>	<b>22-34</b>	<b>35-42</b>	<b>43 &amp; above</b>
	Percentile rank range	Up to 11	14-38	43-60	64-90	91-96	<b>97 &amp; above</b>
‘B’	<b>Raw scores range</b>	<b>0-2</b>	<b>3-9</b>	<b>10-13</b>	<b>14-19</b>	<b>20-29</b>	<b>30 &amp; above</b>
	Percentile rank range	Upto 11	16-38	44-60	66-87	91-97	98 & above
‘C’	<b>Raw scores range</b>	<b>0-1</b>	<b>2-3</b>	<b>4</b>	<b>5-6</b>	<b>7</b>	8 & above
	Percentile rank range	Up to 11	21-39	58	67-85	89	95 & above
‘D’	<b>Raw scores range</b>	<b>0-7</b>	<b>8-16</b>	<b>17-21</b>	<b>22-31</b>	<b>32-39</b>	40 & above
	Percentile rank range	Up to 10	12-39	44-60	65-89	90-95	98 & above
<b>Entire Inventory</b>	<b>Raw scores range</b>	<b>0-21</b>	<b>22-46</b>	<b>47-56</b>	<b>57-98</b>	<b>99-120</b>	<b>121 &amp; above</b>
	Percentile rank range	Up to 10	12-39	41-60	63-89	91-96	97 & above

The scores are individually calculated for each sub-area to find out the level of problems being faced in that area and then scores of all the four sub-areas are added to find out the overall psycho-social problems being faced by the adolescents/ children.

## VALIDITY

The validity co-efficient of the inventory had been found out with a number of standardized tests and also with certain other suitable techniques as mentioned below:

Sr. No.	Test/ techniques	Sample size	Validity co-efficient
1.	Problem check list Dr. N. Bhagia	764	0.75
2.	Adjustment inventory prof. H. Asthana	450	0.72
3.	Youth Adjustment analyzer Km. Megru D. Bengali	400	0.68
4.	Moony problem check list	632	0.69
5.	Affirmative answers of the question concerning coverage of problems	720	87%
6.	Known cases	45	Range of scores 69-152

## RELIABILITY

The reliability of youth problem inventory had been found out through the test-retest method. The reliability co-efficient of the youth problem inventory is as follows:

Sr. No.	Area	Reliability co-efficient
1.	Family problems	0.85
2.	School/college problems	0.86
3.	Social problems	0.76
4.	Personal and over sensitivity	0.81
5.	Entire Inventory	0.80

## **2. HEALTH STYLE**

Health dimensions: physical health, Social health, Emotional health, Environment health, Spiritual health, Intellectual health, and Occupational health compared with ideal score of 40 for each one. Every dimension of health was having 10 questions. The scale description is:

- ✓ 1= rarely if ever
- ✓ 2= sometimes
- ✓ 3=most of the time
- ✓ 4= always

After getting scores, it compares with ideal score, and key tell the position of health style; in each dimension of it.

- ✓ Scores of 35-40 points: excellent
- ✓ Scores of 30-34 points: good
- ✓ Scores of 20-29 points: health practices need improvement.
- ✓ Scores of 19 and lower: health practices need serious improvement.

## **3. NUTRATIONAL STATUS**

### **DIET INTAKE**

For dietary intake, the subjects were interviewed for three consecutive days (two normal days plus one holiday) mostly at weekends. 24-hour recall method was used (Swapna, 1995 and Livingstone, 2004). In this method subjects were asked to recall the type and the amount of food eaten in the previous day for the purpose of diet. The investigator filled the columns regarding the food eaten by subjects during 24 hours, based on the responses obtained from the subjects. The total food intake, for three days was recorded, in terms of quality and quantity. This was then converted to the raw ingredient intake, which was further converted to nutrients.

### **Calculation of Calories:**

For assessment the amount of food eaten, the measure of standard sized size of utensils was followed, like small, medium, large bowls, glass & cups. The standards

of conversion of food materials to raw ingredients, as formulated by the deistic Departments of Dietetics PGIMER Chandigarh were applied.

The nutrients value that was Protein, Fat and Carbohydrate of the average daily food intake of the individuals was determined by using food composition tables (Gopalan et.al., 1981). The daily energy intake of the individuals was calculated by multiplying the daily average grams of protein, carbohydrate & fat intake with 4, 4 and 9 respectively. For each subject the nutrients intake was calculated for three days and mean intake was taken, as the average actual daily intake of nutrients. The actual average was then compared with the recommended daily allowances (RDA) for the Indian and reference were taken from ICMR recommendations.

## **STATISTICAL ANALYSES**

Statistical Analyses would be performed by using SPSS. The data had been presented as descriptive statistics such as mean, standard deviation, standard error of mean, minimum value and maximum value. Student's T-Test was applied to see the significant differences. Karl Pearson product moment co-efficient of correlation would be computed to assess the relationship of psycho-social aspects, health and nutritional status of Panjab University girls' students. The level of Significance was set at 0.05 to test the hypotheses.

## CHAPTER-IV

### DATA ANALYSIS AND RESULTS OF THE STUDY

The present study deals with an assessment of psycho-social aspects, health and nutritional status of Panjab University girls' students. For this purpose, the psycho-social aspects among residential and non-residential were measured with the help of "Youth Problem inventory" developed by Dr. (Mrs.) Mithilesh Verma (2010) was used. It measures four dimensions of psycho-social aspects, i.e.; family problems, college problems, social problems, personal problems and over-all psycho-social problems. Health style (1999) was assessed by United State Development of health and human service which consists of 70 statements reflecting the seven areas of health style, i.e.; physical health, (ii) environmental health, (iii) emotional health, (iv) spiritual health, (v) intellectual health (vi) occupational health and (vii) social health. And to measure the nutritional status, "dietary intake 24-hour recall method was used. These tests were administered on 200 girls' students of Panjab University campus as, residential and non-residential girls' students. The sample were consisting of 100 students from the Panjab University girls' residential and 100 non-residential girls' students each.

After collecting the data, the response sheets of these three tests were scored on the basis of scoring keys provided in their respective manuals. The raw scores were statistically analyzed with the help of SPSS software programme of the computer system. To prove hypotheses and objectives of the study, the statistical tools such as descriptive statistics like mean, SD, skewness and kurtosis, minimum and maximum, student t- test and correlation were employed. The results of the study have been discussed in different sections as shown below; -

**Section A:** Descriptive statistics like mean, SD, skewness and kurtosis, minimum and maximum

**Section B:** Significance of scale items using student t-test

**Section C:** Correlation analysis

## SECTION - A

### MEASUREMENT OF PSYCHO- SOCIAL ASPECTS AMONG RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY CAMPUS

The first objective of the current study was to measure the four dimensions of psycho-social aspects, i.e.; family problems, college problems social problems, personal problems and over-all psycho-social problems of Panjab University campus as, residential and non-residential. In order to achieve this objective, descriptive statistics of all these variables under study were computed like mean, standard deviation, skewness and kurtosis, minimum and maximum. The results have been presented in the following tables.

**Table-4.1**

**Descriptive statistics of different components of psycho-social aspects among residential girls' students of Panjab University**

Variable	Mean	SD	Skewness (Sk)	Kurtosis (Ku)	Minimum	Maximum
Family Problems	10.22	8.07	0.94	0.50	0	35
College problems	8.88	5.89	0.78	0.40	0	27
Social Problems	<b>4.53</b>	<b>1.82</b>	<b>0.29</b>	<b>-0.55</b>	2	9
Personal Problem	13.39	8.33	0.73	0.51	0	42
Over-all Psycho-social Problems	37.02	17.37	0.54	-0.16	9	89

Table-4.1 demonstrates the central tendencies such as mean, measure of dispersion viz. standard deviation and measure of symmetry namely, skewness and kurtosis corresponding to psycho-social problems of residential girls' students of Panjab University campus. The mean and standard deviation of over-all Psycho-Social Problems is M=37.02 and S.D=17.37 respectively. Among psycho-social problems, personal problems had the highest mean score of M=13.39 with S.D=8.33 followed by family problems which has mean 10.22 and standard deviation 8.07. Lowest mean value was observed in case of social problems which has mean M=4.53 and SD=1.82.

Skewness and kurtosis were also found to know if the data fall on the distribution or if not so, then what is the divergence from normality. When the distribution of scores is not symmetrical, it is said to be asymmetrical or skewed. The skewness means the degree of its departure from symmetry. The frequency distribution of a set of scores is called symmetrical about it means if the number of frequencies at any point on the upper side of the mean is exactly the same at point equidistance from the mean on the lower side. It has been observed that skewness on all these variables ranged between 0.29 - 0.94. A normal curve has  $Sk=0$ . Deviations from normality can be in negative and positive direction leading to negatively skewed and positively skewed distribution respectively. So, it can be said that the data fell on the normal distribution.

The kurtosis of a distribution refers to its curvedness or peakedness. The peakedness is based on the degree of concentration of the scores near the central tendency. A normal distribution has kurtosis value of '0' (i.e.  $Ku=0$ , as per output of SPSS). If  $Ku$  is more than 0, the distribution is leptokurtic and if  $Ku$  is less than 0, the distribution is platykurtic.

In the present study,  $Ku$  ranged between -0.16 to 0.51. In most of the dimensions,  $Ku$  values were close to 0, and skewness values are also close to zero and hence the data is approximately normally distributed. It is more likely that observations are concentrated around mean.

**Table 4.2**

**Descriptive statistics of different components of psycho-social aspects among non-residential girls' students of Panjab University**

Variable	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
Family Problems	14.88	12.44	0.88	0.92	0	51
College problems	8.94	7.49	0.65	0.65	0	34
Social Problems	<b>4.28</b>	<b>1.61</b>	<b>0.45</b>	<b>-0.26</b>	<b>2</b>	<b>9</b>
Personal Problems	13.61	8.51	0.83	0.51	0	40
Over-all Psycho-social Problems	41.71	24.11	0.95	0.70	9	124

Table-4.2 demonstrates the central tendencies such as mean and measure of dispersion viz. standard deviation and measure of symmetry namely, skewness and kurtosis corresponding to psycho-social aspects of non-residential girls' students of Panjab University Campus. The mean and standard deviation of over-all Psycho-Social Problems is  $M=41.71$  and  $S.D\ 24.11$ . Among psycho-social problems, family problems had the highest mean score of  $M= 14.88$  with  $S.D= 12.44$  followed by personal problems which has mean  $13.61$  and standard deviation  $8.51$ . Lowest mean value and  $S.D.$  was observed in case of social problems i.e.  $4.28$  and  $1.61$ .

The positive value of skewness for the sub- variables; family problems, college problems, social problems, personal problems and over-all Psycho-Social Problems that the data fell slightly on the right side of the distribution. All these values show that the data have a normal distribution, as the values of mean & standard deviation was nearer to zero. Variables with positive kurtosis values had leptokurtic curve, on the other hand, variables having negative kurtosis values had platykurtic curve.

Skewness and kurtosis were also found to know if the data fall on the distribution or if not so, then what is the divergence from normality. When the distribution of scores is not symmetrical, it is said to be asymmetrical or skewed. The skewness means the degree of its departure from symmetry. The frequency distribution of a set of scores is called symmetrical about it means if the number of frequencies at any point on the upper side of the mean is exactly the same at point equidistance from the mean on the lower side. It has been observed that skewness on all these variables ranged between  $0.45-0.95$ . A normal curve has  $Sk=0$ . Deviations from normality can be in negative and positive direction leading to negatively skewed and positively skewed distribution respectively. So, it can be said that the data fell on the normal distribution.

The kurtosis of a distribution refers to its curvedness or peakedness. The peakedness is based on the degree of concentration of the scores near the central tendency. A normal distribution has kurtosis value of '0' (i.e.  $Ku=0$ , as per output of SPSS). If  $Ku$  is more than 0, the distribution is leptokurtic and if  $Ku$  is less than 0, the distribution is platykurtic.

In the present study, Ku ranged between -0.26 to 0.92. In most of the dimensions, Ku values were close to 0, and skewness values are also close to zero and hence the data is approximately normally distributed. It is more likely that observations are concentrated around mean.

### **MEASUREMENT OF HEALTH STYLE AMONG RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY CAMPUS**

The second objective of the current study was to measure the seven dimensions of health style, i.e.; physical health, emotional health, environmental health, spiritual health, intellectual health, social health and occupational health among hostel girls, of Panjab University. In order to achieve this objective, descriptive statistics of all these variables under study were computed like mean, standard deviation, skewness and kurtosis, minimum and maximum. The results have been presented in the following tables.

**Table 4.3**

#### **Descriptive statistics of different components of health style among residential girls' students of Panjab University**

Variables	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
Physical Health	26.21	4.34	0.91	0.90	19	45
Emotional Health	30.23	5.38	-0.22	-0.46	17	40
Environmental Health	30.34	6.96	-0.69	-0.28	13	40
Spiritual Health	33.00	5.52	-0.73	-0.16	20	40
Intellectual Health	31.22	5.62	-0.37	-0.55	19	40
Social Health	<b>33.09</b>	<b>4.89</b>	<b>-0.82</b>	<b>0.54</b>	<b>19</b>	<b>40</b>
Occupational Health	32.10	7.76	-0.63	0.76	02	40
Total Health style	216.87	26.15	-0.59	0.94	128	280

As per the above table-4.3, mean scores and SDs of seven components of health style were as 26.21+\_4.34; 30.23+\_5.38; 30.34+\_6.96; 33.00+\_5.52;

31.22+\_5.62; and 32.10+\_7.76 for physical health, emotional health, environmental health, spiritual health, intellectual health, social health and occupational health respectively, whereas for the total health style, the same were 216.87+\_26.15. In case of health-related problems, social health problems have the maximum mean and standard deviation i.e., 33.09+\_4.89 followed by spiritual health problems with mean 33.00 and S.D. 5.52. Occupational health and Intellectual health have the mean 26.21 and 31.22. There is not much difference in the mean value of emotional and environmental health problems. Physical health problems have the minimum mean among all health problems. Physical health problems indicate that the data fell on the right side of the distribution, while, the distribution of the data of the variables emotional, environmental, spiritual, intellectual, social and occupational health problems with negative values fell on left side. Variables with positive kurtosis values had leptokurtic curve, on the other hand, variables having negative kurtosis values had platykurtic curve The minimum and maximum scores were found to be 19 & 45 for the physical health, 17 & 40 for the emotional health, 13 & 40 for the environmental health, 20 & 40 for the spiritual health, 19 & 40 for the intellectual health, 19 & 40 for the social health, and 02 & 40 for the occupational health. The same for the total health style were 216.87 & 26.15. All these values show that the data have a normal distribution, as the values of mean and S.D. was nearer to each other and there was less deviation. A normal distribution has kurtosis value of '0' (i.e.  $Ku=0$ , as per output of SPSS). If  $Ku$  is more than 0, the distribution is leptokurtic and if  $Ku$  is less than 0, the distribution is platykurtic.

In the present study,  $Ku$  ranged between -0.16 to 0.94. In most of the dimensions,  $Ku$  values were close to 0, and skewness values are also close to zero and hence the data is approximately normally distributed. It is more likely that observations are concentrated around mean.

**Table 4.4****Descriptive statistics of different components of health style among residential girls' students of Panjab University**

Variables	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
Physical Health	26.39	5.61	0.02	-0.22	13	40
Emotional Health	29.21	5.80	-0.21	-0.06	14	40
Environmental Health	28.94	6.77	0.05	0.86	13	53
Spiritual Health	30.78	5.92	-0.68	0.51	13	40
Intellectual Health	30.32	6.10	-0.58	0.03	14	40
Social Health	<b>31.95</b>	<b>5.63</b>	<b>-0.77</b>	<b>0.75</b>	<b>13</b>	<b>40</b>
Occupational Health	30.03	6.25	-0.43	-0.01	13	40
Total Health style	207.62	30.77	-0.69	0.89	94	278

As per the above table-4.4, mean scores and SDs of seven components of health style were as 26.39+<sub>5.61</sub>; 29.21+<sub>5.80</sub>; 28.94+<sub>6.77</sub>; 30.78+<sub>5.92</sub>; 30.32+<sub>6.10</sub>; 31.95+<sub>5.63</sub> and 30.3 +<sub>6.25</sub> for physical health, emotional health, environmental health, spiritual health, intellectual health, social health and occupational health respectively, whereas for the total health style, the same were 207.62+<sub>30.77</sub>. In case of health related problems, social health problems have the maximum mean and standard deviation i.e., M=31.95 and S.D=5.63 followed by spiritual health problems with mean M=30.78 and S.D=5.92. Occupational health and Intellectual health have the mean M=30.03 and 30.32. There is not much difference in the mean value of emotional and environmental health problems. Physical health problems have the minimum mean among all health problems. Physical health problems indicate that the data fell on the right side of the distribution, while, the distribution of the data of the variables physical health, emotional health, environmental health, spiritual health, intellectual health, social health and occupational health with negative values fell on left side. Variables with positive kurtosis values had leptokurtic curve, on the other hand, variables having negative kurtosis values had platykurtic curve. The minimum and maximum scores were found

to be 13 & 40 for the physical health, 14 & 40 for the emotional health, 13 & 53 for the environmental health, 13 & 40 for the spiritual health, 14 & 40 for the intellectual health, 13 & 40 for the social health, and 13 & 40 for the occupational health. The same for the total health style were 207.62 & 30.77. All these values show that the data have a normal distribution, as the values of mean and S.D. was nearer to each other and there was less deviation.

It has been observed that skewness on all these variables ranged between -0.21-0.05. A normal curve has  $Sk=0$ . Deviations from normality can be in negative and positive direction leading to negatively skewed and positively skewed distribution respectively. So, it can be said that the data fell on the normal distribution.

A normal distribution has kurtosis value of '0' (i.e.  $Ku=0$ , as per output of SPSS). If  $Ku$  is more than 0, the distribution is leptokurtic and if  $Ku$  is less than 0, the distribution is platykurtic.

In the present study,  $Ku$  ranged between -0.01 to 0.89. In most of the dimensions,  $Ku$  values were close to 0, and skewness values are also close to zero and hence the data is approximately normally distributed. It is more likely that observations are concentrated around mean.

**Table-4.5**

**Descriptive statistics of different components of Nutritional Status between residential & non-residential girls' students of Panjab University**

	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
Residential	2465.27	376.48	0.16	0.39	1475	3419
Non-residential	2450.88	365.07	0.51	0.78	1720	3535

Table-4.5 depicts that the central tendencies such as mean and measure of dispersion viz. standard deviation and measure of symmetry namely, skewness and kurtosis corresponding to nutritional status among residential and non-residential girls' students of Panjab University campus. Among nutritional status, residential girls' students had highest mean score of 2465.27 with standard deviation 376.48.

It has been observed that skewness on nutritional status ranged was 0.16 and 0.51. A normal curve has  $Sk=0$ . Deviations from normality can be in negative and positive direction leading to negatively skewed and positively skewed distribution respectively. So, it can be said that the data fell on the normal distribution. Ku ranged between 0.39 and 0.78. A normal distribution has kurtosis value of '0' (i.e.  $Ku=0$ , as per output of SPSS). If Ku is more than 0, the distribution is leptokurtic and if Ku is less than 0, the distribution is platykurtic.

In the present study, Ku of both are 0.39 and 0.78. In most of the dimensions, Ku values were close to 0, and skewness values are also close to zero and hence the data is approximately normally distributed. It is more likely that observations are concentrated around mean.

## SECTION B:

In this section we would discuss the significance differences among psycho-social aspects, health style and nutritional status between Panjab University residential and non-residential girls' students. For this purpose, mean scores, Standard Deviation scores for all the above said variables were calculated between residential and non-residential girls' students and their t-value were computed in order to find out if significant difference existed and if so, at what level of significance. These results have been following tables:

### Psycho-social Aspects

**Table 4.6**

**Significance of Family Problems between residential and non-residential girls' students of Panjab University**

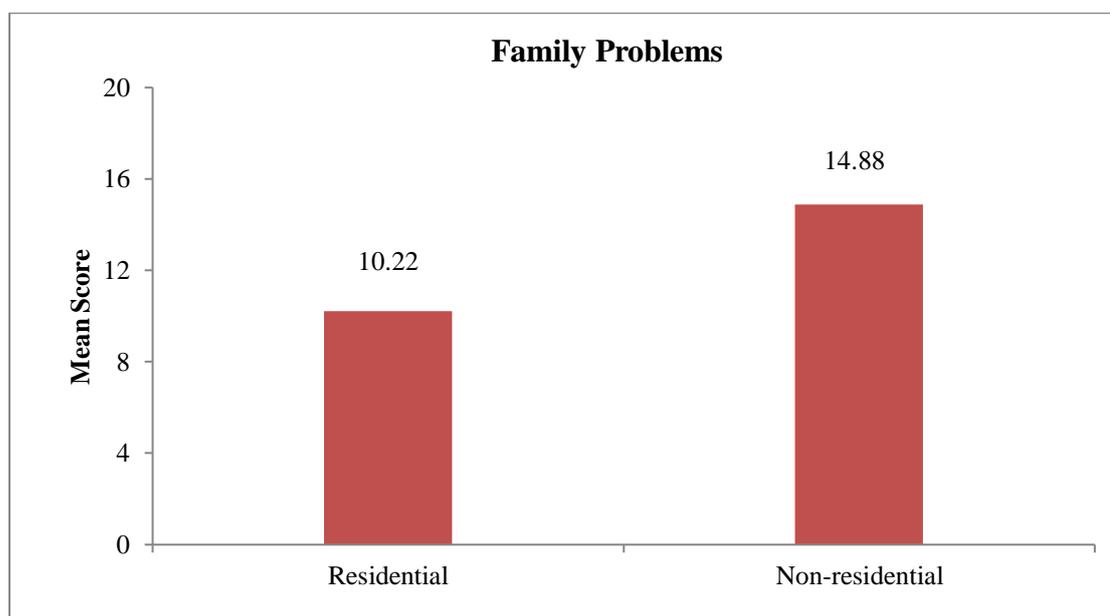
Variable	Residential (n=100)		Non-residential (n=100)		t-value	df	p-value
	Mean	SD	Mean	SD			
Family Problems	10.22	8.07	14.88	12.44	-3.14	198	0.001**

\*\*p-value<.01= highly significance

\*p-value<.05= significant

It has been revealed from table 4.6 that the mean score of residential girls' students were  $M=10.22$  with  $S.D=8.07$  and the mean score of non-residential girls' students were  $M=14.88$  with  $S.D=12.44$ , t-value (-3.14) has been found to be statistically significant as  $p<.001$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable family problems (psycho-social aspects) has been depicted in figure-1.



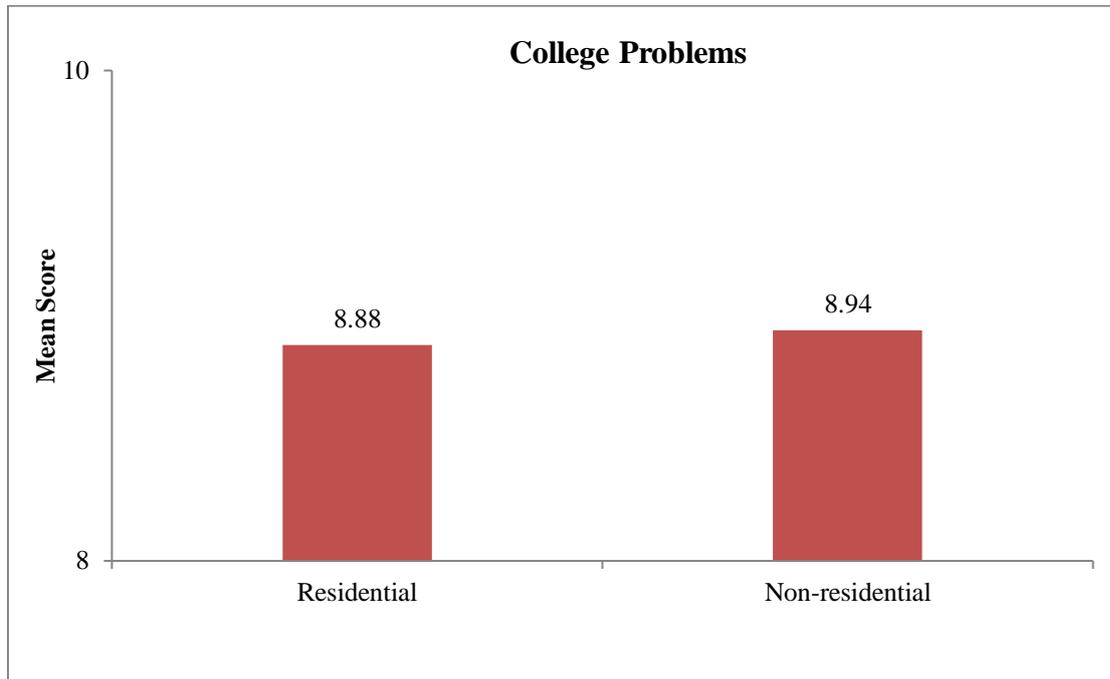
**Table 4.7**

**Significance of College Problems between residential and non-residential girls' students of Panjab University**

Variable	Residential(n=100)		Non-residential (n=100)		t-value	df	p-value
	Mean	SD	Mean	SD			
College problems	8.88	5.89	8.94	7.49	-0.06	198	0.95

It has been revealed from table 4.7 that the mean score of residential girls' students were  $M=8.88$  with  $S.D=5.89$  and the mean score of non-residential girls' students were  $M=8.94$  with  $S.D=7.49$ , t-value has been found to be statistically non-significant as  $p>0.95$ .

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable College problems (psycho-social aspects) has been depicted in figure-2.



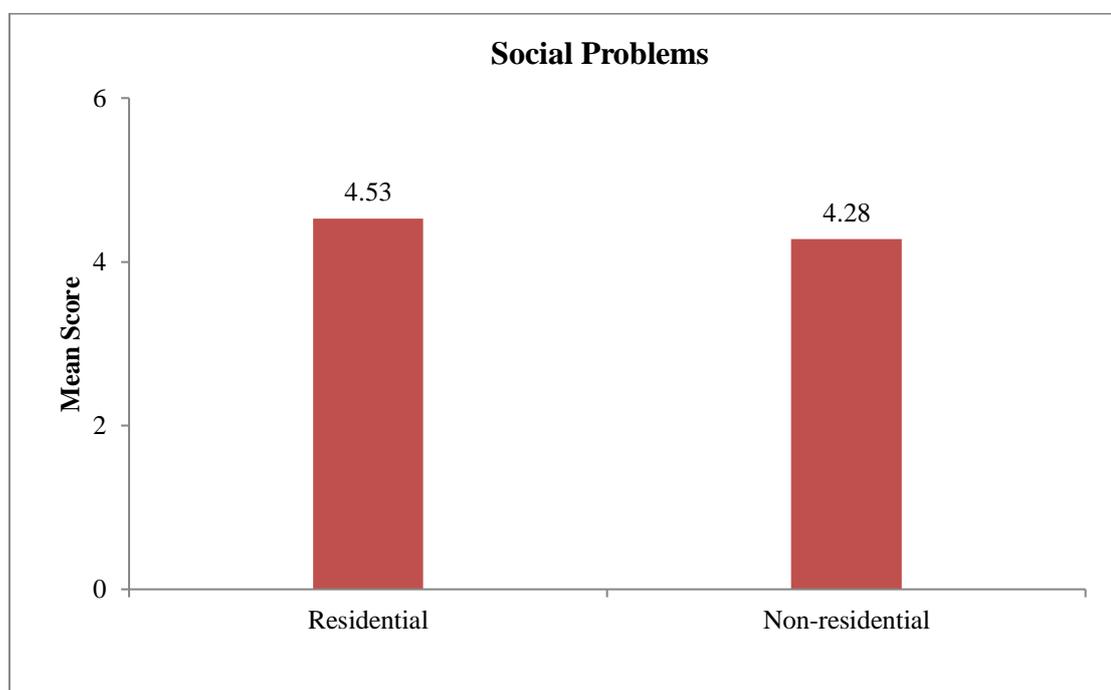
**Table 4.8**

**Significance of Social Problems between residential and non-residential girls' students of Panjab University**

Variable	residential (n=100)		Non-residential (n=100)		t-value	df	p-value
	Mean	SD	Mean	SD			
Social Problems	4.53	1.82	4.28	1.61	1.03	198	0.31

It can be ascertained from table 4.8 that the mean score of residential girls' students were M=4.53 with S.D=1.82 and the mean score of non-residential girls' students were M=4.28 with S.D=1.61 respectively, t-value has been found to be statistically non-significant as  $p > 0.31$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable (psycho-social aspects) has been depicted in figure-3.



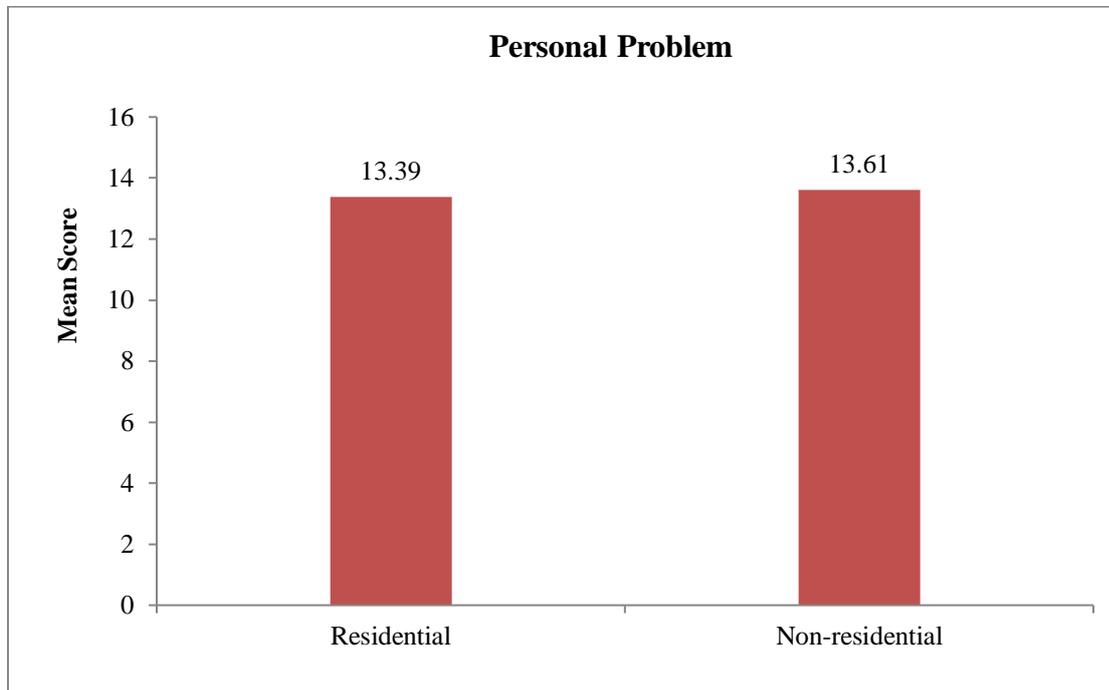
**Table 4.9**

**Significance of Personal Problems between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non-Residential (n=100)		t- value	df	p- value
	Mean	SD	Mean	SD			
Personal Problems	13.39	8.33	13.61	8.51	-0.18	198	0.85

A result presented in table 4.9 that the mean score of residential girls' students were M=13.39 with S.D=8.33 and the mean score of non-residential girls' students were M=13.61 with S.D=8.51 respectively, t-value has been found to be statistically non-significant as  $p > 0.85$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable personal problems (psycho-social aspects) is depicted in figure-4.



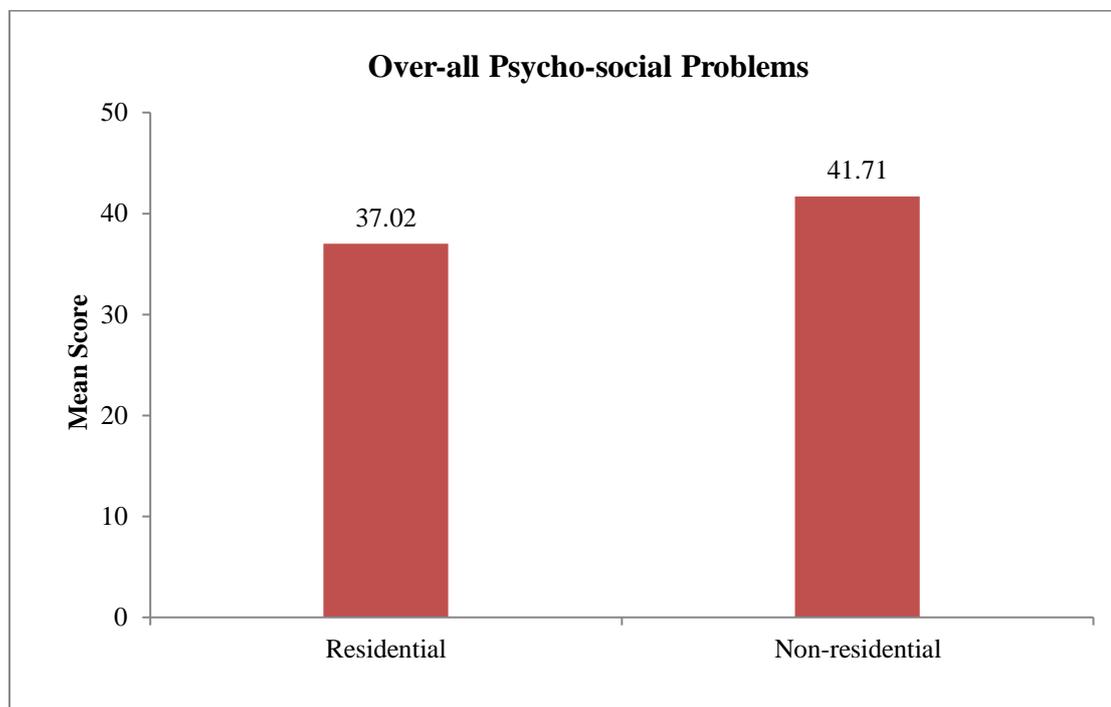
**Table 4.10**

**Significance of Over-all psycho-social problems between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non-residential (n=100)		t-value	df	p-value
	Mean	SD	Mean	SD			
Over-all Psycho-social Problems	37.02	17.36	41.71	24.11	-1.58	198	0.12

The result reflected in table 4.10 that the mean score of residential girls' students were M=37.02 with S.D=17.36 and the mean score of non-residential girls' students were M=41.71 with S.D= 24.11, t-value has been found to be statistically non-significant  $p>0.12$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable Over-all psycho-social problems (psycho-social aspects) is depicted in figure 5.



## Health Style

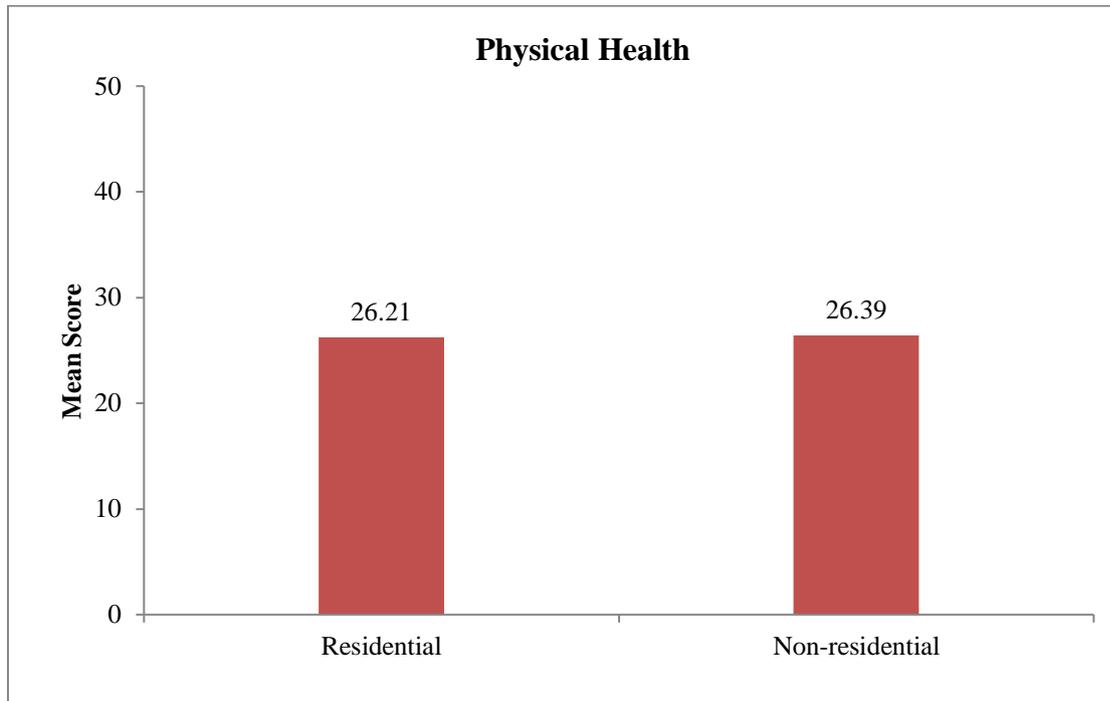
**Table 4.11**

**Significance of Physical health between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non- residential (n=100)		t- value	df	p- value
	Mean	SD	Mean	SD			
Physical Health	26.21	4.34	26.39	5.61	-0.25	198	0.80

The result reflected in table 4.11 that the mean score of residential girls' students were M=26.21 with S.D=4.34 and the mean score of non-residential girls' students were M=26.39 with S.D=5.61 respectively. Again, t-value has been found to be statistically non-significant as  $p > 0.80$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable physical health (Health style) has been depicted in figure 6.



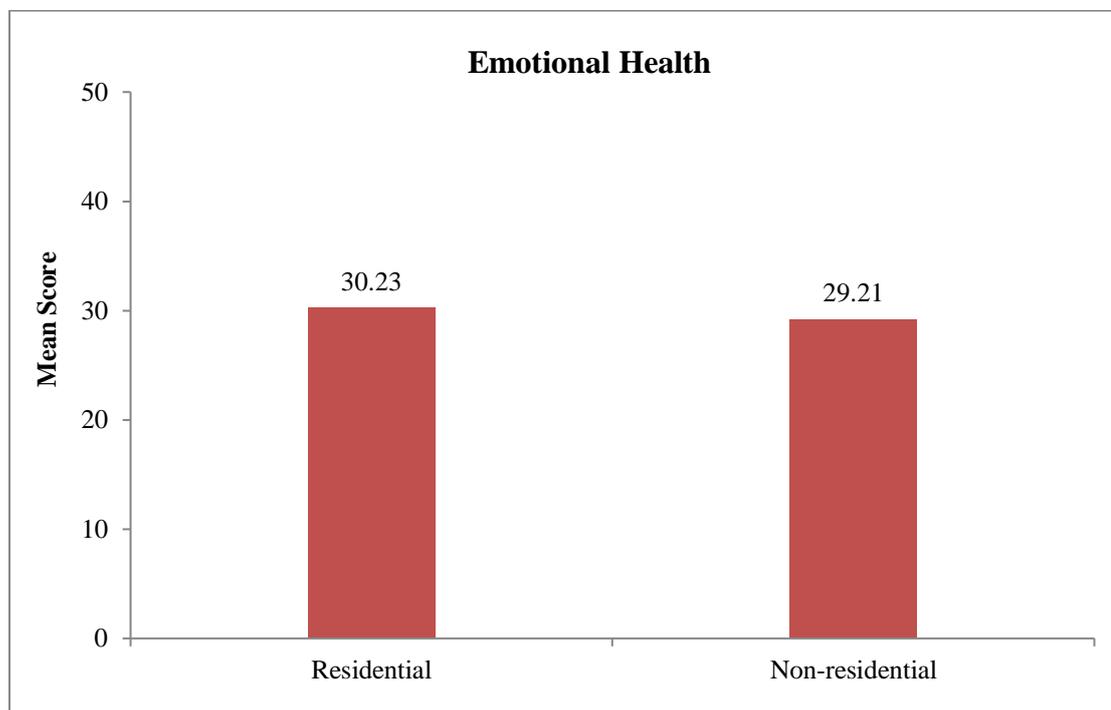
**Table 4.12**

**Significance of Emotional health between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non- residential (n=100)		t-value	df	p-value
	Mean	SD	Mean	SD			
Emotional Health	30.23	5.38	29.21	5.80	1.29	198	0.20

It can be ascertained from table 4.12 that the mean score of residential girls' students were M=30.23 with S.D=5.38 and the mean score of non-residential girls' students were M=29.21 with S.D=5.80 respectively t-value has been found to be statistically non-significant as  $p > 0.20$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable Emotional health (Health style) has been depicted in figure 7.



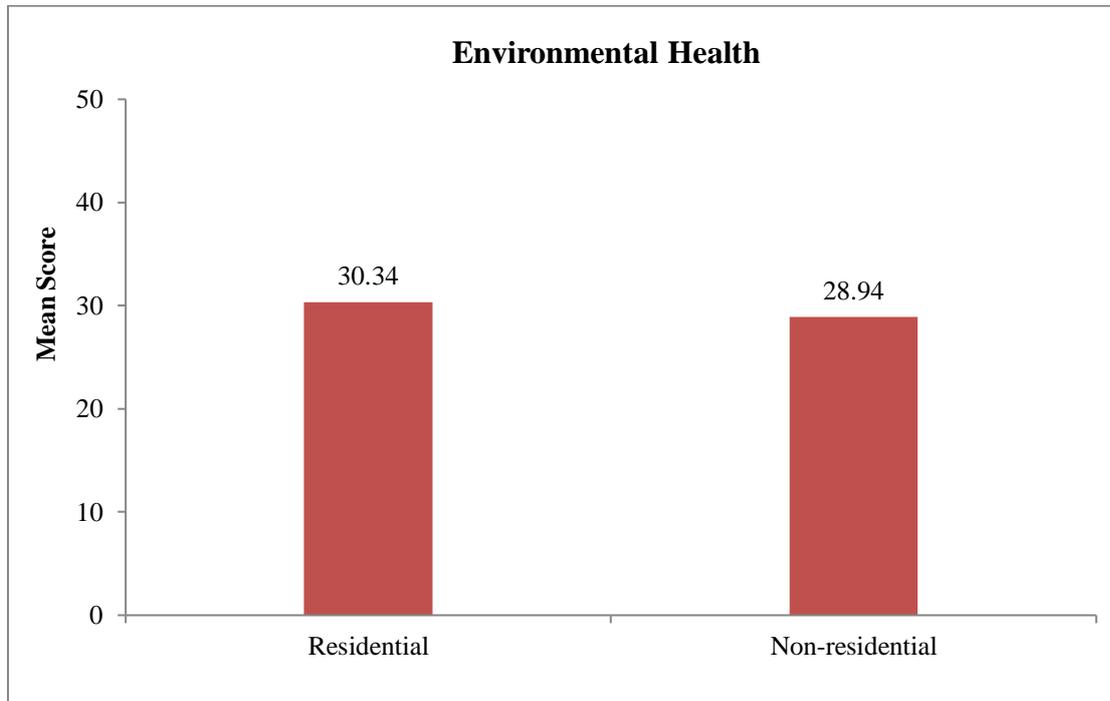
**Table 4.13**

**Significance of environmental health between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non-residential (n=100)		t- value	df	p- value
	Mean	SD	Mean	SD			
Environmental Health	30.34	6.96	28.94	6.77	1.44	198	0.15

It is evident from table 4.13 that the mean score of residential girls' students were M=30.34 with S.D=6.96 and the mean score of non-residential girls' students had mean M=28.94 with S.D= 6.77 respectively, t-value has been found to be statistically non-significant as  $p > 0.15$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable Environmental Health (health style) has been depicted in figure-8.



**Table 4.14**

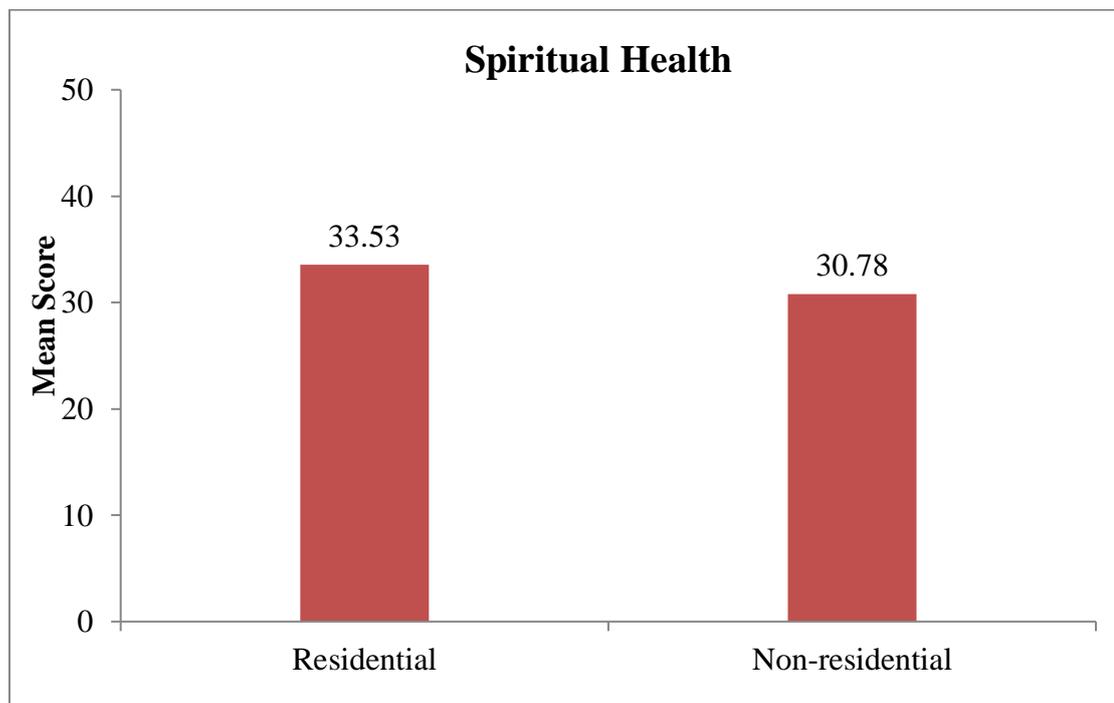
**Significance of Spiritual Health between residential and non-residential girls' students of Panjab University**

variable	Residential (n=100)		Non-residential (n=100)		t- value	df	p-value
	Mean	SD	Mean	SD			
Spiritual Health	33.53	5.52	30.78	5.92	3.40	198	0.001**

\*\*Significant at 0.05 level

It is evident from table 4.14 revealed that the mean score of residential girls' students were M=33.53 with S.D=5.52. And the mean score of non-residential girls' students were M=30.78 with S.D=5.92 respectively, t-value has been found to be statistically significant  $p < 0.001$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable spiritual health (Health style) has been depicted in figure-9.



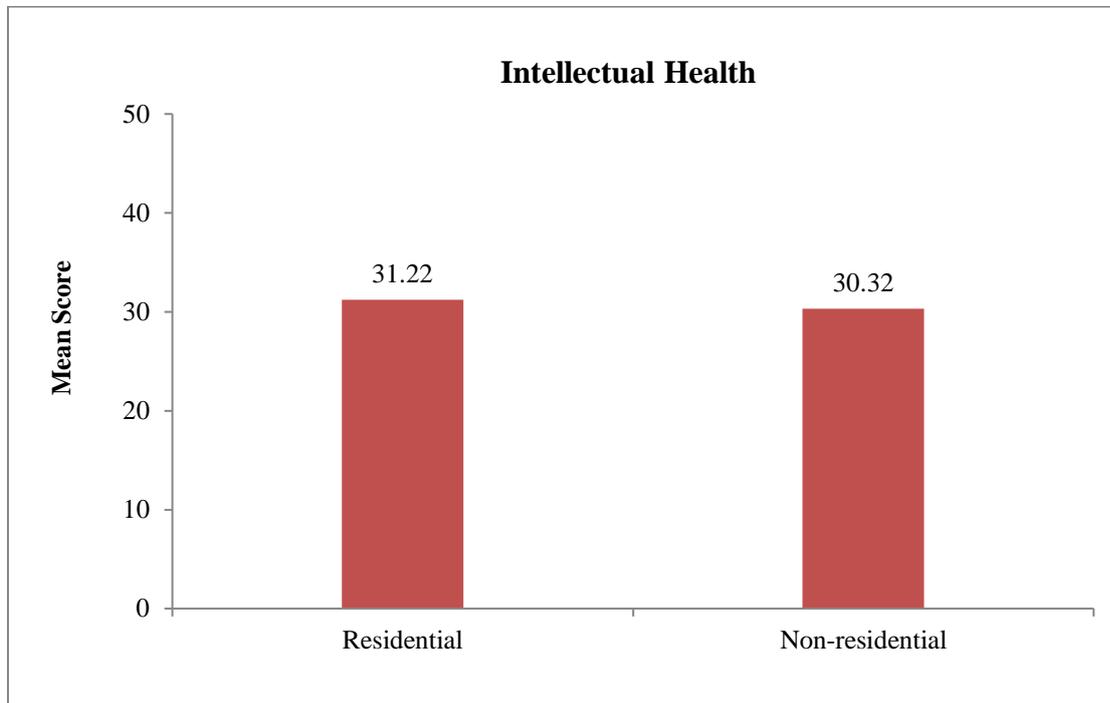
**Table 4.15**

**Significance of Intellectual Health between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non-residential (n=100)		t- value	df	p- value
	Mean	SD	Mean	SD			
Intellectual Health	31.22	5.62	30.32	6.10	1.09	198	0.28

It is evident from table 4.15 that the mean score of residential girls' students were M=31.22 with S.D=5.62. And the mean score of non-residential girls' students were M=30.32 with S.D= 6.10 respectively, t-value has been found to be statistically non-significant as  $p>0.28$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable intellectual health (Health style) has been depicted in figure 10.



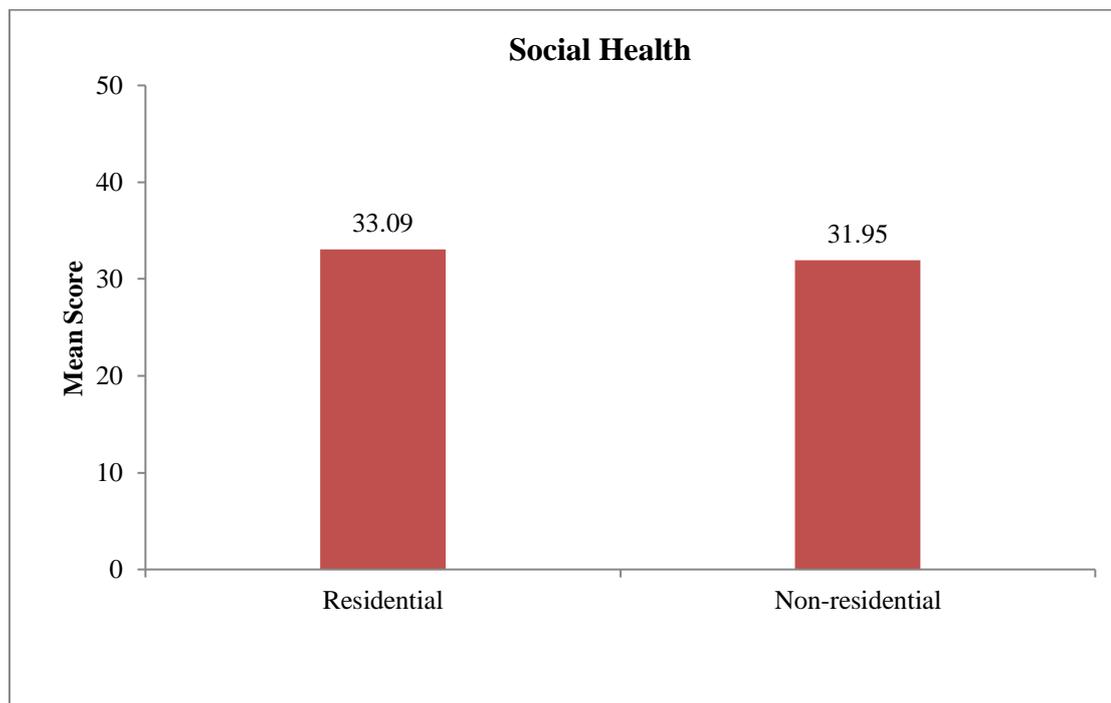
**Table 4.16**

**Significance of social Health between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non-Residential (n=100)		t- value	df	p- value
	Mean	SD	Mean	SD			
Social Health	33.09	4.89	31.95	5.63	1.53	198	0.13

It is observed from table 4.16 that the mean score of residential girls' students were M=33.09 with S.D= 4.89 and the mean score of non-residential girls' students were M=31.95 with S.D= 5.63 respectively. Again, t-value has been found to be statistically non-significant as  $p > 0.13$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable the variable intellectual health (Health style) has been depicted in figure-11.



**Table 4.17**

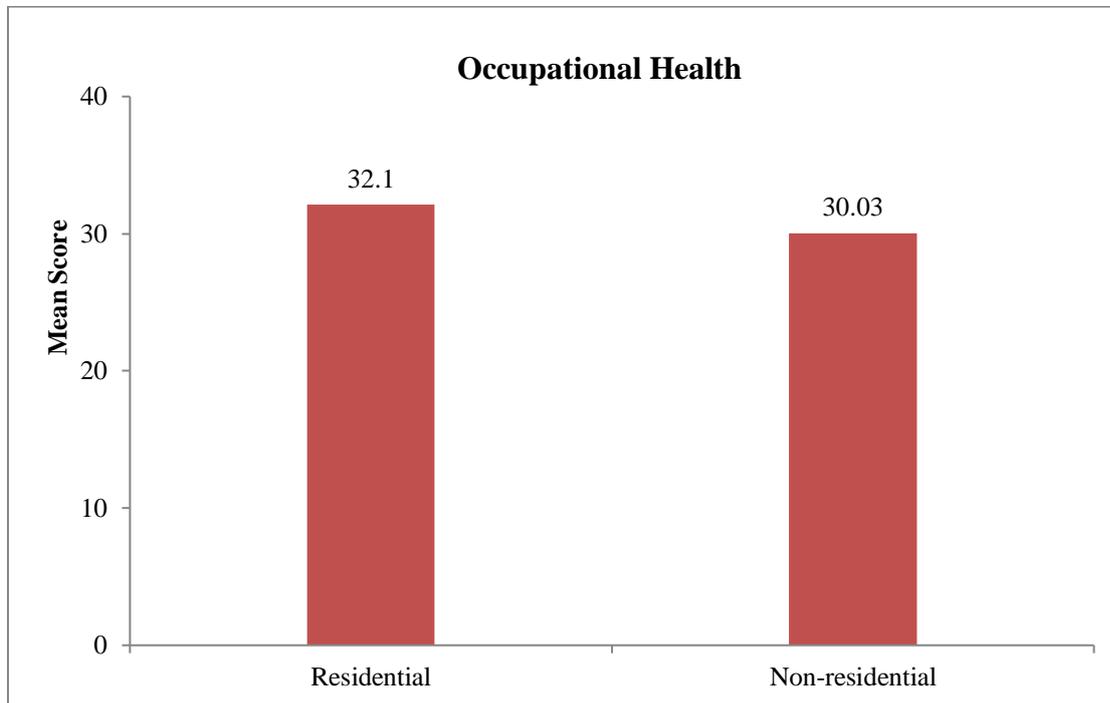
**Significance of occupational Health between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non=residential (n=100)		t-value	df	p-value
	Mean	SD	Mean	SD			
Occupational Health	32.10	7.76	30.03	6.25	2.08	198	0.04*

\*Significant at 0.05 level

A result presented in table 4.17 revealed that the mean score of residential girls' students were M=32.10 with S.D=7.76 and the mean score of non-residential girls' were M=30.03 with S.D= 6.25 respectively, t-value has been found to be statistically significant as  $p < .04$  with 198 degree of freedom.

The graphical representation of Mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable occupational health (health style) is depicted in figure-12.



**Table 4.18**

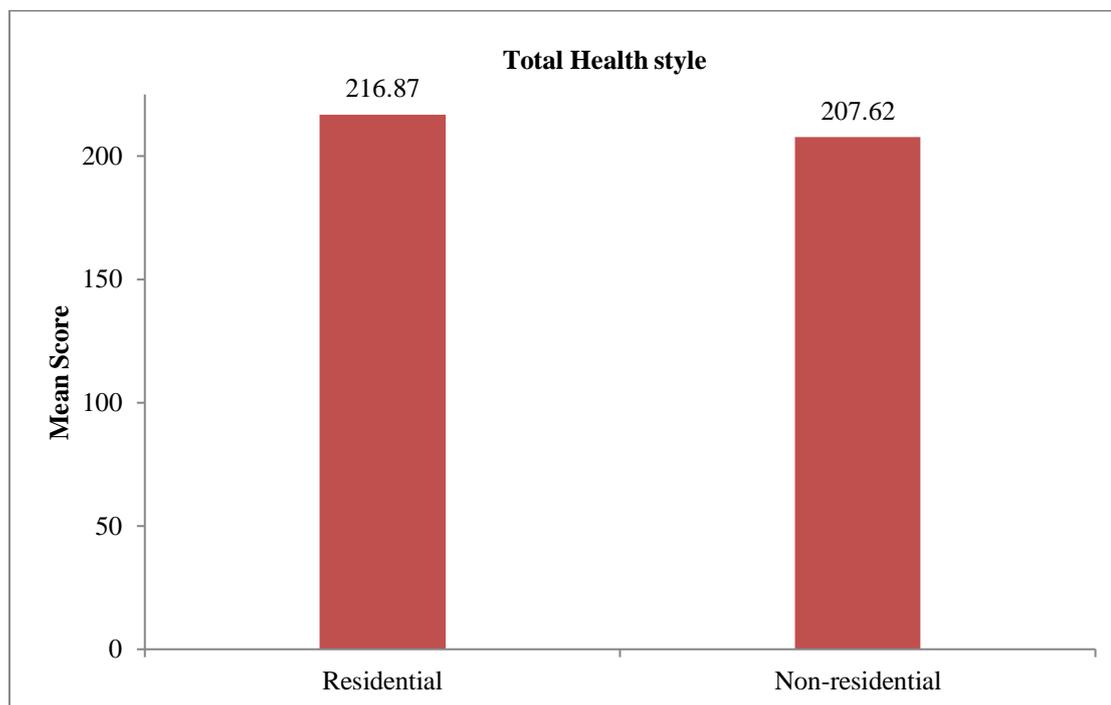
**Significance of total health style between residential and non-residential girls' students of Panjab University**

Variable	Residential (n=100)		Non-residential (n=100)		t-value	df	p-value
	Mean	SD	Mean	SD			
Total Health style	216.87	26.15	207.62	30.77	2.29	198	0.02*

\*Significant at 0.05 level

The table 4.18 revealed that the mean score of residential girls students 'on total health style were 216.87 with S.D=26.15 and the mean score of non-residential girls' students on total health style were 207.62 with S.D= 30.77 respectively, t-value has been found to be statistically significant as  $p < 0.02$  with 198 degree of freedom.

The graphical representation of mean score of residential and non- residential girls' students of Panjab University Chandigarh on total health style (health style) is depicted in figure-13.



## NUTRITIONAL STATUS

**Table 4.19**

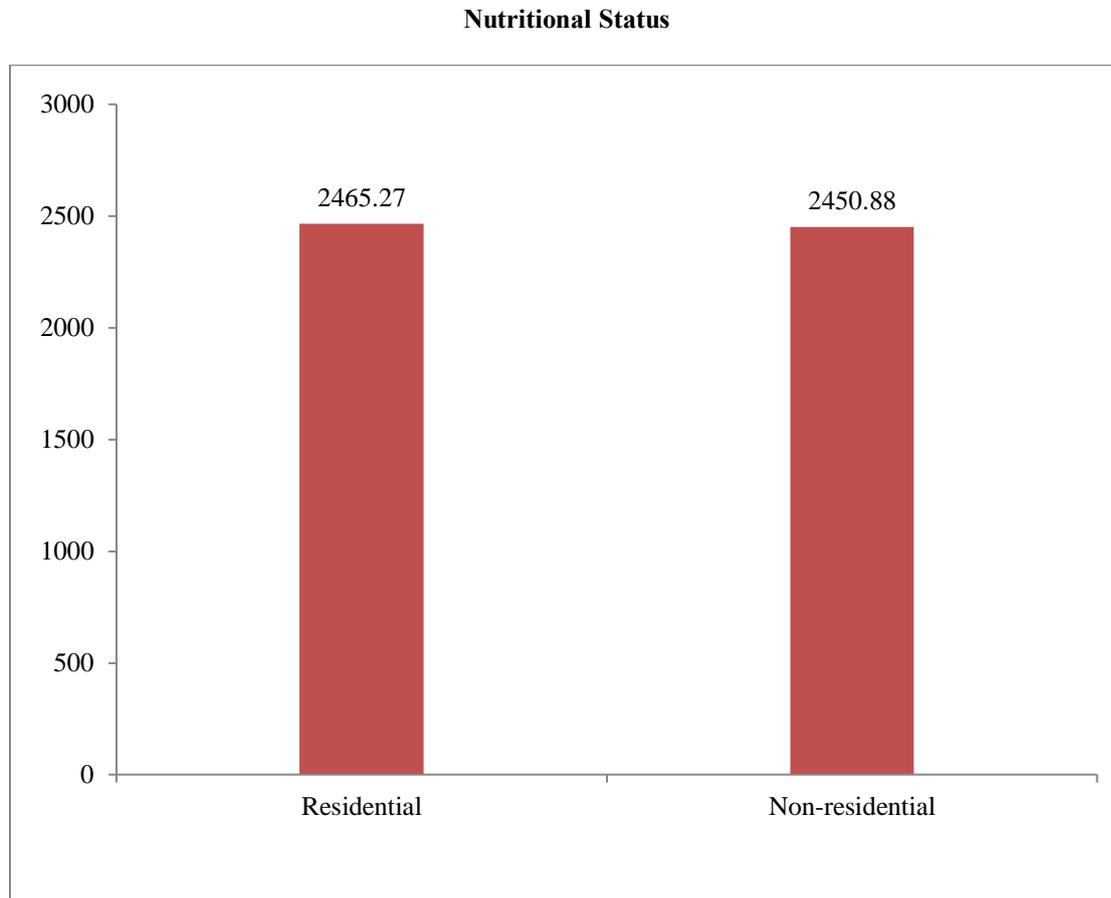
**Significance of nutritional status between residential and non-residential girls' students of Panjab University**

Residential (n=100)		Non- residential (n=100)		t-value	df	p-value
Mean	SD	Mean	SD			
2465.27	376.48	2450.88	365.07	0.27	198	0.78

A result presented in table 4.19 revealed that the mean score of residential girls' students were M=2465.48 with S.D=376.48 and the mean score of non-residential girls' students were M=2450.88 with S.D=8365.07. It means that residential girl' students had more mean for nutritional status, in comparison to non-residential girl students

respectively. The t-test test implies that there has been found to be statistically non-significant as  $p > 0.78$  between residential and non-residential girls' students for the nutritional status at 5 percent level of significance and p-value is greater than 0.05 level.

The graphical representation of mean score of residential and non-residential girls' students of Panjab University Chandigarh on the variable nutritional status is depicted in figure-15.



### **SECTION C:**

One of the objectives of the present study was to establish relationship among the different psycho-social variables, health style and nutritional status of Panjab University residential and non-residential girls' students. For this purpose, coefficient of correlation was calculated with the help of Pearson product moment method to see the relationship. The results have been presented in the following tables: -

**Table 4.20**  
**Correlation between nutritional status and psycho-social variables between residential and non-residential girls' students of Panjab University**

	Nutritional status	Family Problems	College problems	Social Problems	Personal Problem	Over-all Psycho-social Problems
Nutritional status	1	-.071	-.063	.028	-.040	-.070
Family Problems		1	.444**	0.11	.389**	.813**
College problems			1	.085	.633**	.803**
Social Problems				1	-0.005	.162**
Personal Problem					1	.797**
Over-all Psycho-social Problems						1

\*\*Significant at 0.01 level

\*\*Significant at 0.05level

Table 4.20 shows that all the co-efficient of correlation between nutritional status and five areas of psycho-social aspects of residential and non-residential girls' students of Panjab University Chandigarh **were very low however; some of them were significant**. It means that nutritional status had no relationship with psycho-social aspects. But on the other hand, family problem and college problem had positive and significant relationship with others, as all the co-efficient of correlations were found to be positive and significant at 0.01 level. The co-efficient of correlations ranged between .162 with social problem and .813 with over-all psycho-social (family) problems. The highest co-efficient correlation was between college problems and personal problems ( $r=.633$ ) and the lowest one was between family problems and social problems ( $r=0.11$ ).

**Table 4.21**

**Correlation between Nutritional Status and Health Style of Panjab University residential and non-residential girls' students**

	Nutritional status	Physical Health	Emotional Health	Environmental Health	Spiritual Health	Intellectual Health	Social Health	Occupational Health	Total Health style
Nutritional status	1	.045	.087	.071	-.028	-.120	-.142*	-.043	-.023
Physical Health		1	.230**	.298**	.300**	.366**	.232**	.217**	.539**
Emotional Health			1	.424**	.486**	.466**	.409**	.391**	.693**
Environmental Health				1	.344**	.395**	.340**	.230**	.637**
Spiritual Health					1	.579**	.465**	.473**	.755**
Intellectual Health						1	.586**	.514**	.795**
Social Health							1	.503**	.712**
Occupational Health								1	.701**
Total Health style									1

\*\*Significant at 0.01 level and

\*Significant at 0.05 level

Table 4.21 shows that all the co-efficient of correlation between nutritional status and seven areas of health style of residential and non-residential girls' students of Panjab University Chandigarh **were very low however, some of them were significant**. It also means that nutritional status had no relationship with health style. But on the other hand, except, nutritional status all the areas of health style had positive and significant relationship with others, as all the co-efficient of correlations were found to be positive and significant at 0.01 level. The co-efficient of correlations ranged between .539 with physical health and .795 with spiritual health. The highest co-efficient correlation was between intellectual health and social health ( $r=.633$ ) and the lowest one was between physical health and occupational health ( $r=0.11$ ).

**Table 4.22**

**Correlation between Psycho social aspects and Health Style of Panjab University residential and non-residential girls' students**

	Psycho-social Problems	Health Style
Pearson Correlation	1	-.417**
Sig. (2-tailed)		.001
N	200	200

\*\*Significant at 0.01 level

\*\*Significant at 0.05 level

Table 4.22 shows that all the co-efficient of correlation between psycho-social aspects and seven areas of health style of residential and non-residential girls' students of Panjab University Chandigarh. Psycho-social aspects **were moderately negatively related to health style (r= -.417)**.

It also revealed from the table that the Psycho-social problems is statistically have negative relationship with health style as the p value is less than 0.01 level of Significance. When the psycho-social problem increases than health style is decreases.

## **DISCUSSION OF FINDINGS**

Woman is very beautifully defined as the significant 'other', meaning that if man is the important creature of this world, so is the woman. Woman is the base of the everyday flourishing cosmos with scientific and technological innovations. Almost all the activities of this global world revolve around the word 'woman'. The garden of this whole world looks beautiful because it is cared by a very hardworking and enduring gardener in the form of woman who spends most of her time in nourishing and caring this garden. Gone are days when women had to remain under veils and in the four walls of the houses. Now women have shown their existence to this global world by empowering themselves with knowledge, skill and hard work. There is no denying the

fact that in today's era there is no sphere of life where women have not shown their talent and remarkable performance.

The human being needs a wide range of nutrients to keep him healthy and active and he must derive most of these nutrients through his daily diet. Several of these nutrients are known to be quite essential since deficiencies due to inadequate intake of these nutrients are often encountered in the human subjects. The chief source of nutrient is food. It provides energy to keep the body warm and muscles active, supplies building material needed for growth and development. Compensating for the loss incurred by daily wear and tear, food also serves as the protective function.

Nutrition is one of the basic requirements of any living organism to grow and sustains life. But the quality and quantity of nutrients necessary to keep an organism in good health during its life span vary not only with age of the organism but also with many other factors. Any major deviation in quantity from its requirements can affect the growth and life span in a number of ways.

Nutrition is the study of food and nutrients and their effect on health, growth and development of the individual. It is the sum total of the processes involved in the taking in and the utilization of food substances by which growth, repair and maintenance of the body are accomplished (**Jean Bogert, 1956**).

#### **MEASUREMENT OF PSYCHO- SOCIAL ASPECTS, HEALTH STYLE AND NUTRITIONAL STATUS BETWEEN RESIDENTIAL AND NON-RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY CAMPUS**

The table 4.1 to 4.5 illustrates the overall mean value and standard deviation for all the residential girls' students of Panjab University (N=200) of the study. The objective of the current study was to measure the four dimensions of psycho-social aspects, i.e.; family problems, college problems, social problems, personal problems and over-all psycho-social problems, seven areas of health style and nutritional status between residential and non-residential girls' students of Panjab University campus. For this purpose, descriptive statistics were computed like mean scores, standards deviation, skewness, kurtosis and minimum & maximum of the scores of all the sub-variables under study. From the results of the study, it was concluded that the data were normally

distributed as the mean was nearer to each other and there was less deviation. The values skewness and kurtosis also proved that the data had normal distribution as in most of the dimensions, Ku values were close to 0, and skewness values are also close to zero and hence, the data is approximately normally distributed. It is more likely that observations are concentrated around mean.

The tables 4.1 to 4.2 revealed that the mean of overall psycho-social problems was the highest among all. The table also pointed out that the social problems among the residential girls' as well as non-residential girls' students of Panjab University campus had the least mean value. Whereas, the tables 4.3 to 4.4 revealed that in case of health style variable; the social health has the maximum mean and standard deviation i.e.,  $M=32.61$  and  $SD= 5.25$  followed by spiritual health problems with mean  $M=32.15$  and  $SD.= 5.87$ . The Intellectual health and social health have the mean  $M=30.77$  and  $M=31.08$  respectively. There is not much difference in the mean value of emotional and environmental health problems. Physical health has the minimum mean among all health style sub-variables. The table 4.5 revealed that the mean score among the residential and non-residential girls' students with regard to the variable nutritional status was found out to be  $M=2456.40$  and standard deviation  $SD=371.04$  which is almost same in both the group.

#### **COMPARISON OF PSYCHO-SOCIAL PROBLEMS BETWEEN RESIDENTIAL AND NON-RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY CHANDIGARH**

Another objective of the study was to make comparison between residential and non-residential girls' students of Panjab University campus on the sub-variable of psycho-social aspects; family problems, college problems, social problems, personal problems and over-all psycho-social problems. The results of t-value calculated revealed that no significant differences were found between residential and non-residential girls' students of Panjab University campus on almost all the sub-variables as the t-values were found to be statistically non-significant (**tables- 4.7 to 4.10**), except in the case of family problems (**table-4.6**) at 0.05 level of significance. Here the mean value of all psycho-social problems is more in non-residential girls' students of Panjab University in comparison to residential girl' students stipulating the problems

related to family, college, social, personal and over-all psycho social problem were observed more in non-residential girl' students than their counterpart residential girl' students, except social problems where the mean value is marginally higher in residential girls' students than their counterpart.

The results of the study indicated that there were non-significant differences in college, social, personal and over-all psycho social problems. Moreover, in the family problems there were significant differences found among the residential and non-residential girls' students of Panjab University Chandigarh. The present study results have been in line with the study of **Var et al. (2011)**. They reported that the male and female groups differed significantly only in personal problems. Significant difference was found among all the three levels of self-esteem and their personal problems and family problems. Overall findings suggest that rural adolescent suffer more problems than urban adolescents and they highlight the need of community based mental health. The present study also supports (**vishwas, Var, Paul, M.A, Kumar, P& Shah. 2011**). These studies in the field of educational institutions regarding the psycho-social problems of the students, most of them are focusing that there is a great need to emphasis on this issue. The present study also supported by **Pratt HD (2000)** where he revealed that approximately 20% of the adolescents have some type of psychosocial problems that impair their ability to function. Adolescents are vulnerable to a psychological dysfunction when they suffer physical injuries, psychological trauma, or major changes in their environment, especially in the absence of strong support systems. The term 'psychosocial' refers to the interplay between the biological, physiological, emotional, cognitive, social and environmental and the maturational factors. Each of these factors should be considered when the problems and the needs of the adolescents are evaluated.

## **COMPARISON OF HEALTH STYLE BETWEEN RESIDENTIAL AND NON-RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY CHANDIGARH**

One of the objectives of the study is to find out the differences in all the seven areas of health style i.e. physical health, emotional health, environmental health,

spiritual health, intellectual health, social health and occupational health between residential and non-residential girls' students of Panjab University campus.

The analysis of the table depicted that mean value of physical health for residential and non-residential girl' students is almost same, while, mean of emotional, environmental, spiritual, intellectual, social and occupational health problems is higher in residential girls' students as comparison to non-residential girl students. The t-value shows the significance difference between residential and non-residential girls' students for the spiritual and occupational health problems at 0.05 level of significance. (**tables 4.14 and 4.17**). There was no significant difference between residential and non-residential girls' students for the physical, emotional, environmental, intellectual and social health problems. The present study results were supported by **Amariand (2015)** advocated that the majority of college students at Kuwait University conduct a moderate healthy lifestyle. It was found that a high percentage of the students are unaware about the importance of taking the routine physical test and blood test at least every six months, to check if they have any medical problem. College students do not take into account the seriousness of their health behaviors. The present study further supported by another study conducted by **Nasir M. Younis (2014)**, his study was aimed to assess of Healthy lifestyle habits among Mosul University Students and to examine relationship between the University student's characteristics and healthy lifestyles habits. He concluded that the results are accepted concerning healthy lifestyle habit among Mosul University. After completing this survey, the researcher found that a lot of University students had a big problem of their healthy lifestyle habits, especially eating habits such as they skip breakfast, eat snacks and drink tea a lot.

#### **COMPARISON OF NUTRITIONAL STATUS BETWEEN RESIDENTIAL AND NON-RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY CHANDIGARH**

One of the objectives of the study is to find out the differences in all the seven areas of nutritional status between residential and non-residential girls' students of Panjab University campus. The results ascertained that the residential girls' students had more mean value for nutritional status in comparison to non-residential girls' students. However, the t-test test implies that there is no significant difference between

residential and non-residential girls' students for the nutritional status at 0.05 level of significance as p-value is greater than 0.05 level. The present study findings have been in line with the study conducted by **K. Mallikharjuna Rao et al. (2017)**. They conducted the study to find out the nutritional status of tribal and rural population. For this purpose, the data collected during 1998-99 and 2005-06 on diet and nutritional status of tribal and rural population respectively in nine States of India was utilized. They found that the intake of all the foods except for other vegetables and roots and tubers was lower than the suggested level among rural as well as tribal women.

### **RELATIONSHIP BETWEEN NUTRITIONAL STATUS AND PSYCHO-SOCIAL VARIABLES OF RESIDENTIAL AND NON-RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY**

The objective of the study was to establish relationship between Psycho-Social Problems and nutritional status for the girls' students of Panjab University. For this purpose, Pearson correlation coefficient was computed to analyze the relationship between Psycho-Social Problems and nutritional status for the girls' students of Panjab University **were very low however, some of them were significant**. It means that nutritional status had no relationship with psycho-social aspects. But on the other hand, family problem and college problem had positive and significant relationship with others, as all the co-efficient of correlations were found to be positive and significant at 0.01 level. The co-efficient of correlations ranged between .162 with social problem and .813 with over-all psycho-social (family) problems. The highest co-efficient correlation was between college problems and personal problems ( $r=.633$ ) and the lowest one was between family problems and social problems ( $r=0.11$ ).

### **RELATIONSHIP BETWEEN NUTRITIONAL STATUS AND HEALTH STYLE OF RESIDENTIAL AND NON-RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY**

The objective of the study was to establish relationship between nutritional status and health style for the girls' students of Panjab University. For this purpose, **Pearson** correlation coefficient was computed to analyze the relationship between health style and nutritional status for the girls' students of Panjab University.

The result of the study shows that all the co-efficient of correlation between nutritional status and seven areas of health style of residential and non-residential girls' students of Panjab University Chandigarh **were very low however, some of them were significant**. It also means that nutritional status had no relationship with health style. But on the other hand, except, nutritional status all the areas of health style had positive and significant relationship with others, as all the co-efficient Of correlations were found to be positive and significant at 0.01 level. The co-efficient of correlations ranged between ( $r = .539$ ) with physical health and ( $r = .795$ ) **with spiritual health**. The highest co-efficient correlation was between intellectual health and social health ( $r = .633$ ) and the lowest one was between physical health and occupational health ( $r = 0.11$ ).

#### **RELATIONSHIP BETWEEN PSYCHO-SOCIAL VARIABLES AND HEALTH STYLE OF RESIDENTIAL AND NON-RESIDENTIAL GIRLS' STUDENTS OF PANJAB UNIVERSITY**

The objective of the study was to established relationship between health style and Psycho-Social Problems for the girls' students of Panjab University. For this purpose, Pearson correlation coefficient was computed to analyze the relationship between Psycho-Social Problems and health style for the girls' students of Panjab University.

The results show that all the co-efficient of correlation between psycho-social aspects and seven areas of health style of residential and non-residential girls' students of Panjab University Chandigarh. Psycho-social **aspects were moderately negatively related to health style ( $r = -.417$ )**.

It also revealed from the table that the Psycho-social problems is statistically have negative relationship with health style as the p value is less than 0.01 level of Significance. When the psycho-social problem increases than health style is decreases.

#### **TESTING OF HYPOTHESES**

**H 01** stated that "There would be no significant difference between residential and non-residential Panjab University girls' students on the variable psycho-social aspects". The obtained result revealed that there is no significant difference

between residential and non-residential Panjab University girls' students on the variable psycho-social aspects. So according to the existing outcomes, the hypothesis is accepted. However, the obtained result revealed that there is significant difference between residential and non-residential Panjab University girls' students on the sub- variable of psycho-social aspects i.e. family problem. At this point, according to the existing result, hypothesis is rejected.

**H 02** stated that "There would be no relation between residential and non-residential Panjab University girls' students on the variable health status. The obtained result revealed that there is significant difference between residential and non-residential Panjab University girls' students on the sub- variable of health style (i.e. spiritual & occupational health). At this point, according to the existing result, hypothesis is rejected. However, obtained result revealed that there is no significant difference found between residential and non-residential Panjab University girls' students on the sub- variable of health style (physical health, social health, emotional. environmental & intellectual health). At this point, according to the existing result, hypothesis is accepted.

**H 03** stated that "there would be no significant difference between residential and non-residential Panjab University girls' students on the variable nutritional status. The obtained result revealed that there is no significant difference between residential and non-residential Panjab University girls' students on the variable nutritional status. At this point, according to the existing result, hypothesis is accepted.

**H 04** stated that "there would be no significant difference of psycho- social aspects in relation to health style of residential and non-residential Panjab University girls' students." The obtained results revealed that no significant relationship has been found between health status and psycho- social aspects of Panjab University girls' students. So according to the existing results, hypothesis H 04 is accepted. However, the psycho-social sub-variables i.e. family problem and college problem had positive and significant relationship with others, as all the coefficient of correlations were found to be positive and significant at 0.01 level. At this point, according to the existing result, hypothesis is rejected.

**H 05** acknowledged that “there would be no significant difference of health style in relation to nutritional status of residential and non-residential Panjab University girls’ students.” The obtained results revealed that no significant relationship has been found between nutritional status and health style. But on the other hand except, nutritional status all the areas of health style had positive and significant relationship with each other’s, as all the co-efficient of correlations were found to be positive and significant at 0.01 level. So according to the existing results, hypothesis **H 05** is accepted.

**H 06** affirmed that there would be no relation between residential and non-residential Panjab University girls’ students on the variable health style and psycho-social aspects. But the results revealed that the psycho-social aspects were moderately negatively related to health style ( $r = -.417$ ). So we can say that hypothesis **H 06** is rejected.

## CHAPTER –V

### SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### SUMMARY

Woman is very beautifully defined as the significant ‘other’, meaning that if man is the important creature of this world, so is the woman. Woman is the base of the everyday flourishing cosmos with scientific and technological innovations. Almost all the activities of this global world revolve around the word ‘woman’. The garden of this whole world looks beautiful because it is cared by a very hardworking and enduring gardener in the form of woman who spends most of her time in nourishing and caring this garden. Gone are days when women had to remain under veils and in the four walls of the houses. Now women have shown their existence to this global world by empowering themselves with knowledge, skill and hard work. There is no denying the fact that in today’s era there is no sphere of life where women have not shown their talent and remarkable performance. If any group of this society has shown its drastic and recognizable progress in this dynamic world, it is the women. Modern woman not only breaks free from the custody of the man but also travel in space to show her potential and caliber to this world.

Women are almost one half of the world’s population having enormous potential and caliber being utilized for the economic, social and human resource development of the country. In today’s era women have to be more committed and responsible because of rapid social changes and fast changing urbanization process. But the history of women is not linear, nor does it have a well-organized structure. Women witnessed a series of ups and downs, having more pitfalls in history. In fact, the history of women is closely interwoven with culture, society and above all, with the lives of the people. Untangling the threads of history of women always remained a sphere of interest for many historians and thinkers. In India, during the Vedic and Mughal periods, women enjoyed greater freedom in the society and family. All important decisions of the family were taken only in consultation with 2 women. Women had great freedom of mobility. But in later days they were gradually

suppressed and finally neglected by the society as well as by the family. They were restricted from going out of the houses and not permitted to attend social functions, religious ceremonies, political meetings, etc. Modern world is also not a bed of roses for women. They have been facing enormous physiological, psychological, social, economic, political and cultural problems.

Psychosocial aspect assessed in this study includes four variables; family problems, college/school problems, personal problems and social problems. The term 'psycho-social' was first used by psychologist **Erik Erikson (1959)** in his description of the stages of psychosocial development. It means, it relates to many phases of individual's life. The individual needs not be fully aware of this relationship with her or his environment. Problems that occur in one's psychosocial functioning can be referred to as "psychosocial dysfunction" or "psychosocial morbidity." This refers to the lack of development or diverse atrophy of the psychosocial self, often occurring alongside other dysfunctions that may be physical, emotional, or cognitive in nature.

The health status of women is one of the vital elements in the assessment of quality of life of the people. Health related indicators like maternal mortality rates, infant mortality rates, life expectancy, fertility rates along with nutritional status, reproductive health of women point towards women's well-being and physical status. Above all, women's health plays an important role in determining the health of the future population as it has an inter-generational effect.

The nutritional status of women, especially that of rural women and women belonging to lower socio-economic status, is far from what is desired. The low nutritional status of women in India applies to all the age groups but is more acute in the case of young girls and pregnant mothers. While in the lowest socio-economic groups the low nutritional status of women is mainly due to poverty, in the middle-income groups it is aggravated by general neglect and is the indirect result of stronger gender discrimination.

The sample of the study consisted of two hundred (N=200) under-graduate and post-graduate girls' students of Panjab University Chandigarh Campus who were residential and non-residential students. The random sampling method was applied for

the selection the female subjects between the age of 17-23 years. The sample mainly consisted of two type population i.e. residential and non-residential girls' students. Only those students were selected who are studying in the Panjab University Campus. A survey type study would be designed to establish and to assess the psycho-social aspects, health style and nutritional status of Panjab University girls' students to highlight any differences between students living at and away from home and to examine aspects of their health and nutritional status. The study would be a descriptive type in which questionnaire were used as the tools.

A total of three questionnaires were employed for the collection of the data; 1. To measure Psycho-social aspects, "Youth Problem inventory" developed by Dr. (Mrs.) Mithilesh Verma (2010) was used. 2. To measure Health Style, "Health Style: A Self-Test" constructed by United State Development of health and human service (USDHHS, 1999) was administered. 3. To measure Nutritional status, "dietary intake 24-hour recalls method (Swapna, 1995 and Livingstone, 2004) was applied.

The data thus collected was evaluated by applying (SPSS) version 16.0 software. The data had been presented as descriptive statistics such as mean, standard deviation, standard error of mean, minimum value and maximum value. Student's T-Test, Karl Pearson Correlation and linear regression. Karl Pearson product moment co-efficient of correlation would be computed to assess the relationship of psycho-social aspects, health and nutritional status of Panjab University girls' students. The level of Significance was set at 0.05 to test the hypotheses.

## **FINDINGS OF THE STUDY**

Keeping in mind the limitation of the study, the following findings have been made in accordance to the outcomes of the present study.

### **1. Findings related to the psycho-social problems between residential and non-residential girls' students of Panjab University Chandigarh**

The mean value of all psycho-social problems is more in non-residential girls' students of Panjab University in comparison to residential girls' students stipulating the problems related to family, college, social, personal and over-all psycho social problems were observed more in non-residential girls'

students than their counterpart residential girl' students, except social problems where the mean value is marginally higher in residential girls' students than their counterpart. The results of the study indicated that there were non-significant differences in college, social, personal and over-all psycho-social problems tables (4.7 to 4.10) Moreover, in the sub- variable of psycho-social aspects i.e. family problems ( $p > 0.05$ ) table (4.6) there were significant differences found among the residential and non-residential girls' students of Panjab University Chandigarh.

2. **Findings related to the health style between residential and non-residential girls' students of Panjab University Chandigarh**

The t-value shows the significance difference found between residential and non-residential girls' students for the sub-variables of health style i.e. total health style, Spiritual health and Occupational health ( $p > 0.05$ ) table (4.14, 4.17 & 4.18).

However, there was no significant difference between residential and non-residential girls' students for the physical, emotional, environmental, intellectual and social health tables (4.11 to 4.13, 4.15 & 4.16) respectively.

3. **Findings related to the nutritional status between residential and non-residential girls' students of Panjab University Chandigarh**

The results ascertained that the residential girls' students had more mean value for nutritional status in comparison to non-residential girls' students. However, the t-test test implies that there is no significant difference between residential and non-residential girls' students for the nutritional status at 0.05 level of significance as p-value is greater than 0.05 level.

4. **Findings in respect with relationship between nutritional status and psycho-social variables of residential and non-residential girls' students of Panjab University**

The study could not find any relationship between psycho-social problems and nutritional status for the residential girls' students as well as non-residential girls' students of Panjab University as results showed there were **very low**

**significant relationship however, some of them were significant (table 4.20).** It means that nutritional status had no relationship with psycho-social aspects. But on the other hand, family problem and college problem had positive and significant relationship with others, as all the co-efficient Of correlations were found to be positive and significant at 0.01 level. The co-efficient of correlations ranged between .162 with social problem and .813 with over-all psycho-social (family) problems. The highest co-efficient correlation was between college problems and personal problems ( $r=.633$ ) and the lowest one was between family problems and social problems ( $r=0.11$ ).

**5. Findings in respect with relationship between nutritional status and health style of residential and non-residential girls' students of Panjab University**

The result of the study shows that all the co-efficient of correlation between nutritional status and seven areas of health style of residential and non-residential girls' students of Panjab University Chandigarh **were very low however, some of them were significant.** It also means that nutritional status had no relationship with health style. But on the other hand, except nutritional status all the areas of health style had positive and significant relationship with others, as all the co-efficient Of correlations were found to be positive and significant at 0.01 level. The co-efficient of correlations ranged between **.539 with physical health and .795 with spiritual health table (4.21).** The highest co-efficient correlation was between intellectual health and social health ( $r=.586$ ) and the lowest one was between physical health and occupational health ( $r=0.217$ ).

**6. Findings in respect with relationship between Psycho social aspects and Health style of Panjab University girls' students**

The results show that all the co-efficient of correlation between psycho-social aspects and seven areas of health style of residential and non-residential girls' students of Panjab University Chandigarh. Psycho-social aspects **were moderately negatively related to health style ( $r= -.417$ ) (table 4.22).** It also

revealed that the Psycho-social problems is statistically have negative relationship with health style as the p value is less than 0.01 level of Significance. When the psycho-social problem increases than health style is decreases.

## **CONCLUSIONS**

The finding of the present study leads to the following conclusions:

1. The above results concluded that the mean value of all psycho-social problems is more in non-residential girls' students of Panjab University in comparison to residential girls' students stipulating the problems related to family, college, social, personal and over-all psycho social problems were observed more in non-residential girls' students than their counterpart residential girls' students, except social problems, where the mean value is marginally higher in residential girls' students than their counterpart. This may be due to the reasons that students' life during their college periods is very important time for the students has most of them in their late adolescent age, getting physically mature and psychologically unstable. They are undergoing various kinds of stresses to study, to complete their tasks and to participate in various activities in the campus because of the imbalance between environment and demands.
2. From the results of the present study it was found that students are facing psycho-social problems such as family problems. However, there have not been any significant differences between residential and non-residential girls' students of Panjab University. Even though the problems are still there. So, it is very important to raises these issues in the University environment.
3. The above results concluded that the t-value shows the significance difference between residential and non-residential girls' students for the sub-variables of health style i.e. total health style, Spiritual health and Occupational health. This may be because students, during their academic terms, are spending many hours away from home and inevitably to change their eating habits. And moreover, students are frequently consuming their meals in the canteens and nearby food stalls.

4. However, there was no significant difference between residential and non-residential girls' students for the sub- variables of health style i.e. physical, emotional, environmental, intellectual and social health.
5. The above results ascertained that the residential girls' students had more mean value for nutritional status in comparison to non-residential girls' students. However, the t-test test implies that there is no significant difference between residential and non-residential girls' students for the nutritional status. The results suggested that lifestyle affect the dietary habits and could have important consequences for the health of University students. The University authorities must promote good eating habits and nutritional education programme have to be activated within the University campus.

### **RECOMMENDATIONS FOR THE FUTURE RESEARCH**

In the explanation of the findings of the present study the following recommendations can be made to the authorities, educationists and administrators of the institutions for making policies programmes for the students. This will enable to evaluate existing policies and approve further ones for all students at college and University levels who are residential and non-residential girls, students. Thus, for future research and in the light of the results and conclusion of the study.

The following recommendations have been made:

1. The future research should focus on interventions that help to overcoming psycho-social problems.
2. Similar study may be conducted on the students belonging to the different regions of country.
3. A comparative study can be done on psycho-social aspects, health style and nutritional status among male individual and female individual.
4. Similar study can be conducted by using longitudinal design for comparing male and female subjects on all variables used in the present study.
5. The study can be broadened by involving different type of population groups, sportsman & players etc.

6. It is also recommended to the Principals, head of the institutions and physical educationist at school levels and college levels to evaluate psycho-social aspects, health style and nutritional status time to time for development of their students.
7. To make the study more authentic and valid, the study may be repeated in large sample.
8. It is also recommended that the present study may be continual by selecting to rural and urban areas.
9. Some possible development of the present study and other studies of similar nature can be done to compare the data obtained in this present study with those found in Universities of other nations

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