Chapter I

Introduction
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INTRODUCTION

Education has been conceived to be a vehicle for enhancing the quality of life of individuals and economic growth of a country. Education develops manpower for different levels of economy (NPE, 1986). It enhances employability and work proficiency. Work is a means of subsistence, a source of psychological and social identity, a source of self-fulfillment and self-realization. It serves a meaningful function of providing livelihood and outlets for leisure time pursuits. In the modern society, due to the complex and fluid nature of the world of work and the variety of work options available, there is sufficient scope and reason to develop an understanding of this dynamic process of career decision-making and to have rational placement of individuals. Career decision-making has undergone tremendous change in this age of increasing industrialization and changing aspirations and life values. Education, from this point of view, becomes an important intervening variable in youth's striving towards occupational or career goals. Havighurst (1953) has emphasized the developmental task concept, which he defines as a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to happiness and success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks. The tasks, which must be mastered, vary at different stages of development, with changes in the individual and in the demands of society.

Jones (1973) views that although life goals provide the centre of all activities and give meaning to life, a satisfying and successful life is often dependent on the wise choice of a career. The selection of a career can be conceptualized as a process made up of a series of events or "choice acts" which take place over a considerable period of time, usually from the end of childhood to the beginning of youth, and which largely terminates when the individual enters an occupation.

The concept of vocational choice as a developmental process has its origin in the early work of Carter (1940). He concluded that formation of interest patterns in adolescence, progresses in the late childhood, which ensures mature realistic solutions to problems of youth and adulthood. Ginzberg et al. (1951) introduced the idea that
vocational choice is a continuous process which remains in existence for a prolonged period. In this developmental framework, career behaviour refers to the responses that an individual makes in selecting a career and adjusting in it. It is considered as a continuous fluid process of growth and learning, including self-concept, developmental experiences, personal history, and psycho-social environment as major determinants of career choice.

The development of a person through stages of maturity, parallels the educational and vocational choice process. These two processes interact with each other. In the continuity of career development, educational and vocational choices are seen as a series of acts forming crucial factors for personal development. The personality of an individual has an essential influence on decisions, as picking up a choice behaviour involves a series of inter-dependent decisions which are, to some extent, irreversible and are intimately tied to an individual. These decisions occur or are taken with determination at various stages. Super (1957) concluded, “an individual is, more or less, conscious of his vocational decision-making, depending upon the stage of his development”. The appropriate decision not only benefits the individual but it is also vital for the optimal utilization of human resources.

Life and work in the past were dictated by tradition and custom and thus the people had neither the necessity nor the freedom of making career choices. The child usually adopted the profession of his/her parents. But today life of man is not the same as it used to be. An adolescent is expected to choose at the senior secondary stage, a particular stream from vocational and academic groups. The students opting for academic stream have to make decision regarding the pursuance of higher studies in the field of arts, science or commerce whereas the vocational stream aims to divert large number of students to the world of work by attracting them to need-based, region-specific vocational courses. These choices are ultimately viewed as career choices which determine the future role of an individual in the world of work. Right career choice thus leads to personal growth and happiness.

As Ross and Ross (1957) viewed that a well-chosen vocation spells out not only efficiency but also happiness. Vocational development is, therefore, a necessary concomitant of overall growth and development. Super’s (1957) view is that vocational development is one aspect of an individual’s progress which is as essential as social,
emotional and intellectual development. Like other aspects of development, vocational development must be conceived of as beginning early in the life and proceeding along a normal curve until late in life (Super et al. 1957).

Various approaches have been adopted to explain how and why people choose their careers. Crites (1969) draws a distinction between non-psychological and psychological approaches. The non-psychological theories of vocational choice attribute choice phenomenon to the operation of some system that is external to the individual. The individual, accordingly, enters an occupation solely because of the operation of environmental factors such as chance factors, the social forces, and the economic forces such as laws of supply and demand. In contrast to the belief in chance factors, but equally inadequate are “impulse theories” which attribute the choices solely to internal factors. In doing so, they overstress the role of impulses and overlook reality factors. The scientifically developed psychological approaches, on the other hand, deal with the role of such internal factors as one’s abilities, interests, personality, attitudes and other personal, social and ecological factors. According to Ginzberg et al. (1951) a comprehensive theory of career choice would have to provide an analysis of the internal elements that so largely condition the responses of the individual to external forces. Individual, according to Crites (1969), is the crucial variable in the vocational decision-making process.

CAREER DEVELOPMENT THEORIES

A theory is way of organizing and systematizing what is known about a phenomena. It is, in fact, “a rationalized set of assumptions or hypotheses that provides a person with tools that can be used to explain the past and predict the future” (Johnson, 2000). Theories therefore provide direction, and when tested and supported, can assist in expanding our knowledge.

Career development is the process of assimilating the extraneous situation consisting of social structures of family, education, and work with the self and the self-concept, and brings about changes in one’s personal, social and vocational situation. Career development is not just a decision to enter a particular line of work; it reflects a
person's accumulated life experience and inevitably has a profound effect on all aspects of that person's life. The family life and leisure activities of the physician, machinist, teacher, concert pianist, and writer are likely to differ because of the difference in their working lines.

Career development theories try to explain why individuals choose careers. They also deal with the career adjustments people make over time. The career development theories are of great value for teachers and for counselors, because they need to seek constantly for insight into the reasons that motivate students to make certain career choices. Only by doing so, they will be able to understand and help them. Researches have been conducted in an attempt to develop systematic theory of career development so that students can be properly guided. Modern theories, which are broad and comprehensive in regard to individual and occupational development, began appearing in the literature in the 1950s. According to Johnson (2000), career development theories can be grouped into two categories: Structural and Developmental. A third group called Social Cognitive Career Theory is also discussed.

STRUCTURAL THEORIES

Structural theories attempt to describe characteristics of both the person and the work place. A systematic examination of these characteristics is undertaken to help individuals “match” their characteristics to the most suitable environment.

The following structural theories are discussed briefly:

**Trait and Factor Theory**

Trait and factor theory began with Parsons (1909), who proposed that a choice of vocation depended upon (1) an accurate knowledge of self, (2) a thorough knowledge of job specifications, and (3) the ability to make a proper match between the two. According to Parsons, “In the wise choice of a vocation there are three broad factors: (1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations; (2) a thorough knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities and prospects in different types of work; (3) a true reasoning on the relations of these two groups of acts”. Two
major assumptions of the trait and factor theory are (1) that individuals and job traits can be matched (2) that close matches are positively correlated with job success and satisfaction (Herr, 2001; Langley, Du Toit and Herbst, 1996).

Langley, Du Toit and Herbst (1996) maintained that the perspective of the trait and factor theories was a short range, static view and that it was essentially orientated towards the organisation’s needs, as opposed to the needs of the individual. In order to identify the needs of an individual it is necessary to first review the concept of personality.

**Holland’s Personality types**

A prolific writer in the field of personality and the influence of personality on career choice is Holland (1973, 1985). He developed a theory to predict the characteristics of individuals and their environment that could lead to either positive or negative occupational outcomes and stability. According to him career choices are expressions of personality, ability and the appropriate environment.

According to Holland (1985) and Herr (2001) personal and environmental influences have a great impact on the development of an individual’s personality. Parents consciously create environment that is consistent with their own personality type, world of work and friends. The child is exposed to the environment that the parents have created and in turn will model the behaviour of the parents. The environment, as well as genetics, play a role in creating certain preferences for certain activities. These environmental influences contribute to the formation of personality types, which manifest in certain behaviour (Holland, 1973 and 1985; Pattysmith, 2000).

Holland identified six categories in which personality types and job environments can be classified. A very brief overview of six personality types, six work related activities, and sample occupations is presented in Table 1.1.
Table 1.1
The Six Personality Types (Holland, 1985)

<table>
<thead>
<tr>
<th>Type</th>
<th>Activities</th>
<th>Occupations</th>
</tr>
</thead>
</table>
| Realistic (“Do-ers”) | • Practical minded  
• Prefers to work outdoors  
• Likes to build or repair things | farmer, forester, pilot, truck driver, locksmith, carpenter, mechanical engineer |
| Investigative (“Thinkers”) | • Likes to solve mathematical and scientific problems by focusing on theory  
• Not particularly interested in working with people | chemist, biologist, dentist, physician, medical technician, surveyor |
| Artistic (“Creators”) | • Likes self-expression and working alone  
• Creative in artistic media  
• Unconventional | dancer, actor, comedian, editor musician, composer, painter, writer |
| Social (“Helpers”) | • Concerned for welfare of others.  
• Gets along well with people | nurse, social worker, counselor, teacher |
| Entrepreneurial (“Go-getters”) | • Likes leadership roles  
• Likes to persuade others  
• Does not like tasks that require long periods of intellectual effort | lawyer, judge, sales person, hotel manager, recreation leader, auctioneer |
| Conventional (“Organisers”) | • Dislikes work requiring physical skills  
• Prefers structured activities  
• Does not mind rules and regulations | accounts clerk, bookkeeper, typist, bank teller, mail carrier, secretary. |
Holland suggested that people can function and develop best and find job satisfaction in work environments that are compatible with their personalities. He added that closer the match of personality to job, the greater the satisfaction. So personal satisfaction in a work setting depends on the degree of congruence between the personality type and the work environment. For example, an artistic person will probably not fit well into a conventional job environment, such as that of office manager.

Roe’s Theory of Career Development: Childhood Determinants

Roe’s theory (1956) puts primary emphasis on genetic tendencies and childhood determinants of future vocational choice. The family environment and the training given to the child in early years set the patterns of personality which will play a decisive role in the choice of future career. Rejection, acceptance, domination and democratic attitudes of parents towards their children lay foundation for certain personality characteristics and these characteristics are important for certain types of occupations. Roe believes there is an unconscious motivation from this period that influences people to choose a career in which these needs can be expressed and satisfied.

Three different parents child relationship climates, one is over protection, in which the parents do too much for the child and encourage dependency. The other is over-demanding, in which parents emphasise achievement. Children who grow up in these types of environments usually develop a need for constant feed back and rewards. They frequently choose careers that provide recognition from others, such as performing arts. The second child rearing pattern is avoidance of the child. There are two extremes within this pattern. One is neglectful parenting, in which there is little effort made to satisfy the needs of the child. The other is rejecting parenting, in which no effort is made to satisfy the child’s needs. Roe speculates that children reared in such environments will concentrate on careers that involve scientific and mechanical interests as a way of finding gratification in life. They are more prone to deal with things and ideas. The final pattern of child-parent relationships is acceptance of the child. Acceptance may be casual or more actively loving, in either case, independence is encouraged. Children from these families usually seek careers that balance the personal and non-personal aspects of life, such as teaching or counseling.
Romine, Robinson and Owens (1999) divided Roe’s theory into two tiers. The first tier focuses on the genetic background that underlies a person’s abilities and interests, which in turn are related to his/her occupational choice. Internal energy, that is genetically determined, is expended and influences the development of a person’s ability. Combined with this energy is the development of need primacies such as those highlighted by Maslow’s hierarchy of needs. The second tier of Roe’s theory focuses on higher order needs, such as Maslow’s self-actualisation need. Lower-order needs will become dominant and block higher-order needs if not satisfied.

Some criticism of Roe’s approach is that the results are difficult to test empirically, that it ignored non-parental influences and that her classification of occupations is seen as too simplistic (Romine, Robinson and Owens, 1999).

Although personality theories are vital to understanding careers, yet it is not sufficient. Individuals are complex beings who influence the environment and are influenced by it. In order to sketch a complete picture of what makes a person operate in a specific way it is essential to focus on the influence of external factors. The socio-economic theory considers those external factors that influence an individual.

**Socio-economic Theory**

Sociologists and economists provide detailed explanation and description of how an individual’s culture, family background, social and economic conditions and other factors outside his/her control can influence his/her identity, values and career development. This approach to understanding career development suggests that many people follow the path of least resistance in their career development by simply accepting whatever work opportunities they are presented with (Improved Career Decision Making (ICDM) in a Changing World, 1996.). The socio-economic theory does not take internal factors into consideration and does not focus on the development and growth of an individual during his/her life.

**DEVELOPMENTAL THEORIES**

Whilst the trait and factor theories tend to deal with career issues at a given point in time and the socio-economic theory follows a very mechanistic approach, the developmental theories take a long-term, developmental perspective. The goal of the
individual is to master various developmental tasks during successive stage of life in order to progress effectively. For the purpose of this study Super’s developmental approach and Crites’s comprehensive theory are discussed briefly.

**Super’s Theory**

Super (1957) and other theorists of career development recognized the changes that people go through as they mature. Career patterns are determined by socioeconomic factors, mental and physical abilities, personal characteristics and the opportunities to which persons are exposed. People seek career satisfaction through work roles in which they can express themselves and implement and develop their self-concepts. Career maturity, a main concept in Super’s theory, is manifested in the successful accomplishment of age and stage developmental tasks across the life span (ICDM, 1996).

He suggested that vocational development upholds in five stages each of which contains a developmental task to be completed. Super’s life stages of vocational development is depicted in Table 1.2.

**Table 1.2**

**Super’s Life Stages of Vocational Development (Super, 1957)**

<table>
<thead>
<tr>
<th>STAGE</th>
<th>AGE</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>Birth-14 to 15</td>
<td>Form self-concept, develop capacity, attitudes, interests and needs, and form a general understanding of the world of work.</td>
</tr>
<tr>
<td>Exploratory</td>
<td>15-24</td>
<td>‘Try Out” through classes, work experience, hobbies, collect relevant information, tentative choice and related skill development.</td>
</tr>
<tr>
<td>Establishment</td>
<td>25-44</td>
<td>Entry, skill building and stabilization through work experience.</td>
</tr>
<tr>
<td>Maintenance</td>
<td>45-64</td>
<td>Continual adjustment, process to improve position.</td>
</tr>
<tr>
<td>Decline</td>
<td>65+</td>
<td>Reduced output, prepare for retirement.</td>
</tr>
</tbody>
</table>

Final stage, decline (age 65 to death) is a time for disengagement from work and alignment with other sources of satisfaction. It has two sub stages deceleration (age 65-
70) and retirement age (71 to death). The table indicates that a person goes through different stages during his/her life. During each of these life stages a person is confronted with certain vocational tasks, which if completed, will enable him/her to progress towards the next developmental stage.

Although Super initially viewed these stages as chronological, he later revised his theory to acknowledge that individuals might move between phases depending on external influences. Super (1957, 1980) therefore came to the conclusion that a career does not only exist within the vocational context but is in fact a combination of roles in life. He postulated that these life roles interact in a manner that is supportive, supplementary, compensatory or neutral. Depending on the different circumstances, role interactions can be either facilitating or in conflict with one another.

Super (1962) further made the assumption that values are a major component in the career development process. The degree to which the individual can express his/her values within the work environment will determine the degree of his/her career satisfaction.

Briefly it can be stated that Super's theory focuses on career development as a process of incorporating the life stages, roles and values of an individual.

**Crites's Comprehensive Approach**

Crites (1981) created a comprehensive career development model by integrating different approaches. In essence his approach focuses on development that relates to the decision-making process and not the content. He views time as the underlying factor of career development, and divides an individual's life span into certain stages. The stages are not tied to specific time frames and differ from person to person. He also focused on career maturity and postulated that maturity would increase over time. He proposed that the most important stage in career development is the establishment phase (age 16 to 25 years), which is a good predictor of future career success. Crites (1978; 1981) proposed a career maturity model with two dimensions: an affective dimension and a cognitive dimension.

The cognitive dimension is represented by career decision-making skills, whereas the affective dimension represents attitudes towards career development. Crites (1978)
maintained that attitude is a dispositional response tendency that is distinct from abilities and interests.

**SOCIAL COGNITIVE CAREER THEORIES**

Social cognitive theories of career development are built around how individuals process, integrate and react to information. The ways in which individuals process information are determined by their cognitive structures. These structures influence how individuals see themselves, others and the environment. Cognitive theories suggest ways to help individuals to build or refine a hierarchy of thinking and decision-making skills that influence career development. It offers a framework for career development, and accounts for the interplay between educational and vocational interest, career-related choices, and work performance (Lent, Brown and Hackett 1996).

An important contribution of the social cognitive career theory to career development domain is that it focuses on the relationships among social cognitive variables (e.g. self-efficacy) and their relationships with other variables in the individual's socio-contextual environment, such as gender, race/culture, family, community and political components. The theory states that if individuals believe in their own ability and have a clear expectation of the outcome of their behaviour, they will behave in a way that will help them to achieve their goal (Herr 2001).

From the above it is clear that there are several different viewpoints regarding career development. While researchers like Holland (1973; 1985) focused on personality by attempting to illustrate the interrelationship of personality, behaviour and careers, other researchers, like Roe (1956) used human genetics and early childhood experience as the basis for their theories of career development. Super (1957; 1962) made a profound contribution to career development by his introduction of the concept of career maturity. Crites (1981) supported this theory, with his development of the first measuring tool for career maturity.

**Career Development in the Future**

Although it is important to consider the events and accomplishments of the past century, it is essential to look at where career development is going. According to
McDaniels (2000), there are five issues that the field of career development is faced within the 21st century, namely:

1. The need to increase our understanding of the concept of what a career is, incorporating a shift from occupational guidance to career development.
2. The need to sharpen the focus and stimulate further research on the concept of a lifelong career.
3. The need to conduct further research with regard to career development of previously disadvantaged groups.
4. The need to conduct further research specifically in the field of skills and ability development.
5. The need to optimally utilise multimedia facilities, thereby broadening the individual's information base.

It seems that the above issues are similar to main building blocks of career maturity. It is therefore evident that career maturity will be the focus area of the 21st century. The concept will have to be researched and current knowledge will have to be applied more effectively to address the demands of career development in the future.

CONCEPT OF CAREER MATURITY AND RELATED TERMS

Career

In everyday usage, the term career seems often to be associated with upward mobility, advancement or getting on via a series of related jobs. Oxford English Dictionary (1961, Vol. VI) defines career as "a person's course or progress through life".

Schein (1977) was of the opinion that a career is a planned direction that an individual follows over time and space, which includes involvement in a specific role.

Super (1977) defined career as the course of events which constitutes life; the sequence of occupations and other life roles which combine to express one's commitment to work in his or her total pattern of self development; the series of remunerated and nonremunerated positions occupied by a person from adolescence through retirement, of which occupation is only one; includes work-related roles such as those of student, employee, and pensioner together with complementary vocational, familial, and civic roles. Careers exist only as people pursue them; they are person centered.
Super (1983) defined career as a sequence of positions occupied by a person throughout his or her pre-occupational, occupational, and post-occupational life.

According to Leeman (1984), career is the life long sequence of work, education and leisure experience. It is the totality of work and leisure in which a person is involved during his or her life.

Super (1990) views career as a life-long experience filled with decisions that an individual has to make.

Distinguishing career from either a job or an occupation, Verhoeve (1996) believes that a job is only part of it, and that career includes, in addition, elements such as family, community, education, hobbies, and even personal space. In short, career should be thought of holistically. An adult’s happiness in a career depends on a balance of all that constitutes the individual, his or her varied interests, values, involvements, and accomplishments.

**Vocation**

According to Deighton (1971), the term vocation might best be reserved for occupations chosen and engaged in for a substantial period of time, because it is appropriate to the individual’s abilities, interests, values and desires.

Vocation, according to Super (1983) is an activity pursued for its own sake with an objective other than monetary gain, although it may incidentally result in gain.

**Occupation**

Occupation means a person’s trade, vocation or principal means of earning a living, a group of jobs with a significant number of tasks and skills in common (Good, 1959).

A group of similar jobs found in industries or organizations that exist independent of any person. Careers, on the other hand, exist only when people are pursuing them (Super, 1983).

**Profession**

It is an evaluative term describing the most prestigious occupations which may be termed professions, if they carry out an essential social service, are founded on systematic knowledge, require lengthy, academic and practical training, have high autonomy and a code of ethics and generate in-service growth (Good, 1959).
Job

Job refers to a piece of work especially a specific task done as a part of the routine of one's occupation. It is also termed as part of employment or as a part of one's occupation for an agreed price (Good, 1959).

Career maturity

Choosing an appropriate occupation by one self has been considered one of the hallmarks of career maturity, ever since Parsons (1909) referred to it as "true reasoning" in the process of career decision making. The career mature person not only has greater knowledge about self and work but also relates one-self and work (Crites, 1964).

Career maturity is a construct that has been investigated, measured and debated for over thirty years. It refers to the degree of readiness to choose, prepare and plan for the future vocation. The concept of career maturity has come to be used as a pre-requisite of the ability to make a wise occupational choice and assuming that maturity represents development along a continuum. The greater the maturity, greater is the likelihood that individual is able to cope with developmental tasks at different stages of career development.

Career maturity is not thought as a static goal, an ideal end result which has been achieved. It is rather received as a development in the direction of an ideal goal (achieving satisfaction and success in an occupation), in this context, it is essential to know about the levels of maturity that is required to make choices.

Super (1955) defined the concept normatively in terms of the congruence between the individual's vocational behaviour and expected vocational behaviour at that age. The vocational development proceeds systematically along certain, identifiable directions, it should be possible to assess not only how much of the road an individual has covered, but also how fast he is traveling in comparison with others, who are embarked on the same journey. Thus, rate and progress along this road might be an indication of an individual's vocational maturity.

Super (1957) elaborated upon the theory of career development and introduced the concept of career maturity as "the place reached on the continuum of vocational development from exploration to decline." Career maturity is thus degree that one has reached in cognitive, emotional and other psychological factors whereby one acquires the
capacity of making realistic and mature career choices. The concept of career maturity became popular through the famous Career Pattern Study Monograph II entitled “The Vocational Maturity of Ninth Grade Boys” (Super and Overstreet, 1960). This longitudinal study extending over a period of 21 years and involving ninth graders to begin with, consisted of an analysis of the maturity of vocational thinking, behaviour, abilities, and traits of high school boys, their transition from school to work and other exploratory behaviours.

Super et al. (1957) defined career maturity as “the life stage in which the individual actually is, as evidenced by the developmental tasks with which he is dealing, in relation to the life stage in which he is expected to be, in terms of his age. Career maturity, thus, indicates the degree of development reached by an individual, as evidenced by his ability to deal successfully in terms of his age with the developmental tasks, expected of him. Vocational development, thus finds culmination in career maturity, which is the ability to plan and make judicious choice of future vocation.

Ginzberg et al. (1951) maintained that “to some degree the way in which a young person deals with his occupational choice is indicative of his general maturity and, conversely, in assessing the latter, consideration must be given to the way in which he is handling his occupational choice problems.” Crites (1961) described it as “the maturity of an individual’s vocational behaviour as indicated by the similarity between his behaviour and that of the oldest individual on his vocational life stage”. He further described vocational maturity as a point in the continuum of vocational development which implies more than a change although it is certainly a necessary condition for the maturation of vocational behaviour. If vocational development is a continuum and vocational maturity is a point on this continuum, it becomes imperative to specify the dimensions along which the vocational development takes place and vocational maturity is measured.

Super and Overstreet (1960) stated that in conceptualizing career maturity, they used three of the developmental psychology principles viz.;

1. Development proceeds from random, undifferentiated activity to goal-directed specific activity.
2. Development is in the direction of increasing awareness and orientation to reality, and
3. Development is from dependence to increasing independence.

With these principles as guidelines, Super and Overstreet (1960) constructed a framework for their research under Career Pattern Study which included the following dimensions:

(1) **Orientation to vocational choice**: It is the degree to which the student shows concern for vocational choices and the effectiveness of his use of the resources available to him in coping with the decision-making tasks.

(2) **Information and planning about preferred occupations**: It can be assessed by the student about his preferred occupation, the degree of specificity of his planning for the occupation of his choice and the extent to which the student is involved in planning activities.

(3) **Crystallization of traits**: It has six indices: Interest maturity, degree of patterning of measured interests, liking for work, concern for work rewards, vocational independence and acceptance of responsibility for educational planning.

(4) **Consistency of vocational preferences**: It has three indices: Consistency of vocational preferences within occupational fields, within occupational levels and within occupational families.

(5) **Wisdom of vocational preferences**: It reflects the agreement between ability and preference, fantasy occupational level and socio-economic accessibility of the preferences of the students.

Later, Super and Thompson (1979) gave “six psychologically meaningful dimensions”, which were arrived at using research data on Career Development Inventory Form III (1971). These dimensions are:

1. Extent of planning-referring to planfulness.
2. Use and evaluation of resources in exploration.
3. Career decision making-referring to the student’s knowledge and application of career decision making principles.
4. Career development information.
5. World of work information.
6. Information about the preferred occupation.
An individual’s vocational maturity, then, can be defined by his standing along these dimensions in relation to either chronological age and expected life stage or the behaviour of others coping with the same developmental tasks” (Super et al. 1957). An individual’s vocational or career maturity reflects his readiness to make vocational decisions, called for by society, revealed by method of coping with developmental tasks, which are occupational in nature (Super 1964).

According to Super (1977) career maturity can be defined as “the way in which an individual successfully completes certain career development tasks that are required according to his current developmental phase”. It is seen as collection of behaviour necessary to identify, choose, plan and execute career goals.

Yost and Corbishly (1987) defined career maturity as the ability to successfully negotiate the tasks and transitions inherent in the process of career development and readiness to make age and stage appropriate career choices.

Super (1990) defined career maturity as the individual’s readiness to successfully cope with the developmental tasks at any given stage of life career and the expectations placed on him by the society. For adolescents, it is the stage of exploration in Super’s theory, when they are required to master the task of defining their self-concept and relate it to the world of work. During this period they are increasing their decision-making skills and ability to realize what they can and cannot do and the knowledge of the world of work (Foud and Keeley, 1992).

Langley, Du Toit and Herbst, (1996) defined career maturity as the extent to which an individual is able to master certain career developmental tasks that are applicable to his/her life stage. It is extremely important to identify an individual’s state of career maturity in order to give appropriate career guidance. Langley, Du Toit and Herbst (1996) highlighted the following aspects of career maturity:

1. Obtaining information about oneself and converting such information to self-knowledge.
2. Acquiring decision-making skills and applying them in effective decision-making.
3. Gathering career information and converting it into knowledge of the occupational world.
4. Integrating self-knowledge and knowledge of the occupational world.
5. Implementing the obtained knowledge in career planning.

Levinson et al. (1998) defined career maturity as the person’s ability to make a realistic and stable career choice with awareness of what is required to make an appropriate career decision.

Coertse and Schepers (2004), defined career maturity as an important prerequisite for an individual to make appropriate and accurate career decision.

Alvarez Gonzalez et al. (2007) defined career maturity as behaviour that a person manifests in the intent to carry out different career development tasks, appropriate to each stage of maturity.

Salami (2008) conceptualized career maturity as an individual’s readiness to make well informed, age-appropriate career decision, and to shape one’s career carefully in the face of existing societal opportunities and constraints.

The above descriptions highlight that career maturity is not a single act, it is rather a continuous process. It finds its roots in early life of a person and develops over a period of years. It is a maturing process of learning about oneself and one’s choice options or both. Of all the judgments one makes in life, none is more important than the judgment one passes on while seeking, selecting and setting a career. One’s choice of vocation has to be based on good and realistic calculations and if one does not make a proper decision, it results in individual and national loss. Super (1980) postulated that the process of career development is essentially that of developing and implementing a self-concept. It is important in this context that the students know themselves and their potential to make the best decision possible.

FACTORS AFFECTING CARRER MATURITY

The process of career maturity is influenced by many psychological and environmental factors.

PSYCHOLOGICAL FACTORS

Psychological factors work as catalysts for environmental factors and are essential factors in themselves.
1. Intellectual Ability

Intellectual ability is an important consideration for career development. Every profession needs a certain level of intellectual abilities without which an individual cannot function efficiently on his job. It has been reported by Pillai (1977) that children with high intellectual abilities aspire to high level occupations and children with low intellectual abilities are more interested in lower level occupations. Many researchers have traced the importance of intelligence in career development and in achieving career maturity. Gupta (1991) found intelligence to be the most significant variable contributing to the prediction of career maturity.

Aptitude

Various combinations of aptitudes or special abilities influence performance in a given field of endeavor. Individual’s aptitude exerts influence on the vocational level he is likely to attain, the training he is likely to be admitted to or succeed in, and the quality of work he is able to perform. It should be kept in mind that special aptitudes, typically correlate more highly with success in training than with success in work performance. Cosby (1974) concluded that subjects with high levels of intellectual maturity tended to be vocationally more mature than others with lesser mental abilities.

Self-Concept

The reason for entering an occupation may be related to the protection and improvement of one’s self-concept. Persons choose an occupation that they perceive as congruent with their self-concept. Positive self-concept, self-esteem, ego-development, self-actualizing components, personal adjustment, career adjustment and lower stress are required for healthy adjustment. Self-concept would, therefore, influence individuals perceptions of their ability to perform different tasks and occupational roles. According to Franken (1994) persons with high esteem have greater maturity and choose occupations that are congruent with self-concept.

Values

What individuals value in work itself as well as the rewards it offers is presumable internalized in their vocational development and influences their choices of occupations. The values held by an individual are the products of a host of variables including rearing, education and environment. Occupational values held by individuals
constitute an essential and important element of their motivational structure and if understood, can provide invaluable insight into the decision-making process.

**Sex Differences**

There are wide differences in attitudes, interest and intellectual patterning of boys and girls which are of considerable importance. Studies examining in career development, sex differences on career maturity have established that girls are vocationally more mature than boys. (Super and Nevill, 1984). Evidence is also available that there are no significant differences among boys and girls in vocational maturity with regard to school samples (Chand, 1979). Gupta (1991) and Parlikar (1973) however found sex differences on various dimensions of career maturity.

**Academic Achievement**

It is well established fact that those students who have better academic records tend to be vocationally more mature individuals than those whose academic achievements are poor (Cosby, 1974; Parlikar, 1973).

**ENVIRONMENTAL FACTORS**

**Influence of Schooling**

Schooling exerts a powerful influence upon an individual’s choice of a career by clarifying and modifying some of the forces which are set in motion by the family and by providing a stimulating environment. The school environment and the facilities provided influence the career development of students to a great extent. The influence of faculty members, the policies and philosophy of an institution, its resources and facilities, the faculty attitudes and behaviour, all these contribute to students perceptions of the relationship among their educational preparation, their personal development and their career potential. The influence of school is shown in the saying, “The battle of Waterloo was won in the playfields of Eton”. MacCaffrey (1980) found that students who had a high degree of participation in those extra-curricular activities which emphasized individual responsibility and a positive response to social expectation were more likely to evidence high levels of vocational tasks and dimensions as correlated with vocational behaviour.
Family

Family influences, including child rearing practices and socio-economic level, appear to affect career maturity of an individual. Though it is not known why an association exists between a father’s occupation and his son’s career choice, this relationship is present and influences the career development of some students. McNair (1981) indicated that the best set of predictors of vocational maturity was parental influence.

Culture

The cultural milieu in which an individual lives, affects his freedom to choose independently by exerting the influence of the existing social patterns. Various conditions and modes of living in different cultures induce their members to take up jobs, in consonance with their prevailing systems and value structures (Madan, 1984).

Social Class

The social class affects an individual’s vocational development by its influence on his becoming the kind of person he is and by effects of the general socio-economic milieu of the family on the young person’s attitudes, values, opportunities, and the reactions of others towards him (Jersild, 1967).

Environmental and psychological factors are helpful in developing a realistic educational and vocational self-perception of an individual. The integrated person displays an effective balance in his behaviour. Career maturity is the result of an interaction of environmental and psychological variables.

It can be pointed out that career maturity is a fabric of many threads composed of an individual’s personal history, extrinsic and intrinsic factors in the environment, conveying values and encouragement differently about educational and occupational options. Thus mature career preferences, interests, aspirations, intelligence, self-concept, academic achievement and family environment are important components for developing vocationally mature behaviour of an individual.

CAREER MATURITY AND INTELLIGENCE

Researchers have traced the importance of intelligence in career development and in achieving career maturity. The dictionary meaning of intelligence is the capacity to acquire and apply knowledge.
According to Terman (1921), an individual is intelligent in the proportion that he is able to carry on abstract thinking.

Wagnons (1937) described intelligence as the capacity to learn and adjust to relatively new changing conditions. More the adjustment more is the intelligence.

Stoddard (1943) presented comprehensive description of intelligence as the ability to undertake activities that are characterized by (i) difficulty (ii) complexity (iii) abstraction (iv) economy (v) adaptiveness to goal (vi) social value and (vii) the emergence of originals, and to maintain such activities under conditions that demand a concentration of energy and a resistance to emotional forces.

According to Wechsler (1944), intelligence is the aggregate or global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment.

According to Garrett (1946), intelligence includes atleast the abilities demanded in the solution of problem which require the comprehension and use of symbols.

Guilford (1950) on thorough analysis of structure of intelligence identified, five major groups of intellectual abilities, these groups are (1) Cognition (2) Memory (3) Convergent thinking (4) Divergent thinking (5) Evaluation.

Piaget (1952) described intelligence as ability to adapt to ones surrounding.

Garry (1965) says that intelligence is the innate ability to solve problems. The innate ability is that which is present in a person from birth and not acquired through self-study or as a result of classroom instructions.

Sternberg’s (1985) theory of intelligence contains three sub theories, one about context, one about experience, and one about the cognitive components of information processing. The contextual sub theory attempts to specify what would be considered “intelligent” in a given culture or context. According to Sternberg, culturally intelligent behaviour involves either adapting to one’s present environment, selecting a more optimal environment, or reshaping one’s current environment. The experiential sub theory claims that the expression of any intelligent behaviour will be a function of the amount of experience one has with the particular class of tasks being tested. According to Sternberg, intelligence is best demonstrated when the task is relatively novel or unfamiliar.
The componential sub theory describes the cognitive structures and processes that together produce intelligent behaviour. Sternberg proposes three general types of processes: a) metacomponents (which control and monitor processing), b) performance components (processes that execute plans), and c) knowledge acquisition components (which encode and assemble new knowledge). As a whole, the triarchic theory claims different aspects or kinds of intelligence (e.g. academic, practical).

One of the most popular recent views of intelligence, has come from Gardner and Hatch (1989). They proposed a theory of multiple intelligence in which they claim that there are seven relatively independent types of intelligence. Those are logical-mathematical, linguistic, musical, spatial, bodily kinesthetic, interpersonal and intrapersonal.

Gardner (1989) opined that human intelligence has the following characteristics.
1. A set of skills that enable a person to resolve genuine problems encountered in life.
2. The ability to create an effective product or offer a service that is valued in a culture.
3. The potential for recognizing or creating problems, thereby establishing the necessity for the new knowledge.

Sternberg (1990) proposes that intelligence is made of three integrated and independent aspects: the internal world, the relationships to the external world, and experiences which interrelates the internal and external worlds.

The internal world: cognition
(a) Processes for deciding what to do and for deciding how well it was done.
(b) Processes for doing what one has decided to do.
(c) Processes for learning how to do.

The external world: perception and action.
(a) Adaptation to existing environments.
(b) The shaping of existing environments into new ones.
(c) The selection of new environments when old ones prove unsatisfactory.

The integration of the internal and external worlds through experience.
(a) The ability to cope with new situations.
(b) Processes for setting up goals and for planning.
(c) The shaping of cognitive processes by external experience.
Intelligence is defined as a combination of the general abilities and practiced skills. The term intelligence refers to highly practiced skills or generalized problem-solving ability, the kind of ability that one can apply in an unfamiliar situation. But even ability develops over time and is a product of one's life experiences (Kalat, 1996).

According to The New Encyclopedia Britannica (1997), it is the “ability to adapt effectively to the environment, either by making a change in oneself or by changing the environment or finding a new one.” This definition embodies learning (a change in oneself), manufacturing and sheltering (changing the environment) and migration (finding a new environment). Intelligence is a multifactor entity, involving things such as language, thought, memory, imagination, reasoning, conscience (the perception of self), capacity for learning and integration of several sensory modalities. In order to adapt effectively, the brain must use all these functions. Therefore intelligence is not a single mental process, but rather a combination of many mental processes directed towards effective adaptation to the environment.

Horst (2002) says that intelligence is the successful (i.e. goal achieving) performance of the system in a complicated environment.

According to Simonton (2003), certain set of cognitive capacities that enable an individual to adapt and thrive in any given environment they find themselves in, and those cognitive capacities include things like memory and retrieval, and problem solving and so forth.

According to Wikipedia (2006)
- “The ability to use memory, knowledge, experience, understanding, reasoning, imagination and judgment in order to solve problems and adapt to new situations.” (All Words Dictionary, 2006).
- “The ability to learn, understand and make judgments or have opinions that are based on reason.” (Cambridge Advance Learner’s Dictionary, 2006).
- “The ability to learn facts and skills and apply them, especially when this ability is highly developed”. (Encarta World English Dictionary, 2006).
- “The general mental ability involved in calculating, reasoning, perceiving relationships and analogies, learning quickly, storing and retrieving information,

- “Capacity for learning, reasoning, understanding and similar forms of mental activity; aptitude in grasping truths, relationships, facts, meanings, etc”. (Random House Unabridged Dictionary, 2006).

- “The ability to learn or understand or to deal with new or trying situations: 1) the skilled use of reasons. 2) the ability to apply knowledge to manipulate one’s environment or to think abstractly as measured by objective criteria (as tests).” (Merriam – Webster online Dictionary, 2006).

- “Intelligence is a property of mind that encompasses many related mental abilities, such as the capacities to reason, plan, solve problems, think abstractly, comprehend ideas and language, and learn.” (Wikipedia, 2006).

- “Capacity of mind, especially to understand principles, truths, facts or meanings, acquire knowledge and apply it to practice; the ability to learn and comprehend”. (Wiktionary, 2006).

Definitions of intelligence may thus be categorized as follows (1) Intelligence as the ability to adapt to the environment through learning. (2) Intelligence as the ability to deal with symbols or abstractions (3) Intelligence as the ability to act purposefully, think rationally and deal effectively with the environment.

Many researchers are of the opinion that more intelligent an individual is, the more capable one would expect him to be in dealing with the developmental tasks in various areas of behaviour including the vocational success. Intelligence enables an individual to assess himself, know his strengths and short comings. Intelligence is an important factor that contributes to the success in life even though it does not imply that a person of high intelligence will always be a successful man or woman.

Thus, in brief it can be stated that intelligence implies mental ability of an individual. The understanding of vocational world is vital for the students as it enables them to review their career decisions in the light of their potentialities. For proper guidance in the selection of courses, of studies as well as in occupation, intelligence testing plays an important role. What an individual wishes to do, what he can do, and how he can do, are the factors that determine the level of performance of a person in any
venture. If a person enters an occupation which requires intelligence more than what he has, he will find himself unadjustable with the type of work. The same difficulty will occur with an individual whose intelligence is greater than what his work requires. He faces dissatisfaction and lack of competitive spirit in his job. The close relationship of intelligence in vocational choice and satisfaction establishes the importance of intelligence testing in guidance and education. Therefore, for the selection of a particular course of studies as well as in occupation, intelligence is required.

CAREER MATURITY AND SELF-CONCEPT

The choices and decisions with regard to a career also concern the implementation of the self-concept (Super, 1957)

According to Adkins (1992), vocational self-concept refers to what people incorporate into their self-perceptions and personal qualities related to their role as a worker. It also refers to the manner in which people relate their personal attributes to the attributes needed in specific vocations. An appropriate vocational choice to a greater extent, thus, depends upon knowledge about the self.

Super (1951) described the role of self, played in the choice of a career. As career decision requires a person to explicitly state his conception of himself, people with accurate information about themselves and the world are most likely to make sound vocational decisions. Hence, the choice of an individual should be viewed within the framework of the general personality development of the individual, as he views himself and the world around him (Allport, 1961).

Thus key concept of becoming a healthy, well-adjusted person is the ability to discover who you are, define yourself and then begin a lifelong process of developing your potentialities and abilities. Most people go through this process of self-discovery most actively during early adolescence.

According to Hershey and Lugo (1970), by the time of adolescence, the person’s self-concept is almost fully developed. However, frequently the ideas one has about himself are based on what others think he is or should be. From these experiences with others, the person develops what is frequently referred to as an ideal self. The ideal self is
challenged during adolescence because it is during this time that the person develops more independence and autonomy so that his real self can be developed fully.

Individual’s self-concept is considered as one of the most basic and crucial component of personality. In simple words it can be described as the picture or image a person has of oneself i.e. perception about oneself. It is his own conception of intelligence, abilities, academic status, behaviour, temperamental qualities, mental health, emotional tendencies and socio-economic status. The self-concept is the apex of the all the social and personal experience the child has had.

Self-concept is a central theme around which revolves a large number of major aspects of person’s thoughts and feelings, striving and hopes, fears and fantasies, his view of what he is, what he has been, what he might become and his attitudes pertaining to his worth (Jersild, 1960). Self-concept is more or less organized perceptual object resulting from the present and the past. It is the cognitive-affective map of an individual which helps him in understanding oneself-especially during moments of crisis or choices.

In Good’s Dictionary of Education (1973), self-concept is defined as the individuals’ perception of himself as a person, which includes his abilities, appearance, performance in his job and other phases of daily living.

Ambrom (1975) defined self-concept as the description of oneself including a person’s mental image of his physical self, his expectations about his own behaviour and other such expressions of the person’s sense of himself.

Brigham (1986) opines that we develop and maintain our self-concept through the process of taking action and then reflecting on what we have done and what others tell us about what we have done. We reflect on what we have done and can do in comparison to our expectations and the expectations of others as well as to the characteristics and accomplishments of other, that is self-concept is not innate, but is developed by the individual, through interaction with the environment and reflecting on that interaction. This dynamic aspect of self-concept is important because it indicates that it can be modified or changed.

The recent view of self-concept as summarized by Markus and Wurf (1987) is a multifaceted phenomenon as a set or collection of images, schemes, conceptions, prototypes, theories, goals or tasks.
Purkey (1988) defined self-concept as the totality of complex, organized, and dynamic system of learnt beliefs, attitudes and opinions that each person holds to be true about his or her personal existence.

Mehar (1988) opines that the self-concept is the picture that a person has about himself.

The self has four popular dimensions.

1) Perceived self what we think we are.
2) Real self what we actually are.
3) Ideal self what we would like to be.
4) Social self what other think we are.

The different aspects of self are not identical for one individual. Not all the self representations that comprise the self-concept are alike. Some are more important and more elaborated with behavioural evidences than others. Some are positive, some negative, some refer to the past or new experience, some are pre presentations of what the self would like to be, could be, ought to be, or is afraid of being.

Franken (1994) states that there is a growing body of research which indicates that it is possible to change the self-concept. Self change depends on the process of self-reflection. Through self-reflection, people often come to view themselves in a new, more powerful way, and it is through this new more powerful way of viewing the self that people can develop possible selves.

Baumeister, Boden and Smart (1996) defined self-concept as a favourable global evaluation of oneself. The term self-concept has acquired highly positive connotations, but it has simple synonyms the connotations of which are more mixed, including self-esteem, egotism, arrogance, and sense of superiority, which share the fundamental meaning of favourable self-evaluation.

The California Task Force to Promote Self-esteem and Personal and Social Responsibility (1998) published a definition as appreciating one's own worth and importance and having the character to be accountable to oneself and to act responsibly towards others.

Guindon (2001) adds that there are two kinds of self-concept. Global self-concept is defined as an overall estimate of general self-worth i.e. level of self-acceptance or
respect of oneself. Selective self-concept is an evaluation of a specific trait or quality that is weighted and combined into an overall evaluation of oneself.

According to Woolfolk (2001), self-concept is defined as the value that an individual places on his or her own characteristics, qualities, abilities, and actions. The term self-concept refers to the ordered set of attitudes and perceptions that an individual holds about him or herself (Wolffe, 2000; Woolfolk, 2001 and Tuttel and Tuttel, 2004). The self-concept comprises of three main elements:

- The identity of the subject or self-image referred to as the perceptions of him/herself.
- Self-esteem, which is related to the value individuals attach to the particular manner in which they see themselves.
- A behaviour component reflecting how self-concept influences and formulates the individual’s behaviour (Tuttel and Tuttel, 2004).

According to Wikipedia (2006), self-concept is multi-dimensional construct that refers to an individual’s perception of “self” in relation to number of characteristics, such as academics and non-academics, gender roles and sexuality, racial identity and many others. Self-concept “refers to the extent to which self-knowledge is clearly and confidently defined, internally consistent, and temporally stable”, it presupposes but is distinguishable from self-awareness, which is simply an individual’s awareness of their self. It is also more general than self-esteem which is the purely evaluative element of the self-concept.

- The self-concept is composed of relatively permanent self-assessments, such as personality attributes, knowledge of one’s skills and abilities, one’s occupation and hobbies, and awareness of one’s physical attributes. Nevertheless, a person’s self-concept may change with time, possibly going through turbulent periods of identity crisis and reassessment.
- The self-concept is not restricted to the present. It includes past selves and future selves. Future selves or “possible selves” represent individual’s ideas of what they might become, what they would like to become, and what they are afraid of becoming. These correspond to hopes, fears, standards, goals, and threats. Possible
selves may function as incentives for future behaviour and they also provide an evaluative and interpretive context for the current view of self.

Thus, briefly it can be stated that self-concept is the description or perception of oneself, including a person's mental image of his physical self, his expectations about his own behaviour and other such expressions of the person's sense of himself. The choice of an occupation is one of the points in life at which a young person is called upon to state rather explicitly his concept of himself-I am this or that kind of person, whether job permits him to play the kind of role he wants to play, whether the role the job makes him play is compatible with his self-concept. It is a process of testing his self-concept against his reality whether he can actually live up to his future of himself. Hence, vocational development is an aspect of personal development. A realistic concept of oneself is necessary what are my aptitudes and interests? In what jobs are they likely to be successful? In choosing an occupation one is in fact choosing means of implementing a self-concept

CAREER MATURITY AND ACADEMIC ACHIEVEMENT

Many researchers have traced the relationship between academic achievement and the choice of an occupation.

Achievement refers to accomplishment. It signifies successfully carried out performance by an individual or a group as assessed after the completion of a task whether to be academic, manual or social. To achieve, is one of the most important social needs. People from infancy to old age, want to achieve something.

Horrocks (1969) defined achievement as the status or level of person's skill, the range and depth of his knowledge or his proficiency in a designated area of learning or behaviour.

Steinberger (1993) states that achievement encompasses student ability and performance; it is multidimensional; it is intricately related to human growth and cognitive, emotional, social, and physical development; it reflects the whole child; it is not related to a single instance, but occurs across time and levels, through a student's life in school and on into post secondary years and working life. Thus, achievement refers to
knowledge and skills gained from experience, an achieved level of expertise or performance in a specific domain.

Academic Achievement refers to the degree or level of success or that of proficiency attained in some specific area concerning scholastic or academic work. In general, it refers to the scores obtained in the annual examination. The academic achievement is assessed by school authorities with the help of achievement tests which may either be standardized or teacher made.

Stephens (1956) states that academic achievement is the unique responsibility of all educational institutions to promote wholesome scholastic development of pupils along with other educational objectives.

Good (1959) refers to academic achievement as the knowledge attained or skills developed in the school subject, usually designated by the test scores or marks assigned by the teacher.

Trow (1967) defined academic achievement as attained ability or degree of competence in school task, usually as measured by standardized tests and expressed in percentage or grade units based on norms derived from pupil’s performance.

Pandey (1973) refers to academic achievement as the quality and quantity of learning in a subject or a group of subjects assessed by examination marks.

According to Hawes and Hawes (1982) achievement means successful accomplishment in particular subject, areas, or courses, usually by reasons of skill, hard work and interest.

According to Wikipedia (2006), academic achievement is something you do or achieve at school, college or university in class, in a laboratory, library or fieldwork, it does not include sport or music. An academic achievement, such as graduating 1st in one’s class, in sometimes a purely quantitative matter, while having the findings of lengthy, comprehensive research published by a recognized journal is also a notable academic achievement. Being named head-chairman of a particular department at a university is both a professional and an academic achievement.

Academic achievement has great importance in a person’s life. Success in academic subjects acts as an emotional tonic and any damage done to a child in the home or neighbourhood may be partially repaired by success in school.
It also leads to better adjustment and success in the school subjects, cause children to set high goals for themselves. Importance of academic achievement can also be judged when we realize fuller and happier life which we wish for every student would be impossible unless he has attained a high degree of proficiency in his subjects. Academic achievement to a great extent predicts the future of the child.

At the time of admission, for entrance in job, for scholarship, for further studies, good academic result is the only recommendation, whatever one’s interest, attitude, aptitude may be but one has to keep in mind the academic record. Every parent today sets high goals to educate his child. Good academic achievement helps to develop self-esteem, self-respect, self-realization, self-appraisal and self-confidence and helps the individual to create a niche for himself in the competition ridden society.

Thus, academic achievement is defined as a measure of knowledge, understanding of skills in a specific subject or group of subjects. It refers to achievement in a separate subject or a total score of several subjects combined. It is concerned with quality and quantity of learning attained in a subject or group of subjects, after a period of instructions. Apart from being the basis of admission and promotion in a class, academic achievement is also taken as an index of future success in life. A measure of achievement involves a determination of how quickly, how accurately and at what level an individual can perform the tasks taken to represent accomplishment. The academic achievement measures proficiency to ascertain the extent to which a person possess capacity to carryout an occupation.

CAREER MATURITY AND FAMILY ENVIRONMENT

Family environment seemingly has a significant bearing on pathogenesis in the family. In spite of various changes that have taken place in the pattern of Indian life in the recent decades, the family is still the most important in the child’s social network because the members of the family constitute the child’s first environment and are the most significant people during the early formative years. It is the family environment which lays the foundation for patterns of adjustment, attitude development and finally personality and cognitive development. It is the family that provides feelings of security, meets the physical and psychological needs, guides and helps in times of problems and
caters to all the wishes and whims of children. Not only this, family is also a source of affection, acceptance and companionship.

Family climate affects the child’s cognitive and social development, which in turn influences his/her self-confidence, self-reliance, assertiveness, personality characteristic coping skills, academic motivation and success (Pfeiffer and Aylward, 1990).

Family is the most important socializing agent that influences the child’s life (Tewari, Merbhatt and Kumar, 1981).

Family environment is the complex of social and cultural condition, the combination of external or extrinsic physical conditions that affect and influence the growth and development of the members of the family, the most instinctive fundamental social group which includes parents and their children. The adolescents are likely to gear their educational efforts for the attainment of their vocational goals with family support.

SIGNIFICANCE OF THE STUDY

Selection of career and setting in it is an important task and a source of personal gratification. In the modern age of science and technology, hundreds of vocations have been thrown open to an individual. The choice of a right vocation is becoming increasingly difficult in these days. Adolescence is the period when a major turning takes place in the life of a student because the career will depend upon the subjects selected at this level. Any wrong decision of vocational choice due to pressure of the family or from indecisiveness on the part of adolescent, can block his/her growth and development in future. Therefore it was considered relevant to study this aspect namely career maturity among adolescents.

A young adolescent is confronted with the bewildering complexity of choices. In India, the choice of an occupation is a greater problem than in western world where the traditional work ethic has undergone a big change. With increasing affluence and reduced fear of economic insecurity, youth can look for a job that promises personal satisfaction. On the contrary, Indian youth primarily work for economic security. The personal fulfillment in job is limited to only a handful of affluent Indians.

The government of India realized the importance of career education in 1968 and accepted 10+2+3 system of education as a policy objective. Various education
commissions have introduced vocational and technical components and the balance between general education and vocational education has been improving over the years. However, not much has been accomplished in the implementation of career education and vocational guidance with this system of education. Researchers working with Indian students often conclude that more study is needed to understand and address the problems in both educational and career processes of this group (Lee, 1984 and Huffman et al., 1986).

On the recommendation of National Policy of Education, 1986, school curriculum after the 10th class has been diversified into academic and vocational streams. The academic stream consists of study of a foundational course and elective subjects. The foundational course consists of general studies, work-experience, and health and physical education and elective subjects, which include selection of courses from humanities/science/commerce groups. Vocational stream focuses on training the children in vocations like that of agriculture, business and commerce, health and para-medical courses, computer and other kinds of technology, home science and home economics etc. and enables the students to take up a vocation right after the plus two stage.

Some anticipatory or actual vocational decisions have to be made by students at the beginning of plus one class. These educational and vocational decisions influence the students subsequent vocational career by limiting future educational and vocational choices. Once a student has passed 10+2 in any of the streams, it becomes difficult, rather impossible for him/her to choose any other stream or profession. A good decision becomes an asset and a wrong decision becomes a liability for life.

Career maturity of an individual plays a prominent role for the right selection of an occupation. Career maturity comprises of career attitude and career competency. Career attitude elicits the feelings, the subjective reactions and the dispositions that the adolescent has towards making a career choice and entering into the world of work. This also indicates the feeling of an individual about the meaningfulness and importance of a job in his life. In what way one is involved and serious about his career and choice processes has a good indication of his attitude towards a career. What considerations are made in selecting a career is also very important determinant towards job. Therefore, in this conative aspect of decision-making, one should study the attitudes of adolescents.
towards their career. On the other hand, competency measures the cognitive variables in choosing an occupation. These include appraisal of the individual's job related capabilities (strength and weaknesses), knowledge about the world of work, aptness in matching personal characteristics to occupational requirement, farsightedness in planning for a career and effectiveness in dealing with the problems, which arise in the course of career development. Therefore, it can be said that in the selection of suitable job for an individual, his career attitude and competencies are required simultaneously because both are significantly related with each other.

Although educational and vocational choices are made by an individual but they are certainly influenced by many social and environmental factors which include socio-economic status of the family, home environment, rural and urban background, sex, age, psychological factors which may include intelligence, personality, achievement, motivation, interest, aptitude, self-concept and academic achievement etc. Thus, career selection is not an exclusively intellectual process in which various possibilities are sorted out in a logical manner. Instead, decisions are based on the interaction of career maturity with various social or psychological factors. Studies have also substantiated the beliefs concerning the role of psycho-social variables like intelligence, socio-economic status, achievement, parental influence, school influence, and needs and values as motivating factors in specific career preferences of adolescents (Vasantha, 1977; Yadav, 1979).

Therefore, research has become essential in this field. Since the stage of adolescence is preparation for the adult life, so it is very essential that we should prepare lives that are socially efficient and individually satisfied. Moreover, modernization and democracy with its natural consequences of mass education and equality of opportunity have brought drastic changes in the prestige and hierarchy of occupations and career selection. So it is pertinent to ask whether one is ready to make the decisions typically required at that age. Is the adolescent's vocational maturity sufficient to deal adequately with the choice-making tasks? To answer this question, information concerning the career maturity of adolescents is required. Young people should be ready to make the step-by-step choices that are called for as they progress through school, so that the career choices they eventually make will be appropriate for them, conducive to their personal
satisfaction and to their success as productive members of society. To attain this goal more research-derived knowledge of the developmental sequence of vocational behaviour and of the determinants of vocational behaviour is needed. The present study is an endeavour to understand career maturity of adolescents in relation to intelligence, self-concept, academic achievement and family environment.

STATEMENT OF THE PROBLEM

CAREER MATURITY OF ADOLESCENTS IN RELATION TO INTELLIGENCE, SELF-CONCEPT, ACADEMIC ACHIEVEMENT AND FAMILY ENVIRONMENT.

DEFINITION OF THE KEY TERMS

Career Maturity

Career maturity refers to the individual's degree of readiness to choose, prepare and plan for future vocation.

Intelligence

Intelligence implies mental ability of an individual. It may be defined as a combination of general abilities and practiced skills-the kind of ability and skills that one can apply in an unfamiliar situation. But even ability develops over time and is a product of one's life experiences. It can be defined as

- The aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with the environment.
- The property of mind that encompasses many related mental abilities, such as the capacities to reason, plan, solve problems, think abstractly, comprehend ideas and languages and learn.

Self-Concept

Self-concept is the description or perception of oneself; including a person's mental image of his physical self, his expectations about his own behaviour, feelings, attitudes, aspiration and values.
Academic Achievement

Academic achievement is the degree and level of success, and proficiency attained in the academic field. In the present study, it refers to the scores obtained in the annual examination of class X.

Family Environment

Family environment is the perceptions of emphasis placed on different aspects of environment in the family. It is the complex of social and cultural conditions, the combination of external or extrinsic physical conditions that affect and influence the growth and development of the members of the family, the most instinctive fundamental social group which includes parents and their children.

OBJECTIVES

1. To study and compare the level of career maturity (career attitude and career competence), intelligence, self-concept, academic achievement and family environment of adolescents studying in academic and vocational groups.

2. To study and compare the level of career maturity (career attitude and career competence), intelligence, self-concept, academic achievement and family environment of adolescents of science, commerce, arts and vocational groups.

3. To study and compare the level of career maturity (career attitude and career competence), intelligence, self-concept, academic achievement and family environment of adolescent boys and girls.

4. To study and compare the level of career maturity (career attitude and career competence), intelligence, self-concept, academic achievement and family environment of adolescents studying in rural and urban schools.

5. To study the correlation between the criterion variable of career maturity (career attitude and career competence), and the independent variables of intelligence, self-concept, academic achievement and family environment of adolescents.

6. To identify among the independent variables of intelligence, self-concept, academic achievement and family environment which cluster with the criterion variable of career maturity.
HYPOTHESES

1. There exists no significant differences between adolescents studying in academic and vocational groups in respect of (i) Career maturity (career attitude and career competence) (ii) Intelligence (iii) Self-concept (iv) Academic achievement (v) Family environment.

2. There exists no significant differences in adolescents from science, commerce, arts and vocational groups in respect of (i) Career maturity (career attitude and career competence) (ii) Intelligence, (iii) Self-concept (iv) Academic achievement (v) Family environment.

3. There exists significant differences in adolescent boys and girls in respect of (i) Career maturity (career attitude and career competence) (ii) Intelligence (iii) Self-concept (iv) Academic achievement (v) Family environment.

4. There exists no significant differences in adolescents studying in rural and urban schools in respect of (i) Career maturity (career attitude and career competence) (ii) Intelligence (iii) Self-concept (iv) Academic achievement (v) Family environment.

5. There exists significant positive correlation between the criterion variable of career maturity (career attitude and career competence), and the independent variables of intelligence, self-concept, academic achievement and family environment.

6. The criterion variable of career maturity (career attitude and career competence) share significant loadings constellating with the independent variables of intelligence, self-concept, academic achievement and family environment.

DELIMITATIONS OF THE STUDY

1. The study was delimited to 640 adolescents (boys and girls) studying in academic and vocational groups of government schools in Amritsar district.

2. The study was delimited to students of eleventh class only.

3. The study was restricted to the use of following tools only:
   i. Indian adaptation of Career Maturity Inventory (CMI) (Originally prepared by Crites) adapted by Gupta (1989).
   ii. General Mental Ability Test by Jalota (1976).
iii. Self-Concept Inventory by Deo (1985).

iv. Tenth class final examination scores of the students.

v. Indian adaptation of Family Environment Scale originally prepared by Moos and Moos (1986) and adapted by Bhatia and Chadha (1993).