CHAPTER - II

REVIEW OF LITERATURE
CHAPTER II

REVIEW OF LITERATURE

Reviewing advances in the measurement of career development, Chartrand and Camp (1991) identified some important trends in the career development literature over the past 20 years. Substantive research developments were often associated with improved measurement techniques. For example, research on career maturity and development, career indecision and work salience evolved significantly with instrument development. The longevity of newer theories such as Gottfredson's (1981), and new constructs, such as those within career self-efficacy may hinge on the quality of construct measurement.

The 1970s was a decade of instrument development as many important instruments in the field were developed during this time. Most were Likert (1932) - type paper and pencil scales, but a few creative measurement approaches such as career decision making simulations, were used. The 1980s represented a period of empirical application and refinement, with fewer innovative developments. The advances occurring in psychometric theory and technique had little impact on the field.

The 1990s may be a decade of transition (Chartrand and Camp, 1991). Theories, research problems and samples are becoming more diverse and sophisticated. Future directions in career development call for embracing the old and the new.

Gelso and Fassinger (1990) noted that there has been a productive interchange between conceptual, empirical and practical efforts within the vocational field. This productive cycle was also evident within career development research. Major theories have been operationalized and important constructs expanded and clarified. This progress is analogous to the developmental changes that occur across a career. After 20 years of successful
completion of many exploratory tasks, the process of actively establishing this research field is the current focus. After 20 years it is safe to conclude that progress has been made.

In a similar attempt Buboltz and Savickas (1995) conducted a review of the career development quarterly for a period of 20 years. Two principal areas of research activity and publication were evident i.e. life span perspectives on career development and career development intervention, which accounted for 51.2% of the articles examined. Overall, content has remained stable and no clear definite trends across the years were apparent in any given topic.

PERSONALITY AND CAREER PREFERENCE

One of the more promising areas of assessment research has been the focus on the relationships between various aspects of personality traits and interests. In this vein, Jackson, Paunonen and Rothstein (1987) demonstrated similarity between selected personality characteristics (assessed by Jackson's personality Research Form E: PrF-E, 1967) and vocational interests of individuals employed in human resource management occupations. A related investigation by Paunonen and Jackson (1987) revealed that the perceptions of employment interviewers and students regarding personnel managers and computer programmers were similar to conclusions provided by Jackson's (1967) PRF-E.

Dillon and Weisman (1987) examined the relationship between Holland's personality type (as assessed by the Strong Campbell's Interest Inventory, 1974) and the Jungian typologies (as assessed by the Myers-Briggs Type Indicator, 1962). Their findings suggested a considerable degree of correspondence between these two instruments, which were generally consistent with theoretical expectations. In comparing the differential effectiveness of the self-directed search and vocational interest, experience and skill assessment, Gault and Meyers (1987) found that both inventories were well received by the undergraduate clients and that, with few exceptions there were no substantive differences in the evaluation of the two inventories (Phillips et.al., 1988).
In a study along similar lines Apostal and Marks (1990) correlated the General Occupations Themes (GOT) of the Strong campbell Interest Inventory (SCII) with scores on the SCII introversion - extraversion (IE Scale) and the Myers Briggs Type Indicator, extraversion - introversion (EI Scale). For women all correlation between SCII-IE and GOT were significant but only one correlation between MBTI-EI and GOT was significant. For men, most correlations between SCII - IE and GOT were significant, but no correlation between MBTI-EI and GOT was significant. Data support use of the SCII-IE to examine interpersonal attitudes during interpretation of the GOTs.

Friedman and Slatt, (1988) analyzed the scores of 521 1st year medical students on the Myers-Briggs Type Indicator (MBTI) by cross tabulating subjects' MBTI scores with their speciality choice. Findings show that the MBTI was statistically predictive of speciality choice in the 1st postgraduate year.

Comparing the Myers Briggs Type Inventory preferences of pharmacy students and practitioners Lowenthal (1994), obtained Myers-Briggs Type Inventory (MBTI) preferences for 832 students in 10 classes at 4 different schools of pharmacy in the US and for sample of 170 practising pharmacists. Except for 3 isolated instances, the MBTI personality preferences of all students studied were similar. The MBTI preferences of students were similar to those practising pharmacists on the Extravert/Introvert and Sensing/Intuitive preferences. They differed on the Thinking/Feeling preferences in that most students had the feeling preference and on the Judging/Perceiving preferences in that more students had a Perceiving preferences.

In an attempt to assess students needs Kean, Mehlhoff and Sorensen (1988), administered the Myers-Briggs type indicator (MBTI) to 222 students enrolled in a Midwestern university, of whom 115 were textiles, clothing, and design (TCD) students, and 107 were agronomy students. TCD students were predominantly Intuitive Feeling types as compared to the majority of agronomy students who were Sensing, Thinking types. TCD
students may already possess potential for refining and developing strong interpersonal and communication skills but may need to be shown the value of developing analytical approaches to problem solving. Use of the MBTI in assessing career attraction is addressed.

Examining the Myers Briggs Type Indicator as a developmental measure, Brown and De Coster (1991), found MBTI intuitive types achieved higher scores on conceptual levels and age was positively related to conceptual developments. Findings support the construct validity of the MBTI.

Hume (1992) investigated whether learning disabled (LD) high school students exhibit a particular personality configuration as measured by the Myers-Briggs Indicator (MBTI) and particular vocational preferences (VPs) as indicated by the Self Directed Search (SDS). 141 LD students completed the MBTI - AV (abbreviated) and the SDS-E(easy). While subjects in general placed along the Extraversion - Perception MBTI continuum, female subjects placed in that category more often that did males. Additionally girls preferred the MBTI feeling mode, while boys preferred the MBTI thinking mode. VPs indicated most often by the subjects were Realistic - Investigative and Social - Artistic. Although the 1st preference indicated by boys was Realistic, the 1st choice of girls was Social. Vps indicated as 2nd choices differed according to gender as well.

Studying personality and occupational behaviour (occupational behavior being the outcome of choosing a career) Furnham and Springfield (1993a) analysed the MBTI correlates of managerial practices in two cultures. Results indicated that there were major cultural (and to lesser extend gender) differences on the MBTI but not the management practices or climate survey results. Whereas extraversion and introversion seemed important correlates of management practices and climate for the Chinese group, the Thinking/Feeling dimension was important for the European group. Introversion, however, was a strong negative correlate of climate in both cultural groups.
In a study along similar lines Furnham and Springfied (1993b) used Myers Briggs Types Indicator correlates of managerial performances in two culture to examine the relationship between personality and work performance. They found that compared with Chinese subjects, European subjects tended to be more extraverted, intuitive, feeling and perceiving.

The Myers Briggs Type Indicator being the measure of personality in the present study the review thus has focused on the use of this tool in career preference assessment. The review of personality research with reference to career preferences is continued in the ensuing paragraphs.

Gottfredson, Jones and Holland (1993) examined the relations between interest based personality dimensions from J.C.Hollands 1985, theory of vocational personalities and five robust factors of personalities of R.R.Mc CRAE and O.P. JOHN,1992. The result for 479 males and 246 female U.S.Navy trainees imply that the six theoretical scales of vocational preference inventory and 20 scales of the Neo personality inventory share 2 to 4 significant factors. Social and Enterprising vocational preferences were positively correlated with extraversion; Investigative and Artistic preferences were positively correlated with openness; and Conventional preferences were correlated with conscientiousness.

Tracey and Rounds (1995) analyzed the arbitrary nature of Holland's Riasec Types: a concentric circles structure. The results confirm that vocational interests have a uniform distribution along a circle and that the number of scales used is a matter of convenience. The relative utility of 6 or 8 scales and viewing interests as a set of concentric circles are discussed.

Lobel, Agami and Bempechat (1993) compared the personality correlates of career choice in the Kibbutz career and non career women. Results show that Kibbutz career women differed significantly from non career women on several personality characteristics.
These women attributed to themselves more instrumental characteristics, were found to be more independent and emotionally stable, and had a higher need for achievement and a higher academic and social self esteem. In addition, the division of household work was more egalitarian in the case of career women.

Jamroy (1994) examined the personality characteristics of ninety catholic women educators to determine those which might discriminate between 3 life state groups: married, religious and single women. Discriminant analysis reveal significant differences between the three groups. Religious women were more apprehensive, introversive, intuitive and less ambitious and leadership prone than the other two groups. However similarity between the groups were far greater than differences and results would more appropriately be used to enhance self understanding rather than to predict vocational choice.

In a study of schizotypal vocational indecisiveness in a non clinical sample Schulen (1996) found gender differences in the relationship between schizotypal characteristics and vocational interests, but not for career indecision. Females scoring high in schizotypal personality characteristics did not score higher in any of Holland's (1985) six occupational themes: males showed greater interest in Holland's investigative general occupations theme. Both male and female college student scoring high in schizotypal characteristics were more indecisive with regard to career.

The trend to result in this section clearly points out to the fact that personality does play an important role in choosing a career (Paunonen and Jackson, 1987; Friedman and Slatt. 1988; Kean, Mehlhoff and Sorensen, 1988; Hume , 1992; Gottfredson, Jones and Holland.1993; Lowenthal, 1994 and Schulen, 1996). It has found that people with different jobs within a vocation have similar personality profiles (Lowenthal,1994 and Wubbenhorst, 1994).
Gender differences are also seen in the relationship between personality and career preferences (Apostal and Marks, 1990; Hume, 1992 and Schulen, 1996). Differences are also found between career and non career woman (Lobel, Agami and Bempechat, 1993) and between women in different life state groups (Jamroy, 1994).

**CAREER PREFERENCE AND FUNCTIONAL HEMISPHERIC ASYMMETRY**

Recent years have witnessed increased attention to cognitive structure and functions that underlie an individuals' decision making. Two distinct perspectives of cognitive aspects have been studied namely (a) perceived structure of occupations (Benyamini and Gati, 1987; Gati and Winer, 1987a; Gati and Winer, 1987b; and Chartrand et. al., 1987) and (b) Cognitive integration and differentiation (Bodden, 1970; Cochran, 1977; Winer et. al., 1979; Cochran 1983a, b and Neimeyer and Metzler, 1987a, b; Neimeyer, 1988).

While cognitive aspects have been gaining ground, the left/right dichotomy of brain functions has been almost ignored with reference to career choices. There has been a paucity of research in this area which is one of the reasons it has been taken up in the present study. This study attempt to generate research data in this area, in the light of the review of previous literature in this section. This section covers research material on Functional Hemispheric Asymmetry and Career Preference.

It also reviews other variables which have a bearing on career choices, such as psychological differentiation, behavioural variability and creativity. As the above mentioned variables are subject to functional hemispheric asymmetry, their role in preference of careers has been mentioned.

Prakash and Bhogle (1993) studied hemispheric preference pattern in different occupations, using the Wagner Preference Inventory-Form II (WAPI - II) for seven occupational groups. Identifiable cerebral preference patterns emerged.
Harpaz (1991) in a study, found economics and accounting students scored consistently higher in left hemisphere test, while creative art students performed better on right hemisphere test.

Drake and Crow (1989) presented a model in which functional lateral specialization and selective hemispheric priming combine to provide a mechanism for behavioral variability. Findings aid in the understanding of the source of behavioral variability, broaden knowledge of the gross structures and functions of the brain, provide information about the manipulation of perceived control and offer a technique for increasing statistical power in a wide variety of research settings.

Wissing and Guse (1991) proposed a differentiation model that relates neuropsychological (perceptual) differentiation and psychological (personality) differentiation. A significant relationship between functional hemispheric asymmetry and optimal personality functioning was found, based on data from 33 right handed South African college students.

In a study on hemispheric asymmetry, personality and temperament, de Pascalis (1993) found that hemispheric asymmetry ratios revealed some relationship with personality and temperament variables.

Poreh and Whitman (1991) examined the relationship between creative thought processes and hemispheric asymmetry in 47 right handed, male undergraduates. The verbal search factors and components of the nonverbal divergent search factor were related to hemisphericity. Individuals with a right ear advantage produced a large number of ideas, compared with individuals with a left ear advantage when responding to nonverbal stimuli. The latter, however, generated equal or more sophisticated and complex creative solutions.

Functional Hemispheric Asymmetry plays an important role in the processing of formation. The most widely accepted idea is that the left hemisphere is specialised for
"analytical" processing and the right for "global" processing (Bradshaw and Nettleton, 1990). As different kinds of job require different kinds of information to be processed, or rely more on one type of information processing, the present study hypothesizes that Functional Hemispheric Asymmetry influences Career Preferences. The literature in the present review points out to the fact that hemispheric asymmetry does bear a relationship to occupation (Prakash and Bhogle, 1993), behavioral variability (Drake and Crow, 1989), psychological differentiation (Wissing and Guse, 1991), personality and temperament variables (de Pascalis, 1993) and creative thought (Poreh and Whitman, 1991).

EDUCATIONAL INTEREST AND CAREER PREFERENCE

Definitions of interests broadly refer to the direction for curiosity, motivation and desire toward an activity, an event or object. The goal of interest measurement has emphasis on expanding self knowledge and career options open to an individual (Arulmani, 1996).

Research supports the predictive validity of using interest inventories as facilitators for career decisions (Noeth, 1983 and Apostal, 1991). However interest is fluctuating variable and the strength and direction of individuals interest vary with maturation (Savickas, 1984). Stress results due to incongruence between interest and career choice, and persistence in a field of choice increases with congruence between choice and interest (Eagen, 1995).

While research has focused on vocational interest and its role in career preference, data with reference to educational interest has not received as much attention. The present study aims to add to this research database.
VOCATIONAL ASPIRATION AND CAREER PREFERENCE

Many researchers have quantified occupational aspiration by using occupation prestige scales (Maxwell and Cummings, 1988). As mention in chapter one, the present study also adopts this stance.

Leung (1990) found that an Asian-American student may weigh prestige exceedingly highly, while ignoring other variables such as personal interests and aptitudes.

In a similar study Lapan and Jigeleski (1992) found that adolescent males have a high propensity to sacrifice personal interests for entry into jobs that are high on prestige loadings.

Leung (1993) found that prestige variables, cause the premature elimination of career alternatives and generate disinterest in the various other careers that are available.

Arulmani (1996) reported that 73% of 400 parents believed that medicine was the most prestigious of careers, with engineering following next.

Reviewing the above literature, vocational aspiration has emerged as a very significant factor in the choice of career.

SEX ROLE ORIENTATION AND CAREER PREFERENCE.

A central issue in vocational psychology and career counseling is the observed gender differences in career choices (e.g., Mischler, 1975; Dex, 1985; Betz and Fitzgerald 1987; and Goldin, 1990). Women tend to be engaged in a small range of occupations that are traditional, female sex-stereotyped, and in the lower occupational levels where salary levels are usually relatively low. Some investigators have concluded that women's choices have
remained traditional and feminine oriented in spite of recent social changes (e.g., Mischler, 1975; and Nevill and Schlecher 1988); however others have found that although women's career choices are still heavily affected by sex role and stereotypes, these choices are less traditional than, they were formerly (e.g. Betz, Heesacker and Shuttleworth, 1990; and Goldin, 1990). Whatever the case may be, it seems that women and men still differ in their occupational choices (Gati, Givon and Osipow, 1995).

Miller et al. (1993) studied the relationship between sex-role orientation and Holland's typology. The results tend to support the versatility of Holland's theory: subjects identified as Androgynous had scores resembling the Investigative - Artistic - Social personality type. To a lesser degree, subjects identified as Masculine and Feminine had scores resembling the Realistic - Investigative and Social - Artistic types, respectively.

Marro and Vouillot (1991) hypothesized that persistent gender stereotypes, socially encouraged, match masculine rather than feminine character traits to those of the scientific prototype. Results showed a high correlation of males subjects' traits with scientist - prototype traits.

Neimeyer et al (1989) suggested that sex differences in vocational structure may be the result of sex-role socialization. Results of a series of analysis of variance (ANOVAs) support and extend the previous findings on vocational structure. Findings also help to clarify the relationship between sex-role socialization and the measures of cognitive differentiation, integration, extremity and conflict.

In an other study Parr and Neimeyer (1994) found that higher levels of vocational differentiation were found in men than in women and were related to the use of personal constructs when subjects judged highly irrelevant career alternatives, secondly personally used constructs were used with greater differentiation than were standard provided ones, only when participants evaluated highly relevant career alternatives.
In a study Verma and Sharma (1987) investigated the vocational interests of pre-adolescent boys and girls. Results revealed that pre-adolescent girls were significantly more interested in literary, scientific, transport and communication, technical, fine arts, administration, commerce, agriculture and professional fields of vocational interest than their counterparts.

Mishra (1990) reported that any increase or decrease in socio-economic status does have influence on scientific and administration areas of interest, whereas when socio-economic status increases, interest in agriculture and social services decreases and visa versa. Vocational interest of boys and girls are significant in the mechanical, social service, art and administrative areas, whereas in the case of urban and rural it is significant in mechanical, agriculture, art and administration areas of interest.

Evaluating vocational bias and gender, Tomini and Page (1992) assessed subjects' career aspirations, career confidence, assessment of persons most important to career choice and other experiences with high school counselors. Women reported experiences as more favorable than those of men, although women showed lower levels of confidence regarding chosen careers. Student responses did not appear to reflect major problems in terms of gender bias. The overall evaluations of counseling were negative. Both men and women cited teachers as having influenced career choice more than counselors.

O’Brien and Fassinger (1993) tested 2 causal models of career choice and orientation with high school women. Structural equation modelling analysis suggested that the career orientation and career choice of adolescent women were predicted by ability, agentic characteristics, gender role attitudes and relationship with mother. Young women who possessed liberal gender role attitudes, were instrumental and efficacious with regard to mathematics and careers and exhibited moderate degrees of attachment and independence from their mothers, tended to value their career pursuits. Adolescent women who selected non-traditional and prestigious careers showed high ability and strong agentic characteristics.
Matsui, Ohsawa and Onglatco (1991) assessed educational level, liberal sex role values, instrumentality, expressiveness and career commitment in 412 Japanese female clerical workers (aged 18 - 40 years). Career commitment was related significantly and positively to educational level, liberal sex role values and instrumentality and was related negatively to expressiveness. Further analyses indicate that liberal sex role values and instrumentality made dominant contributions to career commitment.

A empirical study was done on the psychological characteristics of Indian women entrepreneurs by Sen and Seth (1992). Results indicated that entrepreneurs possessed better cognitive qualities in terms of being more organized, imaginative, cheerful, self-assertive, decisive, ambitious, socially conscious and mature and integrated. Entrepreneurs were also found to exhibit more masculine characteristics.

In a study on work values of women with differing sex role orientation, Fouad and Kammer (1989) found that work values also play a role in the career choice process.

In a special issue Hollinger and Fleming (1993), provided an overview of PROJECT CHOICE (Creating Her Options In Career Exploration), a career development program for gifted and talented female adolescents that overcomes barriers to the realization of potential. Data were available for 268 original sophomore participants and 126 of the subjects were available for a 3rd follow-up near their 30th birthdays. Results show that only 9.6% of the subjects did not pursue a post secondary education, while 11.2% completed doctoral or professional degrees. Approximately 70% were in well above average levels of career achievement and most reported that they were satisfied with life in general. During adolescence, subjects saw few barriers to the realization of their goals. By final follow-up, however, subjects encountered external barriers such as resistance from family members, sexism and complexities of juggling career and family responsibilities.
Analyzing the literature on Sex Role Orientation, the research supports the impact of the role, socialization plays on career options chosen. Relationship found between Hollands typology and sex role orientation (Miller et al., 1993); a high correlation of masculine traits was found with the scientist-prototype traits (Marro and Vouillot, 1991); studies indicate that sex differences in vocational structures are a result of sex role socialization (Neimeyer et al., 1989); higher levels of vocational differentiation related to the use of personal constructs were found in men than in women (Parr and Neimeyer, 1994); pre-adolescent girls were significantly more interested in literary, scientific, transport and communication, technical, fine arts, administration, commerce, agriculture and professional fields of vocational fields of vocational interest than their counterparts (Verma and Sharma, 1987); some studies indicate that women showed lower levels of confidence regarding chosen careers (Tomini and Page, 1992); in some research it was that women who selected non-traditional and prestigious careers showed high ability and strong agentic characteristics (O'Brien and Fassinger, 1993); career commitment found to be significantly related to sex role values (Matsui, Ohsawa and Onglatco, 1991); Sen and Seth (1992) found that women entrepreneurs exhibited more masculine traits; in a study Fouad and Kramer (1994) found that work values also play a role in the career choice process, of women with differing sex role orientations; and finally, examining the barriers to the realization of their potential in gifted women, Hollinger and Fleming (1993) reported that subjects encountered external barriers such as resistance from family members, sexism and complexities of juggling career and family responsibilities.

FEAR OF SUCCESS AND CAREER PREFERENCE

Horner (1972) has linked Fear of Success to sex role socialization. Because females are not socialized to succeed, fear of success should be more common among women than men (Zuckerman and Allison, 1976). Larkin (1987) suggested that problems in the process of ego identity formation would be manifested as fear of success. She hypothesized that those individuals who had achieved an identity independent of family would be less
likely to fear success. Her study of male and female adult college students revealed that those with lower overall ego identity scores demonstrated greater fear of success, extending fear of success and identity status to work related variables. Larkin (1987) also found that the individuals who fear success were less likely to report success and failures as reasons to leave past jobs and less likely to rate internal factors as important in their progress. Similarly, those who evidenced greater progress in terms of identity formation were more likely to note advancement reasons for leaving previous jobs, to rate themselves as more successful and to consider internal factors as more important in their progress (Phillips et al., 1988).

Rao (1984) reported that faculty-wise differences in fear of success were significant, with students from the medical faculty revealing the most fear of success; maternal employment was positively related to fear of success in that, the subjects whose mothers were gainfully employed manifested greater fear of success.

In a study of fear of success and approval motive, Singh and Kuller (1992) found an increase in relationship between the two variables for female subjects.

Clinton and Barbara (1990) developed the science career predictor scale (SCPs), which assesses 8 factors involved with science career choices. Females had significantly lower scores on the career interest factor. Blacks had significantly higher science-career preference scores, but scored significantly lower on the measure of critical thinking ability. The major factors affecting science-related career decision for all subjects appeared to be personal contact with a scientist.

In a study Leung and Plake (1990) examined L.S. Gottfredson's (see PA, Vol. 67:3363), postulation that individuals are more likely to sacrifice prestige than sex type preference when career compromise is needed.
Overall prestige was more often used as the preferred factor than sex type, but career compromise behaviors were jointly affected by gender and the degree of contrast in prestige and sex type levels that characterized the 3 choice dilemma situations. Implication for Gottfredson's framework and career counseling were discussed.

As postulated by Horner (1972) it seems that fear of success is greater in women than in men (Clinton and Barbara, 1990; Leung and Plake, 1990). Fear of success also differs significantly with different faculties and also maternal employment plays a role in fear of success (Rao, 1984).
<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Author(s)</th>
<th>Sample</th>
<th>Variables</th>
<th>Results / Findings / Comments</th>
</tr>
</thead>
</table>
2. Parental pressure  
3. Traditional influences | 1. Traditional factors ranked very high and psychological factors very low for factors influencing the subject's choice.  
2. Suggestion: The potential of Nigerian children should be explored more extensively, by school counselors. |
2. Locus of control  
3. Traditional feminine courses Vs. traditionally masculine courses. (secretarial Vs management courses). | 1. Secretarial students had a feminine sex role orientation and management students had a masculine sex role orientation.  
2. Both Groups had internal locus of control.  
3. However secretarial students were more likely to attribute events in their lives to luck. |
2. Preferred profession | Results show a close match between subjects' concept of self and preferred profession. |
2. Clinical role  
3. Demographics  
4. Values | 1. Predictors of the administrative role were: age, educational degree, male mentoring, administration, the speciality of physical disabilities, and the values of capability, a sense of accomplishment, freedom and ambition. Predictors of clinical role were age, degree and the values of lovingness, helpfulness, mature love and inner harmony. |
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Author(s)</th>
<th>Sample</th>
<th>Variables</th>
<th>Results / Findings / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Hammond and Dingley (1989)</td>
<td>School students 6th form</td>
<td>1. Sex differences 2. Career preferences</td>
<td>1. For both sexes, careers choices tended to follow traditional patterns. 2. Girls had lower career aspirations than boys. 3. Both sexes had similar attitudes to marriage and related career issues.</td>
</tr>
<tr>
<td>7.</td>
<td>Westbrook, Sanford and Donelly (1990)</td>
<td>9th grade public school pupils.</td>
<td>1. Career maturity 2. Appropriateness of career choice.</td>
<td>1. Correlation between career maturity and appropriateness of career choice were significant for the total group.</td>
</tr>
<tr>
<td>8.</td>
<td>Hill, Pettus and Hedin (1990)</td>
<td>Middle and high school students.</td>
<td>1. Factors involved with science career choices. 2. Critical thinking ability 3. Race 4. Gender</td>
<td>1. Females had significantly lower scores on the career interest factor. 2. Blacks had significantly higher science preference scores, but scored significantly lower on the measure of critical thinking ability. 3. The major factor affecting science related career decisions for all subjects appeared to be personal contact with a scientist.</td>
</tr>
<tr>
<td>9.</td>
<td>Hesketh, Durant and Pryor (1990)</td>
<td>Age: 15-42 years</td>
<td>1. Career compromise 2. Career aspiration 3. Sex-type 4. Prestige 5. Interests</td>
<td>1. No support was found for the compromise model. 2. Sex type and interests were not the most resistant to compromise. Contd..</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Author(s)</td>
<td>Sample</td>
<td>Variables</td>
<td>Results / Findings / Comments</td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>--------</td>
<td>-----------</td>
<td>------------------------------</td>
</tr>
</tbody>
</table>
2. Social factors  
3. Career choice | 3. Results are discussed in light of the difficulties encountered in testing the compromise model. Relationships were found in the following areas:  
1. Socio-demographic characteristics.  
2. Personality and attitudinal variables.  
3. Institutional characteristics of the medical school.  
4. Characteristics of the speciality training programs.  
5. Information available to students about the various careers. |
2. Socio-economically advantaged Vs non-advantaged | Results reveal that the socio-economically advantaged group had significantly stronger vocational interest in literary, scientific, artistic and persuasive areas than their counterparts. |
2. Parental attachment  
3. Career decision making.  
4. Commitment to career choices. | 1. For women attachment to and conflictual independence from both parents were positively related to progress in the commitment process and negatively related to the tendency to foreclose. |

Contd..
<table>
<thead>
<tr>
<th>SL No.</th>
<th>Author(s)</th>
<th>Sample</th>
<th>Variables</th>
<th>Results / Findings / Comments</th>
</tr>
</thead>
</table>
2. Vocational choice behavior | Findings:  
1. Five out of nine CMM correlated substantially with almost all or at least some criterion variables.  
2. Best predicted criteria were: Career choice concerns, self-assessed appropriateness of preference/certainty of realization, length of time considering the preferred career option, vocational choice motivation and career or major decidedness.  
Results:  
2. For men attachment to, attitudinal dependence on, and conflictual independence from their fathers were predictive of progress in the commitment process. |
| 15.    | Mc Kenna and Ferrero (1991), | Ninth grade students | 1. Attitudes towards vocational education  
2. Non traditional vocational education program | Results:  
1. Same sex parents were primary source of career information.  
2. Non traditional occupations did not appeal to most subjects. |
2. Career choice competencies  
3. No treatment control | 1. Subjects had significantly higher occupational information and planning scores than the no treatment control, and Career Conferences did not influence the career choice competencies of subjects in the self-appraisal area suggesting a lack of maturity in this area. |
<table>
<thead>
<tr>
<th>SL No.</th>
<th>Author(s)</th>
<th>Sample</th>
<th>Variables</th>
<th>Results / Findings / Comments</th>
</tr>
</thead>
</table>
2. Competent individual | Comments: A profile was created for a leisure oriented, supremely confident individual who would produce 10 to 13 occupational scale scores at a level recommended for consideration as a career choice. Presenting the career counselor with a paradox. Options for the counselors in this situation are discussed. |
2. National rates of Economic Growth. | 1. UK subjects had higher achievement motivation while Japanese subjects had a higher competitive motivation and strong money beliefs.  
2. Significant sex differences were found on scales of work ethics, competitiveness, achievement via conformity and money beliefs. |
2. Career Preference | Results indicated significant changes in career plans:  
(1) Away from primary care practice toward the surgical specialties.  
(2) Away from office based practice toward clinical practice in a university medical center.  
(3) Away from practice in small towns and communities toward locations in larger cities. Contd... |
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Author(s)</th>
<th>Sample</th>
<th>Variables</th>
<th>Results / Findings / Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td>Meier, (1992)</td>
<td>-</td>
<td>-</td>
<td>REVIEW (1988-1990).&lt;br&gt;1. Content areas were: person-environment fit perspectives, decision making, career development, intervention, and vocational assessment. &lt;br&gt;2. These four areas continue to be important topics for researchers and practitioners alike.</td>
</tr>
<tr>
<td>22.</td>
<td>McAuliffe, (1992)</td>
<td>-</td>
<td>-</td>
<td>Comments:&lt;br&gt;1. Career classes have been shown to be more effective than both shorter group experiences and individual counseling.&lt;br&gt;2. Early assessment of individual career indecisiveness, followed by tailored treatments for individuals or subgroups is proposed.</td>
</tr>
<tr>
<td>23.</td>
<td>Spokane, (1992)</td>
<td>-</td>
<td>1. Personal constructs&lt;br&gt;2. Career choice</td>
<td>COMMENTS:&lt;br&gt;1. It is mistakenly assumed that simple presentation of information will benefit clients.&lt;br&gt;2. Process by which career information is filtered is more important than the information itself.&lt;br&gt;3. Constructs are differentially permeable depending on the clients circumstances and the source of information.&lt;br&gt;4. Counseling is a discovery process.&lt;br&gt;5. The process is an environmental scanning process using a perceptual filters base and personal constructs. Contd...</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Author(s)</td>
<td>Sample</td>
<td>Variables</td>
<td>Results / Findings / Comments</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>--------</td>
<td>-----------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>26.</td>
<td>Hoffman, Hojacker and Goldsmith, (1993).</td>
<td>1 Senior Level Undergraduates 2 Master level Business Students</td>
<td>1. Parental closeness 2. Parental influence on career choice decisions</td>
<td>1. Parents were found to be primary influence on subjects career choice. 2. Fathers influenced career decisions more than mothers. 3. Gender was not related to perception of parental career influence. 4. Closeness to father was a strong influence.</td>
</tr>
<tr>
<td>27.</td>
<td>Hopkins (1993)</td>
<td>Young adults in therapy</td>
<td>1. Career choice 2. Identity diffusion</td>
<td>Comments: The problem is traced to parents who have not modelled healthy career choices and also to social influences.</td>
</tr>
<tr>
<td>29.</td>
<td>Mathieu, Sowa and Niles (1993).</td>
<td>Female under graduates</td>
<td>1. Career self efficacy 2. Traditional vs non-traditional occupations</td>
<td>1. Women who expressed preference for non traditional occupations did not demonstrate higher levels of</td>
</tr>
<tr>
<td>Sl. No.</td>
<td>Author(s)</td>
<td>Sample</td>
<td>Variables</td>
<td>Results / Findings / Comments</td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>--------</td>
<td>-----------</td>
<td>-------------------------------</td>
</tr>
</tbody>
</table>

From the review of literature it is clear that career preference is the result of the interaction of several psycho-social factors. Drawing from the trend of results, the present study aimed to investigate the effects of Personality Type (as measured by the Myers Briggs Type Indicator - Form G) and some psycho-social correlates namely: Pattern of Functional Hemispheric Asymmetry, Educational Interest, Vocational Aspiration, Sex Role Orientation, Fear of Success and Demographic Variables on Career Preferences among high school students (Standard X).
The reviews by Chartrand and Camp (1991) and Buboltz and Savickas (1995) infer that Functional Hemispheric Asymmetry emerges as the only variable that has contributed almost negligibly to career development constructs. Thus, the present study has included this variable along with other psycho-social variables to give a global picture to the career preference construct.