CHAPTER – ONE
INTRODUCTION
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This thesis deals with the research carried out to explore the relationship between two sets of variables. Firstly it would explore the relationship between personality traits and vocational interests and secondly it would explore the relationship between personality traits and career maturity in an Indian context. This chapter deals with the basics of personality traits, interests and career maturity. It would present an overview of the definitions, meanings and other theoretical aspects of the concepts included in this study but first here a discussion of some historical background of the guidance movement and the study of vocational behaviour is presented in brief.

The basic concepts included in this study are personality traits, vocational interests and career maturity. Among these the study of personality is as old as the field of modern psychology. Interests are also being studied since the phenomenal work by E. K. Strong, who developed first ever psychological test to measure vocational interests. Vocational behaviour is being studied since the dawn of the 20th century.

1.1 GUIDANCE MOVEMENT IN THE WEST:

Today psychology is recognized as a very vast field of theoretical knowledge and applied practice. The roots of this growth and progress could be found in the efforts made by many psychologists in the latter half of the nineteenth century and at the beginning of the twentieth century. During the latter part of the nineteenth century far reaching innovations in the field of psychology were made. The first psychological laboratory was founded at Leipzig by Wilhelm Wundt in 1879. In 1883, Stanley Hall
started the first psychological laboratory in the USA. In 1895 George Merrill established the first systematic vocational programme in San Francisco. Lightener Witmer heralded the beginning of the counselling movement by founding the first psychological clinic in 1886. However, it was Jesse B. Davis who first used the term ‘counselling’. He set up the educational career counselling centre in Detroit in 1898 (Rao, S.N., 2000).

The first decade of the twentieth century saw the emergence and popularization of guidance movement. Many different varieties of occupational fields came into existence as a result of Industrial Revolution. These new jobs/vocations were in need of skilled and trained human resource to fulfill the requirements of this new work environment. The traditional occupational system used to put a person in an occupation quite automatically. The traditional business or trade or any occupation of the family was accepted easily by the next generation and got training in their own households or as an apprentice in a professional group or a guild (Arulmani & Nag-Arulmani, 2004). This situation changed due to the process of Industrial Revolution. Now the issue of matching people to particular jobs became important and vital. The industry needed workers and personnel with specific traits and abilities and potential worker needed guidance towards jobs for which he/she was best suited. It is in response to this need and situation that the Vocational guidance emerged as a new discipline. It was Frank Parsons (1854-1908) who for the first time recognized the need of matching people to jobs and developed a method to suit the new industrial work order. Parsons planned and started the Vocational Bureau of Boston on 13th January, 1908 and his book, ‘Choosing a Vocation’ was published posthumously in 1909 (Rao, S.N., 2000, Herr, H.L., 2001). Frank Parsons is recognized as ‘the father of vocational guidance movement’ and broadly speaking could be called as ‘the father

For the first time Frank Parsons provided a systematic procedure for guiding youth towards a specific job. He provided a three stage model or a three part framework for choosing a vocation wisely. It has been argued in some articles related to Parsons’ contribution to the field of guidance that his framework and ideas could be applied even in the modern day counselling set up (Watts, 1994; McDaniels, 1994; Zytowski & Swanson, 1994; Taylor 1994 & O’Brien, 2001). McDaniels (1994) and Taylor (1994) has quoted Parsons’ basic framework in their separate articles as follows: In the wise choice of vocation there are three broad factors: (1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations and their causes; (2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities, and prospects in different lines of work; (3) true reasoning on the relations of these two groups of factors. Frank parsons not only proposed a systematic approach to vocational guidance but also explained the need and emphasized the training of vocational counsellors. He also suggested the traits that a vocational counsellor should posses (Gibson & Mitchell, 2005 p.5).

Finally, it could be said that the vocational guidance movement emerged out of the need to link the education system to the needs of the economy and industries in the early twentieth century. The school system in the latter part of the nineteenth century was narrow and limited in its scope and it fulfilled only the scholastic needs of an individual. The school system was not adequate enough to prepare individuals for the new work order. Therefore, the need for guidance as a part of school system
was felt increasingly. With the growing demands in the industry for ‘the right person in the right job’, vocational guidance emerged as an organized service in education. It rendered vocational help to the youth on the threshold of their career (Kinra, 2008 p.2).

1.2 The Guidance Movement in India:

In the year 1915 Calcutta University setup the first psychological laboratory in India. In 1936, a separate section of research in Applied Psychology was opened under the direction of Dr. G. S. Bose, the then head of department. The purpose of this applied wing was to adapt the psychological tests constructed in America to suit the Indian situation and to satisfy the vocational needs of Indian students through procedures and methods that would suit Indian condition. Thus, guidance movement in India started off as a branch of research and study at the University of Calcutta. Soon after this initial effort vocational guidance bureaus were started by private and government agencies. In 1941 Batliboi Vocational Guidance Bureau was established in Bombay with the efforts of a retired accountant in Calcutta and of Mukerjee, a psychologist from Calcutta University. Patna University also contributed to the movement by establishing the Department of Psychological Services and Research in 1945. It not only offered personal and vocational guidance to students but also constructed a number of psychological tests. In 1947 The Parsi Panchayat Vocational Bureau was established in Bombay. Bureau’s first Director, Dr. H.P. Mehta, provided vocational guidance to the public of the city and to Parsi community also. He organized training courses for career masters at the Bureau. Dr. Mehta also started a journal of vocational and educational guidance for the first time.
The first state Government to take interest was the Uttar Pradesh Government. The U.P. Government appointed Acharya Narendra Dev Committee in 1938 to examine the issues related to vocational guidance services in schools. In 1947, the U.P. Government established the Bureau of Psychology in Allahabad on the recommendations of this committee. After encouraging results and increasing demands to extend the services to more people, the U.P. Government established five regional Bureaus at Varanasi, Lucknow, Kanpur, Meerut and Bareilly. In 1950, the then Bombay Government started off the vocational Guidance Bureau in Bombay. It was renamed as the Institute of Vocational Guidance in 1957.

The government of India set-up Mudaliar secondary education commission in 1952 to review the secondary education system and in 1964 Kothari commission was set up to review the total education system all over India. Both commissions stressed the importance of guidance and counselling services in secondary schools and made good recommendations on this topic. A definite shape to the guidance movement was given when the Ministry of Education, Government of India, set-up the central Bureau of educational and vocational guidance in 1954. During the years 1955 and 1960 thirty five state bureaus of educational and vocational guidance came into existence (Aggarwal, 2005; Dunakhe, 2005 & Kinra, 2008).

In spite of the fact that the guidance movement took birth in India in the 1950s, it is observed that the movement has not made much headway. One of the most important reasons for this is that by and large it has been given only lip sympathy (Aggarwal, 2005). Following are some of the most important reasons for the very slow growth of guidance movement in India: 1) Conservation and traditionalism among many sections engaged in the field of education. 2) Lack of training facilities in guidance. 3) Lack of standardized tests constructed in India. 4)
Heavy work load on teachers. 5) Lack of infrastructural facilities such as rooms, tools etc. 6) Supremacy of examinations. 7) Lack of operational research in guidance. 8) Overloaded Curriculum etc. (Aggarwal, 2005).

1.3 PERSONALITY:

This section deals with the theoretical issues related to the concept of personality. The study of personality is known as ‘personality psychology’ or ‘personology’ and it exists in psychology since over a century. But the contemporary concept of personality was introduced and the scientific, formalized and systematic study of it was started in late 1930s in American psychology with the efforts and phenomenal work of Gordon Allport at Harvard University (Shultz & Shultz, 2007) and also by such scholars as Henry Murray and Gardner Murphy (Phares & Chaplin, 1997). The psychology of personality deals with the understanding of the human nature and describing people in terms of their characteristics. The term ‘personality’ is a widely and frequently used term in various ways in the social sciences and in day to day conversations of people. We use this word to describe other people and ourselves and we believe we know it’s meaning (Shultz & Schultz, 2007). Hence one finds variety in definitions of personality and there is no universally accepted definition of personality. After a survey of this matter, Allport (1937) concluded that there are at least fifty different meanings of the term. He reports that “personality” came originally from the Latin word “persona” which was associated with ancient Greek theatre (Guilford). The term personality was derived from the Latin word persona and it referred to a mask used by actors in a play. On the basis of this derivation we can conclude that personality refers to our external and visible characteristics which are the aspects of us other people can see and the impressions we make on others (Shultz & Shultz, 2007). But this definition is inadequate because when we speak of
personality we refer to more than our appearances and we mean to include many attributes of a person. We talk about (and assume) a totality of collection of various characteristics that goes beyond superficial physical qualities (Shultz & Shultz, 2007, p. 9-10). According to Shultz & Shultz (2007) the concept of personality also refers to the enduring or relatively stable and predictable characteristics of an individual and also refers to the uniqueness of these characteristics.

Many definitions of personality have been offered by many psychologists and some of them are as under (Phares & Chaplin, 1997):

1) Deceptive masquerade or mimicry

2) Superficial attractiveness

3) Social-stimulus value

4) The entire organization of a human being at any stage of development

5) Levels or layers of dispositions, usually with a unifying or integrative principle at top

6) The integration of those systems or habits that represent an individual’s characteristic adjustments to the environment

7) The way in which the person does such things as talking, remembering, thinking or loving

8) The dynamic organization within the individual of those psychological systems that determine his or her unique adjustment to the environment. [Items 1-8 were adapted from those collected by Allport, 1937 (stated in Phares & Chaplin, 1997)]

9) A person’s unique pattern of traits (from Guilford, 1959 (stated in Phares & Chaplin, 1997))
10) Those characteristics of the person or of people generally that account for consistent pattern of behaviour (from Pervin, 1989(stated in Phares & Chaplin, 1997))

After giving above stated definitions Phares & Chaplin (1997) have given a general definition of personality that is similar to many of those used by contemporary psychologists: “Personality is that pattern of characteristic thoughts, feelings and behaviours that distinguishes one person from another and that persists over time and situations”. There are two basic aspects of this definition that are important. One is the distinctiveness or individuality which implies uniqueness of a person and second is stability and consistency. Stability refers to regularity of a person’s behaviour and personality across time and Consistency refers to the regularity in behaviour and personality across different situations (Phares & Chaplin, 1997).

When psychologists define ‘personality’ they tend to refer to qualities within a person, characteristics of a person’s behaviour or both. Gordon Allport’s definition considers both inner qualities and behaviour, but his emphasis is on inner qualities. Allport tried to combine the best elements of previous definitions and he avoided their major shortcomings. Allport’s following definition is widely accepted: “Personality is the dynamic organization within the individual of those psychological systems that determine his unique adjustments to his environment” (Hall, Lindzey & Campbell, 2002). The key concepts in this definition need brief explanation (Shultz & Shultz, 2007) as follows. By ‘dynamic organization’ Allport means that although personality is constantly changing and growing, the growth is organized and not random. The term ‘Psychophysical' indicates that personality is composed of mind and body functioning together as a unit and personality is neither exclusively mental nor exclusively neural (Shultz & Shultz, 2007) or biological (Hall, Lindzey & Campbell,
The word ‘determine’ means that all facets of personality activate or direct specific behaviours and thoughts. The phrase ‘characteristic behaviour and thought’ means that everything we think and do is characteristic or typical of us implying uniqueness of each person (Shultz & Shultz, 2007). Walter Mischel (1976) mentioned both inner processes and behaviour but emphasized behaviour. Personality, he wrote, consists of “the distinctive patterns of behaviour (including thoughts & emotions) that characterize each individual’s adaptation to the situations of his/her life (Morgan & et al, 1996, p-568).

1.3.1 PERSONALITY TRAITS:

Definitions of a trait convey a common meaning that it is a characteristic of a person’s behaviour. Allport, the major proponent of trait theory defined trait as a “neuropsychic structure having the capacity to render many stimuli functionally equivalent, and to initiate and guide equivalent (meaningfully consistent) forms of adaptive and expressive Behaviour” (Phares & Chaplin, 1997 & Hall, Lindzey & Campbell, 2002). In Allport’s view personality traits are predispositions to respond in a similar manner to different kinds of stimuli. Traits are consistent and enduring ways of reacting to our environment (Schultz & Schultz, 2007). According to Freeman (2006, p. 556) “a trait is a generalized mode of behaviour or a form of readiness to respond with a marked degree of consistency to a set of situations that are functionally equivalent for the respondent”.

Traits are important ways of describing an individual’s personality and behaviour. Traits can be defined as relatively enduring and consisting ways or patterns of thinking, acting, behaving and feeling. Traits are supposed to be relatively consistent across situations and time (Kumar, 2007, p. 39 & Abhyankar & et al, 2007,
For example, aggressiveness, shyness, honesty, shrewdness, confidence etc. Following are the basic characteristics of traits: they are enduring, they do not change according to situation, and predominance & combination of traits produce individual differences (Abhyankar & et al, 2007, p. 38-39). In short, personality trait is a relatively constant characteristic of a person that determines consistency in his / her behaviour. Traits interact with the situation and this interaction leads to a particular behaviour of a person.

1.4 PERSONALITY AND CAREER:

Abilities / aptitudes, interests & personality are components in vocational choice process (Osipow & Fitzgerald, 1996, p. 54-60). According to Osipow & Fitzgerald (1996) early writers in the field of vocational psychology suggested a positive relationship between vocational interests and personality (e.g. Darley & Hagenah, 1955; Roe, 1956) while some disagreed (Super, 1957) on this relationship. They report that these early studies failed to prove substantial interrelationships among aptitudes, interests & personality and these could be considered relatively independent components. But later work by Holland strongly disagreed with these earlier studies. Holland proposed that interests are personality, or, at least, are direct expressions of personality and presented strong evidence for this relationship. Later Costa, McCrae and Holland concluded that “personality dispositions show strong consistent associations with vocational interests”. They found theoretically consistent relationships between Holland types and personality traits such as extraversion (social, enterprising) and openness (investigative, artistic), as well as they found lack of relationship between type and neuroticism (Osipow & Fitzgerald, 1996). Later research supported the contention of personality traits being associated with vocational interests (e.g. Ackerman & Heggested, 1997; Blake, 1999; Larson &
Borgen, 2002; Staggs & et al, 2003; Mount & et al, 2005; Staggs & et al, 2007). Another important area of research according to Osipow & Fitzgerald (1996) was the relationship between personality and occupational membership. Researchers have identified patterns of work needs or motivations that differ by occupational group membership. Although needs / motivators like compensation, status, moral values etc. were not included in the domain of personality, such variables meet traditional criteria for personality traits and lend considerable support to the contention that personality and occupational choice are systematically related to each other. It should also be noted that the relationship between personality and occupational choice and membership appear to be moderated by gender, for example, it has been observed that women who choose occupations considered nontraditional for their sex have reliably higher self-esteem than those who select traditional occupations (Osipow & Fitzgerald, 1996).

Personality, occupational choice and job satisfaction are positively related to each other. Congruence between individual’s personality and his/her job selection is positively related to job satisfaction (Assousline & Meir, 1987; Spokane, 1985 cited in Momberg, 2005). The idea of congruence is derived from Holland’s theory of vocational choice. This theory states that the choice of vocation is an expression of personality (Holland in Jagger & Neukrag, 1992 cited in Momberg, 2005). The implication here is that an individual’s vocational interests and therefore choice stems from his/her personality. Secondly the vocational satisfaction and achievement depend on the congruence between an individual’s personality and work environment (Holland in Jagger & Neukrag, 1992 cited in Momberg, 2005). Therefore, by congruence the degree of personality – environment fit is implied. This means that individuals tend to do best in those environments which correspond most closely with
their personality, since such environments provide them with the most opportunities, offer meaningful compensation and best fulfill their needs. The implication here is that one must choose a career in which the work environment will best correspond with one’s personality type (Holland in Stead & Watson, 1999, cited in Momberg, 2005).

The present investigator’s objective observation in this regard is that students here in small cities like Jalna (where this study was carried out) tend to choose courses & careers on the basis of their parents’ wish or marks obtained in examinations ignoring their own personality traits, abilities, interests, and talents. Or they accept any job that comes before them as they need financial support as soon as possible due to their lower income group background.

1.5 THEORIES OF PERSONALITY:

Theories are considered as essential elements of any scientific pursuit and they are useful in many ways to fulfill some scientific purposes. According to Larson & Buss (2002) a good theory fulfills three main purposes in science. Firstly, theories serve as a guide for researchers, directing them towards questions in an area of research. Secondly, useful function of a theory according to Larson & Buss (2002) is to organise known findings, that is a theory should explain or account for various observations and thus bring coherence and understanding to the known world. A third purpose of theories according to Larson & Buss (2002) is to make predictions about behaviour and psychological phenomena. According to Schultz & Schultz (2007) a theory without research evidence to support it is a kind of speculation. Similarly a heap of research data could be meaningless without a set of framework or a context which could explain and throws some light on the phenomena under study. This
framework is provided by a theory which makes it possible to simplify and describe empirical data in a meaningful way. Theories bring order to the data, to fit them into a pattern. According to Schultz & Schultz (2007) theories are sets of principles used to explain particular phenomena such as behaviours and experiences relating to personality.

Many personality theories have been emerged since the beginning of the scientific study of psychology. Personality theories provide conceptual and integrative systems or paradigms. These help us logically and consistently explain, describe assess and predict human behaviour (Bergh, 2003). Different authors have classified these approaches / perspectives or theories of personality in different manner considering common and different aspects of those theories. For example, Larson & Buss (2002) discussed personality in terms of six domains of knowledge about human nature. The six domains include biological, Intrapsychic, Dispositional, Cognitive/Experiential, Social - Cultural and Adjustment domains. Schultz & Schultz (2007) has given eight major approaches to the study of personality which are: Psychoanalytical, Neo-psychoanalytical, Life-Span, Trait, Humanistic, Cognitive, Behavioural and Social-Learning Approach. Similarly, Friedman & Schustack (2004) has also presented following eight basic aspects of personality: Psychoanalytical, Neo-psychoanalytical, Biological, Behaviourist & Learning, Cognitive & Social-cognitive, Trait & Skill, Humanistic & Existential, and Person–situation Integrationist aspect of personality. Among all the above stated classifications Friedman & Schustack’s seems to be most comprehensive but describing all these aspect is beyond the scope of this thesis. So here only some of the major aspects of some of the major personality theories are discussed. Trait theory of personality proposed by Allport and
later by Cattell is closely related to the topic of this thesis so it is discussed at some length. Following theories would be presented here.

1.5.1 The Psychodynamic theories

1.5.2 Humanistic theories

1.5.3 Behavioural & Social-cognitive theories

1.5.4 Trait theories

**1.5.1 The Psychodynamic Theories**

The earliest approach to the study of personality was that of psychodynamic approach or more precisely psychoanalysis of Dr. Sigmund Freud. The psychodynamic paradigm views each person as a complex system of diverse sources of psychic energy. These energies are believed to push a person in different direction. Biological drives play a key role in psychodynamic theories. Psychodynamic approach emphasizes dynamic, biologically oriented processes, particularly those that take place in the unconscious mind (Phares & Chaplin, 1997, Shultz & Shultz, 2007). Psychodynamic theories propose that the structures of personality are largely unconscious. Therefore people are mostly unaware of why they behave in the ways they do and they try to seek reasons for their behaviours.

The main theorist in psychodynamic approach is Dr. Sigmund Freud, who is also the earliest psychoanalytical theorist. The other psychoanalysts which are called as Neo-psychoanalysts because they differed from Freud in some of the aspects of Freud’s system are Karl Jung, Alfred Adler, Karen Horney, Erich Fromm and Henry Murray.
1.5.1.1 Dr. Sigmund Freud (1856-1939): the psychoanalytic theory:

Psychoanalytic theory, the creation of Sigmund Freud, was the earliest approach to the formal study of personality (Shultz & Shultz, 2007) and it has been the most influential contribution to the field of personality. Psychoanalysis as Freud conceived it emphasized unconscious forces, biologically based drives of sex and aggression, and unavoidable conflicts in childhood. Freud’s views had an impact not only on the psychology but also on the general culture (Shultz & Shultz, 2007) and it is reflected in western art, literature, and cinema (Phares & Chaplin, 1997). Freud proposed that an individual’s psychological functioning is governed by instinctive forces. He believed that these forces exercise their effect outside our consciousness (Arnold & et al, 1995, cited in Momberg, 2005). According to Shultz & Shultz (2007) and Phares & Chaplin (1997) Freud’s theory proposes three main components of structure of personality. The first is the ‘Id’. The Id functions on the pleasure principle and it represents impulsive gratification of instinctual urges and desires. The second component is the ‘Ego’. It functions on the reality principle. It represents the rational aspects of one’s personality. The last component is the ‘Super ego’. It is the moral guard of person’s behaviour. It represents person’s morality or conscience and our ideas of right & wrong. According to Shultz & Shultz (2007) the Superego strives neither for pleasure (as Id does) nor for attainment of realistic goals (as ego does). It strives only for moral perfection. The Id urges strongly for satisfaction, the Ego tries to delay it or manage it with reality and the Superego urges morality or conscience and it admits no compromise with its demands. The ego is caught in the middle (Shultz & Shultz, 2007) and has to maintain balance in the personality. According to Freud these three components of personality work together to maintain a balance in the human personality and to obtain three goals: to keep individual alive, to let the
individual experience optimal joy and to let an individual experience as little guilt as possible (Meyer & et al, 1997, cited in Momberg, 2005).

1.5.1.2 Carl Jung (1875-1961): the Analytical Psychology:

Carl Jung was follower of Freud but got disappointed with classical psychoanalysis and went on to develop his own theory of personality that was quite different from Freud’s psychoanalysis. He gave an elaborate explanation of human nature which reflected his wide-ranging interests, which included archaeology, spiritualism, mythology, Eastern & Western philosophy, astrology & religion. He called his approach to psychoanalysis as Analytical Psychology (Phares & Chaplin, 1997; Hall, Lindzey & Campbell, 2002, & Shultz & Shultz, 2007). In Jung’s view the total personality or psyche is comprised of several distinct systems or structures that can influence one another. The main systems are Ego, Personal Unconscious and the Collective Unconscious.

The Ego is the centre of consciousness concerned with perceiving, thinking, feeling and remembering. It is our awareness of ourselves and we carry our daily activities with the help of it (Shultz & Shultz, 2007). It represents the “I” feeling and it is similar to Freud’s concept of Ego (Phares & Chaplin, 1997).

According to Jung our conscious perception of our environment and our reactions to it are determined by our mental attitudes of Extraversion and Introversion. Extraverts are open, sociable, and socially assertive, oriented towards other people and the external world. Introverts are often shy, and tent to focus on themselves and on their own thoughts & feelings (Shultz & Shultz, 2007). Preference for one of these attitudes is largely based on inborn temperament but experiences in one’s life can change our orientation towards these opposing attitudes (Phares &
Chaplin, 1997). According to Shultz & Shultz (2007) Jung further proposed four functions of psyche: sensing, intuiting, thinking, & feeling based on different kinds of extraverts and introverts. These functions refer to our ways of perceiving and apprehending external real world as well as our subjective inner feeling. Further Jung proposed eight Psychological Types based on interactions of the two attitudes & four functions and this theory of psychological types is considered as one of the most influential contributions to personality psychology (Phares & Chaplin, 1997 and Shultz & Shultz, 2007). The eight psychological types and their characteristics are given as under (based on Shultz & Shultz, 2007):

1. Extraverted thinking: logical, objective, dogmatic
2. Extraverted feeling: emotional, sensitive, sociable,
3. Extraverted sensing: outgoing, pleasure-seeking, adaptable
4. Extraverted intuiting: creative, able to motivate others and to seize opportunities
5. Introverted thinking: more interested in ideas than in people
6. Introverted feeling: reserved, undemonstrative, yet capable of deep emotion
7. Introverted sensing: outwardly detached, expressing in aesthetic pursuits.
8. Introverted intuiting: more concerned with the unconscious than with everyday reality.

The Personal Unconscious is similar to Freud’s concept of the preconscious. It refers to the material that was conscious at some point of time in the past and can be accessed without much effort. The material may have been suppressed or forgotten, or perhaps it was trivial and was not vivid enough to have been remembered initially (Phares & Chaplin, 1997 and Shultz & Shultz, 2007). There is a connection between
the ego and the personal unconscious e.g. our attention can wander away easily from this printed page to a memory of something we did yesterday. All kinds of experiences are stored in personal unconscious (Shultz & Shultz, 2007).

The Collective Unconscious is the Jung’s most important contribution to psychoanalytic theory. The collective unconscious is the deepest and least accessible level of the psyche and it is composed of memory traces from our ancestral past, including prehuman species. Jung believed that humankind collectively accumulates and files all our experiences as a species and store these in the collective unconscious and it is passed to the new generation. The content of the collective unconscious is similar for all of us because it arises out of the common experiences of all our ancestors. The collective unconscious has a strong influence on our thoughts and behaviour (Phares & Chaplin, 1997 & Shultz & Shultz, 2007).

1.5.1.3 Alfred Adler (1870-1937): the Individual Psychology:

According to Phares & Chaplin (1997) initially Adler was impressed by Freud’s work but latter he officially ended his affiliation with Freudian psychoanalysis. The main reason for this breakup was Freud’s overemphasis on sexual instincts and underemphasis on the ego defenses. Adler emphasized social and familial factors as shapers of personality and rejected Freud’s biological determinism as reflected in instinctual energy. Adler’s theory ignores structural concepts of Freud. Adler viewed personality as a whole and a person functions in order to attain set goals (Hall, Lindzey & Campbell, 2002). Adler’s theory proposes that people are born into this world with a sense of inferiority. As children they are weak and helpless and strive to overcome and compensate their inferiorities by becoming superior among those around them. An individual’s growth results from compensation (Phares &
Adler’s theory proposes that all psychological phenomena are directed toward the goal of attainment of superiority. But some people feel that they cannot attain superiority and thus develop inferiority complex (Phares & Chaplin, 2007). The ultimate goal for a person is superiority or perfection and to attain that goal we develop unique pattern of characteristics, behaviours, and habits which Adler called a distinctive character or Style of life (Shultz & Shultz, 2007). Adler considered family as an influential factor in personality development. He emphasized not only the relationship between parents and child but also such variables as family size, relationship among siblings, and child’s ordinal position in the family (Phares & Chaplin, 1997). Adler believed that order of birth is a major social influence in childhood and we create our style of life from it. Adler believed that whether one is an only child, the eldest child or a middle child affects the development of personality because they do not have identical social environments even though they have the same parents, same house to live in. being older or younger than one’s siblings and being exposed to different parental attitudes create different childhood conditions that help determine personality (Phares & Chaplin, 1997 and Shultz & Shultz, 2007).

1.5.1.4 The Neo-Freudians:

According to Phares & Chaplin 91997) Some of the psychoanalysts revised orthodox Freudian concepts of instinctual, sexual motives as the source of human personality and focused on interpersonal issues as the source of human distress and resulting coping strategies. They began to propose the essential social nature of human beings. The main revisionists were Karen Horny, Erich Fromm & Harry Stack Sullivan with Erik Erikson’s ego psychology.
Karen Horny (1885-1952): Horney rejected Freudian concept of ‘penis envy’ as a dominant motive in women. She argued that many feelings of inferiority and inadequacy experienced by women is result of the way our culture regards women in general. In her view, to understand individual’s conflict we must understand how personality is shaped by the texture of society. With this broader perspective she put her primary concept of basic anxiety. In today’s competitive cultures the child feels helpless, alone and menaced by others because the child is small comparatively to adults and the child must develop ways of coping with this basic anxiety. According to Horney there are three basic strategies: moving toward people or protecting oneself by overtures of affection, dependency and submission to others; moving against people or protecting oneself through aggression, hostility and attack; and moving away from people or protecting oneself by isolation and withdrawal. Person’s personality is based on the manner of combinations of these strategies made by an individual. Neuroticism is a result of rigidity to one strategy (Phares & Chaplin, 1997).

Erich Fromm (1900-1980): According to Phares & Chaplin (1997) the social theme could also be found in the theory of Erich Fromm. Our strongest need is the need to belong. Fear is resulted from feelings of loneliness and insignificant. Humans search for significance and relationship to others. She suggested some ways that individuals employ to cope with their loneliness. One’s personality is based on the orientation or combination of orientations employed: Receptive, exploitative, hoarding, marketing and productive. First four of these strategies are productive and result in psychological problems.

Harry Stack Sullivan: according to Sullivan every situation in interpersonal, even when alone the individual is in tune with past experiences with others. Sullivan also
proposed the concept of self. Sullivan considered ‘self’ as that grows out of the “reflected appraisal” of others. It means that positive interactions with significant adults as the child develops will lead to a positive view of the self and negative interactions will produce negative self-esteem. Thus major aspects of our personality are the products of our interactions with others. Sullivan also proposed the stages of development as Freud but Sullivan’s emphasis is on interpersonal rather than psychosexual (Phares & Chaplin, 1997).

**Erik Erikson (1902-1994):** Erikson’s views about personality are close to the views of Freud. Erikson also believed in the concepts of Id, Ego and Superego. But he emphasized the role of Ego than Freud did. Erikson proposed psychosocial theory and eight stages of personality development. Erikson considered social development important at every stage than the sexual development (Phares & Chaplin, 1997).

The psychodynamic approach to the study of personality emphasized dynamism, biological drives & instincts, and unconscious mind and structure of personality. This approach does not explain the influence of personality on vocational interests or career development in a specific manner. However, Osipow & Fitzgerald (1996) has discussed psychoanalytic conceptions of career choice. According to them psychoanalytical & psychodynamic approaches tried to account for the career bahaviour. Some attempts have been made to conceptualize the process of vocational development within the framework of psychoanalysis. For example, Brill (1949) proposed that vocational selection is the aspect of behaviour in which society permits an individual to combine the pleasure and reality principle. Brill further proposed that a particular vocation an individual chooses is not the result of an accidental process but personality and impulses lead a person to choose a career in which basic life impulses may be satisfied through sublimation. According to Brill unconscious
motives underlie all behaviour including vocational selection. According to Osipow & Fitzgerald (1996) the process of career development has been explained by Bordin, Nachmann & Segal (1963) in entirely within the psychoanalytical framework. According to Osipow & Fitzgerald (1996) some of the psychoanalytic concepts have implications for vocational psychology and a few attempts have been made to apply these concepts to career development. Career choice is typically seen as a by-product of personality development. Career development deserves attention only because difficulty in career choice is a symptom of more basic psychological disturbance or because the choice process itself represents the general status of the individual’s psychological development. Aptitude and interests are of no importance in vocational selection in psychoanalytic conception. Some aspects of psychoanalytic theory are more relevant to vocational choice, for example, the mechanism of identification is a very strong factor in determining vocational behaviour, and it is important to know with whom the individual identifies, to what extent.

1.5.2. Humanistic theories:

According to Shultz & Shultz (2007) the term humanistic psychology was first used by Gordon Allport in 1930. Allport and Henry Murray are considered pioneers of humanistic approach to personality. The humanistic approach to personality is a part of the humanistic movement flourished in the 1960s and 1970s and even has significant influence in today’s psychology. Humanistic psychologists opposed psychoanalysis and behaviourism arguing that these approaches presented human nature too demeaning and mechanistic. Humanists criticized Freud and psychoanalysts for highlighting only emotionally disturbed side of human nature. Humanists stressed study of our strengths and virtues and explored human behaviour at its best instead of focusing on neurosis and psychosis. According to humanists
behaviourism presented human beings in a narrow and sterile fashion and depicted human beings as mechanized robots reacting to stimuli. Humanists objected behaviourism arguing that people are not big white rats or slow computers. The humanistic approach to personality as represented in the works of Abraham Maslow and Carl Rogers emphasize human strengths and aspirations, conscious free will, and fulfillment of our potential. They present optimistic image of human nature and describe people as active, creative beings concerned with growth and self-actualization (Shultz & Shultz, 2007).

1.5.2.1 Abraham Maslow (1908-1970): the hierarchy of needs:

According to Shultz & Shultz (2007) Maslow is recognized as the founder and leader of the humanistic movement in psychology. He strongly criticized behaviourism and psychoanalysis. His theory grew out of the research on creative, independent, self-sufficient, fulfilled adults. Maslow proposed a theory of **Hierarchy of Needs**. He described five basic needs that activate and direct human behaviour. They are the physiological, safety, belongingness and love, esteem, and self-actualization needs. Maslow called these needs as **instinctoid** which meant that they have a hereditary component still these needs can be affected or overdriven by learning, social expectations, and fear of disapproval. We receive these needs at birth but the behaviours we use to satisfy them are learned and so subject to variation from person to person (Shultz & Shultz, 2007). According to Phares & Chaplin (1997) the needs are arranged in a hierarchy and the lowest in the hierarchy are the physiological (hunger, thirst, etc.) needs and must be satisfied before the next step of needs, involving safety (pain, avoidance, safety, etc.) can be pursued. According to Shultz & Shultz (2007) lower needs must be at least partially satisfied before higher needs emerge. For example, hungry people do not urge to fulfill the need for esteem because
they are preoccupied with satisfying the physiological need for food, not with approval and esteem from other people. It is only after having enough food and shelter and when the lower needs are fulfilled that they are motivated by needs at the higher level in the hierarchy. People do not have an urge to satisfy all the needs at the same time. Generally only one need dominates our personality at a time and which it will be depends on which of the others have been satisfied. People who are successful in their careers are no longer driven by, or even aware of, their physiological and safety needs. Maslow suggested that the order of the needs can be changed (Shultz & Shultz, 2007). The needs given by Maslow and as described by Phares & Chaplin (1997) and Shultz & Shultz (2007) are as under.

*Physiological needs* include need for food, water, sex, sleep, and elimination. These needs must be satisfied before moving on to the next level of needs.

*Safety needs* include need for structure, security, order, avoidance of pain, and protection.

*Belongingness and love needs* include affiliation and affection and these needs arise when physiological and safety needs have been secured. These are powerful motives.

*Esteem needs* are the needs of self-respect and esteem from others. People need to feel personally competent and worthy and they want recognition of it from others.

*Self-Actualization need* is the highest need in hierarchy and the one who has generally satisfied all the previous needs is in a position to seek self-actualization. It means the maximum realization and fulfillment of our potentials, talents, and abilities.

1.5.2.2 Carl Rogers (1902-1987): the self theory:

According to Phares & Chaplin (1997) the phenomenological theory of Carl Rogers evolved through his observations of troubled people during psychotherapy. In
Rogers’s theory the most important aspect of a human being is the ‘self’ and each person’s perception of the self. He believed that persons strive towards self-actualization and that people tend to become more and more complex as they strive to fulfill their potential. According to Rogers the most important motive is the inborn tendency to actualize, to develop our abilities and potentials, from the strictly biological to the most sophisticated psychological aspect of our being (Shultz & Shultz, 2007). His approach to therapy and theory, and the optimism & humanism depicted in his theory were warmly accepted in psychology and education (Shultz & Shultz, 2007). Rogers viewed people as basically good and healthy.

According to Ciccarelli & Meyer (2007) Rogers believed that human beings always strive to fulfill their innate capabilities and they strive to become what their genetic potential allows them to become. This striving is called as self-actualizing tendency. The important tool in this process is the development of the one’s own image which is called as the ‘self’ by Rogers and now it is more widely known as the self-concept (Weiten & Lloyd, 2007). A self-concept is a collection of beliefs about one’s own nature, unique qualities, and typical behaviour (as stated in Weiten & Lloyd, 2007). The self-concept is based on what others tell about us and how the sense of self is reflected in the words and actions of important people in one’s life such as parents, siblings, coworkers, friends and teachers. Two major components of the self-concept are the real self and the ideal self the real self consists of one’s actual perceptions of characteristics and abilities which are the basis for the striving for self-actualization. The ideal self is the perception of what one would like to be. The ideal self develops from those significant others in our life, very often the parents (Ciccarelli & Meyer, 2007). According to Ciccarelli & Meyer (2007) Rogers believed that when real self and ideal self are in close proximity people feel competent and
capable but when there is a mismatch between the two people feel anxious. According to Weiten & Lloyd (2007) Rogers used the term *incongruence* to refer to the disparity between one’s self-concept and one’s actual experience and if a person’s self-concept is reasonably accurate, it is called to be *congruent* with reality. Everyone experiences some incongruence. Personality development is concerned with the childhood experiences. Rogers believed that everyone has a strong need for affection, love and acceptance from others. Parents are the main source of this love and acceptance but some parents make their affection *conditional* (*conditional positive regard*) which means they make it depend on the child’s behaving well and living up to expectations. This attitude makes children uncomfortable and makes them feel unworthy of love. Rogers described opposite of this in terms of parents making their affection *unconditional* (*unconditional positive regard*) which has a positive impact on the children and they feel worthy of parents affection in spite of what they do or do not do (Ciccarelli & Meyer, 2007 and Weiten & Lloyd, 2007). According to Ciccarelli & Meyer (2007) for Rogers a **fully functioning person** is one who in the process of self-actualizing works towards exploring potentials and abilities and experiences a match between real and ideal selves. Such persons are in touch with their own feelings, abilities and they trust their urges and intuitions. Unconditional positive regard leads an individual to become fully functioning.

The humanistic approach focuses on self-actualization and believes that people are in control of their own development. This paradigm permits us to make speculations about career development and development of interests in relation to one’s personality. It could be said that individual responsibility and human experience plays a key role in the development of vocational interests. It could also be speculated that development of interests could be viewed as conscious decision. It could be
assumed that this approach would have viewed the relationship between personality and career development s a conscious process based on subjective experiences and development of self-concept.

1.5.3 Behavioural & Social Cognitive Theories:

1.5.3.1 Behavioural perspective: Classical conditioning & operant conditioning:

According to Weiten & Lloyd (2007) behaviourism is a theoretical orientation based on the premise that scientific psychology should study observable behaviour. John b. Watson rejected mind and mental processes as subject matter of psychology and focused exclusively on overt behaviour. The behaviourists have shown little interest on internal personality structures such as Freud’s id, ego & superego because they can’t be observed. They think personality in terms of observable “response tendencies”. Thus for most behaviourists personality is a collection of response tendencies that are tied to various stimulus situations (Weiten & Lloyd, 2007). Behaviourists show less interest in structure of personality but focus extensively on personality development. They explain development of personality through learning. Specifically, they focus on how children’s response tendencies are shaped through classical conditioning, operant conditioning and observational learning.

According to Weiten & Lloyd (2007) Ivan Pavlov’s Classical conditioning refers to a type of learning in which a neutral stimulus acquires the capacity to evoke a response that was originally evoked by another stimulus. Classical conditioning contributes to the acquisition of emotional responses such as anxieties, fears and phobias. Another kind of conditioning is called as Operant conditioning given by B.F. Skinner. According to Weiten & Lloyd (2007) it refers to a form of learning in which
voluntary responses come to be controlled by their consequences. Human behaviour is largely shaped by operant conditioning than by classical conditioning. The fundamental principle of operant conditioning is very simple according to Skinner: *organisms tend to repeat those responses that are followed by favourable consequences, and they tend not to repeat those responses that are followed by neutral or unfavourable consequences* (Weiten & Lloyd, 2007 p. 47). In skinner’s paradigm reinforcement, extinction and punishment play a major role in shaping personality. According to Weiten & Lloyd (2007) there are two types of reinforcements. In *positive reinforcement* a response is strengthened because it is followed by the arrival of a pleasant stimulus. It is roughly like a reward and it is subjective in nature because something serving as a reinforcer for one person may not serve as reinforcer for another. Positive reinforcement motivates much of our everyday behaviour. Students study hard because good grades are likely to follow as a result or an employee works extra hard in winning a promotion. Positive reinforcement influences personality development. Responses followed by pleasant outcomes are strengthened and tend to become habitual patterns of behaviour. *Negative reinforcement* occurs when a response is strengthened because it is followed by the removal of an unpleasant stimulus (Weiten & Lloyd, 2007 p.47). The strengthening in this reinforcement occurs because the response gets rid of an aversive stimulus. For example, we clean our house to get rid of a mess or a person takes a tablet to get rid of his headache. Negative reinforcement plays a major role in the development of avoidance tendencies. Many people avoid facing awkward situations. This personality trait typically develops because avoidance behaviour gets rid of anxiety associated with such situation and thus negatively reinforced (Weiten & Lloyd, 2007). According to Weiten & Lloyd (2007) in both types of conditioning
extinction is the process of gradual weakening and disappearance of a response. In operant conditioning the extinction occurs when a response or an outcome of response stops getting reinforcement and the frequency of response decreases and eventually the learned response vanishes or disappears. Punishment also weakens a response. In Skinnerian operant conditioning punishment occurs when a response is weakened because it is followed by the arrival of an unpleasant stimulus (Weiten & Lloyd, 2007 p.48).

1.5.3.2 Julian Rotter (1916-1987): the social-learning theory:

According to Shultz & Shultz (2007) Rotter tried to explain organism’s behaviour and personality in terms of the internal cognitive processes and external reinforcements. He opposed pure behaviourism by arguing that human beings are more complex than lower animals and pure behaviourism does not account fully for the complex human behaviour and personality. Rotter’s main contribution to the field of personality psychology is his concept of locus of control. He found that some people believe that their reinforcers depend on their own actions and other people believe that their reinforcers are controlled by other people or outside forces. Rotter called this concept locus of control (Shultz & Shultz, 2007). The personalities characterized as having an internal locus of control believe that the reinforcement they receive is under the control of their own behaviour and attributes. Opposite of this are the people with an external locus of control think that their reinforcement is dependent on other people, fate or luck. They consider themselves as powerless beings (Shultz & Shultz, 2007). Rotter recognized the importance of environmental events on personality development. But he emphasized the meaning one assigns to these events rather than the actual stimuli or the reinforcer alone. Rotter was more interested in cognitive aspects of personality and stated that human bahaviour is not
dependent only on the person or only on the environment, but emphasized the interaction of the variables (Phares & Chaplin, 1997).

1.5.3.3 Albert Bandura (1925- ): the social-cognitive theory:

Bandura’s approach to personality is behavioural in nature but he also considers the cognitive variables as important determinants of behaviour. His approach is called as social-cognitive theory. This view state that behaviour is influenced by not just by external stimuli and response patterns but also by the cognitive processes such as anticipating, judging, and memory as well as imitative learning (Ciccarelli & Meyer, 2007). According to Ciccarelli & Meyer (2007) Bandura believes that three factors influence one another in determining behaviour. They are: environment, the behaviour itself, and personal or cognitive factors. These three factors affect each other in a reciprocal or give and take, relationship. Bandura calls this as reciprocal determinism. His theory emphasizes reciprocal determinism, which means that the external determinants of behaviour (reward & punishment) and internal determinants (beliefs, thoughts, & expectations) are part of a system of interacting influences that affect both behaviour and other parts of the system (Smith & et al, 2006). According to Weiten & Lloyd, (2007) Bandura adheres to the basic principles of behaviourism in that he believes that personality is largely shaped through learning but he refuses conditioning to be a mechanical process involving people as passive participants. Weiten and Lloyd further state that Bandura’s major contribution is the description of observational learning. Observational learning occurs when an organism’s responding is influenced by the observation of others, who are called models (Weiten & Lloyd, 2007 p. 49). Bandura does not propose observational learning as entirely separate from classical and operant conditioning but he thinks it in terms of an indirect process. Instead of experiencing reinforcement
ourselves for each of our actions, we learn through *vicarious reinforcement* by observing the behaviour of other people and the consequences of that behaviour. This is a distinctive feature of Bandura’s theory (Shultz & Shultz, 2007). Bandura concept of self-efficacy is a person variable that affects one’s behaviour. According to Shultz & Shultz (2007) in Bandura’s system self-efficacy refers to feelings of adequacy, efficiency, and competence in coping with life. Self-efficacy also refers to one’s perception of how effective behaviour will be in any particular circumstance (Ciccarelli & Meyer, 2007). According to Weiten & Lloyd (2007) Bandura believes that self-efficacy is an important aspect of personality. *Self-efficacy is one's belief about one's ability to perform behaviours that should lead to expected outcomes.* Bandura viewed self-efficacy as in terms of our perception of the control we have over our life. People having lower levels of self-efficacy often feel helpless. They feel that the necessary responses may be beyond their abilities. People high in self-efficacy believe that they can control their lives effectively. Because they believe that they will get success in overcoming obstacles. They are persistent at given task and they often perform at a higher level. When one’s self-efficacy is high, he or she feels confident in executing the responses necessary to earn reinforcement. Perception of self-efficacy is subjective and specific to different tasks (Shultz & Shultz, 2007 and Weiten & Lloyd, 2007).

Behavioural and socio-cognitive approach to personality view personality development as interaction effect of the person variable, environment and cognitions. So it could be assumed that in development of vocational interests the role of reinforcement becomes important. The tasks that receive positive reinforcement could create a liking for that task and particular interests may develop. It could be speculated that observation of model’s behaviour could lead to have an interest in a
specific field. Even vicarious learning could lead one to have an interest in some area and to not have any interest in another field. Self-efficacy beliefs can also account for one’s interest in particular area. The relationship between self-efficacy and interests is presented in the section on theoretical aspects of interests in this thesis.

1.5.4 Trait Theories:

According to Shultz & Shultz (2007) the field of personality study was formally started by Allport several decades ago. The trait approach given by Allport to the study of personality remains vital still today. The trait theories are less concerned with the explanation of personality development and changing personality and they are more concerned about describing personality and predicting behaviour on that description (Ciccarelli & Meyer, 2007). Major names in trait approach are Allport & Cattell and their theories are presented here.

1.5.4.1 Gordon Allport (1897-1967):

According to Shultz & Shultz (2007) Allport’s Ph.D. dissertation (1922) “An Experimental Study of the Traits of Personality” was the first research conducted on personality traits in the United States and still remains influential. Allport reviewed some 50 definitions of personality and given his own as follows: “personality is the dynamic organization within the individual of those psychophysical systems that determine his/her unique adjustment to his or her environment” (Phares & Chaplin, 1997 and Shultz & Shultz, 2007). In this definition the term dynamic organization means that personality constantly changes and grows but the growth is organised and not random and thus lends structure and coherence to personality (Phares & Chaplin, 1997 and Shultz & Shultz, 2007). The term psychophysical refers to the role of both the mind and the body and their functioning together. By determine, Allport means
that facets of personality activate and direct behaviour and thought which helps an individual to adjust to his environment and this adjustment is unique in the sense that it is characteristic or typical to us.

According to Passer & Smith (2007) Allport went through the English Dictionary and recorded 17,953 words that could be used to describe personal traits. After eliminating synonyms he reduced this list to 200 traits and presented them in pairs (Ciccarelli & Meyer, 2007). For Allport personality traits are predispositions to respond in a similar manner to a variety of different stimuli or situations. In other word, traits are consistent and enduring ways of reacting to our environment (Phares & Chaplin, 1997 and Shultz & Shultz, 2007).

According to Shultz & Shultz (2007) Allport initially proposed two types of traits: individual traits and common traits. Individual traits or personal traits are unique to a person and serve to explain why no two people are alike. Common traits are shared by a number of people from a culture. These traits are concerned with people’s similarities and permit comparison across individuals. For example, a common trait, aggressiveness could be studied by comparing the scores obtained by persons on an inventory measuring traits (Phares & Chaplin, 1997). As Allport realized that some confusion could arise from calling these phenomena traits, he relabeled common traits as traits and individual traits as personal dispositions. These are further divided into three categories based on their pervasiveness and influence on behaviour: cardinal traits, central traits and secondary traits. A cardinal trait is that which is so pervasive and influential that it touches every aspect of a person’s life and acts as powerful motivators or ruling passions and dominates one’s life and behaviour. Everyone has a few (5 to 10) central traits that sufficiently describe our behaviour. These are the characteristics of people we mention when we
discuss a friend’s personality. For example, we describe someone as reliable, punctual, self-starting and trustworthy. The least influential are the secondary traits which are less consistent and generalized than cardinal and central traits. A preference for certain clothes or type of music or dislikes for a specific type of movies are examples of secondary traits (Phares & Chaplin, 1997 and Shultz & Shultz, 2007). Allport also differentiated traits from other concepts such as habits, which are limited or narrower dispositions that are confined to specific situation. They are relatively inflexible and involve a specific response to a specific stimulus. Integration of several habits leads to broader traits or personal dispositions and habits may combine to form a single trait. For example, children learn to brush their teeth and wash their hands before eating and after some time these behaviours become automatic or habitual. These habits then constitute the trait named cleanliness. Although it is difficult to differentiate between traits and attitudes Allport tried to distinguish between them in two general ways. First, attitudes have some specific object or reference. A person has an attitude towards something or someone, For example, toward environmental issues, towards musical group or a brand of athletic shoes. A trait or personal disposition is not specifically directed toward a single object or category of objects. A person having a trait of shyness would interact with most of the people in the same way regardless of their pair of shoes or their attitude towards a musical band. So it could be said that traits are broader in scope than attitudes. Second distinction is that attitudes are positive or negative towards something or against something or someone. Attitude leads one to liking or hate, or acceptance or rejection of certain things or people. Attitude involves judgment or evaluation whereas traits do not involve it (Shultz & Shultz, 2007).
1.5.4.2 Raymond Cattell (1905-1998): the trait theory:

According to Shultz & Shultz (2007) Cattell’s theory of personality did not emerged in a clinical setup as many theories like Freud’s evolved in a clinical practice but Cattell’s approach was rigorously scientific. He collected massive data and then analyzed it using a statistical technique called factor analysis, which involves reducing massive data into meaningful factors. Cattell referred to these factors as traits. To Allport traits are the mental elements of personality. We can predict someone’s behaviour in a given situation only after knowing the entire pattern of traits of a person that define his/her personality.

Cattell was born in Staffordshire, England in 1905. He received his Bachelor of Science degree in chemistry & physics from university of London when he was 19 years old and awarded Ph.D. in 1929. He began graduate study at University of London with the eminent psychologists-statistician Charles E. Spearman, who had developed the technique of factor analysis for studying mental abilities, whereas Cattell used it to study the structure of personality. His stay in London encouraged his to pursue interest in social problems and in studying human mind. Cattell applied factor analysis to narrow down Allport & Odbert’s list of about 18000 words to 4,500 and then narrowed these down to 171 trait names. According to Shultz & Shultz (2007) Cattell identified 16 source traits as basic factors of personality only after intensive factor-analytical research spanning over more than two decades. Cattell presented the traits in bipolar form for example; factor A Reserves Vs Outgoing, a person scoring at the lower end could be described as reserved, aloof and detached and someone scoring at the higher end could be described as outgoing, warmhearted and easygoing. According to Cattell human personality could be summarized in terms of these basic traits. In Cattell’s system source traits are the basic elements of
personality just as atoms are the basic units of the physical world. In Cattell’s view to understand or generate laws about personality the nature of these basic elements should be described precisely (Shultz & Shultz, 2007). In a way they are the building blocks of personality structure. Cattell’s 16 source traits are depicted in the following table (Table 1.1) which could be measured through an objective personality test devised by Cattell known as the Sixteen Personality Factor (16PF) Questionnaire.

<table>
<thead>
<tr>
<th>FACTOR (Traits)</th>
<th>Low Scorers</th>
<th>High Scorers</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Reserved, aloof, detached</td>
<td>Outgoing, warmhearted, easygoing</td>
</tr>
<tr>
<td>B</td>
<td>Low in intelligence</td>
<td>High in intelligence</td>
</tr>
<tr>
<td>C</td>
<td>Low ego strength, easily upset, less emotionally stable</td>
<td>High ego strength, calm, emotionally stable</td>
</tr>
<tr>
<td>E</td>
<td>Submissive, obedient, docile, unsure, meek</td>
<td>Dominant, assertive, forceful</td>
</tr>
<tr>
<td>F</td>
<td>Serious, sober, depressed, worrying</td>
<td>Happy-go-lucky, enthusiastic, cheerful,</td>
</tr>
<tr>
<td>G</td>
<td>Expedient, low in superego</td>
<td>Conscientious, high in superego</td>
</tr>
<tr>
<td>H</td>
<td>Timid, shy, aloof, restrained</td>
<td>Bold, adventurous</td>
</tr>
<tr>
<td>I</td>
<td>Tough-minded, self-reliant, demanding</td>
<td>Tender-minded, sensitive, dependent</td>
</tr>
<tr>
<td>L</td>
<td>Trusting, understanding, accepting</td>
<td>Suspicious, jealous, withdrawn</td>
</tr>
<tr>
<td>M</td>
<td>Practical, down-to-earth, concerned with detail</td>
<td>Imaginative, absentminded</td>
</tr>
<tr>
<td>N</td>
<td>Forthright, naïve, unpretentious</td>
<td>Shrewd, worldly, insightful</td>
</tr>
<tr>
<td>O</td>
<td>Self-assured, secure, complacent</td>
<td>Apprehensive, insecure, self-reproaching</td>
</tr>
<tr>
<td>Q₁</td>
<td>Conservative, holds traditional values, dislike change</td>
<td>Radical, liberal, experimenting, embraces change</td>
</tr>
<tr>
<td>Q₂</td>
<td>Group-dependent, prefers to join and follow others</td>
<td>Self-sufficient, resourceful, independent</td>
</tr>
<tr>
<td>Q₃</td>
<td>Uncontrolled, lax, impulsive</td>
<td>Controlled, compulsive, exacting</td>
</tr>
<tr>
<td>Q₄</td>
<td>Relaxed, tranquil, composed</td>
<td>Tense, driven, fretful</td>
</tr>
</tbody>
</table>

**Theory & Concepts:** According to Shultz & Shultz (2007, p. 276) Cattell defined traits as relatively permanent reaction tendencies that are the basic structural units of the personality. In Cattell’s (2009, p.28) own words “by a trait, we obviously mean
some relatively permanent and broad reaction tendency”. Cattell did not provide a
general definition of personality but he conceptualized it as whatever it is that allows
us to predict what a person will do in a specific situation (Phares & Chaplin, 1997).
For Cattell (2009, p.25) personality may be defined as that which tells what a man
will do when placed in a given situation. He put this in an equation form as \( R = f(S.P) \)
which means that the magnitude of a person’s behavioural response (R) is some
function (f) of the stimulus situation one confronts and the nature of his personality
(P). Cattell viewed personality and development of trait as a result of environmental
factors and heredity (Cattell, 2009). According to Phares & Chaplin (1997, p. 423) for
Cattell traits are the elements out of which the structure of personality is formed,
which predisposes the individual to behave with consistency from one situation to
another and from one time to another.

Classification of Traits: Cattell describes several classes of traits:

Ability, Temperament & Dynamic Traits (Cattell, 2009): Ability traits determine
how efficiently one will be able to work toward a goal e.g. intelligence is an ability
trait. Temperament traits are the general style and emotional tone of one’s
behaviour e.g. easygoing, irritable, bold etc, these determine our reactions to various
situations. Dynamic traits are the motivating factors of our personality. They define
our interests and ambitions (Shultz & Shultz, 2007).

Common Traits & Unique Traits: Cattell also distinguished between common and
unique traits. Like Allport, Cattell also believed that some traits are possessed by all
members of the same culture but some people have them to e greater extent than
others and these are called as common traits (Cattell, 2009; Phares & Chaplin, 1997
& Shultz & Shultz, 2007). Unique traits are those which are specific to a person than
others. These are those aspects of our personality which are shared by few other
people. They are revealed in our interests and attitudes (Cattell, 2009; Phares & Chaplin, 1997 & Shultz & Shultz, 2007).

**Surface Traits & Source Traits:** According to Phares & Chaplin (1997) surface trait is one which is observed in a series of behaviours that all have some elements in common. It could be identified easily from overt behaviour e.g. a trait of friendliness could be inferred from such behaviours as saying hallo on the street, smiling, and responding to a greeting which occur together. A surface trait is only viewed as an explanatory concept; only a description of an observation that a group of behaviours or characteristics tend to be correlated. Surface traits are characteristics or groups of behaviours that correlate with one another but do not form a factor because they are not determined by a single source (Shultz & Shultz, 2007). According to Phares & Chaplin (1997) source traits have an explanatory function as they are the basic underlying structures that Cattell regard as constituting the core of personality. They are viewed as causes of behaviour and determine the consistencies in people’s behaviour. Source traits are fewer in number as because one source trait will have its impact or influence on several surface traits. These are considered as more stable and permanent in nature (Shultz & Shultz, 2007). Cattell also believed that everyone possesses the same source traits but they vary in degree from one person to another (Phares & Chaplin, 1997).

**Constitutional Traits & Environmental-Mold Traits:** On the basis of their origin the source traits are further classified as either constitutional traits or environmental-mold traits. Traits that have a biological or hereditary (genetic) origin are called as Constitutional traits. On the other hand, Environmental-mold traits are those that develop out of our experiences and from influences of the social and physical environment on us. These traits are learned characteristics and behaviours that form a
personality pattern. The behaviour of a person reared in a slum is molded differently from the behaviour of a person reared in upper-class luxury. A military officer shows a different behavioural pattern from a classical musician. Cattell recognized the interaction of both personal and situational factors (Shultz & Shultz, 2007).

**Dynamic Traits:** Cattell described these traits as traits concerned with motivation, they motivate a person. Personality theory is incomplete without considering the impact of dynamic or motivating forces behind behaviour. There are two types of dynamic traits: **ergs** and **sentiments**. The word *erg* derives from Greek word *ergon*, which means work or energy and it is a dynamic constitutional source trait. It denotes the concept of instinct or drive. It is innate energy source or driving force for all behaviours. Examples of ergs are curiosity, self-assertion, and gregariousness. Sentiments are environmental-mold traits that develop through social and physical influences and one’s experiences with various socio-cultural institutions and customs (Phares & Chaplin, 1997 and Shultz & Shultz, 2007). A sentiment is a pattern of learned attitudes towards important aspects of life such as community, spouse, occupation, religion, or hobby.

**Attitudes:** according to Shultz & Shultz (2007) Cattell viewed attitudes in a broader perspective and defined attitudes as are our interests, emotions and behaviours toward some person, object or event. It does not refer only to an opinion for or against something but it includes all our emotions and actions toward an object or situation.

**Development of Personality:** Cattell considered both heredity and environment as important determinants of personality. He discovered the influence and contribution of heredity and environmental factors using statistical techniques and comparing twins of various types and siblings. He confirmed, for example, that 80% of intelligence (Factor B) and 80% of Boldness (Factor H) is determined by heredity.
Overall, in Cattell’s view, one-third of our personality is genetically based, and two-thirds is determined by social and environmental influences (Shultz & Shultz, 2007).

Cattell has also emphasized the basic learning principles of classical and instrumental conditioning as shapers of personality.

1.6 THEORIES OF CAREER DEVELOPMENT AND CHOICE & DECISION MAKING:

According to Arulmani & Nag-Arulmani (2004, p.42) the psychology of career development is one of the most robust and vigorously growing branch of the behavioural sciences, and Career Psychology has been an area of concentrated investigation. While stressing this fact they also point out the contradictory situation that prevails in India in the field of Career Psychology by stating that Career Psychology is in its infancy in India and very less research efforts have been initiated. India yet does not have a model or theory of Career Psychology that would uniquely suit to the Indian environment (2004, p.72). After scanning the available sources and literature on career behaviour they have categorized the information into certain themes which throw light on career choice behaviour in the Indian context. This section of the thesis highlights some of the career development theories. The theories of career development and decision making that make an effort to explain the career choice behaviour and career development throughout the life span could be classified into number of ways. One such classification suggests that theoretical traditions could be broadly classified into three schools of thought: 1) the Trait-Factor approaches 2) the Developmental School and 3) Social learning/Social Cognitive position (Hackett, Lent & Greenhaus, 1991, cited in Arulmani & Nag-Arulmani, 2004, p.42).
Rao S.N. (2000, p.24) has given a working classification of vocational
development theories as suggested by Herr & Crammer (1972) in the following
manner: 1) The trait and factor or actuarial theory 2) the decision theory 3) the
sociological theory 4) the psychological theory 5) the developmental theory 6) the
psychoanalytical theory and some other views. According to Johnson (2000) as stated
by Coertse & Schepers (2004) career development theories could be grouped into two
major types: i)Structural and ii) Developmental plus a third dimension which is Social
Cognitive Career Theory. In an attempt to review the core career development
theories Egan, Upton & Lynham (2006) has divided 19 core theories into to core
categories: General and Specific. They have also listed 30 definitions of the term
‘career development’. Here the researcher did not intend to discuss all these theories
but just the growth and vastness of the literature was implied. This dissertation would
state only some of the major career development theories without any adherence to
suggested classifications. Before moving ahead it would be apt to state that “a theory
is a rationalized set of assumptions or hypotheses that provide a person with tools that
can be used to explain the past and predict the future” (Johnson, 2000 cited in Coertse
& Schepers, 2004). Thus theories can provide a sense of direction and if tested and
supported by the evidence, could be helpful in explaining the career behaviour and in
the expansion and growth of our knowledge.

The paragraphs that would follow present some of the major postulates and
themes of some of the major career development theories for a better understanding of
the concept of career maturity. The term originated as a construct in the career
development theory of Super and it is one of the important themes discussed in
relation to career development. Coertse & Schepers (2004) has stated Super’s
definition of Career Maturity as follows, “the way in which an individual successfully
completes certain career development tasks that are required according to his/her current developmental phase”. It is considered as the collection of behaviours essentials in identifying, choosing, planning and executing career goals. As the construct of CM has originated in Super’s developmental approach, his theory would be discussed at some length and other theories would be stated in brief with highlighting main themes.

1.6.1 Trait and Factor Theory:

The trait and factor approach emphasizes an individual’s innate abilities and acquired interests and matching these to specific occupations (Rao, 2000). Trait and Factor theory began with the father of vocational guidance movement, Frank Parsons (1854-1908). He proposed that choice of a vocation depended upon, an accurate knowledge of yourself, thorough knowledge of job specifications and the ability to make a proper match between the two. He suggested following three steps as quoted by McDaniels (1994), “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 and their causes; 2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities, and prospects in different lines of work; 3) true reasoning on the relations of these two groups of facts”.

The major assumptions of trait and factor theory are: 1) there are unique traits that can be measured, and it is possible to match one’s traits to an occupation’s traits/requirements 2) close match between one’s traits and an occupation’s trait/profile are positively correlated with occupational success and satisfaction. Paterson, Darley and Williamson developed this theory further through the use of
tests and other assessment tools. Though systematic and served very well to the needs of the youth in Parsons’ time, this theory takes a static and somewhat rigid point of view (Rao, 2000 p.215) and fails to explain career development which is a dynamic process that changes and evolves (Arulmani & Nag-Arulmani, 2004 p.45). Still McDaniels (1994) holds that the framework that Parsons has provided stood the test of time and his ideas have matured over the years and they are very much alive and active in the practice of counselling for career development today.

1.6.2 Holland’s Personality Types:

John Holland’s theory of career choice is perhaps the most well known and widely studied career theory in the history of career psychology (Arulmani & Nag-Arulmani, 2004 p.46). This theory is based on major assumptions regarding personality types, their determination and relation to various outcomes and vocational choices. Concepts and assumptions that underlie the theory are as follows (Gibson & Mitchell, 2005, p.315): 1) The choice of vocation is expressions of personality 2) Interest inventories are personality inventories 3) Vocational stereotypes have reliable and important psychological and sociological meaning. 4) The members of a vocation have similar personalities and similar histories of personal development 5) Because people in a vocational group have similar personalities, they will respond to many situations and problems in similar ways, and they will create characteristic interpersonal environments 6) Vocational satisfaction, stability, and achievement depend on the congruence between one’s personality and environment (composed largely of other people) in which one works. Gibson & Mitchell (2005) has summarized the major assumptions of Holland’s (1966, 1973, 1985a) theory as follows: 1) It is possible to categorize persons and environments into following six types: Realistic, Investigative, Artistic, Social, enterprising and conventional
(RIASEC). 2) People search for environments and occupations that will permit them to exercise their skills and abilities, to express their attitudes and values, to take on agreeable problems and roles, and to avoid disagreeable ones. 3) A Person’s behaviour can be explained by the interaction of his personality and his environment.

Table 1.2 summarizes major vocational personality types, their preferences and suitable occupations for each type. According to Holland people try to seek environments where they can implement their personality characteristics and this provides direction regarding career choices or decisions. For example, a Realistic type would be comfortable in an occupational environment that carries the characteristics of the realistic type and therefore one would search for careers which offers manifestation of his/her characteristics. The person-environment fit model of Holland further holds following assumptions and propositions:

1) **Calculus:** - Holland has arranged the six personality types (RIASEC) according to a hexagonal structure and follows a certain sequence. The types closest to each other on the hexagon have the most characteristics common and those that are opposite have the least in common.
Table: 2.2 Holland Types & Their Characteristics

<table>
<thead>
<tr>
<th>Personality Type</th>
<th>Characteristics/Preferences</th>
<th>Suitable Occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realistic</td>
<td>Activities involving concrete and clearly defined systems and norms. Not comfortable in social context &amp; situations demanding expression of emotional sensitively.</td>
<td>Farmer, Machine Operator, Plumber, Athletic, Engineer, Pilot, Electrician, Mechanic, Truck Driver</td>
</tr>
<tr>
<td>Investigative</td>
<td>Analytical in orientation &amp; enjoys drawing conclusion from systematic &amp; objective observation. Aversion to persuasive, social &amp; repetitive activities.</td>
<td>Doctor, Researcher, Detective, Biologist, Mathematician, Clinical Psychologist</td>
</tr>
<tr>
<td>Artistic</td>
<td>Expressive, Original, Unconventional, sensitive to personal feeling, thoughts &amp; ideas. Aversion to ordered &amp; mechanical activities.</td>
<td>Actor, Actress, painter Designers, Architect, Musician, Writer, Stage Director, Sculpture,</td>
</tr>
<tr>
<td>Social</td>
<td>Oriented to human interactions, sensitive to human needs, emotions, concern for welfare of others. Aversion to non human situation (Materials, tools &amp; Machines).</td>
<td>Nurse, Social Workers, Counsellor, Teacher, Priest, Speech Therapist, Special Educator.</td>
</tr>
<tr>
<td>Enterprising</td>
<td>Typically self driven, organizing people, objects and resources to build organizations for goal attainment. Aversion to observational, symbolic, systematic &amp; repetitive activity.</td>
<td>Chef, Hotel Manager, Sales Person, Politician, Business Executive, Buyer.</td>
</tr>
<tr>
<td>Conventional</td>
<td>Preference for organized and predictable situations, routine &amp; repetitive activities. Aversion to ambiguous, free, exploratory &amp; unsystematized activities.</td>
<td>Accountant, Banker Bookkeeper, Clerk, Stenographer, Tax expert, Secretary, Typist.</td>
</tr>
</tbody>
</table>

2) Consistency: - Degree of relatedness between personality type and environment. Some types are more closely related than others. For example, Artistic & Social type has greater commonality than artistic and conventional.
3) **Differentiation:** - The degree to which one fits into a certain personality type. Persons, who Cleary ‘fit into’ a type are said to be well differentiated (has specific interests) than those who does not fit into a type clearly.

4) **Identity:** - One who has a clear and stable picture of one’s interests, talents and goals is said to be closer to identity achievement.

5) **Congruence:** - The degree to which a person’s personality type matches the work environment. Congruence leads to job satisfaction.

Holland’s model has emerged in the west and has generated large body of research and study. These investigations indicate that some of Holland’s propositions were empirically supported but some yielded mixed evidence (Arulmani & Nag-Arulmani, 2004) in non-western context. The research on Holland’s model reported ambiguous findings and, therefore, a question mark on its relevance in countries like India. Arulmani & Nag- Arulmani (2004) has reported one such study by Leong & et al which tested the vocational Preference Inventory (VPI) on 172 natives of India. The finding indicated that congruence, consistency, and differentiation did not predict occupational satisfaction. The frame work of Holland instruments did not allow for an easy fit into Indian ways of thinking plus VPI included occupations that would be considered too low by some participants in the study. Therefore, it could be suggested that Holland’s approach could be limited by cross cultural boundaries.

**1.6.3 Socio-economic Theory:**

This theory is developed mainly by sociologists and economists who emphasize the contribution of sociological and economic factors in career choice and development. They provide an explanation and description of how 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 (Carlson 1996, cited in Coertse & Schepers, 2004). The other factor outside one’s control could be the chance factor. A popular sociological view of career is one which suggests that people arrive at a particular occupation more by chance than through deliberate planning or steady progress toward an earlier defined goal (Gibson & Mitchell, 2005, p.318). This approach to understanding career development suggest that many people follow the path of least resistance in their career development by simply accepting whatever work opportunities they are presented with (Carlson, 1996, cited in Coertse & Schepers, 2004). In short, career choice is influenced by the environment, social class, culture, media, conditions one is born into or raised in; opportunities for education, role models, an impulse or sudden emotional reaction (Gibson & Mitchell, 2005 p.318). Economic theories stress the importance of economic factors in career choice. The suggestions given by these theories seem to be quite influential in developing countries like India.

1.6.4 Social Learning Theory:

John D. Krumboltz and his colleagues have outlined the social learning theory of career decision making. According to this theory genetic endowment, environmental conditions and learning experiences and skill development are important factors that influenced one’s career development (Arulmani & Nag-Arulmani, 2004, p. 61). In 1966, Mitchell and Krumboltz added to their earlier Social Learning Theory approach to include the suggestion that entire theory be referred to as a ‘learning theory of career counseling’ (LTCC) (Gibson & Mitchell, 2005, p.318). It is summarized as follows: The theory is an attempt to simplify the process of career selection and is based primarily on life events that are influential in determining career selection. Four factors: - 1) Genetic endowment and special abilities - include
inherited qualities that may set limits on the individual’s career opportunities 2) Environmental conditions and events - factors of influence that are often beyond the individual’s control. 3) Learning experiences - a) instrumental: what the individual learns through reaction to consequences, through direct observable results of actions, and through reactions of others b) associative: negative and positive reactions to pairs of previously neutral situations can be learned through observation, written materials and films 4) Task approach skills - sets of skills the individual has developed, such as problem-solving, work habits, mental sets, emotional and cognitive responses often modified as a result of desirable or undesirable experiences. Each individual’s unique learning experiences over the life span develop the primary influences that lead to career choice. This theory believes that career decision-making is a skill that should be taught.

1.6.5 Social Cognitive Career Theory (SCCT):

The Social Cognitive Career Theory is a direct extension of the social cognitive model to career planning behaviour (Arulmani & Nag-Arulmani, 2004, p.70). Bandura’s self- efficacy construct which is embedded in a larger Social Cognitive Theory, has produced a significant amount of research on career behaviour over the last 25 years. Hacket and Betz (1981) were the first researchers to investigate the relevance of self-efficacy to career development process (Lent & Brown, 2006). After their initial efforts and an accumulation of information through some basic research on self-efficacy and related social cognitive variables gradually developed the Social Cognitive Career theory (Lent & Brown, 2006). This theory (SCCT, 1987) takes into consideration the issues of culture, gender, genetic endowment, social context and unexpected life events that may interact with career behaviour. The SCCT focuses on the connection of self efficacy, outcome expectations and personal goals
that influence an individual’s career choice. It proposes that choice of career is influenced by the beliefs developed in the individual and refines through major sources: - a) personal performance accomplishments b) vicarious learning c) social persuasion and d) physiological states and reaction. These aspects work together in one’s career development through a process in which one develops an expertise/ability for a particular endeavor and meets with success. This process reinforces one’s self-efficacy or belief in future continued success in the use of this expertise/ability. As a result, one is likely to develop goals that involve continuous involvement in that activity/endeavor. Through the evolutionary process beginning in early childhood and continuing throughout adulthood, one narrows the scope to successful endeavors to focus on and form a career goal/choice. What is critical to the success of the process is the extent to which one view the endeavor/activity as one at which they are successful and offers valued compensation. The contextual factors come into play by influencing the individual’s perception of the probability of success. If the person perceives few barriers the likelihood of success reinforces the career choice, but if the barriers are viewed as significant there is a weaker interest and career choice action.

By adolescence, most people have a sense of their competence at a vast array of performance areas, along with convictions about the likely outcomes of career. Through a process of intervening learning experiences that shape further one’s abilities and impact self efficacy and outcome beliefs, one’s vocational interests, choices and performance are shaped and reshaped. The SCCT differs significantly from the majority of existing career theories in its dynamic nature. Through its focus upon the role of the self system and the individual’s beliefs the inherent influence of the social and economic contexts are addressed.
1.6.6 Developmental Theories:

The developmental theory emphasizes that career choice is not a static decision, but it is a process of continuous modification and adaptation (Rao, 2000. p.215). Career development is viewed as one of the aspects of a person’s total development and assumes that it occurs over an individual’s lifespan and that is why supporters of developmental approach focus their discussion on developmental stages related to age (Gibson & Mitchell, 2005. p.311). These theorists have put forth the idea that career development keeps pace with the individual’s maturation and described as occurring in the stages. The individual is faced with career development tasks at each developmental stage and successful resolution of these tasks facilitates entry into the next stage of career development (Super, 1957, cited in Arulmani & Nag-Arulmani, 2004, p.53).

1.6.6a Ginzberg, Ginsburg, Axelrad and Herma Theory (1951):

These were the early pioneers who proposed a theory of occupational choice from a developmental perspective (Gibson & Mitchell, 2005, p.311). Ginzberg & et al recognized that occupational decision making is influenced by four factors: the reality factor, the influence of the educational process, the emotional factor and individual values. This theory holds the view that a developmental path leads to career choice starting from preteen years and ending in young adulthood, individuals pass through three stages: Fantasy, Tentative and Realistic. The children are free to fantasize about any occupational choice in the first stage. Then the young one further defines one’s interests, capacities and values related to occupational choice and move towards more realistic career decisions. The realistic stage spans from mid-adolescence through young adulthood and has three sub stages: exploration, crystallization and
specification. In the exploration stage the adolescent begins to restrict choices based on personal likes, skills and abilities. In the crystallization stage an occupational choice is made. Followed by the specification stage where the individual pursues the educational experiences required in achieving his career goal. Ginzberg later modified his theory (1971) in certain aspects and suggested that the process of vocational choice and development is lifelong and open-ended. He also placed considerable weight on constraints such as family income and situation, parental attitudes and values, opportunities in the world of work, and value orientation. Both the early theory and Ginzberg’s later revision suggest the importance of early school years in influencing later career planning (Gibson & Mitchell, 2005, p.311).

1.6.6b Tiedeman and O’Hara’s Theory:

Tiedeman and O’Hara’s career development theory defines the process as building vocational identity through differentiation and integration. Theory focuses on the process of organizing and identifying different occupations through the interaction of individual’s personality with society. According to Tiedeman (1979), there are four steps in first phase/stage: 1) the anticipation step involves exploration of goals, past experiences, abilities etc. 2) the crystallization step includes consideration of values, goals etc. 3) the opting for a particular choice which follows crystallization of goals and values, and 4) clarification which concludes the differentiation phase of decision making.

The individual enters the second phase of implementation and adjustment. This phase includes process of putting plans in effect. There are three sub-steps involved in this process: i) induction, the actual entry into the specific occupation ii) reformation as a result of the individual’s experience of the occupation in which he has entered (reformation consists of responding and adjusting to the
environmental changes) and iii) integration step involves a balance between one’s needs and demands of the situation/occupation (Rao, 2000, p.217 and Coetzee & Schepers, 2004). Although Tiedeman’s (1979) theory was not one of the most popular career development theories, he is regarded as having had a significant influence in the way career progression is approached. His theory was considered to be a very mechanistic and simplistic view of one’s ability to make informed decisions. His theory focuses only on the adult phase, whereas research indicates the importance of childhood experiences also (Coetzee & Schepers, 2004).

1.6.6c Gottfredson’s Theory of Circumscription and Compromise:

Linda Gottfredson’s (1996) theory offers a developmental sociological perspective on career development and focuses on the type of compromises people make in formulating their occupational aspirations. This theory attempts to describe the process of gradual narrowing down of occupational possibilities as a function of emerging self concepts resulting through the process of circumscription and compromise (Arulmani & Nag-Arulmani, 2004, p.57). Gottfredson’s theory (1997) proposes three developmental processes: 1) The development of images or perceptions of one’s self and of the occupational world. 2) The progressive ‘circumscription’ or narrowing with age of the career options children consider acceptable for themselves, and 3) ‘Compromise’ in the face of reality. These processes begin in early childhood to shape the occupational aspirations that adolescents and young adult’s later attempt to implement (Gottfredson, 1997). Following table 1.3 summarizes the four stages of cognitive development.
Table 1.3 Stages of Development in Gottfredson's Theory

<table>
<thead>
<tr>
<th>Stage</th>
<th>Ages</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Orientation to size and power</td>
<td>3-5</td>
<td>Children orient themselves to differences in size and power between themselves and adults and realize that jobs are adult roles.</td>
</tr>
<tr>
<td>2. Orientation to social valuation</td>
<td>6-8</td>
<td>Children begin to understand and apply the concept of sex roles. They believe that certain jobs are for boys and others are girls.</td>
</tr>
<tr>
<td>3. Orientation to social valuation</td>
<td>9-13</td>
<td>Children and early adolescents develop a zone of occupations as acceptable on social class and ability level (Prestige differences among job).</td>
</tr>
<tr>
<td>4. Orientation to internal, unique self</td>
<td>14+</td>
<td>Adolescents and adults become more introspective and self-aware, establishing a self identity or self concept and related personal goal. Compromise occurs as preferred careers are eliminated due to external realities such as job opportunities.</td>
</tr>
</tbody>
</table>

Gottfredson’s theory (1981) hypothesized that when the need to compromise arises, one’s vocational interests are compromised first, followed by prestige and then sex type preferences. A later revision of the theory (Gottfredson, 1996) proposes that the kind of compromise people make depend on the degree of compromise required - major, moderate or minor. That is, what they opt to give up depends on how deeply a compromise threatens the self concept (Gottfredson, 1997).

1.6.6d Donald E. Super’s Developmental Theory:

Perhaps the most influential of the developmental career researcher and writers was Donald E. Super (Gibson & Mitchell, 2005, p.311). He is often referred to as the father of career development. He viewed career development as a series of events occurring over on individual’s life span as in contrast to the static trait and father approach. His theory takes into consideration the close link between career
development and the individual’s physical, cognitive, emotional and social maturation. In the development of his theory, super emphasized the important role played by vocational maturity. The major concepts in Super’s theory are: a) Vocational stages b) Developmental tasks to achieve if one is to successfully pass through a particular stage c) Implementation of the self concept in developing a career identity d) Development of career maturity and e) Career patterns.

According to super career planning is a continuous process and not just a single choice. He stressed through his work the importance of monitoring one’s career progression throughout one’s life rather than just prediction at the initial occupational entry. He proposed that one moves through various occupational stages during one’s life. Following table 1.4a and 1.4b summarizes Super’s contribution in the formation of life stages in career development and developmental tasks over the life span.

According to Super’s theory as briefly summarized in table 1.4 one goes through different stages during one’s life. During each of these life stages the individual comes across certain developmental tasks and completing these tasks facilitate progress into the next developmental stage. Initially super proposed these stages and tasks in a chronological or in a sequential manner but later he acknowledged that persons may move between phases as a result of adaptation to changes in themselves as well as changes in the external world. He concluded that a career is in fact a combination of different occupational and life roles. According to super (1982) there are at least nine major types of roles and they are: child, student, leisurer, citizen, worker, spouse, homemaker, parent, pensioner. He postulated that these life roles interact in a manner that is supportive, supplementary, compensatory or neutral. These role interactions could be either facilitating or in conflict with one
another as a result of the influences of different circumstances. Thus, super viewed work as embedded within other life roles.

Table: 1.4a Super’s life stages of career development-

<table>
<thead>
<tr>
<th>LIFE STAGES</th>
<th>AGE</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth</td>
<td>00-14</td>
<td>Physical &amp; Psychological grown; 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 experiences, 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>Maintaince</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>

Table: 1.4b Career Developmental tasks-

<table>
<thead>
<tr>
<th>TASKS</th>
<th>AGE</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystallization</td>
<td>14-18</td>
<td>Developing and planning a tentative vocational goal mostly based on information from surroundings and role models. Early stages unrealistic and imaginative, later years - more focused in terms of a definite goal.</td>
</tr>
<tr>
<td>Specification</td>
<td>18-21</td>
<td>Firming the vocational goal - more realistic and factual.</td>
</tr>
<tr>
<td>Implementation</td>
<td>21-24</td>
<td>Training/education for and obtaining employment</td>
</tr>
<tr>
<td>Stabilization</td>
<td>24-35</td>
<td>Working and confirming or changing career choice.</td>
</tr>
<tr>
<td>Consolidation</td>
<td>35+</td>
<td>Advancement in career.</td>
</tr>
</tbody>
</table>

One of the main concepts in Super’s theory is that of career maturity which is manifested in the successful accomplishment of age and stage developmental tasks across the life span. Super’s concept of career maturity consists of following five dimensions: 1) awareness of the need to plan ahead 2) decision making skill 3)
knowledge of the self and the world of work plus the use of information resources 4) general career information and 5) reality orientation. These five dimensions develop through activities that Super called developmental tasks which are listed in Table 1.4b.

To summarize in short, the developmental perspective proposes that every individual is confronted with career developmental tasks which are unique to a particular stage of development. Successful completion of these tasks results into an increased level of career maturity. The theory focuses on career development as a process that incorporates life stages, roles and personal characteristics.

1.7 CRITES’ APPROACH:

Earlier Crites (1975) has proposed a comprehensive model of career development with reference to the early childhood. He conceptualized this model in respect of the critical phase in one’s life i.e. school to work transition phase which usually occurs in early adulthood According to him for most workers the transitional period of moving from school to work in between ages 16 and 25. This marks the beginning of Establishment stage, to age 35 and 45. The Maintenance stage follows through to 55 and 70, after which the last stage of Retirement (deceleration and decline) continues until death. Of these stages perhaps the most critical is that of Establishment phase. He formulated this model to better understand and study the problem of youth who is entering the world of work. For constructing such a model he identified theoretically salient variables from vocational and organizational psychology, adjustment and developmental psychology and industrial and occupational sociology. He postulated that dynamics of career adjustment, stages in the work life, organizational climate, environmental and psycho-social milieu were the necessary elements of a comprehensive model of career development in early
adulthood. There was an intricate interrelationship among these variables and career adjustment takes place within the organizational climate against a complex of background and status dimension which span the entire course of career development from exploration to retirement. This model focuses upon early adulthood but Crites suggested it’s applicability to other periods in career development also (Crites, 1975). Later Crites (1981) revised the comprehensive career development model by integrating different approaches (Coertse & Schepers, 2004). His approach focused on the development that relates to the decision making process and not the content. According to him, the underlying factor of career development was time and he divided one’s life span into specific time frames and differs from person to person. He has given importance to the concept of Career Maturity and postulated that Career Maturity would be a function of time i.e. career maturity would increase over time. According to him the most important stage in career development was the establishment phase (ages 16 to 25 years), which was a good predictor of future career success. Crites proposed a model of Career Maturity based on two dimensions, namely an Affective and a Cognitive dimension. The affective dimension represents attitudes towards career development and cognitive dimension concerned with the career decision-making skills. According to Crites attitude is a dispositional response tendency which is different from abilities and interests.

**Instrument for the Measurement of Career Maturity:-**

Many instruments were developed to measure the construct of career maturity (like Career Development Inventory by Super), but probably the most popular seems to be the Career Maturity Inventory (CMI) by Crites. It was designed to measure one’s attitude towards career decision-making (e.g. orientation to work and reality and making compromises) as well as the competencies or skills one requires to make
appropriate career decisions (e.g. self-appraisal skills, planning, problem solving). The CMI consists of two parts, one is the Attitude Scale and the other is a Competence Test. A revised form of CMI was published in 1995 (Crites & Savickas, 1996) with following intentions: i) to reduce administration and testing time, ii) to extend the CMI to the post secondary adult levels, iii) to eliminate sub scales, iv) to construct the Career Developer (CDR) as a supplement to the CMI, v) to prepare CMI and CDR forms for a variety of scoring techniques and aggregate data analysis.

Both Crites and Super, view career development as a lifelong process filled with decisions that one has to make, a huge contribution has been made by Crites in the field of career assessment and particularly in the assessment of Career Maturity (Coertse & Schepers, 2004).

1.8 LANGLEY’S INTEGRATED APPROACH:

Coertse & Schepers (2004) has presented Langley’s approach in a paper which reports the findings of a comprehensive study of correlates of career maturity. Langley underlines the importance of assessing one’s level of career maturity in order to provide appropriate career guidance. According to Langley, Dutoit & Herbst, (1996) as stated in Coertse & Schepers (2004), “Career Maturity is the extent to which an individual is able to master certain career developmental tasks that are applicable to his/her life stage”. They considered following important 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 the occupational knowledge in career planning.
Assessment of the level of career maturity is important in order to guide an individual in respect of the developmental tasks that one needs to concentrate upon. Integrating the approaches of Super (1980), Crites (1981), and Westbrook (1983), Langley prepared Career Maturity Scale which measures following: i) Knowledge of self, ii) Decision making, iii) Career information, iv) Integration of knowledge about self and about career & v) Career planning. The integrated approach implies that one’s career maturity increases with the successful completion of certain developmental task. In this approach there are developmental tasks related to every aspect of career maturity. One of them is knowledge of self. In order to gain an appropriate and factual knowledge of self, the developmental tasks one should accomplish are to know ones needs life roles, values, occupational interests and other relevant factors. One who has a proper idea of these factors is said to be a career mature person. Then one needs to make a decision and occupational choice. To make a decision regarding occupational choice one should have occupational information. After getting occupational information one is supposed to integrate this information with knowledge of the self and move ahead with career planning. The developmental tasks of having an idea of one’s needs, life roles, values, interests, occupational choice and integrating information with self knowledge leads to an increased career maturity and this leads further in implementing obtained knowledge in career planning behaviour.

1.9 SIGNIFICANCE OF THE PRESENT STUDY:

This study is significant in the following manner: This study may reveal some interesting facts regarding the relationship between personality traits and vocational interests. If these two aspects are found to be significantly correlated then guidance and counselling workers can be benefited from this. They would be in a better
position to help students in need or clients. Inferences about vocational interests could be made using personality profiles.

Students could be advised and encouraged to explore and develop their interests through a lot of activities in schools and colleges. This exploration could help them in choosing a career of their own choice. Our ‘rote learning education system’ does not give them any opportunity of such exploration.

This study may reveal some interesting facts regarding personality traits, vocational interests and career maturity variables in the engineering college students in Jalna city as there is a lacuna of such study in this region (Marathwada). The career guidance and counselling facilities are also not there to meet students’ requirement on a vast scale. Hence this study has a lot of implications for those who would like to enter, rather venture into the field of career guidance and counselling. The present investigator intends to do so and that’s why it has a lot of practical implications.

According to Arulmani & Arulmani (2004) there are a lot of influences other than the personal characteristics or abilities, such as aptitude, intelligence, and interests and so on that has an impact on work behaviour and career development especially in the Indian context. According to Arulmani these influences vary from culture to culture. They include: social and cultural prestige, caste, gender, socio-economic status, and many others. For example, their research on the ‘influence of significant others’ on career decision-making behaviour showed that 46% young people had made career choices based exclusively on what their parents wanted them to do, with relatives and friends also playing a role. Only 4% of the individuals they have interviewed made career decisions on their own (Arulmani, 1995). These observations indicate differences regarding career maturity in the collectivistic eastern societies and cultures. In the west, child rearing practices and educational philosophy
encourage and nurture this skill, and independent decision-making is expected at an early age. The Indian situation is different from the west. Indian child rearing practices do not directly foster the development of independent decision-making (Arulmani2004).

The above stated situation could be considered representative of all the parts of our country. In the light of the above stated situation the studies like this one could be quite beneficial to counsel students in schools and colleges. This study may be helpful in at least spreading a little bit of curiosity and awareness among participants regarding informed and factual career choices.

The efforts to increase the level of congruence between personality and career choices could be maximized in the light of the conclusions drawn from this study. Also efforts could be directed towards personality development, exploration of vocational interests and development of career maturity levels of the students through proper career guidance and counselling programmes and planned interventions.