INFLUENCE OF ACADEMIC STRESS, SPIRITUAL INTELLIGENCE AND LIFE SATISFACTION ON MENTAL HEALTH AMONG STUDENTS OF PROFESSIONAL AND NON-PROFESSIONAL COURSES

ABSTRACT
OF THE
THESIS
SUBMITTED FOR THE AWARD OF THE DEGREE OF
Doctor of Philosophy
IN
PSYCHOLOGY

BY
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UNDER THE SUPERVISION OF
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ABSTRACT

The study was planned to examine the influence of academic stress, spiritual intelligence and life satisfaction on mental health among the students of professional courses (M.B.B.S., B.Tech. and M.B.A.) and non-professional courses (B.A., B.Sc. and B.Com) and to ascertain the problems pertaining to stated above variables of both the streams of students. Some students may see this transition as positive experiences in their life and they might be exciting but some students might see it somewhat as negative and a kind of threat seem to be emanating from this type of changes. The graduate level students whether they are pursuing professional or non-professional courses have to experience varied level of stress related to their academic achievements. In this research endeavour the academic stress, spiritual intelligence and life satisfaction were independent (predictors) variables and mental health as dependent (criterion) variable.

First chapter of the thesis highlights the basic concepts and review of literature related to variables and background of this study. The research investigator of this study attempted to put in the best of efforts in presenting varied and explicit explanation of the concepts and theoretical background of each variable incorporating relevant studies supporting the same by scanning the available research inputs bearing direct / indirect relations with the topic of the research work done. Keeping in mind the objectives 4 research hypotheses were formulated and tested analyzing the obtained data.

Second chapter of the thesis deals with methodology of the study. In the present research the sample size was consist of 600 students pursuing for the degree of different professional and non professional courses and participants were drawn using purposive random sampling technique from different Faculties and Colleges of
Aligarh Muslim University, Aligarh. The samples were categorized into 6 sub-groups of two major categories of students viz. Professional courses students include (M.B.B.S., B.Tech. and M.B.A). Similarly non-professional courses students include (B.A., B. Sc and B.Com). Both professional and non professional courses students were categorized into equal numbers (100) in each group of students. Both male and female students were also included in the sample and the participants age ranged between 18-25 years (Mean=20.91 and SD=1.931). The tools used in this study were academic stress scale (ASS) which was developed by the present researchers Anjum S., and Khan, M.S. (2012), the life satisfaction scale developed by Warr et. al. (1979), spiritual intelligence self report inventory SISRI-24 was developed by David B. King (2008) and mental health checklist developed by Pramod Kumar (1992). Data obtained from the participants were analyzed by means of SPSS package of 16 version. In order to present the specific results the data was analyzed using Independent t-test to compare the groups of the students of two streams of professional and non-professional courses. One-way ANOVA was applied to see the impact of course-wise comparison on mental health of the students pursuing professional and non-professional courses (M.B.B.S., B. Tech., M.B.A., B.A., B.Sc. and B.Com). Stepwise multiple regression analysis was done to find out the academic stress, spiritual intelligence and its four dimensions Critical Existential Thinking (CET), Personal Meaning Production (PMP), Transcendental Awareness (TA) and Conscious state expansion (CSE) and life satisfaction predictors of mental health of the students of professional and non-professional courses. The product moment correlation coefficient was applied to determine the relationships of academic stress, spiritual intelligence, and life satisfaction with mental health.
In the third chapter, results and their discussion have been presented systematically in various tables. In the beginning of this chapter the descriptive statistics of overall sample of the students of both the streams including demographic variables are presented in Tables 4.1 to 4.5 to have a look at a glance on all the measures. In this part of thesis the results obtained by applying independent t-tests have been presented in various tables of the group of students of professional and non-professional courses and also high and low groups formed on the basis of Q1 and Q3 cut points to see the influence of high and low academic stress, spiritual intelligence, and life satisfaction on mental health and further the groups were compared in terms of gender, religious faith and family status (joint and nuclear). One-way ANOVA was applied to see the impact on mental health of the students pursuing professional and non-professional courses (M.B.B.S., B. Tech., M.B.A., B.A., B.Sc. and B.Com). In the second part of the thesis the results obtained by stepwise multiple regression analysis was done to find out the academic stress, spiritual intelligence and its four dimensions Critical Existential Thinking (CET), Personal Meaning Production (PMP), Transcendental Awareness (TA) and Conscious State Expansion (CSE) and life satisfaction predictors of mental health of the students of professional and non-professional courses and lastly the product moment correlation coefficient was applied to determine the relationships of academic stress, spiritual intelligence, and life satisfaction with mental health.

The obtained results revealed that:

- The professional and non-professional courses students were compared on measures of spiritual intelligence, academic stress, life satisfaction and mental health. It was found out that the professional courses students showed relatively low level of spiritual intelligence, academic stress and better mental health. In
contrast to it the non-professional courses students showed higher level of spiritual intelligence, academic stress and poor mental health.

- The M.B.B.S., B. Tech., M.B.A., B.A., B.sc and B.com students were compared on mental health. It was observed that M.B.B.S., M.B.A., B.sc and B. Tech students showed better mental health whereas B.A. and B.com students showed poor mental health as compared them on the basis of percentile of mental health checklist.

- The high and low spiritual group of students differed significantly in terms of their mental health. The mental health of high spiritual group of students was found better in comparison to low spiritual intelligence group of students.

- The high and low academic stress group of students differed significantly in terms of mental health. The mental health of high academic stress group of students was found poor than the group of students of low academic stress counterparts.

- The high and low life satisfaction group of students differed significantly in terms of mental health. The mental health of high life satisfaction group of students was found better than the low life satisfaction group of students.

- The life satisfaction appeared as a significant predictor variable of criterion variable (mental health) among professional courses students with the magnitude of 6.8% of variance.

- The life satisfaction appeared as a best significant predictor variable of criterion variable (mental health) among non-professional courses students with the magnitude of 17.2% of variance, academic stress appeared as second predictor variable of criterion variable (mental health) of non-professional courses students with the magnitude of 5.8% of variance and lastly spiritual intelligence
emerged as third strong predictor variable of criterion variable (mental health) of non-professional courses students with the magnitude of 1.1% of variance.

- Personal meaning production (PMP) appeared as the significant predictor of criterion variable (mental health) of the entire sample of the students with the magnitude of 3.5% of variance. Personal meaning production is one of the dimension of spiritual intelligence but other remaining dimensions such as critical existential thinking, transcendental awareness and conscious state expansion did not emerge as significant predictors of criterion variable (mental health) of the students.

- The significant positive relationship was found between spiritual intelligence and life satisfaction with 99% level of confidence for the students of professional courses.

- The significant negative relationship was found between academic stress and life satisfaction at .01 level of significance for the group of students of professional courses.

- The significant positive relationship was found between academic stress and mental health with 95% level of confidence for the group of students of professional courses.

- The significant positive relationship was found between life satisfaction and mental health with 99% level of confidence for the students of professional courses.

- The significant positive relationship was found between spiritual intelligence and life satisfaction at .01 level of significance for the students of non-professional courses.
• The significant positive relationship was found between spiritual intelligence and mental health with 99% level of confidence for the students of non-professional courses.

• The significant positive relationship was found between spiritual intelligence and mental health with .01 level of significance for the students of non-professional courses.

• The significant negative relationship was found between academic stress and life satisfaction with 99% level of confidence for the students of non-professional courses.

• The significant positive relationship was found between academic stress and mental health with 99% level of confidence for the students of non-professional courses.

• The significant positive relationship was found between life satisfaction and mental health with 99% level of confidence for the students of non-professional courses.

The fourth chapter incorporates conclusions, suggestions and implications based on the results of this study. An overview of the findings obtained clearly reveals that the professional courses students showed relatively low level of spiritual intelligence, academic stress and better mental health. In contrast to it the non-professional courses students showed higher level of spiritual intelligence, academic stress and poor mental health. Certain suggestions were given concerning to the mental health problems of the students. For further research it is suggested that the study can be replicated on cross-cultural samples, data can be collected from other Institutions/ Universities in India, the study can be conducted on the group of differently abled students and also the students of other courses.
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2014
Dedicated
To
Almighty Allah,
Beloved Parents
Mr. (Late) Haji Natthey Khan & Mrs. Haseen Begum &
Husband
(Dr. Iqbal Shah)
CANDIDATE'S DECLARATION

I, Shabana Anjum, Department of Psychology certify that the work embodied in this Ph.D. thesis is my own bonafide work carried out by me under the supervision of Prof. Mahmood S. Khan at Aligarh Muslim University, Aligarh. The matter embodied in this Ph.D. thesis has not been submitted for the award of any other degree.

I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and the body of the thesis. I further certify that I have not willfully lifted up some other's work, para, text, data, result, etc, reported in the journals, books, magazines, reports, dissertations, theses, etc., or available at web-sites and included them in this Ph.D. thesis and cited as my own work.

Dated 15-07-2014

Shabana Anjum
Enrolment no. CC-2438

CERTIFICATE FROM THE SUPERVISOR

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

Prof. Mahmood S. Khan
Department of Psychology
Aligarh Muslim University, Aligarh

(Signature of the Chairman of the Department with seal)
COURSE/COMPREHENSIVE EXAMINATION/PRE-SUBMISSION SEMINAR COMPLETION CERTIFICATE

This is to certify that Ms. Shabana Anjum Department of Psychology has satisfactorily completed the course work/comprehensive examination and pre-submission seminar requirement, which is part of her Ph.D. programme.

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CHAIRMAN
Department of Psychology
Aligarh Muslim University
ALIGARH
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Candidate's Name: MS. SHABANA ANJUM

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(Shabana Anjum)
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CHAPTER – 1

Introduction

&

Review of Literature
Background of the study

The students pursuing professional and non-professional courses in the universities and colleges undergo a mild to severe level of stress due to constant and excessive demands that are associated with the changes in the achievement of their academic goals of life. In this process, they have to leave their home, and also make decisions independently or with the pressure of their parent’s decisions and to strive hard in competing the new standards ahead. Some students may see this transition as positive experiences in their life and they might be exciting but some students may see it somewhat as negative and a kind of threat emanating from this kind of change. The graduate level students whether they are pursuing professional or non-professional courses seem to experience more stress related to their academic achievements. The experience of stress in human is universal, but it is also true that there seems to be marked individual differences that how stress is experienced and interpreted by a person. In fact stress has become unavoidable part of one’s life and it is associated with the major life events, daily hassles, and lifestyle changes.

Academic stress is a mental distress with respect to some apprehended frustration association with academic failure or even an awareness of the possibility of such failure (Gupta and Khan, 1987). In the context of school, academic stress means pervasive sense of urgency to learn many things which are related to or prescribed by the school (Shah, 1988). Academic stress is a product of combination of the academic related demands that if exceed to the adaptive resources available to an individual. It is widely acknowledged that the students academic achievement and academic ability largely depend on both internal as well as external factors such as proper study habits, intelligence, educational aspiration of self and parents, medium of instruction and so on. If these situations are not conducive to facilitate learning may lead to develop academic stress in them. The academic stress of different age group as studied by Zeidner (1992) reported that students appeared to show high level of stress by pressure originating from their course overload and academic evaluation procedures and least stressed by personal familiar and social factors. Clift and Thomas (1983) observed that the course work assignment was a major source of academic stress often keeping the students under continual examinations and evaluation put them in the
state of experiencing academic stress. Kahlon’s (1983) conducted a study and reported that lack of parental help, congenial examination system, living up to parental expectation, attitude of the teachers and fear of examination were the stress causing factors. Berg and Keinan’s (1986) observed and reported that imposing excessively high self expectation was the most potent stressor leading to academic stress. Shirom’s (1986) study revealed that examination related to stressors were found to be causing high level of academic stress followed by overload classroom assignments.

The term stress was first employed by Hans Selye in 1930 an endocrinologist in biological context he also emphasized its relevance in psychological context too and in the last few decades it gained more popularity and became a subject of study for all concerned including health professionals, organizational psychologists, counsellors, psychotherapist etc. so far its careful explanation is concerned stress refers to a condition and stressor to the stimulus causing it. It covers a wide range of phenomena, from mild irritation to drastic dysfunction that in long run cause physical and psychological health problems. He identified several signs or symptoms of stress-cognitive, emotional and physical or behavioral. Stress signs may be seen in the form of poor judgment, a general negative outlook, excessive worrying, moodiness, irritability, agitation, inability to relax, feeling lonely, isolated, depressed, feeling of aches/pains, diarrhoea, acute constipation, nausea, dizziness, chest pain, rapid heartbeat, eating too much, lack of appetite, too much sleeping/sleeplessness social withdrawal, procrastination, neglect of responsibilities, increased alcohol intake, excessive smoking, nicotine or drug consumption and nervous habits pacing about or nail biting and so on.

Cannon (1914) an eminent neurologist coined the term homeostasis and pointed out that the stressors disturb body’s equilibrium could be emotional as well as physical. On the basis of experiments conducted, he demonstrated the concept of “fight or flight” response that man and other animals share when threatened. In the face of these reactions there is release of powerful neurotransmitters from a part of the adrenal glands. In 1935, Cannon modified the use of the term stress to describe physical stimuli and used the term strain for organism’s response to the stressor. Some have described the term stress as the quality of stimulus (Dunbar, 1947), while other defined it as the quality of both stimulus and the response.
Stress has a fairly consistent meaning and was used in physics and biology. The concept of stress has its roots in medicine which is evident from the pioneering work of Hans Selye (1936) and later on it became relevant for social sciences. He extended his biological concept of stress in terms of “General Adaptation Syndrome” (GAS), a set of non specific reactions to various noxious environmental agents. As pointed out by him the General Adaptation Syndrome has three stages: stage-1, stage-2 and stage-3.

The ‘Alarm Reaction’ in which outside stressors mobilize the internal stress of the organism i.e. the defense mechanism becomes activated. ‘Resistance’ is the stage of maximum adaptation and hopefully successful return to equilibrium for the individual; if however, the defense does not work. When adaptive mechanism collapses that is called Exhaustion. Grinker (1953), defined stress “that the human organism is part of in-equilibrium with its environment, that its psychological processes assist in maintaining an internal equilibrium and that the psychological functioning of the organism is sensitive to both internal and external conditions”.

It is quite clear from the innovative research work of Selye that begins new avenues of research concerning to stress that provide a large body of knowledge where we find the explanation of the concept in diversified perspectives. In fact the word stress connotes different meanings to different people; therefore it was defined differently by researchers of various disciplines. To live and to experience stress is a universal phenomenon. Its diverse dimensions and ramifications make it one of the most fascinating concepts in the study of behavior. The pioneer researcher stated that “Stress is the spice of life” (Hans Selye, 1974), but the real problem arises when it grows out of all proportions and starts casting its shadow of pessimism on our lives. Lazarus and Launier (1978); Lazarus and Folkman, (1984) stated that “demands that tax or exceed the resources of the system or, to put it in slightly different way, demands to which, there are no readily available adaptive responses.” This perspective emphasizes on ‘coping appraisals’ and ‘coping responses’. Ivancevich and Matteson (1980) have compared it with sin. In their opinion, “both are short emotionally changed words used to refer to something that otherwise would take so many words to say”.

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Janis (1958) stated that stress as a reaction. Mason (1975) pointed out on the basis of literature review on stress pointed out that there is lack of general agreement over the definitions proposed by many researchers. Lazarus and Launier (1978) further said that each of the levels of stress analysis is partially independent and it refers to different conditions, concept and processes. Cox (1978) defined stress as a stimulus, a response, or the result of an interaction between the two, with the interaction described in terms of some imbalance between the person and environment.

Pestonjee and Singh (1987) stated that stress has been used a stimulus, response, as well as the interaction between the two. Lazarus and his associates (1980) were of the view that stress can be observed at the physiological, psychological and behavioral levels of analysis. From these explanation it becomes clear that, “as an ongoing process, affected by individual personality factors and environmental variables. The individual is consequently interacting with the environment and whether the stress is a benefit or harm to the individual’s cognitive appraisal of experiencing stress and the subsequent coping process”.

Antonousky (1979) viewed stress as evolving from exposure to stressors. Stressors could be anything as minor or major that irritates a person and makes him/her uncomfortable to be called stressors. The stressor that defines the type of stress from which a person is suffering may be from internal, external, hidden, obvious, and automatic. Internal stressors lie within oneself and it is self own reason for stress anything that cause stress in a personal internally he is an internal stressors. External stressors can be anything that cause stress outside owns body and his/her environment is external stressors. Some of stressors which cannot identify by the person himself or by the doctor are the hidden stressors. Experiencing a stress before deadline is quite obvious such stressors are indisputable and are known as obvious stressors. There are the stressors which our body itself react sometimes the person is not aware of them such stressors are called automatic stressors. Understanding the stressors is very important from the point of view research as well as identifying the problems of a person suffering from a stress. Stressors disturb the homeostasis therefore the stress is referred to the exposures to the stressors.
Marshall and Cooper (1979) pointed out that the word “stress” can be used to denote any of the three things (1) an excessive environmental force (2) the harm caused (3) the individual’s reaction in such a situation. Hammer and Organ (1978) defined stress as a state of circumstances under which an individual connotes respond adequately to environmental stimuli, or can so respond only at the cost of excessive wear and tear on the organism can be observed as chronic fatigue, tension, nervous breakdown, or loss of self esteem. Lazarus (1990) defined stress “as continually changing relationship between person and environment”. Lazarus (1993) also said stress is a subset of emotion. Levi (1996), stress is caused by multitude of demands (stressors), such as an inadequate fit between what we need and what we capable of, and what we demand for us. Saunders (1997), stated stress is an external pressures and tension is the internal pressures.

According to Pihulyk (2001), “stress is the body’s non specific response to any demand made upon a person”. As defined by Schermerhorn, Hunt and Osborn, (2005), “Stress as a state of tension experienced by individuals facing extraordinary demands, constraints, or opportunities”. From this explanation it becomes obvious that the stress is a response, emotional, cognitive, and physiological all at the same time. This means that stress affects your feelings, your thinking, and your body simultaneously.

The American College Health Association (2006) surveyed college students, and reported that academic stress was one of the greatest health obstacles of college students and it affected their academic performance. In this survey 97,375 college students participated out of which, 32% reported that academic stress had resulted in an incomplete i.e. a dropped course or a lower grade. Academic stress can be the ultimate career stopper. The key to avoid becoming a dropout, as a result of academic stress is to identify its sources which lead to academic stress.

Academic stress is conceptualized as a disturbance induced by student’s appraisal of academic stressors, is common in children and often leads to psychological and somatic distress (Lee & Larson, 2000; Lou & Chi, 2000). It is harmful for the students because they are the sufferer and it is usually caused by the environmental demands which might be perceived as a threat and if the students is in the state as uncertainty with his or her psychological, emotional, behavioral and
physical abilities to deal with it. There may be several situations which might be stressful for the student like negative consequences of failures, future life, too much homework, cutthroat competition, peer group pressure, parent's pressure etc. In 21st century in India the world is changing very rapidly and everyone is surviving with very fast pace. Academic stress is a major problem for the students in general and every student is suffering from academic problems as they face are examination stress, disinterest in attending classes and inability to understand the subject. Examination stress is the feeling of anxiety or apprehension over one’s performance in the exams which seems to put the students to perform well to the best of their abilities in exams. The students who recognize stress as a negative tension fail to realize that stress can generate a positive reaction to a stimulus too. The positive reaction of stress can energize and drive the individuals to achieve and to testify their potential to its fullest strength. Stress can be a positive aspect of learning if students experience stress as a challenge can exhibit an increased capacity to learn (Roberts & White, 1989). Many experiences distress rather than challenge, which can lead students to feel threatened and helpless. Various researches conducted on academic stress on student samples and identified that stressors may be seen as too many assignments, competition with other students, failures, lack of pocket money (Fairbrother & Warn, 2003), poor relationships with other students or lecturers, family or problems at home. University level stressors such as overcrowded lecture halls, (Ongori, 2007; Awino & Agolla, 2008), semester system, and inadequate resources to perform academic work (Erkutlu & Chafra 2006). When an individual is unable to do his or her work in an organized way then they are less able to cope up and they become susceptible to suffer from stress related health problems.

The pressure to perform well in the examination or the test and time allocated makes academic environment very stressful (Erkutlu & Chafra, 2006; Poly chronopoulou & Divaris, 2005; Misra & McKeen, 2000). This is likely to affect the social relations both within the University and outside (Fairbrother & Warn, 2004) then there is conflict between the social aspects of life of an individual, this does not only affect the social relations within or outside the University, but also affects the person's life in terms of commitment in achieving the goals. Knowing the causes of students stress will make the University administrator to know how to monitor and control the stress factors that are responsible for the students stress. (Ornelas &
Kleiner, 2003; Jaramillo, Nixon, & Sams, 2005; Verment & Steesma, 2005; Ongori, 2007; Topper, 2007; Ongori & Agolla, 2008; Agolla, 2009). In the light of these researches the identified symptoms causing academic stress are poor work performance, poor interpersonal relationship, inadequate or lack of resources, inadequate time to perform particular assignments, poor working conditions, overcrowded work situations, excessive paperwork, and many others. Hence, these factors have been found to be responsible for academic stress, it is worth nothing that in order to minimize the stress among students, it is the responsibility of the University administration to develop appropriate strategies that will enable to detect in advance the symptoms and causes of academic stress. Most of the researcher argues that academic stress is not gained much attention because most scholars were preoccupied with the conventional work related stress as opposed to student academic stress. The outcome associated with stress such as suicide, violence, and drug abuse among others have been witnessed in the institution often, and are worth paying attention too. Stress poses a great threat to quality of life for students (Danna & Griffin, 1999; Dyck, 2001). Students interact amongst themselves as well as with their lecturers, therefore unduly stressed and unhappy students will reflect this in the process of the engagement that may result in conflict (Ongori, 2007; Awino & Agolla, 2008). Finally, university has moral duty to protect academic environment by adopting measures that reduce students’ exposure to situations where stress may become a problem.

Academic stress pervades the life of students, and tends to adversely affect the mental and physical health, and their ability to perform schoolwork effectively (Clark & Ricker, 1986; Felston & Wilcox, 1992). Stress is associated with academic activities and linked to various negative outcomes such as poor health (Greenberger, 1981; Lesko & Summerfield, 1989), depression (Aldwin & Greenberger, 1987), and poor academic performance (Clark & Reiker, 1986; Linn & Zeppa, 1984). Lesko Summerfield (1989) found a significant positive correlation between the incidence of illness and the number of exams and assignments. So, (Aldwin & Greenberger, 1987) showed that the perceived academic stress was related to anxiety and depression in college students. Gender differences also influences the student’s perception and reaction to academic stressors (Misra et al., 2000). (Hyde & Plant, 1995; Milkie & Thoits, 1993) reported that female students more often reported letting out their
feelings, whereas men more often report controlling their emotions, accepting the problem, not thinking about the situation, and engaging in problem-solving efforts and coping styles to stressors also differ by gender. When compared at similar levels of stress, women exhibit stress more overtly than males (Hyde & Plant, 1995; Thomas & Williams, 1991).

College students, is a special group particularly prone to experience stress more often (D'Zurilla & Sheedy, 1991) due to the transitional nature of college life (Towbes & Cohen, 1996). They face difficulty to adjust to being away from home for the first time, have to maintain high level of academic achievement, and adjust to a new social environment. Stress occurs with the interaction between stressors and the individual's perception and reaction to those stressors (Romano, 1992). The amount of stress being experienced may be influenced by the individual's ability to effectively cope with stressful events or situations (D'Zurilla & Sheedy, 1991). If stress is not dealt with effectively, feelings of loneliness and nervousness, as well as sleeplessness and excessive worrying may result (Wright, 1967). It is important to consider by the researchers and undertake that the stress intervention programs be designed to address stress of college students. While designing effective interventions the stressors specific to college students must be determined (Wright, 1967). The dynamic relationship between the person and environment in stress perception and reaction is especially magnified in college students. The problems and situations encountered by college students may differ from those faced by their nonstudent peers (Hirsch & Ellis, 1996). The environment where college students live is quite different. While jobs outside of the University setting involve their own sources of stress, such as evaluation by superiors and striving for goals, the continuous evaluation that college students are subjected to, such as weekly tests and papers, is one which is not often seen by non-students (Wright, 1964). The pressure to earn good grades and to earn a degree is very high (Hirsch & Ellis, 1996). Earning high amount is not only the source of stress for college students. Other potential sources of stress include excessive homework, unclear assignments, and uncomfortable classrooms (Kohn & Frazer, 1986). In addition to academic requirements, relations with the faculty members and time pressures may also be sources of stress (Sgan-Cohen & Lowental, 1988). Relationships with family and friends, eating and sleeping habits, and loneliness may affect some students adversely (Wright, 1967). The assessment of academic stress
levels in college students is an important topic for researchers they examined. (Towbes & Cohen, 1996), conducted college chronic life stress survey in which they focused on the frequency of chronic stress in the lives of college students. They evaluated these stressors in relation to how many times a student had to deal with them on a weekly basis. They found that in regard to chronic stress, first-year students scored higher than other students. Similar studies also examined the sources of stress among both undergraduate and graduate students (Gadzella & Rocha-Singh, 1994). While many specific events and situations have been implicated as stressors for college students, more research is needed to investigate the nature of these stressors for college students, and which stressors are most prevalent in college students lives. It is unclear whether most stressors result from interpersonal relationships or academics. In addition, research is needed to clarify whether these stressors are mostly daily hassles or major live events.

Stress is experienced as a part of everyday activities among students which has profound impact on their ability to cope with college life (Dusselier, Dunn, Wang, Shelly & Whalen, 2005; Greenberg, 1993). Stress negatively affects on individual’s health and academic performance (Campbell & Sevenson, 1992; Misra, Mckean, West & Russo, 2000). The primary aim of the studies of theses researchers was to assess the exposure of different stressors and the outcome of stress among undergraduates at different levels of education. These studies also provide some key insight to assist University administrators in identifying potential academic stress behaviours and the sources of stress which are prevalent and these studies also outlines appropriate immediate intervention to prevent any further negative consequences. It was observed that academic stress is associated with a variety of health outcomes, including depression and physical illness.

Academic stress and related studies

Studies reviewed on academic stress reveals that a number of studies reported relationship between stress and poor academic performance (Clark & Rieker, 1986; Linn & Zeppa, 1984; Struthers, Perry & Menec, 2000). Felsten & Wilcox (1992) showed that the significant negative correlation between the stress levels of college students and their academic performance. Cole & Fernando (2011) studied a socio-cognitive motivational diagnostic framework to determine students’ academic stress.
They also reported that students in higher education are under academic and non-academic pressure. The result shows that the pressure does not happen in isolation and that there is a tension between the balance of a student's family, social and employment life with their academic life. The disruption of the balance was recognized by the student being unavailable to participate in academic activities such as lectures, workshops, group work and missing deadlines. The socio-cognitive motivational behavioural diagnostic framework or socio-cognitive frame work gives an indication of academic coping ability in positive or negative terms.

Eric (1980) studied the effects of varying levels of social interaction of 22 1st-year graduate student's reported the stressful events. The result indicated inverse relationship between frequency of social interactions with peers and faculty during the 1st 10 weeks and the incidence of stressful life events and the number of reported physical and psychological disturbances throughout the next 6 month. The quality of faculty–student interactions also emerged as an important factor that moderated the negative consequences of the major life changes associated with beginning among students.

Firth (1986) conducted a study to assess the level of stress of medical students in their fourth year of three British universities. Mean scores were found higher than those in of the other groups of general population, and the estimated prevalence of emotional disturbance was 31.2%, and proportion was similar to that reported in medical students in the United States. There were no significant differences in prevalence or in mean scores of stress between the sexes. Twelve (4%) students reported high intake of alcohol, and almost half of the students had increased their intake in the past two years. The four categories most commonly cited in answers to an open ended question on recent stressful events were talking to psychiatric patients, effects on personal life, presenting cases, and dealing with death and suffering. Relationships with consultants raised the strongest negative feelings, with 102 (34%) students finding these particularly stressful.

D'Zurilla, Sheedy, and Collette (1991) examined the relationship between social problem-solving ability and later psychological stress in college students during the 1st semester of the academic year. The finding revealed that the general problem-solving ability was negatively related to later stress, even after prior stress level and
number of life problems were controlled. More specific analyses indicated that the problem orientation was a better predictor of stress than their problem-solving skills. Results also showed that in terms of the possible stress-reducing effects of perceived control and successful problem resolution.

Alvan, Belgrave, and Zea (1996) examined the role of social support and stress on adjustment among Latino college students. They reported negative relationship between stress and adjustment in bivariate analyses indicating that exposure to stress interferes with adequate adjustment. However, stress did not significantly found to influence adjustment when included with social support in multivariate analyses. Emotional support was found associated with better overall and academic adjustments and less stress than instrumental support. There was a significant negative relationship between support from friend/other and stress. Finally, support from friend/other was negatively correlated with stress from exposure to racism.

Reda (1994) investigated the sources and levels of stress in relation to locus of control and self esteem in university students. The sample consist of 675 (202 males and 473 females) second year undergraduate students. The result shows that the examination results were the highest causes of stress in students and they found out that the 77.6% and 10.4% of the students fall into the moderate and serious stress categories, respectively and there was significant difference between females and males students in both academic and life stress and female students experienced more stressed than males. Results also indicated a significant positive correlation between locus of control and academic stress. A significant negative correlation between self esteem and both academic and life stress emerged indicating that students with high self esteem are less stressed than are those with low.

Major academic stressors among college students were identified are tests, grade competition, time demands, professor and classroom environment, career and future success (Murphy and Archer, 1996).

Wilson, Meyers, and Gilbert (1999) investigated the degree of anxiety and stress experienced by medical students and correlated with examination performance. Results supported that for medical schools, anxiety and stress levels were high. It was found that stress were generally high for both male and female students in the
academic areas but women reported to experience severe to very severe stress more frequently than men. In the areas of personal and environmental factors, the stress scores were similar between genders (mild to moderate) and females tended to report high scores with regard to relationship issues.

Misra (2000) examined the perception of academic stress among male and female college students and to compare faculty members and students perceptions of student's academic stress. The sample consisted of 249 students and 67 faculty members from the Midwestern University. The result shows that the faculty members perceived the students to perceived-to experience a higher level of stress and to display reactions to stressors more frequently than the students actually perceived.

Misra, McKeans, West and Russo (2000) reported that academic stress among college students varies across gender in every year in school. Specifically freshmen and sophomore had higher academic stress levels than juniors and seniors. Females reported higher academic stress than male counterparts. Interestingly, this study reported the difference in the levels of academic stress perceived by students and their faculty. Faculty member’s perceptions of student academic stress and reaction to stressors were higher than student’s self perception. Because faculty members most often observe students during class time, the result of this observation could imply the students experience their largest amount of stress during class hours.

Hudd et al., (2000) reported that association of stress with the type of institution the students attend (e.g. public, private, undergraduate, professional or graduate).

Liselotte, Matthew and Tait (2001) systematically reviewed on depression, anxiety, and burnout among U.S. and Canadian medical students. They identified and examined 40 articles on medical student psychological distress (i.e., depression, anxiety, burnout, and related mental health problems). As reported no any study on burnout among medical students was found at that time. The studies suggest a high prevalence of depression and anxiety among medical students, with levels of overall psychological distress consistently higher than in the general population and age-matched peers by the later years of training. Overall, the studies suggest psychological distress may be higher among female students.
Acharya (2003) conducted a study to investigate the perceived sources of stress and the role of parents in its etiology among 256 dental students in a private dental school in India. The main source of stress were found to be fear of facing parents after failure, full loaded day, and fear of failing course or year. The results showed that the students who joined dentistry due to parental pressure showed greater stress than those who joined their own choice and male students experienced greater stress than the females.

Misra and Castillo (2004) compared the academic stressors and reactions to stressors between American and International students using Gadzella’s Life Stress Inventor (B. M. Gadzella, 1991). The sample consisted of 392 international and American students from 2 Midwestern universities. American students reported higher self-imposed stressors and greater behavioral reactions to stressors than International students and respondent’s status (American or International) and interaction of status and stressors emerged as the 2 strongest predictors of their behavioral, emotional, physiological, and cognitive reaction to stressors. Five stressors attained statistical significance in the regression model. The findings emphasize the need to recognize cultural differences in stress management.

Chambel and Curral (2005) examined the relationship between work characteristics, student well-being and performance of university students (N=825). The finding reveals that the work contexts, student satisfaction with academic life and anxiety/depression levels are strongly dependent on their perceptions of work characteristics. Levels of satisfaction have a direct impact on student performance and mediate the relationship between academic work control and performance.

Dahlin, Joneborg and Runeson (2005) assessed the exposure of different stressors and the prevalence of depression among medical students of different levels of education. The results show that the 1st year students gave high ratings to the workload and lack of feedback stressors, 3rd year students gave high ratings to ‘Worries about future endurance/competence’ and ‘Pedagogical shortcomings’. In 6th year both the latter factors were rated highly, but 6th year students also gave higher ratings than the 2 other groups to ‘Non-supportive climate’. In all 3 cohorts students complained lack of feedback. Female students gave higher ratings than males. Several stress factors were identified as being associated with depression. The prevalence of
depressive symptoms among students was 12.9% significantly higher than in the general population and was 16.1% among female students versus 8.1% among males, and total of 2.7% of students had made suicide attempts, but none during the previous year.

Niemi and Vainiomaki (2006) explored and identified the stress symptoms among undergraduate medical students ($N=110$) at five points scale during the six-year medical training program. The finding reveals that the stress symptoms, such as fatigue, sleeping problems, anxiety, irritability and depression, were common and there was significant gender differences were seen, but there was a consistent increase of stress reports throughout the medical program in both sexes. Those who were most distressed at the beginning of training also reported more stress later.

Teh-yuan, David, and Donald (2002) investigated the factors associated with the academic stress experienced by international students ($N=412$) attending graduate school in the United States. The study was grounded in a cognitive framework in which academic stress is understood as the consequence of student's appraisal of the stressfulness of role demands and their perception of their ability to cope with those demands. Results indicated that the primary determinants of the two types of appraisals differed. Self-perceived English-language skills and a lesser degree, cultural distance were the predictors of primary appraisal, self-perceived English-language, academic and problem-solving skills and social support network were the main determinants of secondary appraisal.

Hall (2006) studied to see the impact of stress and academic success in college students. The study supported the fact that stress places demand on an individual and its response to stress, the body attempt to adapt to the stressful experience to maintain a sense of normalcy (Selye, 1974). Strategies to reduce stress have been associated with academic success in college students (Dziegielewski et al. 2004).

Kumar and Singh (2007) studied the role stress among professional students in India has not been well examined. This study explores the extent and types of role stresses present among the engineering and management students in India. The finding reveals that the students are experiencing role overload, role stagnation and self-role distance. Male students experience higher levels of role stagnation than female students. However, no significant differences could be observed on any of the
role stressors between first year students and their seniors, or between management and engineering students. The results are indicative of the social and educational environment prevailing in the country.

Schneider (2007) examined the perceived stress among engineering students. Responses identified the sources of stress for engineering students as: 1) heavy workload in engineering courses, 2) high level of rigor of engineering curriculum, 3) more time required to complete the assignments, 4) not getting enough sleep, 5) competition with classmates for grades, and 6) inflexibility of engineering curriculum. Finding indicates that perceived stress is often inversely related to academic performance.

Hussain, Kumar and Hussain (2008) examined the level of academic stress and overall adjustment among Public and Government high school students. The finding reveals that the magnitude of academic stress was significantly higher among the Public school students where as Government school students were significantly better in terms of their level of adjustments, because they showed inverse but significant relationships between academic stress and adjustment for both the group of students and each type of school.

Singh and Singh (2008) examined the stress and adjustment among professional and non professional students. The study was carried out to compare the stress and emotional adjustment of professional courses students. They reported that the professional students were poorly emotionally adjusted than non professional group of students.

Leisa, Allison, Nykamp, and Lanke, (2008) studied perceived stress and quality of life among doctors of pharmacy students. They found that family and relationship, examinations and scheduling, outside of class assignments, and finances were the most common stress triggers as reported among the students. While exercising, spending time with friends/family, sleeping, watching TV, and drinking alcohol were the most commonly reported stress-alleviated activities.

Agolla and Ongori (2009) investigated the stressors, symptoms and effects that are likely to be experienced by the undergraduate students in higher institutions (Universities). Stressors related to time, academic pressure, and academic environments were explored. A total of 320 students participated in this study. Data
was collected through self-administered questionnaires that were randomly distributed to the students during lecture time. The result reveals that the academic workload, inadequate resources, low motivation, continuous poor performance in academic, overcrowded lecture halls, and uncertainty of getting job after graduating from the university lead to stress among students. It is hoped that, these findings will help the individual student, lecturers, career and counselling centers, and the university administrators to put in place mechanisms that mitigate the effects of stress at the University.

Wang, Yuen and Slaney (2009) conducted a cross cultural study concerning to perfectionism, depression, loneliness and life satisfaction among 509 Chinese high school students from Hong Kong. The result shows that the comparison of group means revealed that adaptive perfectionists reported higher satisfaction with Life scores and lower Depression scores than the other two groups. They also reported higher Discrepancy scores in comparison to U.S. students' scores in previous studies. Similarities and differences in comparison to previous studies using U.S. participants were also examined.

Paro et al., (2010) examined the mental health problems such as stress, anxiety and depression have been described among medical students and are associated with poor academic and professional performance. It was speculated that these problems impair student's quality of life (QOL). The authors aimed to assess the health-related quality of life of medical students throughout their 6 years of training at a school with a traditional curriculum. The finding reveals that the student's ages ranged from 18 to 31 years (median 22.3 years). Students in years 2, 3, 4 and 6 had lower scores for mental and physical health dimensions of HRQL as compared with the incoming year 1 group ($P < 0.01$), with the largest difference observed for year 3 students. Students with depressive symptoms had lower scores in all domains of the SF-36 ($P < 0.01$). Female students had lower HRQL scores than males ($P < 0.01$). No significance differences were observed for students living with versus without family and no correlation with family income was found.

Shah, Hasan, Malik, Chandrashekhar, and Sreechandra Reddy (2010) found that the most common sources of stress among medical students were related to academic and psychological concerns. High parental expectation, frequency of examinations,
vastness of academic curriculum, sleeping difficulties and worrying about the future were the most frequently and severely occurring sources of stress. The finding reveals that there was a negative correlation was found between perceived stress and academic performance among medical students.

Kausar (2010) examined perceived stress, academic workload and coping strategies adopted by the students studying under the semester system. She reported that the positive relationship between academic workload and stress. Academic workload was positively related with active practical coping strategies and negative relationship with active distractive and avoidance coping. Perceived stress has negatively relationship with practical coping and negative relationship with avoidance coping.

Amna shahid (2010) examined the perceived level of stress and academic achievement between boarders and day scholars' performance due to inability to manage their stress levels.

Glenn (2011) examined the perception of academic stress among college students. Result showed that male and female students differ in terms of their perception of subject, teacher, schedule, classroom and expectation related stressors.

Abhay, Krishanakumar, Paul, and Shashidhar (2011) explored the differences and the correlates of perceived stress among students in professional courses. The data representing 282 students who were studying different courses, by sampling with a probability proportional to size through an anonymous, self administered questionnaire which covered socio-demographic data, stressors and a perceived stress scale. The result showed that they found to be 50% in the study subjects. The mean PSS score was the highest for dental (29.5) and the lowest for pharmacy (23.2) students. The difference in the mean PSS scores among the students of different courses was statistically significant. No statistical difference was noted in perceived stress between the male and female students (P> 0.05). The main sources of stress were found to be related to physical and academic factors. The main coping strategies which were adopted, talking to family members or friends (41.1%), sleeping (16%), watching TV/movies (12.6%) and listening to music. 47.2% students felt a need for professional help during stress.
Pandya, Deshpande, and Karani (2012) conducted a study to explore the components of academic stress among the students of Masters of Business Administration. The sample comprises of 118 Masters of Business Administration students of GTU affiliated colleges from all the five zones of Gujarat. Data was collected through structured academic stress questionnaire. Many researchers have identified the components of Academic stress and different stressors which impact the students. Three major stressors have been identified which affect the performance and three major outcomes of stress. Around twelve micro issues have been identified under the curriculum and instruction component while three stressors were prioritized related to team work; seven sub issues regarding assessment and three micro issues under placement components of academic stress.

Kadapatti and Vijayalaxmi (2012) conducted a study was to identify the stressors of academic stress among pre-university students. The sample consisted of 360 pre-university students of boys and girls were taken from four co-educational college. The result shows that the high aspiration, poor study habits, more study problems, change in medium of instruction and low socio-economic conditions are the factors responsible for the academic stress and become stressors for stress among the students.

Sohail (2013) reported the relationship between stress and academic performance of first year medical students and identified sources of stress, levels of stress and relevant coping strategies. They reported that the level of stress was found to be 7.5% (score <150), moderate level of stress was present in 71.67% (score between 150 and 300), and high level of stress was observed in 20.83% (score >300) of the students. There is moderate negative (-0.583) and significant (p<0.01) correlation was found between academic performance and sources of stress. Similarly there is moderate negative (-0.478) and significant (p<0.01) correlation between academic performance and levels of stress. There was strong positive (0.799) and significant (p<0.01), correlation between stress level and number of stress sources and the results also show that higher level of stress is associated with poor academic performance.

Kaur (2014) conducted a study to see the impact of academic stress on mental health among school going adolescents. The sample size was 200 school going
adolescent students of Bathinda district. The scores obtained were analyzed statistically and the finding of the study reveals that the significant differences exist in mental health of adolescent with regard to level of academic stress they experience. Further significant difference was also found in the mental health of students with respect to their gender in terms of high and low level of academic stress. Hence it was suggested that parents should not overburden the children and should not set over expectations in terms of excellence in academic pursuits beyond the capability and capacity of the child.

Shu-Hui Lin and Yun-Chen Huang (2014) studied the life stress and academic burnout among students and further assessed whether reports of life stresses can serve as a predictor of academic burnout and the data was collected from 2640 students. They reported that both the level of students' burnout and stress are in general not serious. Female students and upper year students were higher on values of life stresses. The self-identity stress, interpersonal stress, future development stress, and academic stress could jointly predict student academic burnout.

Spiritual Intelligence

Before explaining the concept of spiritual intelligence it is essentially required to focus on spiritual philosophy because it seems to be related to a person's spiritual intelligence. So far as spiritual philosophy is concerned it is common to the whole group or class which is not special but it is concerned with any philosophy or teaching that pertains to spirituality or spiritual realities. It may be seen in the perspective of religious or esoteric themes which might be private or secret related to the systems of belief and practice of theosophical society or it may also incorporate new theosophy that includes new age thoughts, mysticism and Eastern philosophy. The concepts such as the nature of the absolute Karma and reincarnation revolution of the soul higher state of consciousness and universal mind and so on may come in the domain of spiritual philosophy. Spirituality in Indian philosophy is dressed up with myths, legends and stories and be fit to understanding of majority. Spirituality is not religion and is not even necessarily affiliated with religion. Religious or non religious person both may or may not be spiritual and spirituality can be better understood in the light of such common themes associated with spirituality. It is a process of self discovery and learning not only who you are and who you want to be? Keeping your mind open
and self-questioning to become better understand the other beliefs, connectedness with others. So that spirituality is considered to a personal matter or characteristics of an individual but it is rooted in the connectivity with others, who are around you and this type of connection facilitate you in finding your place in the world.

It is believed that Spirituality exists in everyone's mind and heart across the culture or society which might be related to religious traditions and independently of tradition. In fact every one of us is spiritual because everyone has ultimate concerns. Some people do not consider themselves or their concerns to be spiritual or vice versa. Spirituality, like emotion may have varying degree of depth and expression. It may be conscious or unconscious and it may be developed or undeveloped, healthy or pathological, naive or sophisticated, beneficial or dangerously distorted. But the well accepted truth about spirituality is one's belief “something bigger than me” and it is a source of creation, and a desire to be in connection with which that source a person comes to know so as it needs to emphasize that the religion and spirituality are not the same things. Religion is one’s expression of a desire to connect with source. For example language is a one way to communicate with other human beings. But there are many languages similarly many religions too. As language is not the only way to communicate – just as religion is not the only way to be spiritual and this statement make it clear that religion and spirituality are not same. For better understanding of concept of spirituality the following points should be kept in mind. (a) Spirituality involves the highest levels of any of the developmental lines, for example, cognitive, moral, emotional and interpersonal; (b) Spirituality is itself a separate developmental line. (c) Spirituality is an attitude (such as openness to love) at any stage; and (d) Spirituality involves peak experiences, not stages. An integral perspective would presumably include all these different views and others as well.

The word intelligence is as old as human existence and symbiotically associated with thinking skills that distinguish an individual from another and most importantly it is a predictor of life adjustment in the society. Psychologists have identified many more areas of intelligence apart from the original one (cognitive intelligence), which include: fluid intelligence, crystallized intelligence, social intelligence, emotional intelligence, spiritual intelligence, financial intelligence etc. which are all the indices of adjustment (Salovey & Mayer 1990; Goleman 1996; Zohar & Marshall 2000; Animasahun 2003; Jimoh 2007). Intelligence is adeptness
(well skilled). It is an innate potential that is brought into form through practice and it is demonstrated by a pattern of behaviors, skills and choices that shows development of this innate potential. An individual is born with some power of intelligence and it is used when we know in the right way at the right time in the right place with the right intention. Sternberg (1997a) defines intelligence as the mental abilities necessary for adaptation to, as well as selection and shaping of, any environmental context. Sternberg (1997b) offers a tri-archaic model consisting of: (a) academic intelligence (as measured by classical IQ tests); (b) practical intelligence (which grows through the accumulation of tacit knowledge for solving practical everyday problems); and (c) creative intelligence, which involves synthetic abilities to see problems in new ways and to escape the bounds of conventional thinking, but has not been studied as rigorously.

Intelligence is sometimes defined as the ability to manage cognitive complexity. In current usage, the distinction between intelligence and reason has been largely lost. For example, as defined in Webster's Dictionary (Mish, 1993), intelligence includes the ability to understand, to apply knowledge, to use reason skillfully, and to manipulate one's environment. The intelligence comprises many different abilities is supported by current trends in neurology and cognitive psychology among researchers who have identified various types of intelligence. Howard Gardner's (1993) pioneering work at Harvard on multiple intelligences has helped people understand that intelligence is multifaceted. Gardner's research indicates that different kinds of intelligence develop relatively independently of each other, and proficiency in one area does not imply proficiency in another. For example, linguistic skill with words can be differentiated from logical mathematical skill with numbers and from the spatial intelligence that perceives spatial relationships. Excellence in one area does not necessarily tell us anything about abilities in another. In addition, Gardner (1993) discussed kinesthetic intelligence that enables a person to use the body in highly differentiated and skilled ways, and interpersonal intelligence that enables us to relate to others empathically.

Goleman (1995) research on emotional intelligence, based primarily on intrapersonal and interpersonal intelligence, indicates that success in many areas of life depends on emotional skills as much as on cognitive capacities. Emotional intelligence includes self-awareness and self-control, as well as the ability to get along
well with others. According to Goleman and others, different kinds of intelligence are associated with different areas of the brain. Although little research has been done to isolate areas of the brain associated with spirituality, numerous studies in meditation research indicate that significant physiological changes result from even limited practice (Murphy & Donovan, 1999; Shapiro & Walsh, 1984; Walsh & Vaughan, 1993). Studies that measure the effects of intensive, long-term practice point to significant psychological benefits in addition to deepening emotional and spiritual sensitivity.

**Spiritual intelligence** is a term used to indicate a spiritual correlate to Intelligence Quotient (IQ) and Emotional Quotient (EQ). Spiritual Intelligence refers to various skills and abilities that empower you to live in harmony with your highest values and move unswervingly towards your life goals. Spiritual intelligence calls for multiple ways of knowing and for the integration of the inner life of mind and spirit with the outer life of work in the world. It can be cultivated through questing, inquiry, and practice. Spiritual experiences may also contribute to its development, depending on the context and means of integration. Spiritual maturity is expressed through wisdom and compassionate action in the world. Spiritual intelligence is necessary for discernment in making spiritual choices that contribute to psychological well-being and overall healthy human development.

The word "**spiritual**" in relation to the intelligence has no necessary connection with organized religion. A person may be high in Spiritual Quotient (SQ) but have no religious faith or belief of any kind. Equally, a person may be very religious but low in SQ (SC). The word spiritual in the Zohar/Marshal concept comes from the Latin word *spiritus*, which means, "that which gives life or vitality to a system".

It is the intelligence that makes us whole, that gives us our integrity. It is the soul's intelligence, the intelligence of the deep self. It is the intelligence with which we ask fundamental questions and with which we reframe our answers. Spiritual intelligence is a huge and an inherently difficult term to define. Even though it sounds familiar, most people have never heard the term, never read about it and never discussed it with anyone else. Some may think they know its meaning, but they may be confusing SQ with spirituality so as an effort is made to gather information through
concentrating on the theorists viewpoints regarding the definitions, dimensions and ways of development of spiritual intelligence.

**Spiritual intelligence based on the teachings of Islam.**

Explanation of spiritual intelligence in Islamic perspectives has attracted considerable attention of all concerns emphasizing that spiritual intelligence or reasoning power in human is a divine gift and pleasant light that is called as inner prophet by nature, wanting to charity, perfections, justice and benefit. This intelligence and ability is the criterion for task, reward and punishment and by the right from wrong, good from evil, way from astray, ugly from beautiful and perfection from mailing is being distinguished. The factors that affecting spiritual intelligence in the Islamic context are considered as faith in God (ALLAH), virtue and piety, along with daily exercises, such as contemplation in the creation, contemplation in the introversive, fasting, worships, reading and reciting the Quran and the honest contemplation in the Quran verses (Sohrabi, 1387). Some of the skills and attributes such as wisdom, creativity, compassion, that has been grown with spiritual awareness was radiation from religion. Amir-ul-Mu 'mineen Ali also about the question of Hammam, who was a God-fearing man, expressed the pious traits as-Hammam, faithful is clever and intelligent man who his joy is on his face and his sadness is in his heart, is courtely, thankful, patient, good-natured and good tempered, unfailing and low nuisance, don’t say unlawfully in the judge and his knowledge does not go astray, his friendship is sincere and his alliance is firm and in the contract is unfailing, is helper religion, pro-believers and Muslims asylum. These features might be considered as the attributes that are spiritually gifted from Imam Ali’s view. Basically, these features are indispensable for spiritual intelligence, which is located on the capabilities and activities includes prayer, meditation, analysis of spiritual and religious visions, beliefs and values, knowledge and skills to understand and interpret the holy concepts and the ability to learn more (Sohrabi, 1387). God in different places in the Holy Quran has referred to this. For example, in chapter Moumenon, verses 2 to 10, features of the faithful are listed as: believers are humble in their prayers and have obedience, namely they have full attention to God (the ability to experience deep consciousness and meditative). They are reluctant to farce and babble namely having purpose in life and doing things for the sake of Allah (giving purpose
and sanctity of life issues). They are ones who pay zakat and committed to their covenant and are careful in their prayer (capacity for virtuous behavior). As mentioned in the explanation of spiritual intelligence, if you know problem solving ability as the best intelligence identifier, spirituality can be seen as a form of intelligence. Due to this, we raised the question of whether morality can have such functional for a person. For answer to this question, we can refer to principles of innate morality that have functions as a mechanism for solving problems in the different values of life.

Definitions of spiritual intelligence

The definitions of spiritual intelligence proposed by many researchers/authors will make the concept of spiritual intelligence more clear and understandable.

Emmons (2000a, 2000b), for example, drawn on Gardner's definition of intelligence and argues that spirituality can be viewed as a form of intelligence because it predicts functioning and adaptation and offers capabilities that enable people to solve problems and attain goals.

Form this perspectives when we look at spirituality through the lens of intelligence, Emmons (1999), pointed out that spiritual intelligence is a framework for identifying and organizing skills and abilities needed for the adaptive use of spirituality.

Emmons (2000a) proposed five components of spiritual intelligence which are as stated below.

i. ability to utilize spiritual resources to solve problems,

ii. ability to enter heightened states of consciousness,

iii. ability to invest everyday activities and relationships with a sense of the sacred,

iv. capacity for transcendence of the physical and material, and

v. capacity to be virtuous.

However, in responding to criticisms from Mayer (2000), who argues that virtuous behavior belongs more to ethics and personality rather than intelligence, Emmons (2000b) drops (e) the capacity to be virtuous from his revised definition of SI and retains the first four (a through d) components of his model.
According to Levin (2000), experiencing spirituality as an intrinsic part of oneself is necessary for being able to apply spiritual principles to one's behavior and lifestyle. Thus, spiritual intelligence is manifested when a person integrates their spirituality with the rest of their life, and acts or operates from their spiritual principles.

Zohar and Marshal (2000), described that "with spiritual intelligence we can place our actions and our lives in a wider, richer, meaning-giving context, the intelligence with which we can assess that one course of action or one's life-path is more meaningful than another"

Levin (2000), pointed out that "spiritual intelligence refers to the awakening the power of one's spirituality and intuition", conceptualized spiritual intelligence as 'a marriage of spirituality and intelligence'.

McGeachy (2001), suggested that “Spiritual Quotient (SQ) is that part of the individual that enables a person to see the consequences of his/her action, create a purpose for their lives, change boundaries, ask "why" the particular rule and create the possibility of having meaning in their life. So, low SQ means that the individual will be making so many errors of judgment that those they deal with.

According to Wolman (2001), "spiritual intelligence is a human capacity about the meaning of life, and to simultaneously experience the seamless between each of us and the world in which we live."

Sisk (2002) described spiritual intelligence as "a deep self-awareness in which one becomes more and more aware of the dimensions of self, not simply as a body, but as a mind-body and spirit". When we employ our spiritual intelligence, we reach the extraordinary place in which our mind no longer produces data of the type wanted or needed and the need for intuition becomes accelerated.

Vaughan (2002) defines Spiritual Intelligence (SI) as "a capacity for a deep understanding of existential questions and insight into multiple levels of consciousness, it implies awareness of our relationship to the transcendent, to each other, to the earth, and all beings".

McMullen (2003) stated that:" If cognitive intelligence is about thinking and emotional intelligence is about feeling, then spiritual intelligence is about being".
Nasel (2004) believed that spiritual intelligence represents the ability to draw on one's spiritual abilities and resources to better identify, find meaning in, and resolve existential, spiritual, and practical issues.

Spiritual Intelligence (SQ) is defined by Wigglesworth (2006) in terms of "the ability to behave with Wisdom and Compassion, while maintaining inner and outer peace (equanimity), regardless of the circumstances". This definition focuses on three important aspects of Spiritual Quotient.

First: The word "behave" is critical. SQ is not about just "feeling good about people." That is relatively easy to accomplish when we are alone in prayer or meditation! SQ is about how we behave-how we actually make decisions and act-in the everyday, stressful world of interacting with difficult people and situations.

Second: The word "love" in English is a very sloppy word. In English we say that we "love" our children and we "love" ice cream. It is one word with many uses making it hard to use for leadership purposes or for training in SQ. There are many definitions for love that might help, but an accurate and elegant one comes from the East where the saying is: "Love is a bird with two wings: one wing is Compassion, the other wing is Wisdom...if either wing is missing the bird cannot fly."

Thus high Spiritual Quotient (SQ) people behave with love-now defined as Wisdom and Compassion. Wisdom is the most elevated stage of development of the intellect (head). Compassion is the most elevated stage of Emotional Intelligence (heart). The behavior which results from such highly developed head-plus-heart competency is skillful.

Third, maintaining "inner and outer peace" relates to an interior calm.

King (2008) proposed that "Spiritual intelligence denotes a set of adaptive mental capacities which are based on nonmaterial and transcendent aspects of reality, specifically those which are related to the nature of one's existence, personal meaning, transcendence, and expanded states of consciousness." This definition includes the following components to explain spiritual intelligence (SI).

1. Critical Existential Thinking: The capacity to critically contemplate the nature of existence, reality, the universe, space, time, and other existential/metaphysical issues;
also the capacity to contemplate non-existential issues in relation to one's existence (i.e., from an existential perspective).

2. **Personal Meaning Production:** The ability to derive personal meaning and purpose from all physical and mental experiences, including the capacity to create and master a life purpose.

3. **Transcendental Awareness:** The capacity to identify transcendent dimensions/patterns of the self (i.e., a transpersonal or transcendent self), of others, and of the physical world (e.g., non-materialism) during normal states of consciousness, accompanied by the capacity to identify their relationship to one's self and to the physical.

4. **Conscious State Expansion:** The ability to enter and exit higher states of consciousness (e.g., pure consciousness, cosmic consciousness, unity, oneness) and other states of trance at one's own discretion (as in deep contemplation, meditation, prayer, etc.)

Sisk (2008) identified many dimension of SQ as following:

**Core** capacities of Spiritual Quotient (SQ) include: Concern with cosmic/existential issues and the skill of meditating, intuition, and visualization.

**Core** values of Spiritual Quotient (SQ) include: Connectedness, unity of all, compassion, a sense of balance, responsibility, and service.

**Core** experience of Spiritual Quotient (SQ) include: Awareness of ultimate values and their meaning, feeling of transcendence, and heightened awareness.

**Key virtues of Spiritual Quotient (SQ)** include: Truth, justice, compassion, and caring.

**Symbolic systems of Spiritual Quotient (SQ)** include: Poetry, music, justice, dance, metaphor, and stories.

**Development of Spiritual Intelligence**

A number of techniques, strategies, and practices have been identified as beneficial for development and enhancement spiritual intelligence.

Given this premise, there are essentially seven ways to enhance/raise or develop spiritual intelligence. They include:
i. Think about your goals, desires and wants to bring your life into perspective and balance, and identify your values.

ii. Access your inner processes and use visualization to see your goals, desires and wants fulfilled; and experience the emotion connected with this fulfillment.

iii. Integrate your personal and universal vision and recognize your connectedness to others, to nature, to the world and to the universe.

iv. Take responsibility for your goals, desires and wants.

v. Develop a sense of community by letting more people into your life.

vi. Focus on love and compassion.

vii. When chance knocks at your door, let it in and take advantage of coincidences.

Levin (2000) argues that Spiritual Intelligence (SI) is exhibited when we live in a way that integrates spirituality into our daily life and suggests that the development of SI requires the recognition of our interconnection to all of life, and the capacity to utilize perceptual powers beyond the five senses including our intuition, which is seen as another level of consciousness and intelligence beyond analytical, linear, and rational thought. She emphasized that the development of spiritual intelligence requires a change in perception and perspective (involving one's intuition), which provide a new basis for motives and intention that consequently shape behaviour. Furthermore, she has suggested that spiritual maturity, characterized by concern for the common good and involvement in the well-being of the greater whole, results from a well-developed spiritual intelligence.

Vaughan (2002) suggested that spiritual intelligence develops with increased openness and the ability to empathies with diverse points of view, with greater sensitivity to and experience of subtle realities such as transcendent states and spirit realms, and with deeper understanding of symbolic, mythical and archetypal representations of the unfolding of consciousness. Thus, from this perspective, an open and contemplative mindset that tolerates uncertainty, paradox, and mystery, is beneficial to the growth of spiritual intelligence, whereas a rigid, closed, and definitive acceptance of a particular belief system may hinder its development.

In fact, as mentioned earlier, open-mindedness has been identified as both a contributing factor to and result of the development of spiritual intelligence and from
another perspective, commitment to any chosen spiritual practice has also been said to greatly facilitate the growth of spiritual intelligence. Such practices may include prayer, journaling, contemplation, self-reflection, yoga, meditation, psychotherapy, charitable service to others, and entering periods of silence or solitude. Mystical or spiritual experiences are also able to contribute to the development of spiritual intelligence, particularly if they occur in a supportive and grounding context that facilitates their integration into everyday life (Nasel, 2004).

Zohar & Marshall (2000) proposed seven practical steps to develop better Spiritual Quotient (SQ) include:

- Become aware of where I am now
- Feel strongly that I want to change
- Reflect on what my own centre is and what my deepest motivations are
- Discover and dissolve obstacles
- Explore many possibilities to go forward
- Commit myself to a path
- Remain aware that there are many path

Buzan (2002) have introduced 10 ways to enhance Spiritual intelligence that include:

1. Getting the 'Big Picture'
2. Exploring your values: Your values and principles determine your behaviour, and have a massive effect on the probability of your success in life.
3. Your Life Vision and Purpose: With a clear and defined purpose, your life will gain meaning and direction, and you will become healthier, stronger and more confident.
4. Compassion: Understanding yourself and others.
5. Give and Receive! Charity and gratitude.
6. The Power of Laughter: Laughter is a vital quality of Spiritual Intelligence, and benefits you in many ways, including reducing stress levels and generally leading to a more cheerful and happier life.
7. Onward to the Child's Playground: Investigations have shown that the more Spiritually Intelligent you become, the more the childlike qualities of
innocence you will be and also cheerfulness, joyfulness, spontaneity, enthusiasm and adventure feeling increases in your life.

8. The Power of Ritual: Which provides stability and opportunity for regeneration, and strengthens a sense of connection with oneself and others.

9. Peace: Cultivate your inner peace through the practice of techniques such as contemplation and meditation.

10. All You Need Is Love.

**Principle Components of Spiritual Intelligence**

- Self-awareness: Knowing what I believe in and value, and what deeply motivates me.
- Spontaneity: Living in and responsive to the moment.
- Being vision and value led: Acting from principles and deep, beliefs, and living accordingly.
- Holism: seeing larger patterns, relationship and connections; having a sense of belonging.
- Compassion: Having the quality of “feeling with” and deep empathy.
- Celebration of Diversity: Valuing other people for their differences, not despite them.
- Field independence: Standing against the crowd and having one’s own convictions.
- Humility: Having the sense of being a player in a larger drama, of one’s true place in the world.
- Tendency to ask fundamental “Why”? questions: Needing to understand the things and get to the bottom of them.
- Ability to reframe: Standing back from a situation or problem and seeing the bigger picture; seeing problem in a wider context.
- Positive use of adversity: Learning and growing from mistakes. Setbacks, and suffering.
- Sense of vocation: Feeling called upon to serve, to give something back.

**Features of Spiritual Intelligence:**

- Capacity to be flexible, active and spontaneously adoptive.
• High self awareness.
• A capacity to face and use suffering.
• A capacity to face and transcendent pain.
• The quality of being inspired by vision and values.
• A reluctance to cause unnecessary harm.
• A tendency to see connections between diverse things.
• A marked tendency to ask ‘why’ and ‘what’ if? Question and to seek fundamental answers.
• Being ‘field independent’-processing a faculty for working against convention.

The “God Spot” in the human brains is a built in spiritual centre and located among neural connections in the temporal lobes (Persinger, 1996). One scan taken with position emission topography these neural areas light up whenever research subjects are exposed to make discussion of spiritual or religious topics. The God Spot does not prove the existence of God but it does show that the brain is sensitive to wider meaning and value.

Singer (1990’s) has shown that there is a neural process in the brain devoted to unifying and giving meaning to our experience, a neural process that reality “binds” our experiences together. Singer’s work on unifying neural oscillations offers the first kind of a third kind of thinking, ‘unitive thinking’ which can deal with question of meaning. Prior to Singer only two forms of brain neural organization were organized: For IQ where serially connected neural tracts allow that brain to follow rules, to think logically and rationally, step by step: and for EQ where our emotion-driven, habit-building, intelligence bundles up to a hundred thousand neurons connected in haphazard fashion to other massive bundles.

Terrance Deacon (1997) has researched into the evolution of symbolic imagination and its role in brain functioning that underpins spiritual Intelligence.

Some practical utility of spiritual intelligence in one’s life

• Acceptance of adversity rather than ranging against it. Not resorting to blame, guilt, rationalizing, anger, denial and other typical defense mechanism.
• Using materials precisely and avoiding waste. Recycling things wherever possible, reducing waste and repairing things instead of replacing them.

• Being grateful for everything including adversity.

• Having the capacity to see one’s ego (witness consciousness) and choose whether to go the ego’s habitual tendency or do something different.

• Apologizing for one’s mistakes and making amendments wherever possible.

• Seeing the inherent beauty of everything and everyone.

• Having a positive attitude.

• Treating everyone and everything with compassion and gratitude including tools and machines.

• Leaving every place you go to better than you found it.

• Respect for the environment and bio-diversity as having inherent as well as practical value.

Some features are associated with spiritual intelligence including: Love, kindness, honesty, patience, tolerance, inner peace or balance in the face of existential challenges of life (Nazel, 2004) Zuher is expressed 9 features for spiritual intelligence as follows:

1. Self-Consciousness: You know who you are and know you are communicating with the whole world.

2. Values vision and idealism: values vision reflects our humanity.

3. Ability to deal with incidents and events: admit mistakes and use tragedy for learning.

4. General orientation: seeing the connections between things and being happy and interested about everything.

5. Diversity: flourishing and praising diversity.

6. Field independence (Applause): a word from psychology that means encouraging independence.

7. Inclined to ask why: questions are unlimited.
8. The ability to re-frame: placing objects in a larger context of meaning.

9. Spontaneity: is originated from the same Latin root word answers and responsibilities that are not expressed with fear. Spontaneity is meant properly accountable to the world (Vigles Worth, 2002).

Imonz states five features for spiritual intelligence that are capacity for transcendancy, ability for engage in intense spiritual states of consciousness, ability to capitalize on activities, events, and relations with religious feeling, ability to utilize spiritual resources to solve life problems, the capacity to engage in the righteous behavior and to be pious (Mayer, 2000). George expresses three most important aspects that spiritual intelligence can be used in it as follow: Personal safety and how affect a person's effectiveness; making relationships and interpersonal understanding, management of change (George, 2006). Sisk and trance express some possible features required for spiritual intelligence and methods for intensifying them as follows.

<table>
<thead>
<tr>
<th>Social characteristics</th>
<th>Methods for intensifying</th>
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<tbody>
<tr>
<td>1. Use internal knowledge</td>
<td>1. To provide time for thought reflection</td>
</tr>
<tr>
<td>2. Capacity to endure hardship</td>
<td>2. To study Life of Spiritual Pioneers</td>
</tr>
<tr>
<td>3. Sensitivity towards our goals in life.</td>
<td>3. To use of personal growing activities</td>
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<tr>
<td>4. Concerning the injustice and inequity</td>
<td>4. To use of problem-based learning on real issues</td>
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<tr>
<td>5. Enjoy Life jerks</td>
<td>5. To provide time for open discussion</td>
</tr>
<tr>
<td>6. Valuing love, compassion and concern for others</td>
<td>6. To use beliefs and consider ideas</td>
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<tr>
<td>7. Search for your understanding</td>
<td>7. To trust your inner voice and nature</td>
</tr>
<tr>
<td>8. To want to make a difference</td>
<td>8. To use what? So what? Now what? Now, what model?</td>
</tr>
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</table>

Wolman (2001) designed PSI model. The PSI is an eighty-item inventory designed to help people assess the focus and pattern of own spirituality.

Those factors may be described briefly as follows:

1. **Divinity**: the sense of connection to a good figure or divine energy source

2. **Mindfulness**: awareness of the interconnection of the mind and body, with an emphasis on practices that enhance that relationship.
3. **Intellectuality**: a cognitive, inquiring approach to spirituality, with a focus on reading and discussing sacred texts.

4. **Community**: the quality of spirituality enacting connection to community at large, whether in charity or politics.

5. **Extrasensory perception**: spiritual feelings and perceptions associated with non-rational ways of knowing, including prophetic dreams near-death experiences.

6. **Childhood spirituality**: a personal, historical association to spirituality through family tradition and activity.

7. **Trauma**: a stimulus to spiritual awareness through experiencing physical or emotional illness or trauma to the self or loved ones.

Assuming we survive long enough with our Physical Quotient (PQ) and Emotional Quotient (EQ) we can develop our Intelligence Quotient (IQ) skills - language and logic. For example think about of your admissions tests in any prestigious course of choice and you will be able to imagine the kind of mental skills which is typically think of as "IQ". Minimal IQ skills to survive in our world would be the ability to see longer-term cause and effect relationships (for example: if I keep writing cheques but don't make any deposits the reality is that, I will be in debt). Minimal IQ skills are necessary to pay rent, keep a job, follow a bus schedule and navigate around town, etc.

Physical Quotient (PQ), Emotional Quotient (EQ) and Intelligence Quotient (IQ) all therefore have a "minimal survival" or **BASIC** requirement. If you don't get to a minimum level of intelligence in each of these areas you will be dependent upon others to assist you in surviving - even as an adult.

But these **BASIC** levels of development do not bring us inner peace. They do quite the opposite, in fact. Being admired in the material world they are focused on scarcity, fear, anger and easily trigger depression or self-righteous attack on others. These are the levels of the ego self, and while they are important for survival, they are a hindrance to deep happiness. Learning how to manage the ego is where our SQ comes in.

In this model Physical Quotient (PQ), Emotional Quotient (EQ) and Intelligence Quotient (IQ) each have a basic level. Basic PQ means individual is
sufficiently to control of their body senses, muscles and fine motor skills to be able to hold down a job, take care of your personal hygiene, and sense dangers (like smelling smoke). Basic EQ means you have developed your fear and anger responses and can bond in small communities for your own protection and a feeling of security. Basic

EQ includes minimal social skills. Basic IQ means you can function sufficiently well to pay bills, hold down a job, and navigate through the basic tasks of life.

**Level 4: Optional Advanced Intelligence Quotient (IQ).** It is the ability to tap into the observer mind, which is the part of ourselves that observes the other part of us that gets fearful, or angry, or irrational. It is a neutral voice which says things like “Oh, look at that. Isn’t that interesting… I am getting angry at that woman”. It is a non-judging, curious voice. The Observer sees through illusions created by our Level 3 mind… it doesn’t accept the usual rationalizations! This is actually the ideal detached “scientific mind” since it is not influenced by preconceived notions or beliefs. It is the scientist wanting to understand Inner Reality. It asks to see things clearly – as they really are. It is willing to tackle tough issues – like mystery and paradox, and to observe calmly the endlessly fascinating ways in which ego undermines our happiness.
**Level 5: Optional Advanced Emotional Quotient (EQ)**, it is based on an open heart a heart that has expanded beyond the interests of the Ego self and can feel Compassion and Forgiveness. The ability to truly forgive another – even when the other person has done criminal acts – is characteristic of **ADVANCED EQ**. It is not about forgiving or condoning the wrongful ACT. It is based in Compassion for the error-based thoughts, fears and anger of ourselves and the other person. It is a gift we give ourselves so that we can learn and move on. The opposite of forgiveness is attachment – where we stay attached to our stories about how we were wronged. Until you get to **ADVANCED OR OPTIONAL IQ** and **ADVANCED EQ** it is impossible to let go of attachments.

**Level 6: Optional Advanced Physical Quotient (PQ)**, it is profound respect for and honoring of the body. We do this by listening to its subtle signals (a strong channel for intuition), being fully mindful (using the senses to stay aware and **OBSERVE** and be present), feeding and exercising it in a way that keeps our energy levels healthy and available for our Spiritual growth, using our body to act in the world in a way that is on-mission and aligned with our values and ethical beliefs.

**Level 7: Soul Intelligence**, this is the intelligence that is linked to Source. It is the part that I believe knew Source before we were born and will be in the presence of Source after death. Our challenge is to remember who and what we really are. When we do, we can integrate our life in this world of three dimensions and physical bodies with our Spirit nature. The result is “The ability to act with Wisdom and Compassion while maintaining inner and outer peace (equanimity), regardless of the circumstances.” It is the Level 7 that helps us determine our calling or Mission in this life. It is Level 7 that helps us to discern the right thing to do in difficult situations. It is Level 7 that sees things clearly and stays calm and centered.

**Spiritual Intelligence and related studies**

Rew and Wong (2006) reviewed some recent research work carried out by several investigators were concerned to ascertain the relationship between adolescent religiosity/spirituality and mental health. They examined 20 articles between 1998 and 2004 and observed that most studies (90%) showed that the higher levels of religiosity/spirituality were associated with better mental health in adolescents. The relationship between religiosity/spirituality and mental health were generally stronger
or more unique for males and older adolescents than for females and younger adolescents.

Saidy, Hassan, Abd, Jalil, Arif, and Eric (2009) in their study discussed the importance of emotional and spiritual intelligence from the National Education Philosophy towards language performance of secondary school students. The result reveals that the awareness of the needs to enhance secondary students' language skills through emotional and spiritual balance should be given emphasis in the current educational system.

Hosseini, Habibah, Krauss, and Aishah (2010) examined the relationship to spiritual intelligence and the related theories. The adolescent period is the best time to develop positive emotions and training skills because adolescents are seeking to find their identifying and their future personality at this period. The spiritual intelligence has a significant influence on the quality of life and adolescence is a sensitive period which required specific training to make their future to become bright and exposed difficulties for them. Emotional intelligence (EI) allow us to judge in which situation we are involve in then to behave appropriately within it and spiritual intelligence allow us to ask if we want to be in this particular situation in the first place.

Green and Noble (2010) conducted a study to explore the intellectual and personal effects of this approach for undergraduate students who were enrolled in an honors course about consciousness at the University of Washington during winter quarter 2008. Result shows that the students become more open to diverse ideas about consciousness, more self-aware and more committed to meditation and self-reflection.

Shabani, Hassan, Ahmad, and Baba (2011) made an attempt to examine the spiritual intelligence and emotional intelligence can be considered as predictor for mental health. They reported that the mental health can be influenced by spiritual intelligence and emotional intelligence, but the moderate effect of age on relationship of spiritual intelligence and emotional intelligence with mental health was not found significant.

Shabani, Hassan, Ahmad, and Baba (2011) conducted a study to examine whether emotional intelligence and spiritual intelligence can be considered as predictors of mental health and also explored the moderating effect of gender on the link between spiritual intelligence and emotional intelligence with mental health.
among high school students. The result showed that the mental health was found to be influenced by spiritual intelligence as well as emotional intelligence and its moderating effect of gender on the relationship of spiritual and emotional intelligence with mental health was not established.

Babanazari, Askari and Honarmand (2011) carried out a study to determine the relationship between the spiritual intelligence and happiness among high school students. The obtained result shows significant relationship between the spiritual intelligence and happiness and awareness sensing, mystery sensing, value sensing and community sensing significantly anticipated with happiness.

Sood, Bakshi and Gupta (2012) in their study made an attempt to explore the relationship between personality traits, spiritual intelligence and well-being among university students. The finding reveals that the positive relationship was found between personal meaning production and two factors namely agreeableness and neuroticism and it also reveals that the significant relationship between transcendental awareness (TA) and openness and TA predicted as well-being.

Hagani, Izadi and Bahadoran (2013) conducted a study to investigate the relationship between spiritual intelligence and social compatibility among high school female students of Tehran city. 123 students were selected for the collection of data from 10 areas through random cluster sampling. The result clearly indicated positive and meaningful relationship between spiritual intelligence and social compatibility of high school female students.

Khaparde (2014) examined the spirituality and mental health among students and social work intervention. Religions and spiritual beliefs are an important part of how people deal with life's joys and hardships. Faith can provide students with a sense of purpose and guidelines for living. When students face tough situations, including mental health problems their religious beliefs and practices can help them fight feelings of isolation and helplessness, restore meaning and order to life situations and promote regaining a sense control. For some students' spirituality can be a powerful and important source of strength. Some medical studies have confirmed that spirituality could profound effect on mental health. No one really knows for sure how spirituality is related to mental health. However it seems the body, mind and spirit are connected. Some researches show that things such as positive beliefs, comfort and
strength gained from religion, mediation and prayer can contribute to healing, a sense of wellbeing may help to feel better, prevent some physical and mental health problems and helps to cope with illness, stress or death.

Entesar, Foumany, and Danshdost (2014) examined the relationship of spiritual intelligence with mental health and organizational commitment of nurses in hospitals of Mashhad. The obtained result revealed that there is a positive relationship between spiritual intelligence and mental health, spiritual intelligence and organizational commitment, mental health and organizational commitment among nurses. Men’s mental health is more than the women. Organizational commitment in women is less than men. The result did not show significant difference in Organizational commitment among nurses with respect to the location of the type of hospitals.

**Life Satisfaction**

The concept of life satisfaction may be better understood and explained the way some Philosophers and Psychologists presented their views about good life of man and explicitly focused on those principles through which it can be achieved (Russell, 1930, 1945; Guignon, 1999). They proposed a sovereign principle to be followed by us in order to bring happiness in our life. The doctrine of hedonism explains the principles of maximizing pleasure and minimizing pain. In fact hedonism is a philosophical system that holds that people are motivated primarily by the production of pleasure and happiness and the avoidance of pain. The word hedonism is originated from a Greek word *hēdonismos*, which means “delight.” In the discussion of this philosophy of life, pleasure and pain have broad meanings. Pleasure and pain that refers to all pleasurable or unpleasant feelings, experiences, states, things, properties, and events, (Watson, 1895). Life satisfaction is often considered as desirable goal in and of itself, it comes from the Aristotelian ethical model, eudemonism, (from eudemonia, the Greek word for happiness) which means correct actions lead to individual well-being, with happiness representing the supreme good (Beutell, 2006). In the modern world, well-being is believed to be inherent to features such as social relationships, health, work related conditions, personal welfare, liberty, moral values and personality traits. In the year 2005, it has been seen an increase in cross-cultural studies, in which perceptions of national characteristics (e.g. societal,
political and economical ones) also received greater attention. Life satisfaction is affected by numerous aspects of life, these so-called life domains can roughly be classified into two categories: 1. Micro-social life domains (or individual living conditions) that include the features work-related conditions, subjective health conditions, marital status, financial household status, and 2. Macro-social life domains (or societal conditions) which include those aspects such as governmental performance, political democracy, welfare growth and economic equality. It appears from the present review of literature on well-being that the use of terms like happiness, life satisfaction and subjective well-being are interchangeably used but this is not entirely correct. If well-being is defined or assessed by the individuals themselves which is termed as subjective well-being. In fact satisfaction is a state of mind and an evaluative appraisal of something by an individual himself that refers to both 'contentment' and 'enjoyment'. As such it covers cognitive as well as affective appraisals. Satisfaction can be both evanescent and stable through time. The concept of life-satisfaction denotes an overall evaluation of life. So the appraisal that life is 'exciting' does not necessarily mean that it is 'satisfying'. There may be too much excitement in one's life, and too few other qualities. An overall evaluation of life involves all relevant criteria in the mind of the individual: for example one feels how well expectations are likely to be met and how desirable various factors are deemed to be and in this perspective it is assessed by the person. The object of evaluation of life is as-a-whole not a specific area of life, e.g., employment. Enjoyment of work may add to the appreciation of life, but does not constitute it. There could be four kinds of satisfaction; (i) global life-satisfaction (GLS), (ii) satisfaction with housing (SH), (iii) satisfaction with finances (SF) and (iv) satisfaction with social contacts (SC). Life satisfaction is the degree to which a person positively evaluates the overall quality of his/her life as-a-whole. In other words, how much the person likes the life he/she leads? The synonyms for life satisfaction are: 'happiness' and 'subjective well-being'. One advantage in using the term life-satisfaction rather than the word 'happiness' is that it emphasizes the subjective character of the concept. The word happiness is also used to refer to an objective good; especially by philosophers. The term life-satisfaction has the advantage over the label of 'subjective well-being' is that life-satisfaction refers to an overall evaluation of life rather than to current feelings or to specific psychosomatic symptoms.
Life satisfaction is defined as a person's cognitive evaluation of his or her quality of life as a whole or with specific domains of life. Life satisfaction as the cognitive component of subjective well-being (Martikainen, 2008). This is consistent with Bradley and Corwyn (2004) who said that life satisfaction reflects both the extent to which basic needs are met and the extent to which a variety of other goals are viewed as attainable. From this perspective it seems only reasonable that by accomplishing more goals, satisfaction with life will also increase. According to Beutell (2006) it is believed that life satisfaction is related to better physical, and mental health, longevity, and other outcomes that are considered positive in nature. In addition, Chow (2009) argues that improved levels of life satisfaction might give rise to better health in the future and this can already be identified within a three-year timeframe. Although there is a lack of congruence regarding the definition of life satisfaction (Iverson and Maguire, 2000). The definition as described by Veenhoven (1991). "Life satisfaction is conceived as the degree to which an individual judges the overall quality of his life-as-a-whole and favorably.

Life satisfaction or satisfaction with life (SWL) defined as the global evaluation of a person's quality of life based on the person's own choice (Shin & Johnson, 1978). In determining one's SWL or life satisfaction judgments are based on a comparison with a standard that each individual sets for him/herself. The above definition suggests that one's SWL is not a universal criteria of quality of life, but on the individual's own evaluation. This is particularly important when the focus is on people of diverse ethnic background, and who may have different values and perceptions of what may characterize "the good life". SWL is one of three components of subjective well-being (SWB), the others being positive and negative affect (Andrews & Withey, 1976). While the later two components refer to the affective, emotional aspects of SWB, "satisfaction" refers to the cognitive/judgmental aspects (Neto, 1995). This is different from happiness which is part of the affective/emotional dimension of SWB. (Diener, Suh, Lucas & Smith, 1999) suggested that the different components of SWB are substantially correlated with each other and each component needs to be studied in its own right. The recent focus of life satisfaction research has been to ascertain when and why people are satisfied with their life, and what processes are influencing their life satisfaction (Liu & Larose, 2008). All researchers have a slightly different version of the definition of life.
satisfaction, but essentially they all state that life satisfaction is a person's cognitive evaluation of his/her quality of life as a whole, or within specific life domains (Paolini, Yanez, & Kelly, 2006). Life satisfaction, along with negative and positive affects, is viewed as being components of the broader construct of subjective well-being. The term subjective well being is defined as the individual's current evaluation of his/her happiness. As subjective well is an evaluation of a person's happiness at any certain time in an individual's life, so as satisfaction can fluctuate substantially over time depending on their current level of happiness (Liu & Larose, 2008). Since happiness, quality of life, satisfaction with life, and life satisfaction are terms used interchangeably while describing subjective well being, in this research the terms will be synonymous.

Life satisfaction is based on essentially what a person believes in their life should be in relation to what it truly is (Paolini, Yanez, & Kelly, 2006). When people believe that their life should be of a certain way of their expectations rise. When their life does not live up to their expectations, they experience a drop in life satisfaction. Past researches have shown that if a person maintains positive levels of life satisfaction which is crucial for normal life adaptation. If a person fall into negative levels of life satisfaction then there is an increased risk for maladaptive life outcomes such as physical or psychological illness (Kitsantas, Gilligan & Kamata, 2003).

Life satisfaction is dependent on a number of life domains such as age, gender, socioeconomic status, student status, job status, family, and others. Each domain has a large effect on an individual's life satisfaction. Domains create roles that an individual participates in, and when one is participating in multiple roles it is likely that a decrease in life satisfaction will occur. Although much research has been done on the different causes of positive or negative life satisfaction, and it needs to conduct research on the subject pool of college students. The focus on this chapter is on different aspects of life and how each one affects the level of life satisfaction of the individual. In the review some specific experiments that were conducted by early researches that bear resemblance to the experiment conducted have been considered in the present research endeavor.

It has been found out that students who are satisfied with one domain of their college experiences are likely to be dissatisfied with other domains and vice-versa.
Chapter I

Introduction & Review of Literature

(Lounsbery, Saudargas, Gibson & Leong, 2005). Life satisfaction in college students has recently been examined as a precursor of withdrawal and dropout for students that are experiencing low life satisfaction. Those who are in college are usually at a higher level of maturity and growth than peers who are not in college. Moller (1996), said that students attributed improvement of their sense of well-being mainly to personal growth and maturity and a sense of achievement. Other positive factors that could influence their sense of satisfaction include progress with their studies, personal and intimate life, and also a change in their attitude toward life. In this competitive world many academic stressors that students encounter have a great influence on them. Studies that have been done on college students from around the world show that college students found predominantly satisfied with their lives, themselves, and with the social domains of family and friends (Diener & Diener, 1995). Some studies show that college students are more satisfied with their lives because they experienced an increase in roles and responsibility (Bailey & Miller, 1998). Other studies show that college students have a high need for cognition and that they derive a sense of satisfaction from their need for cognition (Coutinho & Woolery, 2004). For college students, it has been observed that studying significantly promoted their life satisfaction perhaps because they gather a sense of achievement from it.

The utility of adolescent’s life satisfaction researcher, preliminary evidence suggests that the number of negative and positive outcomes are associated with child/adolescent satisfaction with their life. For example, dissatisfaction with life are linked with a variety of social–emotional difficulties including depression, anxiety (Huebner & Alderman, 1993), negative peer interactions (Valois, Zullig, Huebner, & Drane, 2001), and chemical abuse (Zullig, Huebner, , Gilman, Patton, & Murray, 2005). Whereas high life satisfaction are associated with a variety of positive outcomes including high self-esteem (Harter, 1999), self-concept (Gilman & Huebner, 1997; Terry & Huebner, 1995), and self-mastery (Rosenfield, 1992). Moreover, school-aged students who report higher overall life satisfaction generally report less dissatisfaction with their school experiences (Gilman, 2001), greater satisfaction with their family life (Dew & Huebner, 1994), and greater satisfaction with their friends (Greenspoon & Saklofske, 2001), than the adolescents who report lower level of overall satisfaction with their life.
Life Satisfaction and its determinants

People differ in terms of satisfaction with life, the question arises why? The aim of creating greater happiness for the greater number requires an understanding of the determinants of life-satisfaction. So far, as concerns the determinants of life-satisfaction are only dimly understood. Various levels of human functioning are involved; collective action and individual behaviour, simple sensory experiences and higher cognition, stable characteristics of the individual and his environment as well as chance factors. It is a tentative ordering of factors and processes involved in the assessment of life satisfaction. The human behavior presumes through the judgment of life by drawing on the flow of life-experiences; particularly on positive and negative experiences for mankind. This is what the utilitarian philosophers referred to as ‘pleasures and pains’. The flow of experiences is a mental reaction to the course of life-events. This includes major one-time events, such as marriage or migration, as well as repetitious mundane events, like getting up in the morning and doing the dishes. The events which happen in our life are partly a matter of good or bad luck; such as in the case of accidents. The occurrence of life-events also depends on given conditions and capacities. Traffic accidents are likely to be less frequent in well organized societies and are less likely to occur among more attentive individuals. Thus the chance of ‘rewarding’ and ‘aversive’ events is not the same for everybody. This is commonly referred to as life-chances.

Life satisfaction is the cognitive dimension of subjective well-being (Lucas, Diener, & Suh, 1996). Life satisfaction is also called subjective “wellbeing,” is central to “optimal human functioning” (Gilman, 2006). The interchangeable use shows the measure as a self assessment of current and ongoing fulfillment (Diener, 2000; Gilman, 2006). In studies, participants are generally asked to assess their current status on a likert type scale which ranges from, “not at all satisfied” to “completely satisfied”. Life satisfaction is the emotional reaction of the individual’s life (Hong and Giannakopoulos, 1994) and his/her general attitude towards life (Özdevecio, 2003), according to another approach, it is set forth as the well-being of the individual from various points of view such as happiness and morale (Vara, 1999), and also as the general evaluation of quality of life according to the criteria selected by an individual himself (Shin and Johnson, 1978; Diener, Suh, Lucas, & Smith, 1999). Married
people are more satisfied with their lives and those with life-long marriages appear to be the most satisfied (Evans and Kelly, 2004). Life satisfaction tends to be stable over time (e.g., Cummins, 1998) suggesting a dispositional and perhaps, even a genetic component (Judge & Hulin, 1993). Fujita and Diener (2005) have examined the life satisfaction set-point (a relatively stable level that an individual will return to after facing varying life circumstances) reporting that there are longitudinal changes in satisfaction levels for about one-quarter of their respondents.

Health is associated with happiness and life satisfaction, the adverse health conditions result in lower levels of happiness and life satisfaction (George, 2006). Greater adverse changes in health result in larger negative changes in happiness and life satisfaction, and have also been found to be associated with more long term consequences on happiness and life satisfaction (Easterlin, 2002). The long term effects of health on happiness are commonly used as an argument against the idea of “set point” happiness, but this evidence is derived from point-in-time studies comparing those who report having a disability with those considered non-disabled (Easterlin, 2002).

The relationship between stress and life satisfaction is one that is well documented in the literature. Previous research on stress and life satisfaction indicates that stress has a negative impact on life satisfaction. Researchers examined stress, social support, and life satisfaction among first year college students. Students reporting higher stress also reported lower satisfaction with life (Coffman & Gilligan, 2002; Demakis & McAdams, 1994). Many studies focus on the relationship between living arrangement and mental health, especially life satisfaction, while the conclusions are quite different.

Life satisfaction is also one of the important parameters of measuring mental health. It needs to mention that the life satisfaction is different from well-being, life quality and gladness. Lyubomirsky (2001) in his definition of life satisfaction stated that the term of mental assessment of an individual’s life quality, which has cognitive component and is counted as powerful anticipant of mental health. Life satisfaction is in fact satisfaction of all spheres of life (Sousa & Lyubomirsky, 2001). Life dissatisfaction disregarding its causes has many negative consequences. Life dissatisfaction is related to poor health status, depression symptoms, personality
problems, poor health behaviors and poor social conditions (Bahreinian & Kermani, 2009).

Life satisfaction is often considered a desirable goal, in and of itself, stemming from the Aristotelian ethical model, eudemonism, (from eudemonia, the Greek word for happiness) where correct action lead to individual well-being, with happiness representing the supreme good (Mayers, 1992). Moreover, life satisfaction is related to better physical (Veenhoven, 1991) and mental health (Beutell, 2006), longevity, and other outcomes that are considered positive in nature.

"Life satisfaction is an overall assessment of feelings and attitudes about one’s life at a particular point in time ranging from negative to positive. It is one of three major indicators of well-being: life satisfaction, positive affect, and negative affect (Diener, 1984). Life satisfaction includes the following under life satisfaction: desire to change one’s life; satisfaction with past; satisfaction with future; and significant other’s views of one’s life." (Beutell, 2006). Life satisfaction is considered a cognitive process because when individuals rate their satisfaction with life, they most often compare with their life circumstances to a set of self-imposed standards (Coffman & Gilligan, 2002).

One such transition point occurs when young adults move from high school to college. According to (Lounsbury, Saudargas, Gibson, & Leong 2005), the students who begin college predicts both who they become while in college as well as how satisfied they are with their experience. Thus, understanding the life satisfaction of students during this transitional phase may provide insight on future psychological and college-related outcomes. To better understand which demographic, academic, and psychological variables best predict the life satisfaction of this population, this study investigated indicators of gender, disability, race, parental income, academic achievement, life meaning, and religiousness within a large sample of adolescents immediately prior to their enrolment in college.

Life span theorists such as Erikson (1968), Levinson (1978), Chickering (1969), and Perry (1970) offer frameworks for conceptualizing the transition from adolescence to early adulthood experienced by incoming college students. These developmental theorists outline life tasks such as engaging in intimate relationships, developing a sense of autonomy, establishing a cohesive identity, and advancing
cognitive processing skills. College development research has infused concepts from these theories, often focusing on components of student development as a means to explore precursors of students’ withdrawal from college (e.g., Lounsbury, Saudargas, Gibson, & Leong, 2005; Pantages & Creedon, 1978). But as connections have been established between student’s academic development and their personal growth, including their well-being, more attention has been given to the factors that impact student’s satisfaction during their college years (e.g., Disch, Harlow, Campbell, & Dougan, 2000). However, this research has failed to explore the life satisfaction of students immediately before they enter college, thereby missing potentially important predictors of life satisfaction that predate the stress and excitement of students’ transitions to the college environment.

Several studies have evaluated whether life satisfaction is more of a trait, a relatively stable characteristic of an individual or more a state varying in response to external circumstances. Those who argue that subjective well-being should be regarded as a trait (Brickman, Coates, & Janoff-Bulman, 1978; Costa, McCrae, & Zondeman, 1987; McQuillan, Torres Stone, & Greil, 2007). Stones and Kuzma (1986), pointed out that such demographic variables such as age, gender, and income account for a small portion of the variance in subjective well-being and that changes in life circumstances affect subjective well-being (Andrews & Withey, 1976; Argyle, 1987; Campbell, Converse, & Rodgers, 1976; Myers, 1992). Subjective well-being is relatively stable over time (Lucas, Clark, Georgellis, & Diener, 2004), with intrapersonal correlations around .35. Most life events affect subjective wellbeing for only 3 months (Suh, Diener, & Fujita, 1996). According to Diener and Lucas (1999), personality is one of the strongest predictors of subjective well-being. But to say that subjective well-being is relatively stable is not the same as saying that it is an immutable trait (Veenhoven, 1994). Landau (1992) found that only 10% of his sample stayed in the same happiness category over time. If intrapersonal correlations are around .35, that still leaves plenty of room for factors other than personality to play a role in life satisfaction. A large body of research supports the idea that external events and structural variables can affect subjective well-being (Diener et al., 1999; Keyes, 1998; Myers, 2000; Veenhoven, 1994). For example, there are strong relationships between the wealth of nations and mean levels of subjective well-being, and—although the correlations between wealth and subjective well-being are not strong—
research in this area has consistently found significant relationships (Diener and Oishi, 2000; Veenhoven, 1994). Variables with moderate to strong associations with life satisfaction include education (Campbell, Converse, & Rodgers, 1976), marriage (Glenn, 1975; Gove and Shinn, 1989), health (Cameron, Titus, Kostin, and Kostin, 1971; Schultz and Decker, 1985), and volunteer work (Thoits and Hewitt, 2001). One explanation for the relative stability of subjective well-being and greater impact of recent versus distant events on life satisfaction is adaptation (Helson, 1947). Brickman and Campbell (1971) employ the term hedonic treadmill to describe the process by which individuals who experience diminished subjective well-being following a stressful life event gradually return to their baseline (Kahneman, 1999). The idea that individuals return over time to their hedonic set point (Headey and Waring, 1992) has guided much recent theory and research on subjective well-being (Diener et al., 1999; Lucas et al., 2004; Seligman, 2002). Although adaptive responses to external circumstances are common, they are by no means universal. In a recent study (Lucas, Clark, Georgellis, & Diener, 2004) showed that unemployment lowers the set point for life satisfaction. The experience of unemployment results in a diminution of life satisfaction; after unemployment, life satisfaction increases, but it does not return to its previous level. Another plausible explanation for the low associations between life events and life satisfaction is that individuals with more material resources are less reactive to negative life events because they have alternatives (Diener & Fujita, 1995). In addition to modifying the effects of infertility, emotional coping resources such as religiosity (Ellison, 1991; Gartner, Larson, & Allen, 1991), internal medical locus of control (Lu, Shih, Lin, & Ju, 1997), and social support (Lu, Shih, Lin, & Ju, 1997), should directly contribute to variations in life satisfaction and are likely to modify the infertility to life satisfaction association. From a sociological perspective, definitions of situations should also contribute to responses to situations. According to Michalos's (1985) multiple discrepancy theory, subjective well-being depends less on one's objective circumstances than it does on a comparison of those circumstances to a number of relative standards. Diener and Fujita (1995) showed that resources were more relevant to subjective well-being when they are more closely related to an individual's goals and aspirations.
Review of studies related to life satisfaction

Hoover (1992) assessed American Indian college students' perceptions in four areas critical to the successful completion of college. These included the perceptions of students towards (1) high school preparation; (2) quality of college course instruction; (3) personal views toward attending college and, (4) study skill abilities. An 80% response rate was obtained, and the result indicate that the positive perceptions toward college life and study skill abilities and less than positive perceptions are found for counseling and career guidance in high school. Also, students had significantly lower perceptions toward their study skill abilities than they did toward their college course instruction and personal feelings toward attending college.

Gilman (2001) examined relationship between life satisfaction, social interest, and participation in extracurricular activities among adolescent students. A total of 321 high school adolescents (Grades 9-12) were administered a multidimensional measure of life satisfaction and a scale that assess social interest. It was observed that the higher social interest to be significantly related to higher levels of overall satisfaction, as well as satisfaction with friends and family. Significant race differences were noted. Adolescents who participated in greater numbers of structured extracurricular activities showed higher school satisfaction.

Sam (2001) conducted an exploratory study on the self-reported satisfaction with life and the factors predicting it among 304 international students (159 males and 145 females) at the University of Bergen, Norway. The students who lived in Norway between 2-3 years reported on the whole good satisfaction with life. However, students from Europe and North America were on the whole more satisfied than their peers from Africa and Asia. It was also found that the factors such as the number of friends, satisfaction with finances, perceived discrimination and information received prior to significantly affected the student's life satisfaction. The importance of these factors differed for students from developing and developed countries where some paradoxical findings came out. These paradoxical findings may be the result of the Norwegian context of the study. Language proficiency (with respect to host and English languages), and having a host national friend did not show significant effect on life satisfaction.
McKnight, Huebner, and Suldo (2002) conducted a study to find out relationships among stressful life events (SLEs), temperament, externalizing and internalizing behaviors, with global life satisfaction were investigated on sample of 1,201 adolescents in grades 6 through 12 in a small city of Southeast. A modest correlation was found between life satisfaction and Extraversion, whereas moderate correlations were found between life satisfaction and Neuroticism and Students' Life Satisfaction Scale (SLEs). Based upon hierarchical regression analyses, temperament variables accounted for approximately 16% of the variance in predictions of life satisfaction ratings. When SLEs were added, an additional 3% of the variance in life satisfaction ratings was subsequently explained. Life satisfaction did not operate as a moderator between SLEs and problem behavior. However, when global life satisfaction was added as a mediator variable. The result indicated partial mediational effect, particularly on internalizing behavior.

Cha (2003) studied the subjective well-being of Korean college students and its relation with personality constructs, such as self-esteem, collective self-esteem, and optimism. The subjective well-being and personality constructs of 350 Korean students, assessed with self-report measures. The result showed that the relative contributions of personality constructs in predicting subjective well-being were examined by regression analysis and dominance analysis and Korean students scored low on life satisfaction scale and affective well-being compared than the students of other nations. All personality constructs were found to be significantly correlated with life satisfaction, positive affect, and negative affect.

Gilman & Huebner (2003) reviewed life satisfaction research conducted on children and adolescents. An important construct in positive psychology is life satisfaction (LS). Although its importance has been recognized by some school psychologists, research findings have remained un-synthesized. In this article, theory, measurement, and correlates of LS among children and youth are reviewed. Following this review, interrelationships among LS research, positive psychology, and school psychology were reported.

Kenneth, Tovar, Enrique, Curlette, & William (2008) investigated coping resources, perceived stress and life satisfaction among American and Turkish University students. The finding reveals that the use of transitional stress constructs in
studying life satisfaction with students in both countries. The result indicated that American and Turkish students did not differ significantly in regard to perceived stress, life satisfaction, or an overall measure of coping resources; however, they also did differ significantly regarding coping resources. There were sex differences for both countries, generally favoring males, in regard to specific coping resources.

Valois (2004) explored the relationships between perceived life satisfaction and physical activity behaviors in a statewide sample of adolescents in South Carolina (N = 4,758). The finding reveals that the adjusted logistic regression analyses and multivariate models constructed separately revealed significant race by gender results. Not exercising for 20 minutes over the past 7 days (sweating and hard breathing), not performing stretching exercising (past 7 days), not exercising to strengthen or tone muscles (past 7 days), spending < 20 minutes actually exercising or playing sports in PE class, not playing on sport teams run by school, and not playing on sport teams run by outside school organizations were associated (p = .05) with reduced life satisfaction for specific race/gender groups. Results suggest implications for school and community-based physical activity programs.

Zullig, Huebner, Gilman, Patton, & Murray (2005) investigated the psychometric properties of the Brief Multidimensional Student's Life Satisfaction Scale (BMSLSS) among 522 college students. The Internal consistency reliability explored scale reliability, factor analysis explored construct validity, known-groups validity was assessed by use of items from the National College Youth Risk Behavior Survey and Harvard National Survey of Alcohol Use, and criterion-related validity was explored through analysis with the CDC's Health-Related Quality of Life Scale. The results reveal that the internal consistency reliability, construct, known-groups, and criterion-related validity were established and these findings offer preliminary support for the BMSLSS; it could serve as part of comprehensive evaluations of subjective QOL for program evaluation and/or policy purposes among college students.

Kjeldstadli et al. (2006) studied the relationship between life satisfaction, basic model of personality, stress and coping among medical students. This longitudinal, nationwide questionnaire was used to examined the course of life satisfaction during medical school, compared the level of satisfaction of medical
students with that of other university students, and identified resilience factors. t-test was used to compare means of life satisfaction between and within the population groups. K-means cluster analysis was applied to identify subgroups among the medical students. Analysis of Variance (ANOVA) and logistic regression analyses were used to compare the subgroups. The finding reveals that the life satisfaction decreased during medical school. Medical students were found satisfied with other students in the first year of study but they reported less satisfaction in their graduation year. Medical students who sustained high levels of life satisfaction perceived medical school as interfering less with their social and personal life and were less likely to use emotion focused coping, such as wishful thinking, than their peers.

Keith et al. (2006) examined the mediating role of self-perceived health between perceived spirituality, religiosity and life satisfaction among a stratified random sample of college students, while controlling for gender. Although both models displayed excellent fit criteria, the perceived spirituality and life satisfaction model was fully mediated by self-perceived health and the perceived religiosity and life satisfaction model was partially mediated by self-perceived health. The finding reveals that the both models were equal for men and women and students who described themselves as spiritual (or religious) are likely to report greater self-perceived health and greater self-perceived health likely to influences life satisfaction for both men and women. Results preliminarily support the contention that life satisfaction is related to differing reported health status, whether physical or mental, and that life satisfaction may be influenced by religiosity and spirituality engagement.

Pettay and Francis (2008) explored the relationship between a variety of health behaviors and life satisfaction among 794 college students enrolled in a mid western university during the Fall, 2006 and Spring, 2007 semester, completed an online Health Behavior Assessment designed to measure body mass index (BMI), frequency of physical activity behavior, fruit and vegetable consumption, sleep behavior, alcohol use, frequency of use of stress-management skills, stage of change for physical activity, stage of change for fruit and vegetables consumption, stage of change for frequency of stress-management skills, and life satisfaction. As predicted, significant correlations were found between life satisfaction and BMI, frequency of physical activity, fruit and vegetable consumption, and frequency of use of stress-management skills. Students who regularly received 6-8 hours of sleep showed higher levels of life
satisfaction. Students in the maintenance stage of change for physical activity behavior and stress-management skill were found to have higher levels of life satisfaction compared to individuals in earlier stages of change. Results indicated that increased life satisfaction is related to a variety of health behaviors in college students.

Pan, Wong, Joubert, and Chan (2008) compared the predictive effects of acculturative stressors and meaning of life on life satisfaction between Chinese students in Australia and Hong Kong. The data obtained from the 606 Chinese students studying abroad at the University of Melbourne in Australia and at 6 universities in Hong Kong. The Australian sample experienced a significantly higher level of acculturative stressors than did the Hong Kong sample, but life satisfaction did not differ significantly between the 2 samples. Meaning of life had a strong positive contribution and acculturative stressors had a negative contribution in predicting life satisfaction in both samples. Meaning of life partially mediated the relationship between acculturative stressors and life satisfaction in both samples.

Paschali and Tsitsas (2010) conducted a pilot study on Stress and life satisfaction among 200 university students. The sample was taken from the National and Kapodistrian University of Athens and the Xarokopion University (100 students of 1st year and100 students of 4th year). The mean ± standard deviation of the “life satisfaction score” was 4.3 ± 0.5. Moreover, the majority of participants (63.4%) were found to have low “life satisfaction” without any differences between the two sexes. Analysis of STAI showed that students have lower scores in STATE anxiety scale have high scores in life satisfaction scale whereas high scores have lower scores in life satisfaction (p = 0.005). Furthermore Trait Anxiety score analysis revealed insignificant results. Treating the life satisfaction score as a continuous variable, it was found that the mean score (4.2 ± 0.4) of students of the 1st year was statistically significantly lower compared to students of the 4th year (4.4 ± 0.6, p = 0.005). Two-way ANOVA showed that the two-way interaction between the year and students’ sex (p < 0.001) state of anxiety (p = 0.034) were statistically significant.

Martín, Perles, & Canto (2010) carried out a study for evaluation of three orientations towards happiness: pleasure, meaning and engagement, as well as their relation to life satisfaction and the perception of happiness in a sample of 320
university students. The result showed that the most used kind of orientation towards happiness is pleasure, followed by meaning, and finally engagement. It has also been reported that pleasure is the orientation most closely associated with happiness while engagement seems to be more related to life satisfaction. These findings aim to make distinction between the concepts of happiness and life satisfaction and lead the attention to the actions which can improve the levels of happiness.

Romualdas (2010) examined the severity of injury, and participant's perceptions of stress, social support, and life satisfaction among 123 college athletes (male, $N = 69$, female $N = 54$) with minor (69) or severe (54) injuries, who ranged in age from 18 to 25 years. Participants completed measures of perceived social support, stress, and satisfaction with life. The finding showed that the greater perceived stress was associated with diminished life satisfaction for athletes with a major injury more than for those with a minor injury. The interaction between perceived stress and perceived social support was associated most with diminished life satisfaction for participants with a major injury.

Ojeda, Flores, and Navarro (2011) examined the academic satisfaction and life satisfaction of 457 Mexican American college students attending a Hispanic-Serving Institution. Using structural equation modeling, results indicated that the model provided a good fit to the data. Specifically found out that the positive relations from positive affect to enculturation, acculturation, college self-efficacy, academic satisfaction, and life satisfaction; from enculturation to college self-efficacy; from acculturation to college self-efficacy and college outcome expectations; from college self-efficacy to college outcome expectations, academic goal progress, academic satisfaction, and life satisfaction; from college outcome expectations to academic satisfaction; from academic goal progress to academic and life satisfaction; and from academic satisfaction to life satisfaction. The obtained result reveals that the model was invariant across gender groups, and overall, 38% and 14% of the variance in academic satisfaction and life satisfaction, respectively, were explained by the predictor variables.

Gençay and Alpaslan (2011) carried out a study to ascertain the level of hopelessness and life satisfaction among teacher candidates from the view points of gender and branch variables. With this aim, the “beck hopelessness scale and life
satisfaction scale" has been applied to a total of 278 teacher participants, of which 133 were females and 145 were males. The independent samples t-test was applied to compare the groups. The result showed statistically insignificant difference at the level of hopelessness and life satisfaction of male and female students (p>0.05), whereas, there was a statistically significant difference between hopelessness levels (p<0.05) according to the branch variables. In this study, the hopelessness level of the physical education and sports teaching students has been found to be lower when compared to the CET and PMT departments' students. Besides, when all the teacher candidates were considered, there was a negative correlation between their hopelessness levels and life satisfaction levels (p<0.05).

Achour and Mohd (2014) examined the role of resilience and social support as coping strategies in reducing depression and increasing student satisfaction with life in secondary schools. The respondents were randomly selected from four secondary schools from Kuala Lumpur (N=200). The result reveals that the social support and resilience were found positively related with life satisfaction and the findings also revealed that resilience was positively and significantly related with social support.

Mental Health

The origin of word "health" is from the old English word haelc, meaning "wholeness, being whole, sound or well". Medilexicon's medical dictionary has given three definitions of health, the first being "the state of the organism when it functions optimally without evidence of disease or abnormality" the second was "a state of dynamic balance in which an individual's or a group's capacity to cope with all the circumstances of living is at an optimal level", and the third one was "a state characterized by anatomic, physiologic, and psychological integrity, ability to perform personally valued family, work, and community roles; ability to deal with physical, biological, psychological, and social stress; a feeling of well-being, and freedom from the risk of disease and untimely death". The definition of health proposed by (WHO, 1948) states "a complete physical, mental and social wellbeing and not merely the absence of disease or infirmity". Health can also be described in terms of one's ability to adapt and self manage in the face of social, physical, and emotional challenges.
While explaining the concept of health it needs to emphasize that the relationship between emotion and health is gaining more popularity and since scientific ground last few decades. Psychosomatic disorders are not unfamiliar to many of us especially in primary care or general practice. Moreover those people who get opportunity of emotional training are likely to become capable to improve their emotional intelligence and social skills which seems to lead to better quality of life. Hence, most of us would agree that the relationship between emotional health and physical health is biologically interlinked. However, there is another undeniable fact that human beings invariably in common parlance often exhibits the sense of purpose or meaning in their life, which known as spirituality. The spiritual individuals find their purpose in life and usually eagerly motivated to adapt and cope with changing circumstances or trying life situation more willingly or even happily. There is no paucity of clinical evidence showing the relationship of spirituality or religiosity and health, although the scientific explanation of the effect via psycho-immunology pathway is neither rigorous nor convincing yet. A complete health has six components viz. mental, spiritual, physical, social, environmental, and emotional. Each one is distinct and important for the individuals but in this present investigation the mental health has been taken into consideration in this study because mental health is one of the important components of health for the individual which needs the attention of all concerned for proper investigation especially in this competitive era the difficulties faced by the students of professional and nonprofessional courses.

The fruitful efforts of biologists, psychiatrists and psychologist working on the line of bio-psycho-social approach, this approach positing that biological, psychological (thought, emotion and behaviour) and social factors play a significant role in human functioning in the context of developing diseases or illnesses and from this perspectives health can be best understood in terms of the combination of biological, psychological and social factors rather than purely in terms of merely biological factors. Hence, health is commonly used word that refers to a metabolic efficiency and sickness and it has been described in terms of metabolic inefficiency. It is widely accepted truth that human beings had never been completely healthy and same is also in today's world. In fact every one of us lives with the unique combination of health and sickness, abilities and disabilities, both emotional and physical. Researches have shown that there are various determinants of an
individual's overall health such as nutrition, exercise, stress management and health care. Further it is to emphasize that health is a multidimensional concept so it includes three main dimensions, i.e. physical, social and mental health and also in addition there can be spiritual, emotional, vocational, environmental and political dimensions of health (Wardley, 1993; Aboud, 2011). The physical health refers to reasonably perfect functioning of the body within a normal range and it is the overall condition of living organism at a given time and so as it is easy to understand the physical health and its assessment. The social dimension of health refers to a person's ability to relate and to connect with others and adapt to different social situations and it also includes the levels of social skills which a person process, social functioning and the ability to relate oneself as member of a larger society. As far as spiritual dimension of health is concerned it refers to one's ability, which seems to be connected with religious beliefs and practices of the person. The emotional health refers to the ability to understand ourselves and cope with the life's challenges. It is our emotional reaction to life which is concerned with the person's feeling such as, anger, fear, stress, coping, love, affection and happiness. Vocational health is concerned to one's attitude about work and career, this dimension involves preparing for and participating in work that provides a sense of personal satisfaction and enriches the life of a person.

It appears from the available literature that several definitions of health have been proposed and prominent amongst them are as stated for clear understanding of the concept of health.

- Maslow and Mittelman (1951), presented the following criteria of normal psychological health, adequate feeling of security, adequate self-evaluation, adequate spontaneity and emotionality, efficient contact with reality, adequate bodily desires and the ability to gratify them, adequate self-knowledge, Integration and consistency of personality, adequate life goals, ability to learn from experiences, ability to satisfy the requirements of the group and adequate emancipation from the group or culture.

- Health is not merely the absence of illness; rather it is a physical, social, mental and spiritual well-being, a state which has been identified as an attribute of positive mental health. (Jahooda, 1958 & Berg, 1975).
• Another definition, proposed by specialists in preventive medicine, specifies some tangible components of health; "a state characterized by anatomical, physiological and psychological integrity; ability to perform personally valued family, work and community roles; ability to deal physical, psychological and social stress; a feeling of well-being; and freedom from the risk of disease and untimely death" (Stokes, Noren, & Shindell, 1982).

• Health indicates psychosomatic wellbeing. Bhatia (1982), "health is a state of being hale sound or whole in body and mind".

• Includes continued development of one’s occupational skills.

It is quite evident research literature that health has been found to be a culturally anchored concept; it means the communities have their own concept of health, as a part of their culture. Probably the oldest definition of health found in a research literature is referred to as "the absence of disease". It is also observed that in some cultures health and harmony are considered as equivalent. The harmony is defined as "being at peace with the self the community, God and Cosmos". The ancient Indians and Greeks shared this concept and attributed disease to disturbance in bodily equilibrium of what they called "humors". Modern medical advancement focuses on a study of disease, and did not pay attention to study health. But now with growing awareness health occupies very important place since last several decades and it has been considered as a fundamental human right with the aim of worldwide social goal and essentially important concerning to the satisfaction and expectations of human basic needs and to improve their quality of life.

In the developing countries people face a lot of challenges to sustain in a competitive and changing environment in diverse fields. People should have to be mentally prepared to take up challenges intelligently through hard work in order to achieve prestigious position for better living, through sustainable quality of life has created competitiveness in them such as the University/College students, women, early or late adolescents, organizations and business organizations. The conflicting state of mind leads to disturb the mental health of individuals. When we talk about students mental health we can say that in today’s competitive world students have to deal with societal/cultural issues, family dysfunction, poor frustration tolerance, experimentation with drugs and alcohol and weak interpersonal attachments (Kitzrow,
Health Organization (WHO) reported in 2003, stated that mental health refers to individual’s state of well-being when he realizes his abilities, has the ability to cope with the normal stresses of life, able to work productively and fruitfully and can contribute to his community. In the description of the report of WHO, it was emphasized that mental health issues are expected to increase by 15% by 2020. Additionally, the numbers of cases documenting mental health problems among university students are on the increase each year (Zivin, Eisenberg, Gollust and Golberstein, 2009). Those students who are studying in higher institutions for higher education are more at risk of development of mental health problems or disorders compared with their peers of similar age groups in the general population. (Hamdan-Mansour, Halabi and Dawani, 2009; Stewart-Brown, Evans, Patterson, Petersen, Doll, Balding and Regis, 2000; Humphrey, et al. 1998). Similarly, as the university for undergraduates are considered to be the country’s leaders of the future, these issues need to be looked into with utmost urgency. Approximately 25% of people in this world may suffer from mild to severe forms of mental health problem during their lives. It might be affecting ones daily life, relationships and even his/her physical health. It also includes a person’s ability to enjoy life - to attain a balance between life activities and efforts to achieve psychological resilience.

Mental health has also been explained in different perspectives. According to psychoanalytic viewpoint mental health is a self possessed property of individuals and a function of intra-psychic development and dynamics is still dominant. It maintains that a person acquired good mental health as a consequence of future early socialization; Psychoanalysis and various other forms of psychotherapy has corrective for unfortunate early development. The mental health is a very wide and relatively ambiguous term so it is difficult to agree on its general application in a single context and it can be used in so many ways and it clearly specifies that how do we think, feel and behave that directly affects a person’s whole personality. It may also be affected in any aspect of life such as age, race, gender, or social background of an individual. Mental health disorders such as, schizophrenia, depression, personality disorders, etc. whereas mental health disease concerned such as alzheimer and dementia generally which are developed in old age. Another view of mental health was put forwarded by the proponents of social psychiatry. Psychologist like Fromm (1955) and Frankle
(1948), take a comprehensive view of mental health "as a function of the total society, its norms, values and general style of life".

Review of literature have been carried out in different parts of the world in which to identify some factors that impact on student's mental health since poor mental health has been recognized as the leading cause of suicidal behaviour, a sense of helplessness (Kay, Li, Xiao, Nokkaew & Park, 2009) and lower academic achievements (Puskar & Bernardo, 2007). However, a review of literature on the subject reveals that information regarding mental health among undergraduates were derived from the studies conducted in Malaysia (McKinney, 2005; Sreeramareddy, Shankar, Binu, Mukhopadhyay, Ray; Hamdan-Mansour et al., 2009; Uner, Ozcebe, Telatar & Tezcan, 008; Abdulghani, 2008; Biro, Balajti, Adany & Kosa, 2009). In Malaysia, research on mental health was more focused on medical students rather than on the general student population. (Zaid, Chan & Ho, 2007; Sherina, Lekhraj & Nadarajan, 2003). So, we can say that man is living in the age of high technology such as an age of information, an age of multi-cultures and multi-values. Such age requires us to take every opportunity to face the challenges. The current situation of college student mental health is an unoptimistic. So the college students face lots of pressure and many of them have certain psychological problems. It is a common phenomenon that most of the college students have more or less psychological issues, which do not favors to university student's growth and the nation development. It is the responsibility of the whole society to improve the mental health of the students. Almost 15-20% of the students meeting criteria for a diagnosis of psychiatric illness. Most of the studies are reported that higher prevalence in women than men. Undergraduate records from a British university, however, showed that only 2-4% of students developed a psychiatric disorder that led to absence from the course and 1% required admission to hospital for psychiatric disturbance.

Mental health problems are highly prevalent among college students, according to the reports of surveys. In 2008 National College Health Assessment sponsored by the American College Health Association (ACHA-NCHA), more than one in three undergraduate students reported that "feeling so depressed it was difficult to function" at least once in the previous year, and nearly one in 10 reported "seriously considering attempting suicide". According to a study of 26,000 students from 70 colleges and universities in 2006. The 6% of undergraduate students and 4%
of graduate students reported having seriously considered suicide in the previous 12 months (Drum et al., 2009). In another survey random data was taken from samples at 26 colleges and universities in 2007 and 2009 (the Healthy Minds Study), they found out that 17% of students had positive screens for depression according to the Patient Health Questionnaire-9, including 9% for major depression, and 10% of students had a positive Patient Health Questionnaire screen for an anxiety disorder (panic or generalized anxiety disorder). Blanco et al. (2008) compared college students and non college students attending young adults across a wide range of psychiatric disorders in a nationally representative sample in 2002–2003 National Epidemiological Survey of Alcohol and Related Conditions (NESARC) (Grant, 2003). They found that college students and their non college students attending young adult peers had approximately the same overall 12-month prevalence of mental disorders using a validated and fully structured diagnostic interview (Alcohol Use Disorder and Associated Disabilities Interview Schedule—DSM-IV version). The overall prevalence of mood and anxiety disorders was also roughly equal across the two groups, although the specific condition of bipolar disorder was less prevalent among students. Almost half of college students met the DSM-IV criteria for at least one mental disorder in the previous year, including 18% for a personality disorder, 12% for an anxiety disorder, and 11% for a mood disorder.

A mentally healthy person has all aspects of his well-being, physical, mental, social or super individualistic well coordinated into a balanced and harmonious whole in relationship with the total environment.

Menninger (1945) defined mental health defined as the adjustment of human beings to the world and to each other with a maximum of effectiveness and happiness. He adds that mental health is the ability to maintain an even temper, an alert intelligence, socially considerate behaviour and a happy disposition.

Hadfield (1950), stated mental health in terms of a dynamic state which is not static, it is the functioning of the whole organism towards an end, it is a harmony of movement being active and living.

Conard (1952), differentiated "positive health from non health and negative health, to her, positive health consist in ways of living that are beyond the frontiers of more social existence implied by negative health. This category (positive health)
applies when there is evidence that the individual fully utilizes a capacity or working in that direction”.

Bernard (1957), pointed out that “Mental health is a normal state of well being, a positive but relative quality of life. It is a condition which is characteristic of the average person who meets the demands of life on the basis of his/her own capabilities and limitations, mental health is not only absence of illness but it is an active quality of individual’s daily effective living”.

Jahoda (1958) noted six aspects of positive mental health such as attitude of an individual towards his own self, growth, development or self actualization, integration, autonomy, perception of reality, and environmental mastery.

Kornhaussen (1965) described “mental health of workers as those behaviors, attitudes, perception and feelings that determine workers overall level of personal, effectiveness, success, happiness and excellence of functioning as person”.

Clausen, Merten and Nirbert (1966), a mentally healthy individual maintains a good adjustment with social situation, and engaged in some or other project intended to benefit society”.

According to Hilgard, Atkinson and Atkinson (1971) a mentally healthy person has a philosophy which gives direction to his life while keeping in view the demands of the changed situations and circumstances.

Sawrey and Telford (1971) described that a person with mature mind is constantly engaged in increasing knowledge, behaves responsibly, express thoughts, feeling and viewpoints.

Schultz (1977) prepared seven criteria of sound mental health i.e. extension of the sense of self, warm relations of self to others, emotional security realistic perception, skills and assignments, self objectification and a unifying philosophy of life. Schultz conducted that there is no single prescription for description of psychological health on which all psychologist or personality theorists would agree perhaps the only point on which most of the theorists almost fully agree that “psychologically healthy person are in a conscious control of their lives”.

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Bhatia (1982) described mental health in terms of the ability to balance feelings, desires, ambitions and ideals in one's daily living. It means the ability to face and accept the reality.

According to David Smail (2006) “Advocates of policy based on subjective/psychological indicators cannot address adequately the problem that people’s valuations of their circumstances are crucially conditioned by their frames of reference”

Samman (2007), although there is widespread agreement that mental health is more than the absence of clinically defined mental illness, there is ongoing debate about what constitute the necessary or sufficient elements making up ‘positive mental health’, ‘wellbeing’ or ‘flourishing’.

According to WHO (World Health Organization, 2012) mental health is "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". WHO stated that mental health "is not just the absence of mental disorder". WHO pointed out that especially in low- and middle-income countries, mental health services are very underfunded - both human and financial. Most resources are channeled into treating and caring for mentally ill patients, rather than on any integrated mental health system. Countries should integrate mental health into primary health care (general practice), provide mental health care in general hospitals, and improve community-based mental health services, rather than just providing care in large psychiatric hospitals. Prevalence of most common forms of mental illness are:

**Anxiety disorders** – it is the most common group of mental illnesses. The sufferer has a severe fear or anxiety which is linked to certain objects or situations. Most people with an anxiety disorder will try to avoid exposure to whatever triggers their anxiety. Examples of anxiety disorders include:

**Panic disorder** - person experiences sudden paralyzing terror or imminent disaster.

**Phobias** - these may include simple phobias - disproportionate fear of objects, social phobias - fear of being subject to the judgment of others, and agoraphobia - dread of situations where getting away or breaking free may be difficult. We really do not
know how many phobias people may experience globally - there could be hundreds and hundreds of them.

**Obsessive-compulsive disorder (OCD)** - person has obsessions and compulsions. In other words, constant stressful thoughts (obsessions), and a powerful urge to perform repetitive acts, such as hand washing (compulsion).

**Post-Traumatic Stress Disorder (PTSD)** – It can occur after somebody has been through a traumatic event - something horrible and scary that the person sees or that happens to them. During this type of event the person thinks that his/her life or other people's lives are in danger. The sufferer may feel afraid or feel that he/she has no control over what is happening.

**Mood disorders** - these are also known as affective disorders or depressive disorders. Patients with these illnesses share disturbances or mood changes, generally involving either mania (elation) or depression. Experts say that approximately 80% of patients with depressive disorder improve significantly with treatment.

**Major depression** - the sufferer is not longer interested in and does not enjoy activities and events that he/she previously got pleasure from. There are extreme or prolonged periods of sadness.

**Bipolar disorder** - also known as manic-depressive illness, or manic depression. The sufferer oscillates from episodes of euphoria (mania) and depression (despair).

**Dysthymia** - mild chronic depression. Chronic in medicine means continuous and long-term. The patient has a chronic feeling of ill being and/or lack of interest in activities he/she once enjoyed - but to a lesser extent than in major depression.

**Seasonal Affective Disorder (SAD)** - a type of major depression. However, this one is triggered by lack of daylight. People get it in countries far from the equator during late autumn, winter, and early spring.

**Schizophrenia disorders** - Whether or not schizophrenia is a single disorder or a group of related illnesses has yet to be fully determined. It is a highly complex illness, with some generalizations which exist in virtually all patients diagnosed with schizophrenia disorders. Most sufferers experience onset of schizophrenia between 15 and 25 years of age. The sufferer has thoughts that appear fragmented; he/she also finds it hard to process information. Schizophrenia can have negative or positive
symptoms. Positive symptoms include delusions, thought disorders and hallucinations. Negative symptoms include withdrawal, lack of motivation and a flat or inappropriate mood.

WHO (1981), proposed another definition of mental health with some modification states that “Mental health is the capacity of the individual, the group and the environment to interact with one another in ways that promote subjective well-being, the optimal development and use of mental abilities (cognitive, affective and relational), the achievement of individual and collective goals consisted with justice and the attainment and preservation of condition’s of fundamental equality”. This definition has several advantages in concerning to women’s mental health because;

- stresses the complex web of interrelationships that mental health and that the factors that determine health operate on multiple levels.
- goes beyond the biological and the individual.
- acknowledges the crucial role of the social context.
- highlights the importance of justice and equality in determining mental well-being.

(Tudor 1996; Huppert & Whittington 2003), individuals who fit the criteria for a DSM/ICD mental disorder may have the presence of mental illness plus the absence of mental health, or may have moderate mental health or be flourishing. The absence of mental illness does not necessarily imply the presence of high levels of positive mental health and vice versa. People who have mental health problems may also have positive mental health. The potential independence of mental health and mental illness also suggests that some of the determinants of mental well-being are not the same as the determinants of mental illness (Huppert 2008).

Models of mental health:

“Mental health” has been defined variously by various psychologists emphasizing the negative aspects of mental health, i.e. absence of psychological symptoms such as tension, anxiety, depression, emotional imbalance, anti-social habits and drug addiction. An individual who does not show these symptoms are regarded as a mentally healthy. It may be an operational definition of mental health and it seems to be quite adequate because it is tied up with normality. It shows that a normal person is
well adjusted so we may say that he/she is a mentally healthy person. Some psychologists prepared a list of the positive qualities of mental health that incorporates sociability, emotional maturity, effectiveness of human relationship and so on. In modern psychology several or less independent systems have emerged and everyone finds out to explain its human nature and tries to solve the problems that arise in human mind. Most of these problems are mainly concerned with mental health and these different systems can be grouped into three models viz., the mechanical, dynamic and the humanistic models that explain mental health.

1. **THE MECHANICAL MODEL:** This model explains that man as a reactive being and considered him as merely one or more creatures of nature whose behaviour can be understood and controlled through such processes as conditioning, reinforcement and generalization. This model uses the S-R formula with its several modifications and guiding principles in the study of various human problems that includes mental health too. Most of the experiments which are based on this model are conducted on animals not on human beings.

2. **THE DYNAMIC MODEL:** This model is presented by the analytical school of psychology founded by the Sigmund Freud. According to this model, behind the benign, lurk those wishes, urges, impulses, and a person himself is ashamed to recognized. Since individual’s nature is essentially animal, he has to repress such impulses for the sake of social and cultural adjustment. Many types of adjustments become possible only by resorting to a number of defense mechanisms. The secret of mental health is not to repress the animal desires so that mental conflict is avoided.

3. **THE HUMANISTIC MODEL:** This model shows that man as being in the process of becoming, lays special emphasis on his natural tendencies toward self-direction and self-fulfillment. The significant factors that directly affects on the individual are not in reality as such but rather his interpretation of reality. This means that the reality for any individual is basically the private world of his perceptions. The consistent and organized self is developed through his experiments gained as a result of interaction with others. Unimportant experiences are ignored and those which are acceptable are incorporated in self-structure. The unacceptable experiences later prove a threat to the self which requires that it should be protected from such threats. A person becomes maladjusted when perceives himself at odds with his important
experiences. Tension makes the situation even worse and as a result he loses his mental health.

A person with good mental health is found show the following characteristics

1. A healthy person always possess a sense of contentment and well-being. One must have the ability to enjoy life and have fun. A mentally healthy person always has a zest of living to laugh and enjoy alone with others.
2. You should keep up the spirits high and must be capable to deal with stresses of life. The ability to fight back even in adverse conditions is must.
3. With the help of positive relationships and meaningful activities, a mentally healthy person participates in experiences of life to complete extent. The feeling of self realization in person.
4. Presence of good mental health means ability to grow, change and experiences different aspects as one faces different circumstances in life. You must make yourself flexible in order to deal with or deals of life.
5. Another important characteristic of good mental health is the ability to strike balance in different aspects of life. You must be social as well as remain in solitude with your loved ones. One must have the ability to work and play simultaneously. Similarly, catering all your daily physical and emotional needs of exercising, rest and sleep.
6. There should be intellectual development of one’s health, spirit, mind and soul. A sense of well-roundedness and creativity is considered must.
7. The person who is mentally healthy always shows concerns for other. He or she has the ability to take care of his own and other closed ones. A person must have good self-esteem and self-confidence in order to remain physical and mentally active.

Mental Health and review of studies

Crocker, Luhtanen, Blaine, and Broadnax (2002) conducted study on Collective Self-Esteem and psychological Well-Being among White, Black, and Asian College Students. The sample was 91 Black, 96 White, and 35 Asian college students completed the Collective Self-Esteem Scale (CSES), as well as measures of psychological well-being (personal self-esteem, life satisfaction, depression, and hopelessness). The results showed that the three groups were examined separately, the
relation of CSE to well-being with personal self-esteem partial out was insignificant for Whites, small for Blacks, and moderate to strong for Asians. General and race-specific CSE were correlated for all three groups, although the correlations were strongest for Asians.

Elissa (2004) the purpose of this article was to describe patterns of poor mental health/depression (PMHD) in a national sample of college students and the relationships among PMHD, alcohol consumption, harm, and abuse. Responses to mailed questionnaires completed by a random sample of 27,409 students at 119 colleges were analyzed using logistic regression. Nationally, 4.8% of students reported PMHD. The average college prevalence was 5.01% (range, 0.68% to 13.23%). Students with PMHD were more likely than their peers to be female, non white, and from low socioeconomic status families; less likely to report never drinking; as likely to report frequent, heavy, and heavy episodic drinking; and more likely to report drinking to get drunk. Students with PMHD-especially females-were more likely to report drinking-related harms and alcohol abuse. College is a critical context for studying youth mental health. The interrelationship of mental health problems and their clustering by group and college are important considerations for prevention and treatment.

Patrick, Chamot, and Thomas (2004) conducted study to examine perceived stress, internal resources and social support as determinants of mental health among young adults. The sample size was 2000 university students. Result reveals that the mental health was negatively associated with stress and positively associated with internal resources and social support, internal resources were positively associated with mental health, and buffered the negative impact of stress on mental health. Internal resources and stress mediated the positive impact of social support on mental health.

Jenny, Brian, Madon, and Steve (2006) studied the mental health needs, knowledge, and utilization of counseling services among graduate students at a large university in the western United States. Almost half of graduate student respondents reported having had an emotional or stress-related problem over the past year, and over half reported knowing a colleague who had an emotional or stress-related problem over the past year. Self-reported mental health needs were significantly and
negatively related to confidence about one’s financial status, higher functional relationship with one’s advisor, regular contact with friends, and being married. Utilization of counseling services was positively associated with an index of depression symptoms, the number of semesters in school, and identifying as female. Those students who experienced a significant mental health event in the past year and had higher functional relationships with their advisors were significantly more likely to utilize counseling services. Findings reveal that the need for increased attention to graduate student mental health need, especially the role of financial confidence in student well-being and the relationship of graduate students with their advisors.

Tamini and Mohammady Far (2009) present study aims to investigating mental health and life satisfaction of students of students of Iranian and Indian Universities. Scores of mental health questionnaire were less than S.B.U. and also their mental health situation was better than S.B.U. students; also A.M.U. student’s scores of life satisfaction scale were more than S.B.U. students, furthermore, A.M.U. students were more satisfied from their life than S.B.U. students. The findings suggest that should do more researches about students’ mental health and life satisfaction especially cross-cultural studies.

Nordin, Talib, Yaacob, and Sabran (2010) the purpose of this study was to determine the association between several selected demographic characteristics and the mental health status of young adults studying in public Malaysian Universities. Finding reveals that the majority of undergraduates exhibit a healthy mental state while a minority has some mental health concerns.

Hunt and Eisenberg (2010) conducted study on Mental Health Problems and Help-Seeking Behavior among College Students. They reported that these disorders appear to be increasing in number and severity. The purpose of this report was to review the research literature on college student mental health, while also drawing comparisons to the parallel literature on the broader adolescent and young adult populations.

Significance of the present study

Stress is a complex, dynamic process for every individual and in the fast pace of growth and development in all sphere of life it is inevitably unavoidable to every one of us. In the present scenario the adolescent and young youth are more vulnerable
to stress because their future course of life largely depends upon achieving success in building their academic career expecting for better job and sustainable good livelihood. But in reality they have to face it as a big challenge and encounter diversified hurdles at different stages in getting success in the achievements of their life goals. Stress being experienced by the students may adversely affect their personal well-being and long term professional capabilities. It might lead to disturb their mental health, cognitive functioning and learning abilities. The starting period of students for career building is very crucial and challenging for them because they are supposed to experience varied degrees of manageable or unmanageable stress because of the pressures of their parents to excel, peer group and teachers but somehow the children irrespective of their background have to make efforts to achieve success in fulfilling their aspirations and expectations. When they seek admission in good courses in reputed institutions either professional or non professional then they have to undergo to experience higher degree of academic stress and anxiety. In face of this type of situation at different time periods by the students cannot simply resolved. The stresses of undergraduate students seem to be related to various stressors such as academics, personal, environmental, time management, and economic factors. Academic stress is one of the important factors that affect mental and physical health of the students.

In India the educational institutions maintained by the government are relatively less in number in proportion to the student’s population to accommodate all the students. The students are selected through entrance tests for almost all the courses including professional and non-professional courses. The students have to work hard to get through cutthroat competition to get admission in professional courses as compared to the non-professional courses in government managed institutions. The College/University life is full of stress for most of the students as they go through the process of adapting to new educational and social environment. College may be even more stressful for the students who have the added strain of learning different cultural values and languages in addition to academic preparation. All over the world students are facing various types of problems which dishearten their personal as well as social life; they suffer from so many issues which they have to deal with the problems of their study, time, money, relationships, job hopes and expectations. As stressors accumulate, an individual’s ability to cope or readjustment can be overtaxed, depleting their physical and psychological resources. In turn, these are increased the
probability that physical illness or psychological distress will follow (Lazarus and Folkman, 1994).

Early adulthood is the transitional period between adolescence and adult life, the young adult population or college students experience many forms of life stressors either personal or social. Academic problems are concerned with psycho-social issues which may lead to unhealthy mental conditions. Mental health is an important aspect for human’s life besides physical, spiritual, social and financial well-being. It is believed that a healthy mind is a key to an individual attaining satisfaction in life (Swami, et al. 2007).

The present study entitled “Influence of academic stress, spiritual intelligence and life satisfaction on mental health among students of professional and non-professional courses”. The aim of the research is to ascertain the problems of the students of professional courses (MBBS, B.Tech., and MBA) and non professional courses (B.A., B.Sc. and B.Com). Researcher will collect information from the participants pertaining to their academic stress, spiritual intelligence, life satisfaction and mental health of the students of government managed colleges and universities. But in this competitive era most of the students in India want to take admission in government managed colleges and universities on the top priority rather than private institutes or self financed institute. In India the government maintained institutions are considered well reputed, having low fee structure, high job placement, well qualified teachers than privately managed institutions either in professional or non professional courses and student future seem to be more secured. As there is cutthroat competition for getting admission in professional courses so that students have to strive hard to get success and to maintain their competence over others may show more mental health problems than the non professional students. As reported by (Singh & Singh, 2008), that the professional students stress is high and adjustment level is low than their non-professional counterparts.

On the basis of review of literature the researcher formulated some important the objectives of this study are that as under.
OBJECTIVES

1. To find out the significant difference between academic stress, spiritual intelligence, life satisfaction and mental health of the students of professional and non-professional courses with demographic variables (gender, religion, family status).

2. To determine the influence of high and low levels of academic stress, spiritual intelligence and life satisfaction on mental health of professional and non-professional courses students.

3. To examine the influence of academic stress, spiritual intelligence and its four dimensions (Critical Existential Thinking, Personal Meaning Production, Transcendental Awareness and Conscious State Expansion) and life satisfaction as significant predictors of mental health of the students of professional and non-professional courses.

4. To determine the relationship between academic stress, spiritual intelligence, and life satisfaction with mental health of the students of professional and non-professional courses.

HYPOTHESES

In social sciences the research hypothesis is usually considered as a principle instruments, which helps the decision makers to explore the new ideas and observations. The research investigators are interested in this area in testing the hypotheses on the basis of available information where direct knowledge of population parameters is somewhat rare so hypothesis testing is used that enables researcher to make probability statements about the population from which the sample has been drawn. It is obvious that hypothesis cannot be proved absolutely but in practice it is either accepted or rejected by setting alpha at 0.05 and 0.01 levels of significance. In the light of literature review and realizing the significance of this research work four research hypotheses have been formulated and verified to draw meaningful conclusions. The hypotheses are as stated below.

H1: The professional and non-professional group of students will differ significantly in terms of academic stress, spiritual intelligence and life satisfaction and mental health and also with demographic variables (gender, religion, family status-joint and nuclear).
H2: There will be influence of high and low levels of academic stress, spiritual intelligence and life satisfaction on mental health of the students of professional and non-professional courses.

H3: Academic stress, spiritual intelligence and its four dimensions (Critical Existential Thinking, Personal Meaning Production, Transcendental Awareness and Conscious State Expansion) and life satisfaction will be significant predictors of mental health of the students of professional and non-professional courses.

H4: There will be relationship between academic stress, spiritual intelligence and life satisfaction with mental health among the students of professional and non-professional courses.

**Operational Definitions of Variables**

Academic stress is a mental distress with respect to some apprehended frustration association with academic failure or even an awareness of the possibility of such failure (Gupta and Khan, 1987).

David Brian King (2008) proposed that "Spiritual intelligence denotes a set of adaptive mental capacities which are based on nonmaterial and transcendent aspects of reality, specifically those which are related to the nature of one's existence, personal meaning, transcendence, and expanded states of consciousness." This definition includes the following components to explain spiritual intelligence (SI).

1. **Critical Existential Thinking:** The capacity to critically contemplate the nature of existence, reality, the universe, space, time, and other existential/metaphysical issues; also the capacity to contemplate non-existent issues in relation to one's existence (i.e., from an existential perspective).

2. **Personal Meaning Production:** The ability to derive personal meaning and purpose from all physical and mental experiences, including the capacity to create and master a life purpose.

3. **Transcendental Awareness:** The capacity to identify transcendent dimensions/patterns of the self (i.e., a transpersonal or transcendent self), of others, and of the physical world (e.g., non-materialism) during normal states of consciousness, accompanied by the capacity to identify their relationship to one's self and to the physical.
4. Conscious State Expansion: The ability to enter and exit higher states of consciousness (e.g. pure consciousness, cosmic consciousness, unity, oneness) and other states of trance at one's own discretion (as in deep contemplation, meditation, prayer, etc.

Life Satisfaction is defined as a person's cognitive evaluation of his or her quality of life as a whole or with specific domains of life. Life satisfaction as the cognitive component of subjective well-being (Martikainen, 2008). This is consistent with Bradley & Corwyn (2004) who said that life satisfaction reflects both the extent to which basic needs are met and the extent to which a variety of other goals are viewed as attainable. From this perspective it seems only reasonable that by accomplishing more goals, satisfaction with life will also increase.

Mental health is an index which shows the extent to which the person has been able to meet his environmental demands-social, emotional and physical. However when he finds himself if trapped in a situation he does not have matching coping strategies to deal with it effectively,, he get mentally strained. This mental strain is generally reflected in symptoms like anxiety, tension, restlessness or hopelessness among others. If it is felt for too long and too extensively by the person, these symptoms may take a definite form (or get 'syndromized"), representing a given illness. Mental health, therefore, should not be confused with mental illness; it is a study of pre-illness mental condition of the person (Kumar, 1991). Mental health, as such, represents a psychic condition which is characterized by mental peace, harmony and content. It is defined by the absence of disabling and debilitating symptoms, both mental and the somatic in the person (Schneidres, 1964).

Variables
CRITERION VARIABLE (Dependent Variable)
Mental Health
PREDICTOR VARIABLE (Independent variable)
Academic Stress
Spiritual Intelligence
Life satisfaction
Demographic variables / Personal data sheet (PDS).

The PDS includes the relevant information of the respondents under the following major categories i.e. Age, Gender, Course of the study, Religion, Fathers’ qualification, Mothers’ qualification, Family status, Day scholar or Hostler and Rural or urban.
CHAPTER – 2

Methodology
METHODOLOGY

In the preceding chapters the concepts and related studies concerning to academic stress, spiritual intelligence, life satisfaction and mental health problems of students have been presented. The present chapter covers the statement of the problem at a glance followed by objectives, hypotheses of research design. It also includes design, methodology and the technical details of the tools used in this study. A brief description of the procedures adopted in completing the research work that includes sample size and its characteristics has also been discussed in this chapter.

The objective of any scientific endeavor is to ascertain facts and analyze them in a systematic and unbiased manner. In behavioural sciences the research design plays significant role in collecting and analyzing data and drawing meaningful inferences. Research means, the systematic method of conducting investigation of a problem, formulation of hypothesis, collecting the data, then analysis and reaching at certain conclusions either in the form of solution or towards the solution of the problem of the research and to add something new to the existing knowledge concerning to the variables studied.

Lindquist (1956) pointed out that “the researches are designed to proceed in a planned manner to control variance and to answer pertinent research questions”. Several methodological approaches and deign have been developed and discussed but the choice of appropriate design depends upon the special nature and characteristics of the variables and availability of the sample, nature of measuring instruments and restraints regarding the manipulation/measurement of the variables being studied (Ferguson, 1981). Thus, the choice of method is governed by the aims of the study, the variables under investigation and the nature of the data.

Mohsin (1984) opines that “research design depicts the plan which states the relation observed facts and events on the basis of which conclusion could be drawn”. The main function of an appropriate research design is to maximize the effect of systematic variance, control of extraneous source of variance and minimize error variance (Broota, 1989).

The present study was designed to determine the mental health problems of professional and non-professional courses students as related to academic stress, spiritual intelligence and life satisfaction. In this chapter the research procedure used
to complete this study have been presented. The research design was between group in nature and correlational in nature, in correlational research design researcher observes and measure relationship between variables which occur naturally without any assistance. It does not justify specifically calling one variable as independent variables and others are dependent variable. The multi group comparison will also be done course wise. The present investigation is primarily focusing on the following variables.

CRITERION VARIABLE (Dependent Variable)
Mental Health

PREDICTOR VARIABLE (Independent variable)
Academic Stress
Spiritual Intelligence
Life satisfaction

Participants
In social sciences research the sample size and its selection technique plays an important role. Sampling is a process of selecting a small part from the population of interest assuming that it should process the representing characteristics of the population of which it is a part. The researcher has to plan his/her research work by limiting within its domain in his/her research investigation. The purposive sampling technique was used for collecting information from participants on different measures following inclusion-exclusion criteria as needed for this research work.

Inclusion Criteria:
- Students pursuing professional and non-professional courses students.
- Only professional (M.B.B.S., B.Tech and M.B.A.) and non-professional courses (B.A., B.Sc and B.Com) students were included
- Data was collected from the participants of different faculties of study of AMU, Aligarh
- Participants whose age ranges between 17 to 25 years.

Exclusion Criteria:
- Students of other University/Colleges were not included in the sample.
- Students pursuing Nursing, B.Ed., B.Lib., B.C.A., M.C.A., M.A., M.Sc., M.com., etc. were not included.
- The student repeaters in the same class.
- Participants from other universities such as DU, BHU, JNU, etc.
- Students aged who were more than 25 years and less than 17 years old.

The adequate sample and the method of selecting sample from the population enable an investigator to draw meaningful conclusion and helpful in making generalization about the population from which the samples were drawn. In the present research the sample size was N=600 students (i.e. pursuing for the degree of different professional and non professional courses) drawn randomly from different Faculties and Colleges of Aligarh Muslim University, Aligarh. The samples were categorizes into 6 subgroups of two major categories of students viz. professional courses students includes (MBBS, B.Tech and MBA). Similarly non-professionals courses students includes (B.A., B. Sc and B.Com). Both professional and non professional students were categorizes into equal numbers (100) of each group of students. Both male and female students were also included in this research and the age range of the participants were between 18-25 years old (Mean=20.91 and SD=1.931). The sample break up of the participants of this study is as given below.

\[
\begin{align*}
N &= 600 \\
\text{STUDENTS} \\
\downarrow \\
\text{Professional Course STUDENTS} \\
N &= 300 \\
\downarrow \\
\text{M.B.B.S.} &\quad n=100 \\
\text{B.Tech.} &\quad n=100 \\
\text{M.B.A.} &\quad n=100 \\
\downarrow \\
\text{Non Professional Courses STUDENTS} \\
N &= 300 \\
\downarrow \\
\text{B.A.} &\quad n=100 \\
\text{B.Sc.} &\quad n=100 \\
\text{B.Com.} &\quad n=100
\end{align*}
\]

**Tools**

Psychological tests play most important role for measurement and understanding of human behaviour of explicit or implicit nature objectively. Due to complementary
and dynamic of behaviour, it is required to carefully select most appropriate measures which could serve the purpose of research. For this present study questionnaires used were convenient and favourable. Following measurers and scales were chosen for this study and their details are as given below.

1. Academic Stress Scale (ASS)

Academic stress scale (ASS) developed by the present researchers i.e. Anjum, S. and Khan, M.S. (2012). The researchers developed the necessity test because of not availability of appropriate questionnaire to be used for this type of research work. The researcher decided to construct this scale to meet out the requirements of the research work. Before the development of academic stress scale researcher searched out the relevant literature pertaining to academic stress and in the light of this definition “academic stress is a mental distress with respect to some apprehended frustration association with academic failure or even an awareness of the possibility of such failure (Gupta and Khan, 1987)”. Keeping in view relevant points in mind 28 statements were prepared from various sources and these statements were given to the professors belonging to psychology, sociology and education departments for their comments regarding the appropriateness of the statements for measuring academic stress on a five point rating scale. After taking comments and suggestions from them then researcher conducted a pilot study on the sample of 240 students of professional (MBBS, B.Tech and MBA) and non-professional courses (B.A., B. Sc and B.Com). After conduct of the pilot study researcher analyzed the 28 statements through factor analysis, the items were loaded on SPSS and with the help Varimax rotation each statement were analyzed. The whole procedure clearly confirms the relevance and the face validity of the scale. But in spite of this fact both reliability and variability were calculated for further confirmation. The reliability of ASS cronbach’s alpha was 0.80 and coefficient of correlation was 0.669 (validity). Having collected the data, scoring of each statement was done and thereafter, scoring sheet was prepared for feeding the scores in computer for final analysis with the help of statistical package for social sciences (SPSS) 16 version package this scale will be used for the present research work.

Finally academic stress scale contains 21 items and each item was measured on 5 point likert scale i.e. Strongly disagree-1, Disagree-2, Neither agree nor disagree-
3. Agree-4 and Strongly agree-5. Hence, the total scores of the scale range from 21-105; higher the scores indicate high academic stress and lower the scores is the indicator or low academic stress. The age ranges of the subjects were 17-25 years old and thereafter it was finally used to gather information from the two groups of participants as per need of the proposed research work.

2. Life Satisfaction Scale (LSS)

A ten item scale designed and developed by Warr et. al. (1979) was used to measure the satisfaction with salient features of daily life and activities of the respondents, psychometric properties of the scale (test, retest reliability, split half reliability, internal consistency, reliability and validity), were reported by author and others. Responses to be rated on seven point scale from 1, referring to "I am extremely dissatisfied" to 7, referring to "I am extremely satisfied". The possible range of scores could vary from 10-70. A high score indicates high satisfaction with life and vice versa. The test-retest reliability of the test was 0.87.

3. Spiritual Intelligence Self Report Inventory (SISRI-24)

SISRI-24 was developed by David B. King (2008). It contains of 24 items and it was used to measure spiritual intelligence of the participants. It has 4 dimensions namely Critical Existential Thinking (CET) 7 items were included such as 1,3,5,9,13,17,21 and range was 0-28. Personal Meaning Production (PMP) 5 items were included such as 7, 11,15,19,23 and range was 0-20. Transcendental Awareness (TA) 7 items were included such as 2, 6*, 10, 14,18,20,22 and range was 0-28. Conscious State Expansion (CSE) 5 items were included such as 4, 8,12,16,24 and range was 0-20. All 23 items were positive items except one i.e. 6 item it was negative one in this inventory. The range was 0-96, higher the scores indicates high spiritual intelligence and vice versa. The reliability and validity of SISRI-24 area as; Cronbach’s Alpha=0.920 (CET=0.78; PMP=0.78; TA=0.87; CSE=0.91). Standardized Alpha =0.922 (CET=0.78; PMP=0.78; TA=0.87; CSE=0.91). Average Item Correlation =0.34 (CET=0.34; PMP=0.42; TA=0.49; CSE=0.69). Split half reliability =0.91. The test-retest reliability of the inventory was 0.89. Multivariate skewness =0.02 and Multivariate kurtosis =0.23.
4. Mental Health Checklist-(MHC)

MHC developed by Pramod Kumar (1992), it is consists of 11 items for somatic health. It measures mental health status of an individual. Responses to be rated on 4 point scale i.e., Rarely means (1), At time means (2), often means (3) and Always means (4). The numerical value was 1,2,3,4 is assigned to the 4 response categories the total scores of a person will vary between 11-44 as per manual, higher the scores indicates poor mental health and lower the scores indicates good mental health. The split half reliability correlated with odd-even items (applying the spearman-Brown formula) as reported was found to be 0.70 with an index of reliability of 0.83, and the test-retest reliability found to be 0.65 with an index reliability of 0.81. The face validity of the MHC appears to be fairly high as items were prepared by asking respondents and the content validity was adequately assumed as only those symptoms which showed 100% agreement amongst the judges regarding their relevance to the study of mental health were selected. Separate percentile norms have been prepared and reported for male and female groups. These are to be interpreted in the conventional manner. If a person gets a score equivalent to P90 or more it will show that he/she is under great mental strain. P90 indicates very poor mental health; P75 indicates poor mental health; P50 indicates average mental health; P25 indicates good mental health and P10 indicates very good mental health. The mental health status of the participants to be measured and interpreted accordingly.

Personal Data Sheet (PDS) / Biographical Information

The PDS includes the relevant information of the respondents under the following major categories i.e. Age, Gender, Course of the study, Religion, Fathers’ qualification, Mothers’ qualification, Family status, Day scholar or Hostler and Rural or urban.

Procedure

Collecting information from the participants in the psychological research is a tedious and more challenging job for a researcher. So as foremost priority should be given how one can gather most authentic and appropriate information from the
participants of focused group on different questionnaire/scales. Therefore the researcher has to be conscious while collecting information from the participants on different questionnaires/inventories/scales. For this study the information has to be collected from the students of two different streams i.e. the students who pursuing professional and non-professional courses. The certificate for granting permission from the head of the Institutions was obtained from the supervisor for collecting data. The researcher approached the Principal of the colleges, chairmen of the departments to obtained their permission/approval to collect data from the students of professional and non-professional courses. The researcher contacted the students in small group of two/three students or individually as per availability and convenience of the respondents. The subjects were assured that the information given by them be kept confidential and used merely for academic purpose. They were requested to carefully read the instructions printed and go through each and every statement of the questionnaire/scale and to respond accordingly. The participants took almost 45-55 minutes in completing all the questionnaires. In this way the information of each questionnaire was obtained and scored for data analysis. Four questionnaires/scales were administered on students of professional and non-professional courses (M.B.B.S., B. Tech., M.B.A., B.A., B.Sc. and B.Com) namely academic stress scale, spiritual intelligence self report inventory, life satisfaction scale and mental health checklist with personal data sheet. The sample size was consisted of 600 students and in each subgroup there were 100 participants. In total 1000 questionnaires were distributed and out of them 280 scales were found in one way or the other incomplete and excluded. The questionnaires of 600 participants were found complete in all respect and retained for data analysis. It took almost 8 months in getting the targeted sample. The difficulties faced during the course of data collection were any how managed by the researcher to the best of the abilities and information were gathered from them on different questionnaires/scales and scored for statistical analyses keeping in view the major objectives of the study.

Statistical Analyses

Once the data was collected from the respondents of professional and non-professional courses students, then it was essentially needed to analyze data by means of appropriate statistical techniques to reduce long-wide ranging scores into
intelligible and interpreted from in order to understand the results very easily and conveniently. Statistical analysis provides clear cut picture of obtained results in the form of numerical values. In the light of research objectives and hypotheses of the present research investigation Independent t-test was used to compare the groups of the students of professional and non-professional courses, low and high groups were formed on the basis of Q1 and Q3 cut points to see the impact of low and high academic stress, spiritual intelligence, and life satisfaction on mental health. Further the groups were also compared in terms of gender, religious and family status (joint and nuclear) on all the four above variables. One-way ANOVA was applied to ascertain the influence of different courses of professional and non-professional courses students (M.B.B.S., B. Tech., M.B.A., B.A., B.Sc. and B.Com) on mental health. Multiple regression analysis was done to find out the academic stress, spiritual intelligence and its four dimensions Critical Existential Thinking (CET), Personal Meaning Production (PMP), Transcendental Awareness (TA) and Conscious state expansion (CSE) and life satisfaction as predictors of mental health. Since, there are many methods of Regression analysis as enter, forward, backward, stepwise and remove. Hence, in the present study Regression analysis by adopting stepwise method was found suitable in analyzing the data because one of the advantages of stepwise method is that it produces a most parsimonious model and ensures to end up with a small set of predictor variables which significantly predict the criterion variable, and lastly using product moment correlation coefficient, to determine the relationships of academic stress, spiritual intelligence, and life satisfaction with mental health of professional and non-professional courses students. All statistical analyses were done by (SPSS) version 16. The obtained results are presented systematically in different tables in the next chapter.
CHAPTER - 3

Results and Discussion
RESULTS AND DISCUSSION

In order to meet out the objectives and highlighting the significance of this study as mentioned in preceding chapter, the obtained data have been statistically analyzed and systematically presented in various tables. Initially the descriptive statistics of overall sample of the students of both streams including demographic variables are presented in Tables 4.1 to 4.5 to have a look at a glance on all the measures. The data was analyzed using Independent t-test to compare the groups of the students of two streams of professional and non-professional courses and also high and low groups formed on the basis of Q1 and Q3 cut points to see the influence of high and low academic stress, spiritual intelligence, and life satisfaction on mental health. Further the groups were compared in terms of gender, religious faith and family status (joint and nuclear) using t-test on measures of academic stress, spiritual intelligence, life satisfaction and mental health. One-way ANOVA was applied to see the impact on mental health of the students pursuing professional and non-professional courses (M.B.B.S., B. Tech., M.B.A., B.A., B.Sc. and B.Com). Stepwise multiple regression analysis was done to find out the academic stress, spiritual intelligence and its four dimensions Critical Existential Thinking (CET), Personal Meaning Production (PMP), Transcendental Awareness (TA) and Conscious state expansion (CSE) and life satisfaction predictors of mental health of the students of professional and non-professional courses. The product moment correlation coefficient was applied to determine the relationships of academic stress, spiritual intelligence, and life satisfaction with mental health. All statistical analyses was done by (SPSS) version 16.
Table 3.1

Showing the descriptive statistics of entire group of students (N=600) to have a look at a glance of all the variables measured.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Ns</th>
<th>Means</th>
<th>SDs</th>
<th>Std. error of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>MBBS</td>
<td>100</td>
<td>49.38</td>
<td>15.877</td>
</tr>
<tr>
<td></td>
<td>B. Tech</td>
<td>100</td>
<td>51.97</td>
<td>10.794</td>
</tr>
<tr>
<td></td>
<td>MBA</td>
<td>100</td>
<td>55.54</td>
<td>14.380</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>100</td>
<td>54.94</td>
<td>11.562</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>100</td>
<td>60.00</td>
<td>12.516</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>100</td>
<td>56.61</td>
<td>12.089</td>
</tr>
<tr>
<td>Academic Stress</td>
<td>MBBS</td>
<td>100</td>
<td>52.29</td>
<td>13.108</td>
</tr>
<tr>
<td></td>
<td>B. Tech</td>
<td>100</td>
<td>58.17</td>
<td>11.340</td>
</tr>
<tr>
<td></td>
<td>MBA</td>
<td>100</td>
<td>58.17</td>
<td>11.340</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>100</td>
<td>59.20</td>
<td>11.130</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>100</td>
<td>60.00</td>
<td>12.516</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>100</td>
<td>54.78</td>
<td>12.679</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>MBBS</td>
<td>100</td>
<td>50.66</td>
<td>8.039</td>
</tr>
<tr>
<td></td>
<td>B. Tech</td>
<td>100</td>
<td>45.69</td>
<td>9.182</td>
</tr>
<tr>
<td></td>
<td>MBA</td>
<td>100</td>
<td>49.25</td>
<td>8.739</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>100</td>
<td>45.44</td>
<td>9.514</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>100</td>
<td>50.56</td>
<td>8.379</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>100</td>
<td>49.75</td>
<td>10.129</td>
</tr>
<tr>
<td>Mental health</td>
<td>MBBS</td>
<td>100</td>
<td>20.67</td>
<td>5.673</td>
</tr>
<tr>
<td></td>
<td>B. Tech</td>
<td>100</td>
<td>22.08</td>
<td>6.093</td>
</tr>
<tr>
<td></td>
<td>MBA</td>
<td>100</td>
<td>21.51</td>
<td>5.034</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>100</td>
<td>24.31</td>
<td>4.819</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>100</td>
<td>21.75</td>
<td>5.629</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>100</td>
<td>23.54</td>
<td>5.989</td>
</tr>
</tbody>
</table>
Table-3.2

Showing the percentage of two religious groups in the total samples

<table>
<thead>
<tr>
<th>Religion</th>
<th>N</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>193</td>
<td>32.2</td>
</tr>
<tr>
<td>Muslims</td>
<td>407</td>
<td>67.8</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in the above table descriptive statistics of Religion (Hindu and Muslim), it may be seen in the table 193 students belong to Hindu religion and 407 students belong to Muslim religion. Hindu students contributed 32.2% and Muslim students contributed 67.8%, since the data has been collected from A.M.U. So representation of Muslim students is greater in numbers.

Table-3.3

Showing the descriptive statistics of family status (Joint and Nuclear)

<table>
<thead>
<tr>
<th>Family status</th>
<th>N</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint</td>
<td>220</td>
<td>36.8</td>
</tr>
<tr>
<td>Nuclear</td>
<td>380</td>
<td>63.2</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The descriptive statistics of Family status (Joint and Nuclear), as shown in the table 220 students represented from joint family whereas 380 students from nuclear families. The students of Joint family contributed 36.8% and nuclear family students contributed 63.2%.

Table-3.4

Showing Descriptive statistics of residence (Rural and Urban)

<table>
<thead>
<tr>
<th>Residence</th>
<th>N</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>129</td>
<td>21.5</td>
</tr>
<tr>
<td>Urban</td>
<td>471</td>
<td>78.5</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The above table showing the descriptive statistics of Residence (Rural and Urban), as shown in the table 129 students from rural areas whereas 471 students
from urban areas. The students of rural areas contributed 21.5% and students are from urban areas contributed 78.5%.

Table-3.5

Descriptive statistics of Days scholars / Hostlers

<table>
<thead>
<tr>
<th>Days scholars / Hostlers</th>
<th>N</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day scholar</td>
<td>308</td>
<td>51.3</td>
</tr>
<tr>
<td>Hostler</td>
<td>292</td>
<td>48.7</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The descriptive statistics of Days scholars / Hostlers as shown in the above table 308 students were day scholars whereas 292 students hostlers. Day scholar students contributed 51.3% and hostlers students contributed 48.7%.

In order to test the hypothesis H1 "the professional and non-professional group of students will differ significantly in terms of academic stress, spiritual intelligence, life satisfaction and mental health and also with demographic variables (gender, religion and family status-joint and nuclear). Independent t-test was applied as follows; the obtained results have been presented.

Table-3.6

Showing the significant difference between the mean scores of academic stress, spiritual intelligence, life satisfaction and mental health of the group of students of professional and non-professional courses

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups compared</th>
<th>N</th>
<th>Means</th>
<th>SDs</th>
<th>Std Error of Means</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>Professional courses students</td>
<td>300</td>
<td>52.39</td>
<td>14.040</td>
<td>0.805</td>
<td>3.184</td>
<td>.002*</td>
</tr>
<tr>
<td></td>
<td>Non- Professional courses students</td>
<td>300</td>
<td>55.80</td>
<td>12.239</td>
<td>0.708</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Stress</td>
<td>Professional courses students</td>
<td>300</td>
<td>54.94</td>
<td>12.800</td>
<td>0.739</td>
<td>3.003</td>
<td>.003*</td>
</tr>
<tr>
<td></td>
<td>Non- Professional courses students</td>
<td>300</td>
<td>58.02</td>
<td>12.302</td>
<td>0.709</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Professional courses students</td>
<td>300</td>
<td>48.58</td>
<td>8.886</td>
<td>0.513</td>
<td>0.031</td>
<td>.975</td>
</tr>
<tr>
<td></td>
<td>Non- Professional courses students</td>
<td>300</td>
<td>48.60</td>
<td>9.603</td>
<td>0.554</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>Professional courses students</td>
<td>300</td>
<td>21.72</td>
<td>5.604</td>
<td>0.332</td>
<td>3.192</td>
<td>.001*</td>
</tr>
<tr>
<td></td>
<td>Non- Professional courses students</td>
<td>300</td>
<td>23.19</td>
<td>5.585</td>
<td>0.322</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P<.01
As shown in the Table-3.6, the scores of professional and non-professional courses students were compared on measures of spiritual intelligence, the mean scores of professional courses students was found to be 52.39 and the mean scores of non-professional courses students was 55.80. The result clearly reveals that the t-value was found significant with 99% confidence interval (t = 3.184; p < 0.01), it means professional and non-professional group of students differed so far as their spiritual intelligence was concerned which is evident on the basis of obtained result. Hence, we can say that the spiritual intelligence is found to be important among adolescent too as it is crucial period for them to imbibe spiritual practices such as self awareness, spontaneity, holism, compassion, humility and so on. On the basis of obtained results the group of non-professional students have shown more transcendental awareness than the students of professional courses as this group seems to be overburdened because of heavy syllabi, academic assignments and intra group cut thought competitiveness that lessen their social interactions, contacts, heavy academic load and constant parents’ pressure to excel might be the possible reasons of scoring low on spiritual intelligence which is evident from the low mean scores than their non-professional courses group of students counterpart. Babanazari, Askari and Honarmand (2011) reported significant relationship between the spiritual intelligence and happiness and awareness sensing, mystery sensing, value sensing and community sensing significantly anticipated with happiness of the students. The obtained result somewhat support the findings of these researches.

Similarly when the two groups of professional and non-professional courses students were compared concerning to their academic stress, it was observed that the mean scores of professional courses students was found 54.94 whereas mean scores of non-professional courses students was found to be 58.02. The result clearly reveals that the t-value was found significant with 99% confidence interval (t = 3.003; p < 0.01). On the basis of observed result that academic stress shown by non-professional students might be high self-expectations, higher level of disparities due to perception of bleak future, lack of parental support for academic excellence, academic distortion and uncertain goal, congenial examination help, attitude of teachers, fear of examination and so on as mentioned by earlier researchers who studied academic stress and measured it in the light of these factors. The obtained result of non-professional courses students to be interpreted in the light of these factors as they have
been found to high level of academic stress. The factors that seem to be dominant in this group could be the possible reasons of showing relatively higher level of academic stress in comparison to professional courses students. The factors of academic stress might have made them to experience relatively higher degree of academic stress. So we may say that academic stress pervades the life of students and tends to adversely affect their mental and physical health, and their ability to perform schoolwork effectively (Clark & Rieker, 1986; Felston & Wilcox, 1992). Stress is associated with academic activities and linked to various negative outcomes such as poor health (Greenberger, 1981; Lesko & Summerfield, 1989), depression (Aldwin & Greenberger, 1987), and poor academic performance (Clark & Reiker, 1986; Linn & Zeppa, 1984). Lesko Summerfield (1989) found a significant positive correlation between the incidence of illness and the number of exams and assignments. So, (Aldwin & Greenberger, 1987), shows that the perceived academic stress was found related to anxiety and depression in college students and to the role stress among professional students in India has not been well examined. The finding reveals that the students are experiencing role overload, role stagnation and self-role distance. Male students experience higher levels of role stagnation than female students. However, no significant differences could be observed on any of the role stressors between first year students and their seniors, or between management and engineering students. The results are indicative of the social and educational environment prevailing in the country, Kumar and Singh (2007) and examined the stress and adjustment among professional and non professional students and they reported that the professional students were poorly emotionally adjusted than non professional group of students (Singh & Singh, 2008).

The professional and non-professional courses students were compared on measures of life satisfaction scale the mean scores of professional and non-professional courses students were found 48.58 and 48.60 respectively. The result clearly reveals that the two groups did not differ significantly. It means both groups of student have shown almost equal level of life satisfaction, which is evident from their mean scores. Life satisfaction is the cognitive dimension of subjective well-being (Lucas, Diener, & Suh, 1996) and other researchers examined stress, social support, and life satisfaction among first year college students reported higher level and lower level of satisfaction with life (Coffman & Gilligan, 2002; Demakis & McAdams,
1994). Kenneth, Tovar, Enrique, Curlette, & William (2008) reported that American and Turkish students did not differ significantly in regard to perceived stress, life satisfaction, or an overall measure of coping resources.

The groups of professional and non-professional courses students were compared on measures of mental health and it was observed that the mean scores of professional courses students was found to be 21.72 and mean scores of non-professional courses students was 23.19 the result clearly reveals that the two groups differed significantly in terms of their mean scores (t=3.192; p< 0.01). The non-professional group of students had shown relatively poor mental health in comparison to the students of professional courses. The earlier investigators also compared mental health problems and life satisfaction among students of Iranian and Indian Universities. The scores of mental health questionnaire were found less than S.B.U. students and also their mental health situation was better than S.B.U. students. A.M.U. student's scores of life satisfaction scale was higher than S.B.U. students. Furthermore, A.M.U. students were more satisfied from their life than S.B.U. students. The findings suggested that carrying out more researches about student’s mental health and life satisfaction especially taking cross-cultural samples, (Tamine & Mohammady Far, 2009). Mental health problems are highly prevalent among college students, according to the reports of surveys. In 2008 National College Health Assessment sponsored by the American College Health Association (ACHA-NCHA), more than one in three undergraduate students showed “feeling so depressed it was difficult to function” at least once in the previous year, and nearly one in 10 reported “seriously considering attempting suicide”. According to the study of 26,000 students from 70 colleges and Universities in 2006, the 6% of undergraduate students and 4% of graduate students reported having seriously considered suicide in the previous 12 months (Drum, Brownson, Burton, & Smith 2009).
Table 3.7

The table presents the two groups of students of professional and non-professional courses on measures of mental health.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sources of Dimensions</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td>Between Groups</td>
<td>705.710</td>
<td>5</td>
<td>141.142</td>
<td>4.590</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>18266.364</td>
<td>594</td>
<td>30.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>18972.073</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.01

The group of professional and non-professional courses students were compared on mental health as a dependent variable (F=4.590; p<.01). The obtained result clearly reveals that the F value was significant on mental health with 99% confidence interval. On the basis of obtained result it becomes clear that the mental health is one of the most important aspects of a person’s life besides physical, spiritual and financial well being. It is believed that a healthy mind is a key of an individual attaining satisfaction in life, (Swami, et al. 2007). Those students who are studying in higher institutions for higher education are more at risk of mental health problems or disorders while compared with their peers of similar age groups in the general population (Hamdan-Mansour, Halabi & Dawani, 2009; Stewart-Brown, Evans, Patterson, Petersen, Doll, Balding & Regis, 2000; Humphrey, McCarthy, Popham, Charles, Garland, Gooch, Hornsby, Houghton & Muldoon, 1998). To find out the significant differences in terms of different courses (M.B.B.S., B. Tech, M.B.A., B.A., B.Sc. and B.Com) students of professional and non-professional courses on mental health the Tukey Post Hoc test of one way ANOVA to be discussed in other tables.
Table 3.8

Showing the multiple comparisons of different courses of professional and non-professional students on mental health

<table>
<thead>
<tr>
<th>Groups (I)</th>
<th>Groups (J)</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.B.B.S</td>
<td>B. Tech.</td>
<td>-.585</td>
<td>.782</td>
<td>.976</td>
</tr>
<tr>
<td></td>
<td>M.B.A.</td>
<td>-.015</td>
<td>.782</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>-2.815</td>
<td>.782</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>-.255</td>
<td>.782</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>-2.040</td>
<td>.784</td>
<td>.098</td>
</tr>
<tr>
<td>B. Tech.</td>
<td>M.B.B.S</td>
<td>.585</td>
<td>.782</td>
<td>.976</td>
</tr>
<tr>
<td></td>
<td>M.B.A.</td>
<td>.570</td>
<td>.784</td>
<td>.979</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>-2.230</td>
<td>.784</td>
<td>.052</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>.330</td>
<td>.784</td>
<td>.998</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>-1.455</td>
<td>.786</td>
<td>.434</td>
</tr>
<tr>
<td>M.B.A.</td>
<td>M.B.B.S</td>
<td>.015</td>
<td>.782</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>B. Tech.</td>
<td>-.570</td>
<td>.784</td>
<td>.979</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>-2.800</td>
<td>.784</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>-.240</td>
<td>.784</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>-2.025</td>
<td>.786</td>
<td>.105</td>
</tr>
<tr>
<td>B.A.</td>
<td>M.B.B.S</td>
<td>2.815</td>
<td>.782</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>B. Tech.</td>
<td>2.230</td>
<td>.784</td>
<td>.052</td>
</tr>
<tr>
<td></td>
<td>M.B.A.</td>
<td>2.800</td>
<td>.784</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>2.560</td>
<td>.784</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>.775</td>
<td>.786</td>
<td>.923</td>
</tr>
<tr>
<td>B.Sc.</td>
<td>M.B.B.S</td>
<td>.255</td>
<td>.782</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>B. Tech.</td>
<td>-.330</td>
<td>.784</td>
<td>.998</td>
</tr>
<tr>
<td></td>
<td>M.B.A.</td>
<td>.240</td>
<td>.784</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>-2.560</td>
<td>.784</td>
<td>.015</td>
</tr>
<tr>
<td></td>
<td>B.com</td>
<td>-1.785</td>
<td>.786</td>
<td>.208</td>
</tr>
<tr>
<td>B.Com.</td>
<td>M.B.B.S</td>
<td>2.040</td>
<td>.784</td>
<td>.098</td>
</tr>
<tr>
<td></td>
<td>B. Tech.</td>
<td>1.455</td>
<td>.786</td>
<td>.434</td>
</tr>
<tr>
<td></td>
<td>M.B.A.</td>
<td>2.025</td>
<td>.786</td>
<td>.105</td>
</tr>
<tr>
<td></td>
<td>B.A.</td>
<td>-.775</td>
<td>.786</td>
<td>.923</td>
</tr>
<tr>
<td></td>
<td>B.Sc.</td>
<td>1.785</td>
<td>.786</td>
<td>.208</td>
</tr>
</tbody>
</table>

* The mean difference is significant at the 0.05 level.
Figure-1

Showing the students of professional and non-professional courses in terms of their Means on mental health scale with the help of the following graph.

As shown in the Table-3.8, the group of professional and non-professional courses students were compared and measured on mental health as a dependent variable and the mean scores of B.A. students was highest than M.B.B.S. students (p < 0.05), the mean scores of M.B.A. students was (p < 0.05), and the mean scores of B.Sc. students was (p < 0.05), on the basis of entire mean scores it clearly shows that there was a significant differences found between B.A. and M.B.B.S. students, B.A. and M.B.A. students and also B.A. and B.Sc. courses students on mental health with 95% confidence level than other course of professional as well as non-professional courses students counterparts. On the basis of obtained result it clearly reveals that the B.A. students having higher mean scores on mental health than other courses of professional as well as non-professional courses students because of this they suffer mental health problems and those students who are studying in higher institutions for higher education or professional as well as non-professional courses are more at risk.
of development of mental health problems or disorders compared with their peers of similar age groups in the general population. (Hamdan-Mansour, Halabi & Dawani, 2009; Stewart-Brown, Evans, Patterson, Petersen, Doll, Balding & Regis, 2000; Humphrey, McCarthy, Popham, Charles, Garland, Gooch, Hornsby, Houghton & Muldoon, 1998). Approximately 25% of people in this world may suffer from mild to severe forms of mental health problem during their lives. It might be affects ones daily life, relationships and even his/her physical health. It also includes a person's ability to enjoy life - to attain a balance between life activities and efforts to achieve psychological resilience.

Table-3.9

Showing the significant difference between spiritual intelligence, academic stress, life satisfaction and mental health in terms of demographic variables (Family status, gender and religion).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Family status</th>
<th>N</th>
<th>Means</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>Joint</td>
<td>220</td>
<td>53.97</td>
<td>12.110</td>
<td>.818</td>
<td>.111</td>
<td>.912</td>
</tr>
<tr>
<td></td>
<td>Nuclear</td>
<td>380</td>
<td>54.09</td>
<td>13.838</td>
<td>.711</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Stress</td>
<td>Joint</td>
<td>220</td>
<td>56.27</td>
<td>12.495</td>
<td>.844</td>
<td>.339</td>
<td>.735</td>
</tr>
<tr>
<td></td>
<td>Nuclear</td>
<td>380</td>
<td>56.63</td>
<td>12.718</td>
<td>.653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>Joint</td>
<td>220</td>
<td>47.52</td>
<td>9.633</td>
<td>.651</td>
<td>2.123</td>
<td>.034*</td>
</tr>
<tr>
<td></td>
<td>Nuclear</td>
<td>380</td>
<td>49.18</td>
<td>8.970</td>
<td>.461</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>Joint</td>
<td>220</td>
<td>22.75</td>
<td>5.218</td>
<td>.353</td>
<td>.964</td>
<td>.335</td>
</tr>
<tr>
<td></td>
<td>Nuclear</td>
<td>380</td>
<td>22.29</td>
<td>5.851</td>
<td>.301</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p <.05

As shown in Table-3.9 the group of students were measured on spiritual intelligence, academic stress, life satisfaction and mental health in terms of family status (joint and nuclear). The group of students measured on spiritual intelligence the mean scores of joint family students was found to be 53.97 and nuclear family students was 54.09. The obtained result clearly reveals that the t-value was not statistically significant (t=.111; p >.05). It means that the students representing two types of families do not differ so far as their spiritual intelligence was concerned. Whereas, the group of students were measured on academic stress the mean scores of joint family students was found to be 56.27 and nuclear family students was 56.63.
The negligible difference can be seen and the t-value was found statistically insignificant ($t=.339; p>.05$). On the basis of the result of this study it may be interpreted that the academic stress is not impacted by joint as well as nuclear family status of the participants. Similarly, the group of students measured on life satisfaction and compared the mean scores of joint family students, it was found to be 47.52 and whereas the nuclear family students was 49.18. The obtained result clearly reveals that the t-value was statistically significant ($t=2.123; p<.05$). The obtained result clearly reveals that the life satisfaction aspects differ significantly. It means the family status joint and nuclear do influence the life satisfaction of the students. Whereas, the group of students were measured on mental health the mean scores of joint family students was found to be 22.75 and nuclear family students was 22.29. The obtained result clearly reveals that the t-value was statistically insignificant ($t=.964; p>.05$). So we can say that the mental health status of the students representing both families were equally better and mentally healthy. It means the family status emerges as a potential factor concerning to the mental health problems of both the groups of students.

**Table-3.10**

**Showing the significant difference between spiritual intelligence, academic stress, life satisfaction and mental health of Male and Female students**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error of Mean</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>Male</td>
<td>300</td>
<td>54.62</td>
<td>12.497</td>
<td>.722</td>
<td>1.132</td>
<td>.258</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>300</td>
<td>53.40</td>
<td>14.005</td>
<td>.809</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic stress</td>
<td>Male</td>
<td>300</td>
<td>57.26</td>
<td>13.132</td>
<td>.758</td>
<td>1.504</td>
<td>.133</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>300</td>
<td>55.71</td>
<td>12.089</td>
<td>.698</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>Male</td>
<td>300</td>
<td>47.50</td>
<td>8.911</td>
<td>.514</td>
<td>2.817</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>300</td>
<td>49.62</td>
<td>9.460</td>
<td>.546</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health</td>
<td>Male</td>
<td>300</td>
<td>22.34</td>
<td>5.669</td>
<td>.327</td>
<td>.579</td>
<td>.563</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>300</td>
<td>22.61</td>
<td>5.609</td>
<td>.324</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* $p<.01$
As shown in Table-3.10, the group of students measured on spiritual intelligence, academic stress, life satisfaction and mental health in terms of gender (male and female). The two group of participants were measured on spiritual intelligence and the obtained mean scores of male students was found relatively higher than the female students (Male=54.62 and Female=53.40) and the two groups did not differ significantly regarding their spiritual intelligence \( (t=1.132; \ p > .05) \). Shabani, et al. (2011) reported that the mental health can be influenced by spiritual intelligence as well as emotional intelligence and its moderating effect of gender on the relationship of spiritual and emotional intelligence with mental health but it was not established for the young students. Whereas, the group of students was measured on academic stress and the mean scores of male students was found to be 57.26 whereas female students was 55.71 and the result was not statistically significant \( (t=1.504; \ p > .05) \). The trend of obtained result clearly reveals that the male students showed relatively higher level of academic stress than the female students though it is not statistically significant but it appears from the trend of the obtained result. It means gender is not a potential factor so far as academic stress is concerned. Similarly the group of students was measured on life satisfaction the mean scores of male students was found to be 47.50 and female students was 49.62 and the obtained result was statistically significant \( (t=2.817; \ p < .05) \). From the trend of result female participants appear to show relatively high level of life satisfaction and this result is in support of earlier researches as life satisfaction in college students has recently been examined as a precursor of withdrawal and dropout for students that are experiencing low life satisfaction. Those who are in college are usually at a higher level of maturity and growth than peers who are not in college (Moller 1996) and other positive factors that could influence their sense of satisfaction include progress with their studies, personal and intimate life, and also a change in their attitude toward life. Studies on college students from around the world show that college students found predominantly satisfied with their lives, themselves, and with the social domains of family and friends (Diener & Diener, 1995) and other related review on college students were found more satisfied with their lives because they experienced an increase in roles and responsibility (Bailey & Miller, 1998). Similar studies have showed that college students have a high need for cognition and that they derive a sense of satisfaction from their need for cognition and it has also been observed that
studying in college promote their life satisfaction perhaps because they got opportunity for getting sense of achievement from it (Coutinho & Woolery, 2004). Similarly, The professional and non-professional courses students were compared on mental health in terms gender, the mean scores of male and female students was found somewhat more or less similar (Male=22.34 and female=22.61) and the obtained result was statistically insignificant ($t=5.79; p> .05$). The obtained result clearly reveals that gender seems to be not a probable factor for mental health problems of young students. Wilson et al. (1998) investigated the degree of anxiety and stress experienced by medical students and correlated with examination performance. They reported stress were generally high for both male and female students in the academic areas but women reported severe to very severe stress more frequently than male counterparts. In the areas of personal and environmental factors, the stress scores were similar between genders (mild to moderate) and females tended to report high scores with regard to relationship issues another study reported that females students showed higher academic stress than male counterparts and found out difference in the levels of academic stress perceived by the students and their faculty, (Misra, McKean, West & Russo 2000).

Table 3.11

<table>
<thead>
<tr>
<th>Variables</th>
<th>Religion</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error of Mean</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>Hindu</td>
<td>192</td>
<td>51.74</td>
<td>14.564</td>
<td>1.051</td>
<td>2.932</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>408</td>
<td>55.13</td>
<td>12.473</td>
<td>.618</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic stress</td>
<td>Hindu</td>
<td>192</td>
<td>55.27</td>
<td>13.984</td>
<td>1.009</td>
<td>1.582</td>
<td>.114</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>408</td>
<td>57.02</td>
<td>11.911</td>
<td>.590</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>Hindu</td>
<td>192</td>
<td>50.54</td>
<td>8.730</td>
<td>.630</td>
<td>3.624</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>408</td>
<td>47.64</td>
<td>9.350</td>
<td>.463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental health</td>
<td>Hindu</td>
<td>192</td>
<td>21.44</td>
<td>5.537</td>
<td>.400</td>
<td>3.146</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>Muslim</td>
<td>408</td>
<td>22.98</td>
<td>5.619</td>
<td>.279</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.01
The group of students were compared and measured on spiritual intelligence, academic stress, life satisfaction and mental health of Hindu and Muslim students. Both the groups of students were measured on spiritual intelligence and the obtained mean scores of Hindu students was relatively found lower than their Muslim students counterparts (Hindu =51.74 and Muslim=55.13). The result was statistically significant (t= 2.932; p<05). The two groups of students have different levels of spiritual intelligence the difference observed may be interpreted as Muslims are more orthodox in religion practices and seems to be in the dominance of the spirit of Islamic tenets and the Hindu students might be liberal in imbibing the virtuous of Hindu religion could be the possible reason of showing varied degree of spiritual intelligence. Whereas, the group of students were compared on academic stress of the Hindu and Muslim students showed different level of academic stress i.e. 55.27 and 57.02 respectively though they do not differ significantly (t= 1.582; p>05). Muslim students were found to show higher level of academic stress than their Hindu counterparts. Similarly when we compared and measured Hindu and Muslim students on life satisfaction then the mean scores of Hindu students was higher than Muslim students (Hindu student=50.54 and Muslim students=47.64), and both the groups differed significantly (t= 3.624; p<01). The obtained result may be discussed in the light of socio psychological factors, simplicity endurance so far as their life satisfaction is concerned. Similarly the groups of students were measured and compared on mental health, the mean scores of Hindu students was 21.44 and Muslim students was 22.98 and the result was statistically significant in terms of religion (t= 3.146; p<01). It means that the Hindu student’s mental health was found better than the Muslim students because percentile of mental health checklist the lower score showed good mental health which is evident from the mean score of Hindu students as compared to their Muslim counterparts.

In order to test the hypothesis H2 “to see the influence of high and low level of academic stress, spiritual intelligence and life satisfaction on mental health of the students of total samples”
Table 3.12

Showing the impact of high and low level of academic stress, spiritual intelligence and life satisfaction on mental health of the students (N=600).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Levels</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error of Mean</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>High</td>
<td>154</td>
<td>23.38</td>
<td>5.725</td>
<td>.461</td>
<td>2.624</td>
<td>.009</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>163</td>
<td>21.70</td>
<td>5.694</td>
<td>.446</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic stress</td>
<td>High</td>
<td>155</td>
<td>20.26</td>
<td>4.778</td>
<td>.384</td>
<td>5.723</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>157</td>
<td>23.73</td>
<td>5.863</td>
<td>.468</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life satisfaction</td>
<td>High</td>
<td>156</td>
<td>25.48</td>
<td>5.585</td>
<td>.447</td>
<td>8.359</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>169</td>
<td>20.52</td>
<td>5.112</td>
<td>.393</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* P<.01

The above table shows the influence of high and low spiritual intelligence, academic stress and life satisfaction on mental health in the total samples. The obtained mean scores of high spiritual intelligence was found 23.38 (N=154) and low spiritual intelligence 21.70 (N=163). The result reveals that the two groups were found to differ significantly with 99% confidence level (t=2.624; p< 0.01). Similarly to see the impact of high and low academic stress on mental health of the students and the mean scores of high academic stress was found 20.26 (N=155) and low academic stress 23.73 (N=157), and the obtained result reveals that the (t=5.723; p< 0.01). The result clearly shows that the t-value was found significant with 99% confidence level and significant difference was observed between high and low academic stress concerning to their mental health problems. Whereas, to see the impact of high and low life satisfaction group of students on mental health scores of the students and the mean scores of high life satisfaction was 25.48 (N=156) and low life satisfaction was 20.52 (N=169), and (t=8.359; p< 0.00). The result clearly shows that the t-value was significant with 99% confidence level and the difference was found to be significant between high and low life satisfaction group of students on their mental health.

The obtained results partially supported with the finding of earlier studies so we can say that academic stress is one of the important part for the student’s life and it
is widely acknowledged that a student’s academic achievement and academic ability to depend on both internal as well as external factors such as proper study habits, intelligence, educational aspiration of self and parents, medium of instruction and so on. The academic stress of different age group as studied by Zeidner (1992) reported that students who appeared to show high level of stress by pressure originating from course overload and academic evaluation procedures and least stressed by personal familiar and social factors. Kadapatti and Vijayalaxmi (2012) reported that the high aspiration, poor study habits, more study problems, change in medium of instruction and low socio-economic conditions are the important factors that are responsible for the academic stress and become stressors for stress among the students. Reda (1994) reported that the highest causes of stress in students and they found out that the 77.6% and 10.4% of the students fall into the moderate and serious stress categories, respectively and there was significant differences between females and males students in both academic and life stress and female students experienced more stressed than males. (Hussain, Kumar & Hussain, 2008), studied the level of academic stress and overall adjustment among Public and Government high school students. They reported that the inverse but significant relationship was found between academic stress and adjustment for both the group of students and each type of school. Babanazari, Askari and Honarmand (2011) reported that the there was a significant relationship was found between the spiritual intelligence and happiness and awareness sensing, mystery sensing, value sensing and community sensing significantly anticipated with happiness and also life satisfaction. If a person fall into negative levels of life satisfaction then there is an increased risk for maladaptive life outcomes such as physical or psychological illness (Kitsantas, Gilligan, & Kamata, 2003).

In order to test the hypothesis H3 (a)“ academic stress, spiritual intelligence and its four dimensions (Critical Existential Thinking, Personal Meaning Production, Transcendental Awareness and Conscious State Expansion) and life satisfaction will be the significant predictors of mental health of the students of professional and non-professional courses.” Step-wise multiple regression was applied as follows:
Table 3.13
Stepwise Multiple Regression: Showing the significant predictors of mental health of professional courses students (N=300)

Model $Y = a + \beta L S$

<table>
<thead>
<tr>
<th>Predictor variable in the model</th>
<th>$\beta$</th>
<th>Multiple R</th>
<th>R square</th>
<th>R square change</th>
<th>F-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life satisfaction (LS)</td>
<td>-0.261</td>
<td>-0.261</td>
<td>0.068</td>
<td>0.068</td>
<td>21.695</td>
<td>.000</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29.661</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.13 indicates that predictor variable (life satisfaction) appeared as a significant predictor of criterion variable (mental health) among professional courses students. But the other remaining variables such as academic stress and spiritual intelligence did not emerge as significant predictor of mental health. Summary shows one predictor of the model. Multiple correlation was found to be (-0.261), further R square (0.068) which represents the contribution of predictor variable to the criterion variable is also seen here. Here we have considered R square change (0.068), which is the actual contribution of predictor variable (life satisfaction) to the criterion variable (Mental health). Hence, the real covariance, the magnitude of independent variable life satisfaction (predictor) came out as 6.8% of variance. The statistical value given in the table indicates that (F=21.695) by having look at F-value was found to be significant ($\beta = -0.261$ and $P = .000 < 0.01$) for above mentioned predictor variable (life satisfaction) and criterion variable (Mental health). So we can say that the magnitude of life satisfaction came out as 6.8% of variance and the $\beta$ value clearly indicating an inverse relationship between life satisfaction and mental health among professional courses students. The obtained result clearly reveals that the mental health of professional courses students was found better and their life satisfaction was also found good as assessed and interpreted on the basis of the percentile of mental health checklist. Life satisfaction (predictor) appears to be the potential cause of mental health (criterion) among professional courses students and the equation of the prediction as follows: Mental health = 29.661 + 0.164 (LS)
The obtained results partially supported by the related studies of life satisfaction is dependent on a number of life domains such as age, gender, socioeconomic status, student status, job status, family, and others. Each domain has a large effect on an individual's life satisfaction and it has been found that students who were satisfied with one domain of then their college experiences they also likely to be dissatisfied with other domains and vice-versa (Lounsbury, Saudargas, Gibson, & Leong, 2005). Life satisfaction for college students have a high need for cognition and that they derive a sense of satisfaction from their need for cognition (Coutinho & Woolery, 2004). For college students, it has been observed that studying significantly promoted their life satisfaction perhaps because they gather a sense of achievement from it.

<table>
<thead>
<tr>
<th>Predictor variables in the model</th>
<th>β</th>
<th>Multiple R</th>
<th>R square</th>
<th>R square change</th>
<th>F-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Life satisfaction (LS)</td>
<td>-.415</td>
<td>0.415</td>
<td>0.172</td>
<td>0.172</td>
<td>61.951</td>
<td>.000</td>
</tr>
</tbody>
</table>

Constant 34.912

Model Y= α + βLS

A. Mental health=34.912+ (-0.415, LS)

<table>
<thead>
<tr>
<th>Predictor variable in the model</th>
<th>β</th>
<th>Multiple R</th>
<th>R square</th>
<th>R square change</th>
<th>F-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Academic stress (AS)</td>
<td>0.246</td>
<td>0.480</td>
<td>0.230</td>
<td>.058</td>
<td>44.343</td>
<td>.000</td>
</tr>
</tbody>
</table>

Constant 26.974

Model Y= α + βAS

B. Mental health=26.974+0.246 (AS)
Table 3.14 (b)

<table>
<thead>
<tr>
<th>Predictor variable in the model</th>
<th>β</th>
<th>Multiple R</th>
<th>R square</th>
<th>R square change</th>
<th>F-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Spiritual Intelligence (SI)</td>
<td>0.110</td>
<td>0.491</td>
<td>0.241</td>
<td>0.011</td>
<td>31.264</td>
<td>.000</td>
</tr>
</tbody>
</table>

Constant 28.274

Model Y = a + βSI

C. Mental health = 28.274 + 0.011 (SI)

A. predictors (constant), Life satisfaction
B. predictors (constant), Life satisfaction and Academic stress
C. predictors (constant), Life satisfaction, Academic stress and Spiritual intelligence

Table 3.14 shows that life satisfaction which appeared as the best significant predictor of mental health of non-professional courses students. Summary shows the best predictor in model no. 1 and multiple correlation (R) was found to be (0.415) further R square was (0.172) and R square change (0.172) which is the actual contribution of predictor variable (LS) to the criterion variable (MH). Hence, the real covariance, the magnitude of independent variable i.e. life satisfaction came out as 17.2% of variance and the β value was (-.415) shows the relationship between the predictor variable and criterion variable and the obtained result reveals the inverse relationship was fond between the life satisfaction and mental health. It means that according to the percentile of mental health checklist mentioned in the manual clearly shows that higher the scores indicate poor mental health and lower the scores represents good mental health. Hence, on the basis of obtained result it may be discussed that when life satisfaction increases then the mental health status also increased. The statistical value given in the above table indicates that (F=61.951) by having look at F-value it is statistically significant (β= -.415; p<.01). Similarly, the academic stress appeared as the second strong predictor variable of mental health of non-professional courses students. Which entered in model no.2 and multiple correlation (R) was found to be (0.480) and R square was (0.230) which represents the contribution of predictor variable to the criterion variable is also seen here and we have considered R square change (.058) which is the actual contribution of predictor
variable (academic stress) to the criterion variable (mental health). So, we can say that 
the magnitude of academic stress came out as 5.8% of variance and the β value was 
(0.246) shows the relationship between the predictor as well as criterion variable 
which is positively related i.e. between academic stress and mental health. The 
obtained F-value (F=44.343) has been found significant (β= 0.246; p<.01). Hence, on 
the basis of result we can say that the mental health problems increases then academic 
stress also increases. Whereas, the spiritual intelligence as the last strong predictor 
variable of mental health among students of non-professional courses. Summary 
shows the last predictor in model no. 3, and multiple correlation (R) was found to be 
(0.491) and R square was (0.241) which represents the contribution of predictor 
variable to the criterion variable is also seen here and we have considered R square 
change (.011) which is the actual contribution of predictor variable (spiritual 
intelligence) to the criterion variable (mental health). Hence, the real covariance and 
the magnitude of independent variable i.e. life satisfaction came out as 1.1% of 
variance and the β value was (.110) shows the relationship between the predictor 
variable and criterion variable the positive relationship was found between the 
spiritual intelligence and mental health. The statistical values given in the table 
indicate that (F=31.264) by having look at F-value which is statistically significant 
(β=.110; p<.05). Hence, we can say that the mental health problems increases then 
spiritual intelligence also increases. The following regression equation is as follows:

Mental health=-0.415 (life satisfaction) + 0.246 (academic stress) + 0.110 (spiritual 
intelligence).

The obtained finding is partially supported of the results that Shu-Hui Lin and 
Yun-Chen Huang (2014) examined the life stress and academic burnout among 
students and further assesses whether reports of life stresses can serve as a predictor 
of academic burnout and the data was collected from 2640 students. They reported 
that both the level of student’s burnout and stress are in general not serious. Female 
students and upper year students were having higher levels of life stresses. The self-
identity stress, interpersonal stress, future development stress, and academic stress 
could jointly predicted student academic burnout. Academic stress is likely to affect 
the social relations both within the University and outside (Fairbrother & Warn, 2004) 
and stress negatively affects on individual’s health and academic performance 
(Campbell & Sevenson, 1992; Misra, Mckean, West and Russo, 2000). Shahbani et
al. (2010) made an attempt to examine the spiritual intelligence and emotional intelligence can be considered as predictor for mental health. Nordin et al. (2010) reported that the mental health can be influenced by spiritual intelligence and emotional intelligence, but the moderate effect of age on relationship of spiritual intelligence and emotional intelligence with mental health was not found significant. reported that the majority of undergraduates exhibit a healthy mental state while a minority has some mental health concerns.

In order to test the hypothesis H3(b) “to find out the influence of academic stress, spiritual intelligence and its four dimensions (critical existential thinking, personal meaning production, transcendental awareness and conscious state expansion) and life satisfaction as significant predictors of mental health of the students of professional and non-professional courses.” The stepwise multiple regression was applied and obtained results have been presented in the following table.

Table-3.15

Stepwise multiple regression: Showing the predictors of dimensions of spiritual intelligence on mental health entire group of students (N=600).

Model \( Y = a + \beta \text{SI (PMP)} \)

<table>
<thead>
<tr>
<th>Predictor variable in the model</th>
<th>( \beta )</th>
<th>Multiple R</th>
<th>R square</th>
<th>R square change</th>
<th>F-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal meaning production (PMP)</td>
<td>0.217</td>
<td>0.186</td>
<td>0.035</td>
<td>0.035</td>
<td>5.336</td>
<td>.000</td>
</tr>
<tr>
<td>Constant</td>
<td>25.382</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table-3.15 indicates that the predictor variable (personal meaning production) appeared as a significant predictor of criterion variable (mental health) in the group of students. But the other remaining dimensions of spiritual intelligence such as critical existential thinking, transcendental awareness and conscious state expansion did not emerge as significant predictors of mental health. Summary shows one predictor of the model. Multiple correlation was found to be (0.186) and R square was (0.035) which represents the contribution of predictor variable to the criterion variable is also seen here. Here we have considered R square change (0.035), which is the actual
contribution of predictor variable (PMP) to the criterion variable (MH). Hence, the real covariance and the magnitude of independent variable PMP (predictor) came out as only 3.5% of variance. The statistical values given in the table indicate that ($F=5.336$) by having look at F-value which is statistically significant ($\beta= 0.217$; $p<.01$) for above mentioned predictor variable (PMP) and criterion variable (MH). The $\beta$ value indicating that there exists positive relationship between mental health and personal meaning production and the obtained result clearly reveals that the personal meaning production is the more important dimension of spiritual intelligence which is relevant to mental health of students in total sample. It means that personal meaning production was emerged as significant predictor of mental health as said by Sood, Bakshi and Gupta (2012) they reported that the positive relationship was found between personal meaning production and two factors namely agreeableness and neuroticism and it also reveals that the significant relationship between transcendent awareness (TA) and openness and TA predicted as well-being. (Entesar Foumany & Danshdost, 2014) reported that relationship of spiritual intelligence with mental health and organizational commitment of nurses in hospitals of in Mashhad hospitals. Their obtained results revealed that there is a positive relationship between spiritual intelligence and mental health, spiritual intelligence and organizational commitment, mental health and organizational commitment in nurses. Men’s mental health is more than the women. Organizational commitments in women were less than men. There is no difference in Organizational commitment among nurses with respect to the location of the type of hospitals.

Mental health=$25.382 + 0.217 \times (PMP)$.

In order to test the hypothesis H4 “to ascertain the relationships between academic stress, spiritual intelligence and life satisfaction with mental health of the students of professional and non-professional courses”. Pearson’s coefficient of correlation was applied.
Table 3.16

Showing the coefficient of correlation between academic stress, spiritual intelligence, life satisfaction and mental health of professional courses students. N=300

<table>
<thead>
<tr>
<th>Variables</th>
<th>Spiritual Intelligence</th>
<th>Academic Stress</th>
<th>Life Satisfaction</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>1</td>
<td>.059</td>
<td>.197**</td>
<td>0.065</td>
</tr>
<tr>
<td>Academic Stress</td>
<td>1</td>
<td>-0.230**</td>
<td></td>
<td>0.125*</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>1</td>
<td></td>
<td></td>
<td>0.261**</td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

** p<.01, *p <.05

As shown in Table 3.16 indicating that the amount of coefficient of correlation between spiritual intelligence and life satisfaction was (r=0.197; p<.05). It means that there was significant positive relationship has been found between spiritual intelligence and life satisfaction with 99% confidence. The amount of coefficient of correlation between academic stress and life satisfaction (r = -0.230; p<0.01). It means that there was significant negative relationship have been found between academic stress and life satisfaction with 99% confidence. The amount of coefficient of correlation between academic stress and mental health was (r=.125; p<.05). It means that there was significant positive relationship has been found between academic stress and mental health with 95% confidence. The amount of coefficient of correlation between life satisfaction and mental health was (r= 0.261; p<.01). It means that there was significant positive relationship has been found between academic stress and mental health with 99% confidence. The utility of adolescent’s life satisfaction researches, preliminary evidence suggests that the number of negative and positive outcomes are associated with child/adolescent satisfaction with their life. For example, dissatisfaction with life are linked with a variety of social-emotional difficulties including depression (Lewinsohn et al., 1991), anxiety (Huebner & Alderman, 1993), negative peer interactions (Valois et al., 2001), and chemical abuse (Zulig et al., in press). Whereas high life satisfaction are associated with a variety of
positive outcomes including high self-esteem (Harter, 1999), self-concept (Gilman & Huebner, 1997; Terry & Huebner, 1995), and self-mastery (Rosenfield, 1992). Moreover, school-aged students who report higher overall life satisfaction generally report less dissatisfaction with their school experiences (Gilman et al., 2000), greater satisfaction with their family life (Dew & Huebner, 1994), and greater satisfaction with their friends (Greenspoon and Saklofske, 2001), than the adolescents who report lower level of overall satisfaction with their life. The pressure to perform well in the examination or the test and time allocated makes academic environment very stressful (Erkutlu & Chafra, 2006; Poly chronopoulou & Divaris, 2005; Misra & McKean, 2000). This is likely to affect the social relations both within the University and outside (Fairbrother & Warn, 2004) then there is conflict between the social aspects of life of an individual, this does not only affect the social relations within or outside the University, but also affects the person’s life in terms of commitment in achieving the goals. When we knowing the causes of students stress will make the University administrator to know how to monitor and control the stress factors that are responsible for the students stress. (Ornelas and Kleiner, 2003; Jaramillo et al., 2004; Verment & Steesma, 2005; Ongori, 2007; Topper, 2007; Ongori & Agolla, 2008; Agolla, 2009). In the light of these researches the identified symptoms causing academic stress are poor work performance, poor interpersonal relationship, inadequate or lack of resources, inadequate time to perform particular assignments, poor working conditions, overcrowded work situations, excessive paperwork, and many others. Hence, these factors have been found to be responsible for academic stress, it is worth nothing that in order to minimize the stress among students. It is the responsibility of the university administrators to develop appropriate strategies that will enable to detect in advance the symptoms and causes of academic stress. Academic stress is experienced as a part of everyday activities among students which has profound impact on their ability to cope with college life (Dusselier, Dunn, Wang, Shelly & Whalen, 2005; Greenberg, 1993). Stress negatively affects on individual’s health and academic performance (Campbell & Sevenson, 1992; Misra, Mckean, West and Russo, 2000).
Table 3.17

<table>
<thead>
<tr>
<th>Variables</th>
<th>Spiritual Intelligence</th>
<th>Academic Stress</th>
<th>Life Satisfaction</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Intelligence</td>
<td>1</td>
<td>.067</td>
<td>.321**</td>
<td>.197**</td>
</tr>
<tr>
<td>Academic Stress</td>
<td></td>
<td>1</td>
<td>-.210**</td>
<td>.322**</td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td></td>
<td></td>
<td>1</td>
<td>.415**</td>
</tr>
<tr>
<td>Mental Health</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**P < .01, *P < .05

As shown in Table 3.17, indicating that the amount of coefficient of correlation between spiritual intelligence and life satisfaction was (r=.321; P=.01). It means that there was significant positive relationship have been found between spiritual intelligence and life satisfaction with 99% confidence. The amount of coefficient of correlation between spiritual intelligence and mental health was (r=.197; P<.01). It means that there was significant positive relationship have been found between spiritual intelligence and mental health with 99% confidence. The amount of coefficient of correlation between academic stress and life satisfaction was (r=-.210; P<.01). It means that there was significant negative relationship have been found between academic stress and life satisfaction with 99% confidence. The amount of coefficient of correlation between academic stress and mental health was (r=.322; P<.01). It means that there was significant positive relationship has been found between academic stress and mental health with 99% confidence. The amount of coefficient of correlation between life satisfaction and mental health was (r=-.415; P<.01). It means that there was significant negative relationship have been found between mental health and life satisfaction with 99% confidence.

The obtained result was supported by studies related to academic stress reveals that a number of studies reported positive relationship between stress and poor academic performance (Clark & Rieker, 1986; Linn & Zeppa, 1984; Struthers, Perry & Menec, 2000) and the significant negative correlation was found between the stress...
levels of college students and their academic performance. The professional courses students were supposed to pass through lot of competitions, hard work and even after qualifying have to continuously undergo in pressure for fear of lack of grades, company placements. Dahlin et al., (2005) reported that there was significant difference in degree of pressure for field of study with medical students having higher degrees of pressure than the non professional groups of students. Hagani, Izadi and Bahadoran (2013) reported that there was a positive and meaningful relationship found between spiritual intelligence and social compatibility of high school female students. Kjeldstadli et al. (2006) reported that medical students who sustained high levels of life satisfaction perceived medical school as interfering less with their social and personal life and were less likely to use emotion focused coping, such as wishful thinking, than their peers. Wilson et al. (1998) reported that investigated the degree of anxiety and stress experienced by medical students and correlated with examination performance. Results supported that for medical schools, anxiety and stress levels were high. They found out that stress were generally high for both male and female students in the academic areas but women reported severe to very severe stress more frequently than men. In the areas of personal and environmental factors, the stress scores were similar between genders (mild to moderate) and females tended to report high scores with regard to relationship issues. Schneider (2007) reported the perceived stress among engineering students. Responses identified the sources of stress for engineering students as: i) heavy workload in engineering courses, ii) high level of rigor of engineering curriculum, iii) large amount of time required to get assignments done, iv) not getting enough sleep, v) competition with classmates for grades, and vi) inflexibility of engineering curriculum. Finding reveals that perceived stress is often inversely related to academic performance. Pandya, Deshpande, and Karani (2012) reported that the components of academic stress among the students of Masters of Business Administration of GTU affiliated colleges from all the five zones of Gujarat. They identified three major stressors which affect the performance and three major outcomes of stress. Around twelve micro issues have been identified under the curriculum and instruction component while three stressors were prioritized related to team work; seven sub issues regarding assessment and three micro issues under placement components of academic stress. Shirazi and Khan (2012) reported the relationship between mental health and personality characteristics among students and
they reported the significant correlation were found between mental health and personality characteristics and also significant difference were found in the mean scores of professional and non-professional students with mental health and personality characteristics in terms of gender. Bashir and Shafiq (2012) reported stress and self-esteem among professional and non-professional students of Kashmir valley and result reveals that there was no significant difference found between groups and gender on self-esteem whereas there is significant difference between professional and non professional students and also male and female students on the score of stress. Shirazi and Khan (2013) reported the relationship between life satisfaction and mental health among students. The result indicated that there was no significant difference was found in the mean scores of professional student’s life satisfaction with consideration of residence, gender respectively. On the mean scores of nonprofessional student’s life satisfaction significant difference found with consideration of residence and gender. (Coffman & Gilligan, 2002; Demakis & McAdams, 1994), reported the relationship between stress and life satisfaction is one that is well documented in the literature. Previous research on stress and life satisfaction indicates that stress has a negative impact on life satisfaction. Researchers examined stress, social support, and life satisfaction among first year college students. Students reporting higher stress also reported lower satisfaction with life and many studies focus on the relationship between living arrangement and mental health, especially life satisfaction, while the conclusions are quite different (Silverstein, et al., 2006; Chen & Short, 2008; Li, et al., 2008). Pandey et al. (2008) reported that significance difference between male and female adolescents on academic performance, achievement motivation, intelligence and socio economic status. It was concluded that there was no significant difference between male and female adolescents on the measures of academic achievement, achievement motivation, intelligence and socio economic status in the University of Isfahan. The finding revealed that there was a significant positive relationship between student’s achievement with their emotional and spiritual intelligence. As the results indicated that growth and promotion of the emotional and spiritual intelligence can be considered as methods for improving student’s academic achievement. This can be promoted and revolted through a rich educational environment and leads to better educational performance in the academic environments.
CHAPTER - 4

Conclusions, Suggestions and Implications
CONCLUSIONS, SUGGESTIONS AND IMPLICATIONS

In this section the obtained findings of present study are concluded as under.

- When professional and non-professional courses students were compared on measures of spiritual intelligence, academic stress, life satisfaction and mental health. It was found out that the professional courses students showed relatively low level of spiritual intelligence, academic stress and better mental health. In contrast to it the non-professional courses students showed higher level of spiritual intelligence, academic stress and poor mental health. So far as their life satisfaction was concerned they did not differ significantly but on other measures both the groups were found to differ significantly.

- When course wise comparison of the professional and non-professional group of students (M.B.B.S., B. Tech., M.B.A., B.A., B.sc and B.com) were compared on mental health. It was observed that M.B.B.S., M.B.A., B.sc and B. Tech students showed better mental health whereas B.A. and B.com students showed poor mental health as compared them on the basis of percentile of mental health checklist. On the basis of obtained results it was found that B.A. and M.B.B.S. students; B.A. and M.B.A. students; and B.A. and B.sc students differed significantly on measure of mental health. It means that students pursuing B.A. courses they have highest mean scores on mental health and they suffer more from mental health problems in comparison to students of other remaining courses counterparts.

- Both the group of students were measured and compared on spiritual intelligence, academic stress, life satisfaction and mental health with regards to their family status (joint and nuclear). The nuclear family students have showed higher degree of mean score on all above measured variables than the joint family students counterparts. But only life satisfaction is one of the important factor for the students of both type of families and on the basis of result obtained it clearly reveals that the t-value was statistically significant on measure of life satisfaction. It means life satisfaction is one of the important variable for students of both types of families.
The group of students were measured and compared on spiritual intelligence, academic stress, life satisfaction and mental health in terms of gender (male and female). Both the group of students did not differ significantly on spiritual intelligence, academic stress, life satisfaction and mental health but they significantly differed on the measure of life satisfaction. Hence, the obtained result clearly revealed that the female students experienced greater life satisfaction than their male counterparts during their courses of studies.

When the two religious groups (Hindu and Muslim students) were compared on measures of spiritual intelligence, academic stress, life satisfaction and mental health. It was observed that two group of Hindu and Muslim students differed significantly in terms of their spiritual intelligence, life satisfaction and mental health but they did not differ significantly on measure of academic stress.

The high and low spiritual group of students differed significantly in terms of their mental health. The mental health of high spiritual group of students was found better in comparison to low spiritual intelligence group of students.

The high and low academic stress group of students differed significantly in terms of mental health. The mental health of high academic stress group of students was found poor than the group of students of low academic stress counterparts.

The high and low life satisfaction group of students differed significantly in terms of mental health. The mental health of high life satisfaction group of students was found better than the low life satisfaction group of students.

The life satisfaction appeared as a significant predictor variable of criterion variable (mental health) among professional courses students with the magnitude of 6.8% of variance. But the other remaining variables such as academic stress and spiritual intelligence did not emerge as significant predictors of criterion variable (mental health).

The life satisfaction appeared as a best significant predictor variable of criterion variable (mental health) among non-professional courses students with the magnitude of 17.2% of variance, academic stress appeared as second
predictor variable of criterion variable (mental health) of non-professional courses students with the magnitude of 5.8% of variance and lastly spiritual intelligence emerged as third strong predictor variable of criterion variable (mental health) of non-professional courses students with the magnitude of 1.1% of variance.

- Personal meaning production (PMP) appeared as the significant predictor of criterion variable (mental health) of the entire sample of the students with the magnitude of 3.5% of variance. Personal meaning production is one of the dimension of spiritual intelligence but other remaining dimensions such as critical existential thinking, transcendental awareness and conscious state expansion did not emerge as significant predictors of criterion variable (mental health) of the students.

- The significant positive relationship was found between spiritual intelligence and life satisfaction with 99% level of confidence for the students of professional courses.

- The significant negative relationship was found between academic stress and life satisfaction at .01 level of significance for the group of students of professional courses.

- The significant positive relationship was found between academic stress and mental health with 95% level of confidence for the group of students of professional courses.

- The significant positive relationship was found between life satisfaction and mental health with 99% level of confidence for the students of professional courses.

- The significant positive relationship was found between spiritual intelligence and life satisfaction at .01 level of significance for the students of non-professional courses.

- The significant positive relationship was found between spiritual intelligence and mental health with 99% level of confidence for the students of non-professional courses.
• The significant positive relationship was found between spiritual intelligence and mental health with at .01 level of significance for the students of non-professional courses.

• The significant negative relationship was found between academic stress and life satisfaction with 99% level of confidence for the students of non-professional courses.

• The significant positive relationship was found between academic stress and mental health with 99% level of confidence for the students of non-professional courses.

• The significant positive relationship was found between life satisfaction and mental health with 99% level of confidence for the students of non-professional courses.

Suggestions

It is a generally known fact that research in any disciplines and especially in social sciences too is a never ending effort. Similarly any study can’t be free from criticism from various points of views. Researches in psychology focused on few problematic areas and during the processing of his / her research investigation the researcher came to know about the novel areas which were somewhat unknown during initiation of the study. Each and every research scholar is enthusiastic and inclined to conduct research which is comprehensive and enduring. However in due process of finishing point of research, many hurdles and shortcomings are noticed by the researcher. In a long time period of completion of thesis and thus achieving the desired goal, the investigator has to keep on working by ignoring some important variables because of paucity of time, financial constraints and difficulty in data collection and so on. Sometime the respondents are not available, the other time they may not have the time to answer the investigators’ questions and so on. As all these unavoidable hindrances put certain restrictions on a researcher all through the process of research as many variables in the psychological research remain unexplored. By keeping in mind the results of the present study it is suggested that –

• The study can be conducted by using much larger samples in each sub-group of students.
The study can be replicated on cross-cultural samples.

Further it is also suggested that this type of research can be conducted on samples of students of all professional and non-professional courses.

Data can be collected from other Institutions/ Universities in India.

The study can be conducted on group of differently abled students.

Implications

Whether we are aware of it or not, an assumption underlying in our mind that students are like “empty vessels” and the teacher’s role is to fill them with knowledge and motivate them to make ceaseless efforts to get success in life. It is clear from the findings of the present investigation that professional and non-professional students differ significantly with respect to academic stress, spiritual intelligence and mental health but they did not differ significantly on life satisfaction. When we talked about the course wise comparison of the professional and non-professional group of students (M.B.B.S., B. Tech., M.B.A., B.A., B.sc and B.com) were compared on mental health. It was observed that M.B.B.S., M.B.A., B.sc and B.Tech students showed better mental health than B.A. and B.com students showed poor mental health on the basis of percentile of mental health checklist. It means that students pursuing B.A. courses they had highest mean scores on mental health checklist and they were found to suffer from mental health problems in comparison to other remaining courses group of students. On the basis of findings of this research work the following points should be taken into considerations.

Parents should give moral-spiritual support to their children.

Teachers should emphasize not only to impart knowledge but also to foster obedience and adjustment of students in diverse areas.

The teacher should understand the academic problems of the students and translate the curriculum specification for brighter future and contentment.

The teacher is to get the students involve to learn, the obstacles in their ways of progress will overcome.

Positive interpersonal relationship between teacher and students should be strengthened.

The teacher should apply the correct teaching method in teaching-learning process.
• The classroom facilities should also be improved because it enhances the level of confidence of the students.

• Career counselling should be made important in college/university.

• Seminars should be organized to address the curriculum development and indicate discipline as per the specific needs of the students.

• Universities should provide counselling services to students of both professional and non-professional courses.
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REFERENCES


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Appendices
BIOGRAPHICAL INFORMATION

Age_____________________
Gender: M/ F
Course: __________

Religion: Hindu / Muslim
Father’s qualification___________
Mother’s qualification___________

Family status: Joint / Nuclear
Day scholar / Hostler: D/ H
Rural / Urban: R / U

From,
Shabana Anjum
Ph.D. Scholar
Department of Psychology
Aligarh Muslim University,
Aligarh, (U.P.)
INSTRUCTION

1. The following are the statements related to one's behaviors, thought processes, and mental characteristics. Please read each statement carefully and make your self-assessment and select the best one which one of the five could be the possible responses reflects your opinion by encircling the corresponding number. Printed against each statement, there is no right and wrong response. The responses given by you will be kept confidential and be used for research purpose only. Please don't hesitate in given your responses on each statement. If you are not sure or if a statement does not seem to apply to you, choose the answer that seems to be the best. The five possible alternative responses for each statements are as given below.

- Not at all true of me 0
- Not very true of me 1
- Somewhat true of me 2
- Very true of me 3
- Completely true of me 4

<table>
<thead>
<tr>
<th>S. No</th>
<th>STATEMENTS</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have often questioned or pondered (think) the nature of reality.</td>
<td></td>
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<td>2</td>
<td>I recognize (identify) aspects of myself that are deeper than physical body.</td>
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<td>3</td>
<td>I have spent time contemplating (think about deeply) the purpose or reason for my existence (life).</td>
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<td>4</td>
<td>I am able to enter higher states of consciousness or awareness.</td>
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<tr>
<td>5</td>
<td>I am able to deeply contemplate what happens after death.</td>
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<td>6</td>
<td>It is difficult for me to sense anything other than physical and material.</td>
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<td>7</td>
<td>My ability to find meaning and purpose in life helps me adapt to stressful situations.</td>
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<tr>
<td>8</td>
<td>I can control when I enter higher states of consciousness or awareness.</td>
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<tr>
<td>9</td>
<td>I have developed my own theories about such things as life, death, reality and existence.</td>
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<tr>
<td>10</td>
<td>I am aware of a deeper connection between myself and other people.</td>
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<tr>
<td>11</td>
<td>I am able to define a purpose or reason for my life.</td>
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<tr>
<td>12</td>
<td>I am able to move freely between levels of consciousness or awareness.</td>
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<tr>
<td>13</td>
<td>I frequently contemplate (think about deeply) the meaning of events in my life.</td>
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<tr>
<td>14</td>
<td>I define myself by deeper, non physical self.</td>
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<tr>
<td>15</td>
<td>When I experience a failure, I am still able to find meaning in it.</td>
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<tr>
<td>16</td>
<td>I often see issues and choices more clearly while in higher states of consciousness / awareness.</td>
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<tr>
<td>17</td>
<td>I have often contemplated the relationship between human beings and the result of the universe.</td>
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<tr>
<td>18</td>
<td>I am highly aware of the nonmaterial aspects of life.</td>
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<tr>
<td>19</td>
<td>I am able to make decisions according to my purpose in life.</td>
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<tr>
<td>20</td>
<td>I recognize qualities in people which are more meaningful than their body, personality and emotions.</td>
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<tr>
<td>21</td>
<td>I have deeply contemplated whether or not there is some greater power or force (e.g. god, goodness, divine being, higher energy, etc.)</td>
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<tr>
<td>22</td>
<td>Recognizing the nonmaterial aspects of life helps me feel centered.</td>
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<tr>
<td>23</td>
<td>I am able to find meaning and purpose in my everyday experiences.</td>
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<tr>
<td>24</td>
<td>I have develops my own techniques for entering higher states of consciousness or awareness.</td>
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</tbody>
</table>
2. Dear Respondent you are requested to read the following statements one by one and after making assessment you have to give your response on five point rating scale i.e. Strongly agree to Strongly disagree. If you strongly agree assign ‘5’, agree ‘4’, neither agree nor disagree ‘3’, disagree ‘2’ and strongly disagree ‘1’. Please give your response honestly that describe your best and put tick mark (✓) in the space provided against each statement.

| Strongly Disagree | 1 |
| Disagree          | 2 |
| Neither Agree nor Disagree | 3 |
| Agree            | 4 |
| Strongly Agree   | 5 |

Do not leave any statement unanswered:

<table>
<thead>
<tr>
<th>S.No</th>
<th>STATEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have difficulty in concentrating on my studies.</td>
</tr>
<tr>
<td>2</td>
<td>When I assess myself in terms of abilities I found to be incapable of achieving my academic goals.</td>
</tr>
<tr>
<td>3</td>
<td>My classmates are not cooperative in giving academic help to one another.</td>
</tr>
<tr>
<td>4</td>
<td>I am worried about successfully achieving my academic goal.</td>
</tr>
<tr>
<td>5</td>
<td>I forget easily what I learn.</td>
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<tr>
<td>6</td>
<td>The daily struggle in my life creates problems in achieving the academic goals.</td>
</tr>
<tr>
<td>7</td>
<td>I find myself incompetent in solving day to day academic problems.</td>
</tr>
<tr>
<td>8</td>
<td>I face difficulties in obtaining expenditure on my education.</td>
</tr>
<tr>
<td>9</td>
<td>The heavy syllabi (lengthy syllabi) give no time to maintain in social relations.</td>
</tr>
<tr>
<td>10</td>
<td>I am unable to succeed in competitive examinations.</td>
</tr>
<tr>
<td>11</td>
<td>I blame my luck for academic failure.</td>
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<tr>
<td>12</td>
<td>I am shy in discussing lessons with my teachers.</td>
</tr>
<tr>
<td>13</td>
<td>I want to prove that I have the potential for academic achievement.</td>
</tr>
<tr>
<td>14</td>
<td>I feel mental fatigue because of heavy academic workload.</td>
</tr>
<tr>
<td>15</td>
<td>Due to lack of academic planning I find myself unable to complete my course.</td>
</tr>
<tr>
<td>16</td>
<td>I am unwilling to pursue my present course.</td>
</tr>
<tr>
<td>17</td>
<td>I fear of examination.</td>
</tr>
<tr>
<td>18</td>
<td>Parents’ high expectations about my academic progress disturb my concentration on studies.</td>
</tr>
<tr>
<td>19</td>
<td>After obtaining my degree I shall face difficulties in getting appropriate job.</td>
</tr>
<tr>
<td>20</td>
<td>I am worried of academic failure.</td>
</tr>
<tr>
<td>21</td>
<td>I feel heavy load of academic pressure in pursuing the present course of study.</td>
</tr>
</tbody>
</table>
3. Consider some aspects of your life at the present moment, and indicate how satisfied you feel about each one in turn? Please use the given response alternatives.

<table>
<thead>
<tr>
<th>S.No</th>
<th>STATEMENTS</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Your standard of living: the things you can buy and do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>The education you have</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Your social life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Your family life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Your present state of health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The way you spent your leisure time</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>What the future seems to hold for you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>What you are accomplishing in life</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The moral standards and values in society today</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Taking everything together, your life as a whole these days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix – V

4. Below are given a list of conditions—both mental and physical. You are requested to read them carefully and put (✓) mark at an appropriate place against each of them showing your agreement to disagreement. Since all this information happens to be of personal nature, it is assured that your replies would be kept confidential and used only for research purpose. However, if you desire to know your result, you may contact me personally.

<table>
<thead>
<tr>
<th>S.nos</th>
<th>Do you suffer from?</th>
<th>Always</th>
<th>Often</th>
<th>At time</th>
<th>Rarely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Anxiety and Tension</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Restlessness</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Nervousness</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Loneliness</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Hopelessness</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Anger</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Headache</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Tiredness</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Disturbed sleep</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Indigestion</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Acidity</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>
Publications
Stress and Mental Health of Nurses Working in Government and Private Hospitals

Shabana Anjum, Mahmood S. Khan & Shabnam Khan

Abstract

The study was conducted to assess the level of stress and mental health problems of nurses working in Government and Private Hospitals. The sample consists of 100 Nurses (50 in each group) were asked to complete the mental health and stress symptoms inventories to collect relevant information for this study. The result showed that the nurses working in Government and Private Hospitals differed significantly in terms of mental health as a whole and its dimensions. Perusal of Mean, S.D. and Standard error of mean scores clearly indicate that the nurses in Government hospitals scored high on mental health inventory in comparison to nurses working in Private hospitals. It means the nurses of government hospitals showed better mental health than those working in private hospitals. The mean score on stress symptoms inventory was found high among Private hospital nurses in comparison to their Government hospitals counterpart. The trend of obtained result is clear that the private hospital nurses showed more stressful symptoms as compared to the Government hospitals nurses. On the basis of obtained result it is discussed that Private hospital nurses working conditions are very much demanding and crucial, seems to meet the patients expectations, lack in self respect and their salary package is also low than Government hospital nurses. The results clearly show that the mental health of private hospital nurses is poor and stress level is high than that of the nurses working in Government hospitals.

Key Words: * Stress * Mental health * Nurses * Government hospitals * Private hospitals.

The word ‘stress’ refers to “a state of affair involving demand on physical or mental energy”. A condition or circumstance if exceeds to one’s ability (not always adverse), which can disturb the normal physical and mental health of an individual. Stress is defined as ‘demand-perception response. It means the basic concept of stress is related to both to people’s perception of the demand being made on them and to make their perception of their capability to meet those demands. In the fast pace of change in all spheres stress as a negative experience has become inevitable and its persistence in one’s life is bad and also depends much upon person’s perception of a situation and his/ her ability to cope with it. Almost any change -social, economic, political, environmental, organizational and technological put certain demands and if exceeds to an individual’s capacity will definitely create stress of varied degree. Though, experiencing’ stress
Stress and Mental Health of Nurses Working in Government and Private Hospitals

is an everyday fact of life but people react differently to stressful experiences and the events that cause stress might be subjective. Hans Selye (1936) extended his biological concept of stress as the “General Adaptation Syndrome (GAS)”, a set of non specific reactions to various noxious environmental agents. The General Adaptation Syndrome has three stages. The ‘Alarm Reaction’ in which outside stressors mobilize the internal stress of the organism i.e. the defence mechanism becomes activated. ‘Resistance’ the stage of maximum adaptation and hopefully successful return to equilibrium for the individual; if however, the defence does not work. When adaptive mechanism collapses and that is called Exhaustion.

The Mental health has been described in terms of one’s ability to respond to varied experiences of life with flexibility and a sense of purpose. It is the state of balance between the individual and the surrounding world. It could be seen as a state of harmony between oneself and others, a coexistence between the realities of the self and that of other people and that of the environment. The mentally healthy person is that person who is free form internal conflicts, who is not at “war” with himself. The word mental health is used to describe either a level of cognition and emotional wellbeing or absence of mental disorder. The WHO (1948) defined mental health as “a state of wellbeing in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is also able to make contribution to his / her community”. The definition of mental health proposed by WHO in 1981 with some changes, “Mental health is the capacity of the individual, the group and the environment to interact with one another in ways that promote subjective well-being, the optimal development and use of mental abilities (cognitive, affective and relational), the achievement of individual and collective goals consisted with justice and the attainment and preservation of condition’s of fundamental equality”. This definition has several advantages in concerning to women’s mental health because;

- stresses the complex web of interrelationships that mental health and that the factors that determine health operate on multiple levels.
- goes beyond the biological and the individual.
- acknowledges the crucial role of the social context.
- highlights the importance of justice and equality in determining mental well-being.

Garyfallos, A. Adamopoulou, Ch. Moutzoukis, Th. Panakkeridou, Th. Kapsala and A. Linara, (1993) reported that the nurses working in private hospitals were found to suffer more from psychological problems than their government hospitals Piko (1999) investigated the relationship between the level of stress among nurses and also some of the psychological and organizational characteristics of their job. The result showed that the supportive relationship with peers was found to mitigate the high level of stress of nurses. Another study reported that the problem solving is an important coping strategy to reduce the nurse’s occupational stress effectively (Tyeon, 2002). Finding of another study reveals that nurses working in private hospitals were found to show more job satisfaction and intended to retain their jobs more than nurses of public hospitals (Mrayyan, 2005) and the organizational and environmental conditions of work, job characteristics might be change the nurses’ job satisfaction and distress (Tanya et al. 2005).
Tankha (2006) examined the effect of role stress among nurses working in government and private hospitals. The result showed that the male nurses experienced significantly higher level of stress as compared to females. Golbasi et al. (2008) reported that the job satisfaction and coping strategy have significant relationship between job satisfaction were associated with high positive coping strategies of nurse’s. Suchitra (2008) reported a comparative study among doctors and nurses of Indian and Norway to see the relationship between work family conflict (WFC), job demands, job control, social support, flexibility in working hours and job stress. The findings revealed that the Norwegian nurses showed WFC, high job demands and low flexibility in working hours were predictors of job stress. Whereas for Indian doctors low job control and for Indian nurses high FWC and low social support were found the predictors of job stress. As reported that interrelationships of emotional intelligence (EI), work stress and health. The result reveals that the higher EI nurses experienced low level of stress whereas lower level of EI nurses experienced high level of stress. It means that EI is shown for nurses as a protective factor against stress and facilitative factor for health. (Angusto et al — 2008).

Objectives
1. Is there any significant difference between the nurses of government and private hospitals in terms of their level of stress and its subscales (Physical, Psychological and Social relational symptoms)?
2. Whether nurses working in government and private hospitals differ in terms of their mental health and its subscales (Positive self evaluation, Perception of reality, Integration of personality, Autonomy, Group oriented attitude and Environmental mastery).

Method

Sample
The sample of the present investigation comprised of 100 nurses working in government and private hospitals (N=50 in each group). Both the group of nurses was selected by means of purposive randomly sampling technique from the hospitals of Aligarh, District. The age range of participants was between 20-52 years.

Distribution of Sample
(Nurses)
N=100

Government hospital nurses
Private hospital nurses (50)

Tools Used
1. Mental Health Inventory (MHI): Mental health inventory was developed by A.K. Srivastava (1983) contains 56 items out of which there are 32 negative and 24 positive statements
to measure the mental health of a person as a whole and also its six dimensions namely, 1. Positive self evaluation, 2. Perception of reality, 3. Integration of personality, 4. Autonomy, 5. Group oriented attitude and 6. Environmental mastery. Each item to be related on a four point scale i.e. Always, Most of the times, Sometimes and Never. The scoring of the negative statements will be reversed. High scores obtained by the subjects are indicative of good mental health and vice versa.

2. Stress Symptoms Inventory: This inventory was developed by A.K. Srivastava (1983) to measure 3 kinds of stress as experienced by a person i.e. Physical, Psychological and Social Relational Stresses. It is consist of 39 items, 15 items to measure physical stress, 17 items for psychological stress and 7 items for social relational stress. In SSI the responses were obtained on 4 point scales “Never” to “Almost constantly” i.e. 1-4. The scores on SSI will range between 39-156.

Procedure

The study was finally carried out on 50 government and 50 Private hospital nurses. The investigator contacted the participants and persuaded them to help me by filling the questionnaires for this study. They were given assurance of the confidentiality of the information given and will be used for academic purpose only. During the period of lunch break they agreed to complete the questionnaires and they were told to read the printed instruction carefully and proceed to give their responses on each inventory one after the other as desired without omitting any statement. They were also told not to write their name and also the name of the hospital they are working. The scoring was done as per the norms of the tests used. The data was analyzed by means of t-test in order to compare the groups in terms of stress and mental health as a whole and their various dimensions.

Results and Discussion

The major aim of the present study was to assess and compare the mental health problems and stress related symptoms of nurses who are working in government and private hospitals. The Mental Health Inventory (MHI) was used to measure the mental health status as a whole and its various aspects. The Stress Symptoms Inventory (SSI) was used to measure levels of stress as a whole and its three aspects - Physical, Psychological and Social Relational Symptoms of stress. After collecting the relevant information from the participants then analyzed the data with the help of t-test. The results of stress and mental health measures are shown in the tables.
Table 1: Showing the Mean, S.D. and t-ratio on Mental Health Inventory of government and Private hospital nurses.

<table>
<thead>
<tr>
<th>Mental Health Dimensions</th>
<th>Groups</th>
<th>Mean</th>
<th>S.D.</th>
<th>Standard error of Mean (SEM)</th>
<th>t-value</th>
<th>Level of sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive self evaluation (PSE)</td>
<td>Govt. Nurses</td>
<td>31.28</td>
<td>4.53</td>
<td>0.64</td>
<td>11.91</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses</td>
<td>26.94</td>
<td>4.06</td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perception of reality (POR)</td>
<td>Govt. Nurses</td>
<td>22.30</td>
<td>3.18</td>
<td>0.45</td>
<td>10.41</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses</td>
<td>18.98</td>
<td>2.63</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration of personality (IP)</td>
<td>Govt. Nurses</td>
<td>33.54</td>
<td>5.30</td>
<td>0.75</td>
<td>7.59</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses</td>
<td>30.18</td>
<td>4.25</td>
<td>0.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy (AUTNY)</td>
<td>Govt. Nurses</td>
<td>17.72</td>
<td>2.85</td>
<td>0.40</td>
<td>5.86</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses</td>
<td>15.64</td>
<td>2.62</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Oriented Attitude (GOA)</td>
<td>Govt. Nurses</td>
<td>30.50</td>
<td>3.40</td>
<td>0.48</td>
<td>11.73</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses</td>
<td>27.76</td>
<td>3.49</td>
<td>0.49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Mastery (EM)</td>
<td>Govt. Nurses</td>
<td>26.62</td>
<td>2.98</td>
<td>0.42</td>
<td>10.20</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses</td>
<td>23.26</td>
<td>3.16</td>
<td>0.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Govt. Nurses</td>
<td>161.76</td>
<td>12.72</td>
<td>1.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Private Nurses</td>
<td>142.76</td>
<td>10.30</td>
<td>1.45</td>
<td>18.76</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>
Table 2: Showing the Mean, S.D. and t-ratio on Stress Symptoms Inventory of government and Private hospital nurses (nursing homes).

<table>
<thead>
<tr>
<th>Stress Dimensions</th>
<th>Groups</th>
<th>Mean</th>
<th>S.D.</th>
<th>SEM</th>
<th>t-value</th>
<th>Level of sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical Symptoms</strong></td>
<td>Govt. Nurses</td>
<td>25.96</td>
<td>5.70</td>
<td>0.80</td>
<td>3.07</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses (nursing homes)</td>
<td>27.24</td>
<td>5.47</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Psychological Symptoms</strong></td>
<td>Govt. Nurses</td>
<td>28.62</td>
<td>5.73</td>
<td>0.81</td>
<td>0.79</td>
<td>NS.</td>
</tr>
<tr>
<td></td>
<td>Private Nurses (nursing homes)</td>
<td>28.88</td>
<td>5.76</td>
<td>0.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social Relational Symptoms</strong></td>
<td>Govt. Nurses</td>
<td>11.22</td>
<td>2.72</td>
<td>0.38</td>
<td>1.28</td>
<td>NS.</td>
</tr>
<tr>
<td></td>
<td>Private Nurses (nursing homes)</td>
<td>11.74</td>
<td>2.44</td>
<td>0.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total (Overall)</strong></td>
<td>Govt. Nurses</td>
<td>65.80</td>
<td>11.93</td>
<td>1.68</td>
<td>2.63</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td></td>
<td>Private Nurses (nursing homes)</td>
<td>67.86</td>
<td>10.78</td>
<td>1.36</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in Table 1, both the groups of nurses working Government and Private hospital were compared with regard to the mental health as a whole and its subscales. The result shows that the both the groups of nurses were found to differ significantly as a whole and its subscales of mental health i.e. (Positive self evaluation, Perception of reality, Integration of personality, Autonomy, Group oriented attitude and Environmental mastery). The mean scores of government hospital nurses as a whole was 61.76 and Private hospital nurses was 142.76 and t-value was 18.76. The t-value is high because standard error of mean for both groups were low and shows greater consistency in the responses of both the groups of nurses and apparently it is clear that the mean scores of government hospital nurses was higher than the mean scores of the Private hospital nurses. It means that the government hospital nurses mental health was found better than the Private hospital nurses and the result of this study is supported by the earlier study that nurses who worked in private hospitals suffer more from psychological problems than the nurses of government hospitals (G. Garyfallos, A. Adamopoulou, Ch. Moutzoukis, Th. Panakeridou, Th. Kapsala and A. Lina, 1993). When we compared both the groups of nurses on the basis of subscales of mental health that means Positive self evaluation, Perception of reality, Integration of personality, Autonomy, Group oriented attitude and Environmental mastery. On the basis of mean score of all subscales it was found that the government hospital nurses scored higher than the Private hospital nurses.

Similarly, as shown in Table 2, both the groups of nurses i.e. Government and Private hospital nurses were compared with regard to the stress symptoms inventory as a whole and its three subscales (Physical, Psychological and Social relational symptoms). Both the groups were
found to differ significantly only on Physical symptoms of stress but did not differ significantly on Psychological and Social relational symptoms of stress. Whereas the mean scores of the two groups on stress symptoms inventory as a whole was found to differ significantly at 0.01 levels. The mean scores of Government hospital nurses as a whole was 65.8 , Private hospital nurses was 67.86 and t-value was 2.63 it means the mean scores of Private hospital nurses was found higher than the government hospital nurses it means that Private hospital nurses experienced more stress than Government hospital nurses. The result of the present study is supported by earlier study of Tanka (2006) reported that male nurses from private hospitals showed significantly higher level of stress levels than the government hospital nurses but another findings do not support this study i.e. Mrayyan (2005) as reported that nurses working in private hospitals were found to show more job satisfaction and intended to retain their jobs more than nurses in public hospitals. The purpose of the present study was to find out the mental health problems and stress related symptoms of government and private hospital nurses. The review of literature showed that the private hospital nurses suffer more from mental health and stress related problems than their counterparts. Because some times their family members complaint that their job activities do not allow them to spare sufficient time for family members, some times they become irritated when they do their work a lot also do not get attractive salary and also do not enjoy the status of a prestigious post as they want. These are the possible various reasons due to which their stress level is found high and mental health is disturbed. But in this study it is observed that Private hospital nurses suffer more from stress and mental health problems than government hospital nurses.

Conclusion

Most of the nurses to face various types of stressful situations like frustration, irritation, trauma etc. during their working hours and at home. Due to these stressful situation they may suffer from mental health problems such as depression, anxiety etc. This is the big challenge of nursing profession in the present era and how to reduce their level of stress. After conducting this study and review of literature researcher want to discuss some important points after discussion with them to evolve strategies to mitigate their level of stress. To develop the communication skills between themselves and patients, getting counseling training, develop the quality of leadership, to develop awareness of social environment, good assessment of the patient's problem and their treatment, develop the tendency of trustworthiness etc. If all the nursing profession develop these things with themselves then it might be possible that nurses may reduce or minimize their level of stress and to enhance their mental health and lead a good way of life.

References


Stress and Mental Health of Nurses Working in Government and Private Hospitals


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Shabnam Khan, Mahmood S.Khan & Shabana Anjum

Abstract

In this study an attempt was undertaken to asses and compares the variations in cognitive development between school going and labour class children with the help of Raven’s Progressive Matrices (RPM). A sample of 60 children belonging to almost similar background variables, 30 school going children and 30, engaged in petty jobs (working in homes, dhabas, small lock manufacturing units) were taken from city area of Aligarh district. The research revealed that the performance of school children on Raven’s Standard Progressive Matrices (RSPM) was much better than the performance of children engaged in petty jobs. The majority of labour child were stuck on set B12 or C3 and they found below average in intellectual capacity according to RSPM manual. On the other hand school children were able to solve all the problems with some errors in set C, D, E, they are intellectually average according to RSPM manual.

Key words: Intelligence, cognitive development, family environment, poverty.

Cognition is the mental process which involved perceiving, knowing, learning and understanding things. The concept of cognition is closely related to abstract concepts such as mind and intelligence.

As the child grows his/her cognition incessantly becomes sharper and the environment in which the child lives also influence his/her intelligence to a greater extent. But for many of them hunger, clothing and shelter are most prominent issues that need their immediate attention for survival, and books seem to be a least priority for such children. They cannot even nurture a dream which is supported by an academic excellence. They struggle for survival and their dreams and desires are covered by layers and layers of every day sustainable survival issues.

An individual’s mental abilities are a function of genetic potential in interaction with such prenatal and postnatal environmental conditions as nutrition, health, enriched or impoverished stimulation, the emotional climate of home and the type of feedback provided for behaviour. Given two children with the same gene structure at conception, the child with the best prenatal and postnatal nutrition, the most intellectually stimulating and emotionally secure home and the most appropriate rewards for academic accomplishments will attain the higher intelligence score.

When tested in first grade. Studies have shown that IQ differences between children of low and high socioeconomic status become progressively greater between birth and entrance into school (Bayley, 1970).

Theory about the nature and development of human intelligence was first developed by Jean Piaget, which is also known as a developmental stage theory, that deals with the nature of knowledge itself and how humans come gradually to acquire it, construct it, and use it. He describes the stages through which it develops until maturity. These stages are: Sensory motor stage, Preoperational stage, Concrete Operational stage and Formal Operational stage. All stages are important for cognitive development of the children but investigator's main focus is on the Concrete operational stage because this stage occurs between the ages of 7 and 11 years and is characterized by the appropriate use of logic. Processes involve during this stage are: Seriation— the ability to sort objects in an order according to size, shape, or any other characteristic. Transitivity— The ability to recognize logical relationships among elements in a serial order, and perform 'transitive inferences'. Classification— the ability to name and identify sets of objects according to appearance, size or other characteristic, including the idea that one set of objects can include another. Decentering— the child takes into account multiple aspects of a problem to solve it. Reversibility— the child understands that numbers or objects can be changed then returned to their original state. Conservation— understanding that quantity, length or number of items is unrelated to the arrangement or appearance of the object or items.

Duncan, Brooks-Gunn & Klebanov (1994) suggested that family income and poverty status are significant determinants of cognitive development and behavioural adjustment of children independent of family structure (such as single parent status) and maternal schooling. Specifically, they found that family income was the most significant correlate of age five IQ. Neighbourhood income differences were also significant determinants of age five IQ. Luster, T. & McAdoo (1994) reported a positive relationship between the number of risk factors Children were exposed to and academic or behavioural problems. African American children with the lowest scores on measures of cognitive competence had mothers with lower levels of intelligence and fewer years of education, came from large families, and experienced less supportive home environments. The number of risk factors increased the probability of lower achievement. Evidence suggests that poorly nourished children are at increased risk of poor cognitive development outcomes, and food supplementation programs have been shown to have positive effects on child development in a variety of settings, including Guatemala, Indonesia, and Jamaica, although positive effects in Jamaica were no longer apparent in the long run (Walker et al. 2005). Cognitive development in early childhood is an important predictor of success throughout life. In developed countries, children with low levels of cognitive development before they enter school have lower school achievement and earn lower wages (Currie and Thomas 1999; Case and Paxson 2006). In developing countries, low levels of cognitive development have been tied to poor performance in school in a number of settings. Program like Atención a Crisis to have a positive effect on cognitive development in early childhood. Although the evidence is sparse, children in better-off households appear to have higher levels of cognitive development than those in poorer households in developing countries (Paxson and Schady 2007, 2008; Halpern et al. 1996). (Walker et al. 114
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2007) estimates that between 44 percent and 66 percent of children in developing countries suffer from anemia, and that iron deficiency is one of the main proximate causes for low levels of cognitive development among children in poor countries.

**Aim of the study:** Poverty begins with a low income and lack of resources, the poor people go through malnutrition, poor health, lack of education and lesser opportunities of skill development that lead to low employment opportunities, which in turn, continue their low income condition and health problems and nutrition status. This seems to result in lowered motivational level which makes their life worse, poverty driven and deprivation influence the intellectual functioning and performance on tasks such as (classification, verbal reasoning, time perception and pictorial depth perception). It is often seen that performance of highly deprived individual is low as compared to those who are less deprived. It has also found that the effect of deprivation is attributed to the nature and quality of the environment in which the child grows, whether it is enriched or impoverished, makes a difference in their cognitive development. Keeping this view in mind the present study is designed to investigate and examine the impact of education and family environment on cognitive development of school going children and children engaged in petty jobs.

**Method**

**Sample**

The sample of present investigation consisted of 60 (N=30, school going children and 30, labour class children). The RPM was individually administered to each of the participant of the study. The age group of the children was between 8 years to 11 years. Both groups were taken from almost similar socio-economic background and locality. They are from the lower section of the society; their parents were either rickshaw-puller, road side wanders and working in small scale industries. Those children who are not getting education are coerced by their parents not to attend school and to do some petty jobs for their livelihood. That's why they are working in horeses, Dhabas, small lock manufacturing units. The other group was also taken from the similar section of the society but here parents force their children to go school and get education from government schools and Anganwari. Because they hope that education of their children will improve their future life.

**Tools used**

Raven's Standard Progressive Matrices (RSPM) was developed by J.C. Raven, J.H. Court and J. Raven in 1983. The Standard Progressive Matrices (set A, B, C, D and E) or SPM is a test of a person's capacity at the time of the test to apprehend meaningless figure presented for his/her observation. The test is consisting of 5 sets and each set is divided into 12 subsets then the total set for entire test is 60. The solution of problems becomes progressively more difficult. The order of the items provides the standard training in the method of working. The five sets provide five opportunities for grasping the method and five progressive assessments of a person's capacity for intellectual activity. SPM was designed to cover the widest possible range of mental

ability and to be equally useful with persons of all ages, whatever their education, nationality or physical condition.

Procedure

The study was conducted on 2 groups. 1. School going children, 2. Children engaged in petty jobs, sample was selected from the city area of Aligarh District. Age group of children was between 8 years to 11 years, the socio-economic background of both groups were same. Investigator asked the school children to complete the RPM test, pencil, record form and test books are given then investigator gave instruction to complete this test. The investigator explained each and every thing related to the test in simple language for clear understanding. In the booklet at the first illustration A1, it is a pattern with a piece cut out of it. Some pieces are given each of the pieces is the right shape to fit the space but only one of them is the right pattern. Point to the piece which is quite right, each problem is presented the same instruction is given as long as it serves a useful purpose. Then investigator record the child's answers on the record form. Each child has to complete the R.S.P.M book in 40 minutes. After taken the scores from school children investigator employed RSPM on children engaged in petty job (working in homes, Dhabas and small locks manufacturing units) and same instruction was given to them and the answers were recorded. The RSPM was administered individually on each participant to measure their intellectual level. Accordingly the scores were noted under five categories mentioned in the manual. Grade I, II, III+, IV- AND V; intellectually superior at I above average at II, average at III+ and III-, below average at IV and intellectually impaired at Grade V, which show the raw score converted into percentile according to chronological ages. Then t-test was used to analyse the data because it was found more suitable on this type of research investigation. The t-test is used in order to make comparison of cognitive development between school children and children engaged in petty jobs.

Results and Discussion

Table - 1: Shows the variation in the cognitive ability of the school going and children engaged in petty jobs.

<table>
<thead>
<tr>
<th>Groups compared</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
<th>SEM</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>School children</td>
<td>51.50</td>
<td>5.42</td>
<td>30</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td>Children engaged in petty jobs</td>
<td>30.76</td>
<td>6.11</td>
<td>30</td>
<td>1.11</td>
<td>13.88*</td>
</tr>
</tbody>
</table>

*significant at 0.01

Table-1 shows that the Mean score of school going children on RSPM was found 51.50 where as the mean score of children engaged in petty jobs was found 30.76 with their respectively
SEM was found .99 and 1.11 and the difference between the mean of two groups was found statistically significant at 0.01 level (t-value = 13.88). The higher mean score of school going children despite their similar background was found that their intelligence level and cognitive development are much better than those children who are engaged in petty jobs for sustenance. In support of result it is to mention that the school going children were able to solve all the problems with lesser errors on set C, D and E. They were found average in intellectual ability where as majority of children who did not attend the school and started working on some small jobs were found to stuck on set B12 and C5, they were found much below average in terms of intellectual capacity as per norms of (RSPM).

Children of the lower section of the society were engaged in earning their livelihood because their parents cannot fulfil their basic needs, so how they can give the priority to the education. These children are found to be cognitively deprived because they are living in such type of environment where they have to struggle even for their basic need and therefore, they cannot get opportunity beyond that. Due to this their intellectual capacity remain stagnant and below average. However, both the groups were taken from the lower sections of the society and similar background but their intellectual capacities are different. Parents of school children were also poor but they force their children to go school for education with the hope of future betterment. Government has given full opportunity to all children to promote them by providing free education, launching other similar programs such as Anganwari etc. where government provide free education with daily meal and some money for the upliftment of the lower section of the society. But beside this hereditary also influence intelligence, which is evident from the studies of adopted children that children’s intelligence is more similar to their biological rather than adoptive parents. With respect to the role of environment, studies showed that as children grow in age their intelligence level tends to move closer to their adoptive parents. Children from disadvantage homes adopted into families with higher socio-economic status exhibit a large increase in their intelligence scores. There is evidence that environmental deprivation lowers intelligence while rich nutrition, good family background and quality schooling increases intelligence. So we can say that intelligence is a product of complete interaction of heredity (nature) and environment (nurture), and individual’s development is actually shaped by the support and opportunities of the environment. It also shows that environment and education plays a great role in the cognitive development of children. Education is a right of every child which is necessary for cognitive development it will not only improves the condition of families but also help in the progress of country as a whole.

References


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